

# Philosophy in the Islamic World

VOLUME 2-1: 11TH – 12TH CENTURIES

CENTRAL AND EASTERN REGIONS

*Edited by*

Ulrich Rudolph and Peter Adamson

*English translation by* Gwendolin Goldbloom



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## Philosophy in the Islamic World

# Handbook of Oriental Studies

## Handbuch der Orientalistik

### SECTION ONE

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Peter Adamson

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## Preface to the English Edition

This volume is an English version of *Philosophie in der islamischen Welt. Band 2/1: 11.–12.- Jahrhundert. Zentrale und östliche Gebiete* (ed. by Ulrich Rudolph with assistance from Renate Würsch, Basel 2021). It constitutes the second part of the multi-volume book series *Grundriss der Geschichte der Philosophie: Philosophie in der islamischen Welt*, which first appears in German with the publisher Schwabe (Basel/Berlin), and then in English translation with E.J. Brill (Leiden) under the title *Philosophy in the Islamic World*.

It is thanks to the hard work of numerous people that this English version of volume 2-1 has been able to appear so quickly after the publication of the German text. Above all, I must thank Gwendolin Goldbloom, who managed to be both prompt and precise as she took on the task of translating the entire book, with the exception of chapters that had initially been written in English and then translated into German. As in the case of vol. 1, Peter Adamson edited and proofread the translation with great care and expertise. Hani Mohseni, Nada Abdelsalam, and Zack Candy from Prof Adamson's team at the University of Munich, contributed considerably to the production of the manuscript, tracking down additional information and helping with crucial aspects of the copy-editing process. Both editors have gone through the entire manuscript and are responsible for the final redaction. The authors of the original German chapters have also been involved in the production of this new version, and have helped with the addition of new references to literature that appeared since autumn 2021.

I would like also to express my gratitude to the publishing houses involved in this process. Schwabe was willing to permit the English translation to appear after a shorter wait than volume 1 of the series, while E.J. Brill committed to organizing and supporting the process of translation. Abdurraouf Oueslati from Brill, in particular, has been a reliable and helpful interlocutor throughout. The enthusiasm with which all concerned worked towards this final result has been essential to the production of this book and can be taken as a promise for further volumes soon to appear in the same series.

A final word must be devoted to Wilferd Madelung, author of the chapter on Šahrastānī in this volume, who passed away on May 9, 2023. He possessed extraordinary knowledge of intellectual history in the Islamic world and was a source of inspiration and advice for many of the contributors to this book.

*Ulrich Rudolph*  
Zurich, May 2023

## Preface to the German Edition

The present volume 2-1 of *Philosophy in the Islamic World* continues the work begun in 2012 with Volume 1 (8th to 10th centuries). The project of compiling an independent series on the subject as part of the *Grundriss der Geschichte der Philosophie* is now taking shape ever more clearly, not least because Volume 4 (19th to 20th centuries), edited by Anke von Kügelgen, is being published simultaneously, forging a link not only with the Middle Ages but also with the present.

The ambitious plan of compiling a comprehensive history of philosophy in the Islamic world has thus been shown to be attainable, although it is proving to demand considerable time and energy from all contributors. This also applies to the two tasks still before us: the publication of the second part of Volume 2 on the 11th and 12th centuries (2-2, on the Western Islamic world) and the compilation of Volume 3 (13th to 18th centuries), which has been considered a particular challenge from the very first. The former has been scheduled for 2024, while extensive preparations for the latter have already been carried out. Among these are a detailed plan of the volume, assembling a team of authors to cover a wide range of topics, and the publication of *The Development of Arabic Logic (1200–1800)* (Basel 2019) by Khaled El-Rouayheb, which is closely linked to Volume 3 in its subject matter as well as its structure (cf. El-Rouayheb's Preface, p. 11).

There are several reasons why the discussion of the 11th and 12th centuries has been presented in two volumes and not one, as originally intended. Along with practical considerations, the decisive reason was a weighty one inherent in the subject matter: recent studies, including the extensive work on this series, have shown that the philosophy of the 11th and 12th centuries was not a uniform phenomenon that could be reduced to one single development. It cannot simply be described as the 'classical age' and the crowning evolution of the older, ancient and Islamic trends, as was done for a long time ('from al-Kindī to Ibn Rušd'). On the contrary, it is characterised by innovative approaches and controversies (for details cf. the Introduction to this volume), which developed differently in the different regions of the Islamic world, leading ultimately to a momentous parting of the ways. Thus, we have chosen to present the divergent developments in the central/eastern and in the western Islamic world in separate narratives – despite the undeniable connections between them.

The division of the material implies distributing the chapters on Jewish and Christian authors between the two volumes. In two cases, this turned out to be straightforward. The discussion of the philosophical tradition of the

Syriac Christians in the 11th and 12th centuries (by Hans Daiber) belongs to Volume 2-1 (cf. § 7 in the present volume) because of subject matter and geographic location, and because it follows on from a corresponding chapter in the previous volume (cf. Vol. 1 § 2). The section on the Arabic – Latin translations (by Dag Nikolaus Hasse and Charles Burnett), in its turn, could only be assigned to Volume 2-2 (cf. Vol. 2-2, § 6) because these translations were carried out in Spain and other regions around the western Mediterranean. Allocating the substantial chapter on the Jewish authors of the Islamic world, written by Mauro Zonta (†) for the *Grundriss*, however, was less obvious. This chapter is, in fact, an exceptional case in that its discussion begins in the 3rd/9th century and continues through to the 10th/16th century, spanning the chronological range of volumes 1 and 3. All the same, its main focus is on the Jewish authors of the 5th/11th and 6th/12th centuries, who were almost without exception active in the western Islamic world. For this reason Zonta's contribution, in spite of the range of topics it covers and its chronological and geographic breadth, has been assigned to Volume 2-2 (cf. Vol. 2-2, § 5).

It was only possible to complete the present work because of the many people who contributed to it with great dedication. My heartfelt thanks are due to all of them. Renate Würsch not only composed several subchapters but occupied a key position in the editing team, as she already did for Vol. 1, contributing to essential decisions, which she carried out with her customary expertise, care, and diligence. I was always able to contact Anke von Kügelgen, who was simultaneously working on Volume 4, for most profitable exchanges on every aspect of the subject as well as the organisation of the series. My thanks go to all the authors of this volume for their many years of intensive collaboration with the editing team, and with one another other in the case of collaborative chapters (cf. esp. the long list of authors for § 1, but also § 2, § 4, and § 5). I particularly wish to include David Reisman, our colleague who sadly died too young, in my gratitude; he submitted the first version of § 2.1 which was subsequently edited and significantly expanded by Ahmed H. al-Rahim.

At the Institute of Asian and Oriental Studies in Zurich I was able to rely on numerous helpful colleagues. Johannes Thomann carried out extensive research, revised and contributed subchapters on astronomical subjects, and assisted in the final editing. James Weaver provided indispensable assistance translating and editing extensive and complex English manuscripts. Patric Schaerer, who is to take on the production of Volume 3, contributed with great precision to the final revision of 2-1 and compiled the comprehensive indices to the volume. Nicolas Hintermann and Katarina Roberts worked on the project while still students, contributing to its success with their research and by sourcing relevant texts. Schwabe publishers also supported our work: at the

management level, where David Hoffmann, Wolfgang Rother, and Susanne Franzkeit above all championed it; in the editorial office, where Angela Zoller and Andreas Schatzmann copy-edited the text with precise understanding of the subject and the language; and finally with 'Programmleitung Philosophie', which has been carried out by Christian Barth with great expertise and admirable commitment for some time now. Gratitude is also due to the support from the overall series editors of the *Grundriss*; previously Helmut Holzhey and now Gerald Hartung and Laurent Cesalli, with the latter in particular promoting the requirements of our series and its future continuation.

Many colleagues from the fields of Islamic Studies and Philosophy, too, contributed to the project's success with their advice and readiness to assist. At various times Peter Adamson, Asad Q. Ahmed, Sonja Brentjes, Nadja Germann, Henning Sievert, and Georges Tamer provided me with essential information on a variety of topics. Anke von Kügelgen, Dominik Perler, and Robert Wisnovsky read the introductory chapter of the volume critically and provided comments and suggestions that contributed materially to its final form. Furthermore, a year (2019–2020) spent at the Berlin Institute for Advanced Study (Wissenschaftskolleg zu Berlin) allowed me to conduct fruitful conversations with many people at the institute itself and in the city overall, as well as enabling me to complete my work on this book in an unusually quiet setting.

Lastly thanks are due to several institutions and people who generously funded our project: the Swiss National Science Foundation (SNSF; Schweizerischer Nationalfonds [SNF]) which funded a staff position over several years; the Swiss Academy of Humanities and Social Sciences (Schweizerische Akademie der Geistes- und Sozialwissenschaften [SAGW]), which allowed us to arrange regular meetings of authors; the Dr Charles Hummel Stiftung and Dr Ulrich Albers who helped us through lean times by providing financial support for our work.

*Ulrich Rudolph*  
Zurich, May 2021

# Conditions and Contexts of Philosophising in the 5th/11th and 6th/12th Centuries

*Ulrich Rudolph*

1 New Concepts and New Debates – 2 Intellectual Contexts – 3 Institutional Contexts – 4 Secondary Literature

## 1 New Concepts and New Debates

There are compelling reasons to regard the 5th/11th and 6th/12th centuries as a central period in the history of philosophy in the Islamic world. Not only were the teachings of older authors such as Abū Yūsuf al-Kindī (d. after 247/861) and Abū Naṣr al-Fārābī (d. 339/950) developed further during this time, but, even more importantly, new concepts and new forms of philosophising were discussed. The results of these debates were ground-breaking, as they in turn led to a further formation of philosophical discourse that became established towards 1200 and may be regarded as a consolidation of the results of previous discussions.

The two centuries discussed in the present volume thus occupy a key position in the history of philosophy in the Islamic world. They are situated between the early period (8th–10th cent.), which Richard Walzer (1970 [\*11]) once characterised as the ‘awakening of Islamic philosophy’, and the later period (13th–18th cent.), nowadays usually called the ‘post-classical period’. Whether, consequently, the two centuries should be called the ‘classical period’ of Islamic philosophy, remains doubtful all the same. This term implies normative ideas of rise, classicism, and decline, which were presumed as a matter of course in the past (cf. e.g. Brunschvig, von Grunebaum 1957 [\*4]), but have by now been recognised to be problematic. If we do try to characterise the special position of the 5th/11th and 6th/12 centuries, we might consider it – with recourse to conceptual history as developed prominently by the German scholar Reinhart Koselleck (1923–2006) – as the ‘saddle period’ (‘Sattelzeit’) of the history of philosophy in the Islamic world. However, this metaphor, too, is not uncontroversial, and we must first clarify in what sense and with which limitations such an attribution might be undertaken in order to be hermeneutically profitable



(for a general introduction into the concept and its use in scholarship see the entry by Friedrich Wilhelm Graf 2004 [\*49], English version).

It cannot be denied that the term ‘saddle period’ was originally intended to denote a phenomenon in European intellectual history. It was coined by Koselleck in the course of his work on the encyclopaedia *Geschichtliche Grundbegriffe* to characterise the revolutionary transformation that occurred in the language of political-social discourse in Europe, and especially in the German language area, between the mid-eighteenth and the mid-nineteenth century Koselleck 1972 [\*12: XIII–XXVII]). Used in this sense, the term continues to be employed in the secondary sources, admittedly with some reservations. Certain assumptions that formed part of the foundation on which it was coined – such as the emphasis on breaks as opposed to continuities, or the rather static fixation on the time around 1800 – have been criticised repeatedly, and are embraced only in a modified form in the context of present-day conceptual historical research (on the discussion in detail Motzkin 2005 [\*54], Fulda 2016 [\*82]).

In addition, the discussion has broadened geographically in the meantime. The term has been applied to other regions of the world for some time now. To Asia, for instance, where societies are also understood to have lived through a ‘saddle period’ on the threshold to the modern age, in their case dated to the time between 1850 and 1950, or 1860 and 1940 (Schulz-Forberg 2014 [\*77]; cf. Pernau 2012 [\*73]). This includes the Islamic world, with the result that there have been recent references to an Arab or Near Eastern ‘saddle period’ between the mid-19th and mid-20th century, too (von Kügelgen 2017 [\*90: 22–23]; cf. PIW 4, Introduction, Item 4). While several critical objections have been made (Topal, Wigen 2019 [\*36]), current contributions to the debate by Zemmin and Sievert (2021 [\*113]) have been able to demonstrate that sound reasons can be adduced for employing the term in this context.

In view of this state of research it may seem confusing if we speak of a ‘saddle period’ in a chronologically as well as materially different context. However, such a change of perspective might prove to be beneficial, as long as the term is dissociated from its original geographical and chronological context (German language area/transition to the modern age) and reduced to its structural characteristics and its heuristic potential. The fundamental phenomenon Koselleck intended to describe is a revolutionary conceptual and linguistic transformation, not just some kind of change as it happens more often in the course of history (cf. Koselleck, Richter 2011 [\*70: 9]). This is precisely what took place during the 5th/11th and 6th/12 centuries in the Islamic world. A revolutionary conceptual and linguistic transformation did indeed occur affecting the field

of philosophy and, in its wake, further intellectual fields more profoundly than any change has done in the centuries before or after this period. To be concrete: The ancient knowledge system, adopted during late antiquity and still valid during the 4th/10th century, was gradually transformed and transposed into a new, 'Islamic' system, which would provide the framework for philosophical discourse and intellectual debate from 1200 onwards. The starting point of this development was Ibn Sīnā, whose metaphysics Robert Wisnovsky (2003 [\*48: 15–16]) has interpreted as the culmination as well as the final overcoming of the 'Ammonian Synthesis' (with reference to Ammonios Hermeiou [d. after 517]; regarding him cf. PIW 1 § 1.3). If we interpret 'saddle period' in this sense, several characteristics ascribed to the term on the theoretical level can be identified in the Islamic philosophy of the 5th/11th and 6th/12th centuries: the fundamental nature of the transformation that led from Ibn Sīnā (d. 428/1037) through al-Ġazālī (d. 505/1111) and al-Suhrawardī (d. 587/1191) to Faḥr al-Dīn al-Rāzī (d. 607/1210); the change in the conceptual framework and the language associated with it; the dynamics of the development which took place in several steps and also, in part, in parallel strata. Among these are, besides the obvious 'progressive' trends, the non-synchronous, repetitive and retarding elements Koselleck emphasised in his later deliberations on the 'saddle period' (cf. Jordheim 2012 [\*72: 170–171]); in the case of the Islamic world these might be, for instance, Abū l-Faraġ Ibn al-Ṭayyib (d. 435/1043; cf. PIW 1 § 7.6), 'Abd al-Laṭīf al-Baġdādī (d. 629/1231; cf. § 4.2.5 below), or indeed Ibn Rušd (d. 595/1198; cf. § 3 in Vol. 2-2). And then, finally, there is another aspect to be taken into consideration: The period with regard to which Koselleck coined the phrase was the time when in Germany if not in Europe the most important, and in the long term most influential, philosophers took centre stage, namely Immanuel Kant (1724–1804) and Georg Wilhelm Friedrich Hegel (1770–1831). A similar situation may be observed in the Islamic world of the 5th/11th and 6th/12th centuries, as the authors active during that time (Ibn Sīnā, al-Ġazālī, Ibn Rušd, Faḥr al-Dīn al-Rāzī) would remain authoritative in the teaching of philosophy and intellectual discourse for centuries to come.

There are thus compelling reasons for distinguishing this time from other periods of the history of Islamic philosophy. This applies to the time after 1200, which has long been regarded as a separate period in research (regarding this assessment and the attendant difficulties cf. PIW 1, Introduction), and it also applies to the early centuries. Scholarship in the past tended to mention the latter in the same breath as the 5th/11th and 6th/12 centuries, which often seemed to suggest that there was a continuous development ('from al-Kindī to Ibn Rušd') and indeed a continuum of intellectual history (emphasised by

e.g. Fakhry 1970 [\*10: 128]). In fact, however, the two periods presented in this volume and in Volume 1 are separated by a number of noticeable features that imbue each era with its own distinctive character.

A first difference is that, towards the end of the 4th/10th century, philosophical discourse emancipated itself from the work of the Greek-Arabic translators. Until that time it had been customary for philosophers to cultivate close ties with scholars from the translation movement, with the result that their focus on certain branches of philosophy (natural philosophy, metaphysics, logic, etc.) or on individual philosophical texts was influenced by the work of the translators around them. This is true not only of al-Kindī, the most important author of the 3rd/9th century, whose work directly reflects this kind of influence (cf. PIW 1 § 4.3). Similar tendencies may be seen in the work of philosophers of the 4th/10th century, such as Abū Bakr al-Rāzī (ibid. § 6.2) and al-Fārābī (ibid. § 8.2 and § 8.4.1), too. Even a work like the encyclopaedia of the Iḥwān al-Ṣafā', probably composed no earlier than the decade between 360/970 and 370/980, directly reflects the selection and orientation of the Greek sources available in Arabic translation at the time (ibid. § 9.4.2.3).

Soon afterwards, however, the significance of these connections dwindled. We may still encounter a few Greek-(Syriac)-Arabic translators by the end of the 4th/10th century, especially in the context of the 'Aḡudī hospital founded in Baghdad in 372/982. One of these was the Melkite physician Naẓīf b. Yumn al-Rūmī, who translated several medical works as well as parts of Aristotle's *Metaphysics* and was apparently interested in Euclid's *Elements*; another was his colleague Ibrāhīm b. Bakkūš al-'Aššārī, who was the translator of several works by Theophrastus and the editor of a Syriac version of Aristotle's *Sophistical Refutations*. Activities of this kind, however, increasingly became the exception, and appear to have ceased altogether in the 5th/11th century. At least we hear no more about new translations of ancient texts that influenced philosophical debate (Gutas 1998 [\*42: 151–155]).

This is likely to be closely linked to the second difference observable between the two periods, namely the shift in the philosophical paradigm that served as the model and starting point for the philosophical observations of the contemporary actors. Until the beginning of the 5th/11th century, Aristotle was regarded as the definitive authority. His position may not have been exclusive, as some authors preferred other Greek authorities; Abū Bakr al-Rāzī, for instance, responded especially to Plato and Galen, while many Ismā'īlī thinkers looked to Neo-Platonism. To most philosophers writing in Arabic, however, Aristotle offered an uncontested paradigm that must be understood and interpreted. This was expressed in many eulogies, most explicitly by al-Fārābī who not only accepted the Stagirite's unique position but explained it in the context of cultural history in *On the Emergence of Philosophy* and *The*

*Particles* (PIW 1 § 8.4.1). His opinion would be shared by all other followers of the Baghdad School including Ibn al-Ṭayyib (d. 435/1043). In other regions of the Islamic world, Aristotle was revered as the unsurpassed master for even longer. This is particularly true of Spain, where Ṣāʿid al-Andalusī (d. 462/1070) composed a universal history of the sciences, entitled *Ṭabaqāt al-umam* (*The Generations of Nations*), around the middle of the 5th/11th century. Here he describes in detail the contributions made to the development of the sciences by the various peoples (Indians, Persians, Chaldeans [Babylonians], Greeks, Romans, [late ancient] Egyptians, Arabs, and [Spanish] Jews). In his opinion, it is clear that most outstanding achievements in philosophy, medicine, mathematics, and astronomy are due to the Greeks, and that Aristotle was ‘the seal of their philosophers and the chief among their scholars’ (*ḥātimat ḥukamāʾihim wa-sayyid ʿulamāʾihim*) (Ṣāʿid, *Ṭabaqāt* [\* 2: 24,7]).

As Ṣāʿid al-Andalusī wrote these lines, the eastern part of the Islamic world already witnessed a paradigm shift initiated by Ibn Sīnā’s (d. 428/1037) monumental oeuvre. It not only held great fascination for his immediate circle (cf. § 2.1 below) but was met with interest across a much broader range of readers, soon becoming a new point of reference for philosophical discourse. Ibn Sīnā, too, based his deliberations on the *Corpus Aristotelicum*. In fact, his philosophical activity may be described as a continuous debate with Aristotelian tradition (Gutas 2014 [\*76]). This links him with his late ancient and Arabic predecessors who also investigated the Aristotelian corpus, endeavouring to find conceptual bridges for its internal divergences (for instance between the *Categories* and the *Metaphysics*) as well as the differences between Aristotle and Plato, for instance in the context of the image of God or the doctrine of the soul (Wisnovsky 2003 [\*48; 15. 43–141]). At the same time, Ibn Sīnā’s philosophical project aims far beyond this exegetic concern. He not only wants to understand Aristotle, but to surpass his doctrine and transpose it into a new synthesis. His objective is to combine the insights of philosophy with the contemporary insights of the sciences (medicine, astronomy, etc.) and with certain concerns of Islamic theology (cf. § 1.4.1 below and Wisnovsky 2003 [\*48: 16. 145–160. 227–243]). Ultimately, this led to a new paradigm that went beyond the ‘Ammonian Synthesis’, setting new standards not only within the field of metaphysics (thus already Goichon 1938 [\*3] and Verbeke 1983 [\*21]), but throughout wide swathes of philosophy. This was accompanied by linguistic transformation. Central terms such as ‘being’, ‘essence’, ‘necessity’, and ‘possibility’, which had long been established in philosophical terminology, were given new significance by Ibn Sīnā (Wisnovsky 2003 [\*48: 145–263]).

The reaction to Ibn Sīnā was correspondingly vehement. He no longer presented philosophy as an ‘alien’ intellectual heritage, but as a comprehensive science including both the well-established (late) ancient topics and the

fundamental concerns of Islamic society of the 5th/11th century, which were integrated into philosophical discourse (examples of this are provided by Gutas in § 4.5 below). This could only fascinate educated Muslims, and would soon lead to a shift of emphasis. Philosophy was no longer a matter for a small coterie of experts, but increasingly moved to the centre of intellectual discussion. Moreover, this was not a momentary development, but an incisive and enduring process which may be called the third and perhaps major difference between this period and the preceding centuries.

The debate surrounding Ibn Sīnā's theories persisted and may be seen as an intensive struggle to find the right path. On one side were scholars who embraced his views or diverged from them only marginally. Their long line begins with his immediate companions al-Ġūzġānī (d. after 428/337), al-Ma'šūmī (d. c. 430/1038–1039), Ibn Zayla (d. c. 440/1048–1049), and Bahmanyār (d. 458/1066–1067?) (for all these, cf. § 2.1 below), leading through Abū l-'Abbās al-Lawkarī (d. after 503/1109) (cf. § 2.2) to the 'Avicennians' of the 6th/12th century: 'Umar al-Ḥayyām (d. 517/1123–1124 or 526/1131–1132), Muḥammad al-Hindī (d. c. 529/1135), al-Īlāqī (d. 536/1141), Ibn Sahlān al-Sāwī (d. after 536/1141) und Maġdaddīn al-Ġilī (d. before 596/1199) (for all these, cf. § 4.1 below) – all of them, in fact, authors working in the eastern or the central part of the Islamic world.

On the other side, we meet several critical voices. The kind of opposition they express differs, documenting a broad range of attitudes to philosophy current at the time. One position was to criticise 'the philosophers' – this usually referred to Ibn Sīnā – from outside, i.e. from the point of view of the religious scholar. The most outstanding instance is al-Ġazālī (d. 505/1111) who found them guilty of two capital errors in his famous polemical text *Tahāfut al-falāsifa* (*The Incoherence of the Philosophers*): the methodological inability to prove their theories in accordance with their own rules of logic, and the fact that their metaphysics and physics were in breach of several of the fundamental assumptions of Islam (cf. § 3 below). Other authors, who also argued theologically, adopted a similar perspective: Ibn al-Malāḥimī (d. 536/1141), who attacked the philosophers in order to defend his own Mu'tazilī beliefs (§ 4.2.1); Ibn Ḡaylān al-Balḥī (fl. 580/1184), and Šaraf al-Dīn al-Mas'ūdī (d. after 582/1182), who attacked Ibn Sīnā because of certain transgressions against Sunni doctrine, with al-Mas'ūdī offering more differentiated arguments based on more precise philosophical knowledge (§ 4.2.4); and finally Abū l-Faṭḥ al-Šahrastānī (d. 548/1153), who composed a theological polemic in which Ibn Sīnā's metaphysics was criticised from the point of view of Ismā'īlī doctrine (§ 4.2.2).

Another approach, which instead understood itself as being an internal critique of philosophy, was most strikingly represented by Abū l-Barakāt al-Baġdādī (d. between 555–566/1160–1170). While he, too, represented religious

convictions, even converting to Islam from Judaism, his disagreement with Ibn Sīnā was carried out not so much on the theological level but rather within the philosophical context. This is shown in his *magnum opus*, the voluminous *al-Kitāb al-Mu'tabar fī l-ḥikma* (*The Carefully Considered Book of Philosophy*). It does not recur to tenets of faith anywhere, employing rational arguments throughout. With his theories as well as his method of 'careful consideration' (*i'tibār*), Abū l-Barakāt distances himself clearly from Ibn Sīnā (§ 4.2.3).

A third position aimed at combining philosophy with Sufism. This, too, was promoted by several thinkers in the 6th/12th century, although the ideas of how this aim might be achieved could differ considerably. The argument proposed by Ibn Ṭufayl (d. 581/1185), a Spanish author, was inclusivist. His novel *Ḥayy b. Yaqẓān* (*Alive, Son of Awake*) describes a path of knowledge in which both traditions are joined harmoniously. The introduction to the text states explicitly that one can recognise the truth only by following Ibn Sīnā as well as al-Ġazālī, and by revealing the inner meaning of their respective teachings (cf. § 2 in Vol. 2-2). Šihāb al-Dīn al-Suhrawardī (d. 587/1191), an approximate contemporary of Ibn Ṭufayl's in the east of the Islamic world, also had Sufi leanings. As a result, modern scholars used to characterize him as having combined philosophy with Sufism, and there are still good reasons to do that. Recent scholarship, however, stresses more his philosophical insights. Jari Kaukua e.g. argues in a book which has just appeared that Suhrawardī's corpus offers a rival philosophical system to Ibn Sīnā's, with many technical positions on topics like the essence/existence distinction, the nature of matter, the sufficiency of nominal definitions, etc. (Kaukua 2022 [\*114]). Interpreted in that way Suhrawardī's project would be essentially philosophical and share some important features with the project of Abū l-Barakāt.

Still other critics had no intention of modifying Ibn Sīnā's teachings, let alone developing them further. On the contrary: In their view, the changes he had made to the Aristotelian system had weakened philosophy and made it vulnerable to attacks like al-Ġazālī's *Tahāfut*. The only possible reaction to this plight was to restore the original paradigm. Demands of this kind were consequently raised in several locations in the Islamic world. In the West – with great success – by Ibn Rušd (d. 595/1198), who went back to concentrating entirely on commenting on the Aristotelian corpus (cf. § 3 in Vol. 2-2). In the East – with rather less resonance – by 'Abd al-Laṭīf al-Baġdādī (d. 629/1231), who advised the readers of his *Kitāb al-Naṣīḥatayn* (*Book of Two Pieces of Advice*) to return to Hippocrates in medicine, and to Plato and Aristotle in philosophy (cf. § 4.2.5 below).

And finally, there was Faḥr al-Dīn al-Rāzī (d. 606/1210). His activity marks the transition from the period discussed in this volume to the subsequent period (13th–18th cent.), as it were. Al-Rāzī, who was an expert in the religious

disciplines (theology, jurisprudence, Quranic exegesis) as well as the writings of Ibn Sīnā, adopted the method of ‘carefully considering’ (*i’tibār*) from Abū l-Barakāt, applying it not only to philosophy but indeed to all the sciences which he studied systematically (cf. § 6 below). As a result, he, more than his predecessors, created a new field of discourse for the various intellectual traditions. Ibn Sīnā’s thought occupied a privileged position therein, as al-Rāzī’s detailed and vehement discussion of the content of his last summa, *al-Iṣārāt wa-l-tanbīhāt* (*Pointers and Reminders*) impressively demonstrates (cf. Shihadeh 2017 [\*91]). Al-Rāzī did not reject philosophy but critically scrutinised it in order to combine it constructively with considerations based on theology as well as other religious sciences. How these connections evolved individually and in the long term, however, was decided not by him but by intellectuals of the following generations, who will be the subject of Volume 3 of this series.

## 2 Intellectual Contexts

2.1 The Growing Resonance of Philosophy – 2.2 Logic – 2.3 Theology – 2.4 Jurisprudence – 2.5 Linguistic and Literary Theory

### 2.1 *The Growing Resonance of Philosophy*

It was not only the philosophical content of Ibn Sīnā’s teachings that gave rise to this sort of reaction. Another factor was their ability to establish connections to other disciplines. Indeed, it is remarkable that the reception of his ideas was not limited to the philosophical class but extended to other circles as well, opening new contexts to philosophy that had previously regarded it with reservation or rejection.

Of course, earlier philosophers, too, had observed their intellectual surroundings and reacted to them. We know, for instance, that al-Kindī’s teachings displayed a number of points of contact with the Mu‘tazilī theology of his time (Walzer 1962 [\*6: 176–200], Ivry 1974 [\*13: 22], Endress 1991 [\*32: 155, 158]). Later representatives of his school such as Abū l-Ḥasan al-‘Āmirī (d. 381/992) were also willing to combine philosophy and religious or theological thought (cf. PIW 1 § 5.2.3). Even al-Fārābī was open to this idea. He continued to accuse the Muslim theologians of having achieved only limited access to knowledge and of interpreting the content of the revelation inadequately (Rudolph 2007 [\*63: 61–78, esp. 67–68]). This did not, however, stop him from taking the core concerns of Islamic theology seriously and discussing them from

the philosophical point of view step by step in his *Mabādī' ārā' ahl al-madīna al-fāḍila* (*The Principles of the Opinions of the Inhabitants of the Excellent City*) (Rudolph 2008 [\*64], 2022 [\*115: 17–32]; cf. PIW 1 § 8.3.9).

All these endeavours remained without significant resonance. The philosophical concepts of the 3rd/9th and 4th/10th centuries circulated to a certain degree among authors who were interested in ethics, medicine and the natural sciences, or Ismā'īlī metaphysical speculations (cf. PIW 1 § 9). They did not reach the mainstream of Islamic scholarship, though, with the result that the sciences described as 'ancient' or 'alien' and the 'religious' disciplines (theology, jurisprudence, Quranic exegesis, Arabic grammar, etc.) generally remained separate during this time. It was only in the 5th/11th century that the distance between them began to erode. A major stimulus came from Ibn Sīnā's doctrine which, as we have mentioned, offered conceptual advances in a variety of fields. This led to philosophical theses and questions, or at least notions, being received in a variety of contexts. In the following, the processes through which this occurred will be demonstrated using a few significant examples. Due to the current state of knowledge, our observations can be preliminary only, as research has so far concentrated almost exclusively on the history of ideas, not inquiring into the intellectual contexts of philosophising until recently, when this aspect has increasingly come to the fore (cf. Adamson 2019 [\*98]; Germann, Najafi 2021 [\*109], as well as the further volumes scheduled in the series *Philosophy in the Islamic World in Context*).

## 2.2 Logic

Logic provides us with a varied field for observations of this kind. Its status underwent a fundamental change in the 5th/11th century, as it transformed from a science for experts to an instrument employed in many disciplines, and as such was introduced into the general educational curriculum. Previously it had played at best a marginal role in the deliberations of religious scholars. We know that individual theological issues of the early Islamic period, especially the 2nd/8th century, were discussed with recourse to late ancient logical concepts. Among these was, for instance, the question of how indefinite or generally expressed statements in the Quran (such as 'the evildoers are in hell') should be quantified or modalised, a matter of immediate importance not least because the answer to the question directly influenced religious doctrine. Even so, the discussions presumed at best selective access to Greek logic. It is moreover not clear whether the actors (primarily theologians of the Murǧi'a and the Mu'tazila) were even aware of this connection. It is entirely possible that their arguments rested not on the text-based study of Aristotelian or Stoic logic, but



rather on the reception of oral discourses taking place in several languages since late antiquity (Greek, Syriac, later Arabic) (Schöck 2005 [\*57], 2006 [\*61: 14–16 and *passim*]).

This is even more true as Islamic theology (*kalām*) and jurisprudence (*fiqh*) soon evolved their own methods of drawing conclusions and conducting arguments. They were not based in Aristotelian syllogistics, but emphasised conclusions by analogy, which were called ‘concluding to the hidden from the manifest’ (*qiyās al-ġā’ib ‘alā l-šāhid* or *istidlāl bi-l-šāhid ‘alā l-ġā’ib*) in *kalām*, and, more succinctly, ‘analogical argument’ (*qiyās*) in *fiqh* (van Ess 1970 [\*9], 1976 [\*15], 1991–1997 [\*34: IV 660–666]). As a consequence of this development, religious scholars and logicians formed rival groups in the 3rd/9th and 4th/10th centuries. *Kalām* scholars did not study Aristotelian logic but refuted it, with examples including the Mu‘tazilī Abū l-‘Abbās al-Nāšī’ (d. 293/906) and the Shiīte Ḥasan ibn Mūsā al-Nawbaḥtī (d. c. 305/917) (El-Rouayheb 2016 [\*81: 408]). Or else they endeavoured to undermine the logicians’ claims with derision and irony, as did the prominent Mu‘tazilī Abū Hāšim al-Ġubbā’ī (d. 321/933), to whom the sources ascribe the sarcastic question whether the term ‘logic’ (*manṭiq*), rather than denoting an independent form of knowledge, was not simply derived from the word ‘speech/talk’ (*nuṭq*) (van Ess 1970 [\*9: 21]).

The backdrop of such remarks was the fundamental rivalry between (Greek) logic and (Arabic) grammar. It found its visible expression in several public debates concerned with the scope of application of the two disciplines. One of these was carried out towards the end of the 5th/11th century in Spain, between the philosopher Ibn Bāġġa and his opponent Ibn al-Sīd al-Baṭalyawṣī (cf. Elamrani-Jamal 1979 [\*18] and PIW 2-2 § 2). Much better known, however, is another dispute, conducted in 326/937–938 in Baghdad between the logician and philosopher Abū Bišr Mattā (d. 328/940) and the grammarian and theologian Abū Sa‘īd al-Sīrāfī (d. 368/979). In a report by Abū Ḥayyān al-Tawḥīdī (d. 414/1023) (regarding him see PIW 1 § 5.3), grammar emerges victorious. Only grammar, he says, knows the diverse possibilities of expression and meaning that the Arabic language possesses, and is thus the only authority capable of deciding which statements are true and which false. Aristotelian logic, on the other hand, is not capable of this as, despite its claim to universality, it is subject to the conventions of Greek. Even when it advances as far as rules of seemingly universal application, it has to express them in grammatically correct Arabic (Adamson, Key 2015 [\*79: 76–82]; cf. Endress 1986 [\*23], Kühn 1986 [\*24]).

Many religious scholars of the 4th/10th century were of this opinion, in fact, not just al-Sīrāfī who is celebrated here as the victorious debater. For them, not logic but Arabic grammar was the methodological guiding science enabling

them to fulfil the tasks of religious hermeneutics (Quranic exegesis, interpretation of the *ṣarīʿa*, etc.). The fact that very few authors, such as the jurist Abū Bakr al-Ġaṣṣāṣ (d. 370/980), were willing to travel a separate path and integrate certain elements of logic into their hermeneutics, did not change the overall situation (Shehaby 1975 [\*14]).

A change came only in the 5th/11th century. The first indication was given by the Andalusian scholar Ibn Ḥazm (d. 456/1064) who spoke out against the application of traditional conclusions by analogy (*qiyās*) in Islamic law, proposing instead that Aristotelian logic including syllogistics be applied in religious hermeneutics (Chejne 1984 [\*22]; cf. Abrahamov 2016 [\*80: 266–269]). However, his initiative had no effect as he was a member of the minority Zāhiri school, and as such had no influence on Sunni theology and jurisprudence (Hallaq 1997 [\*38: 137]). Furthermore, Ibn Ḥazm's knowledge of philosophy was limited to the basic texts of the *Organon* and the older logical tradition (Street 2004 [\*50: 561]), while the innovative approaches of Ibn Sīnā's works were unknown in Spain in his time.

Consequently, the true turning point in the development is marked by the activity of al-Ġazālī (d. 505/111). He not only studied Ibn Sīnā's logic texts but also recommended them to all religious scholars, composing several handbooks himself in order to introduce his colleagues to logic. The details of this process are described at § 3 below (§ 3.3.3 and § 3.4.2; cf. also Rudolph 2005 [\*56]). It thus suffices to point out here that al-Ġazālī's initiative was particularly successful. He succeeded in integrating logic into the study of the religious sciences as a propaedeutic, ensuring it a place within the curriculum of the madrasa. The result was a significant rise in logical studies (El-Rouayheb 2019 [\*101]; cf. also PIW 3), as well as a turning point in Islamic theology. This was so important that Ibn Ḥaldūn (d. 808/1406), the famous historiographer and historian of science from Tunis, wrote in the *Muqaddima* (*Introduction*) to his *Kitāb al-Iḥṣān* (*Book of Examples*) that the history of theology was divided into two phases: the time *before* al-Ġazālī, during which the theologians (Ar. *mutakallimūn*) refused to apply Aristotelian logic, and the time *after* al-Ġazālī, when they – with very few exceptions – accepted logic as a methodological guiding science (Ibn Ḥaldūn, *Muqaddima* [\*1: III 41. 113–116; Engl. transl. III 51–52. 143–146]; for an analysis of Ibn Ḥaldūn's view cf. Street 2004 [\*50: 556–558]).

Ibn Ḥaldūn was clearly aware of the profound and lasting changes that began in the 6th/12th century. Consequently, he distinguished between the method of 'the earlier ones' (*al-mutaqaddimūn*) and the method of 'the later ones' (*al-mutaʾaḥḥirūn*), which at first sight seems to imply that 'the later ones' superseded their predecessors. Still, we must be wary of evoking false associations

with terms of this kind. The pair *al-mutaqaddimūn/al-muta'ahhīrūn* was used by many Arabic authors (not only in philosophy and theology but also in literature), expressing a variety of chronological and material delimitations (Wisnovsky 2014 [\*78: 704]). The presumption that the 'later ones' must represent an ascending trend or progress compared to the 'earlier ones' was by no means a universal one. Ibn Ḥaldūn certainly used the phrase with a negative connotation. He accused the 'later' theologians of mixing their science too much with philosophy (which he criticised) (Ibn Ḥaldūn, *Muqaddima* [\*1: III 41. 43; Engl. transl. III 52. 54]). This documents that philosophy not only gained influence in the later period, but also had to expect growing resistance.

### 2.3 Theology

The interaction between philosophy and theology was not, however, limited to the methodological level. Within the field of ontology (or natural philosophy) and metaphysics, too, it is possible to discern times of proximity and times of distance between the two disciplines which even display a certain parallelism with the development in logic. Here, too, it is possible to distinguish three phases: an early one in which the theologians still actively engaged with the ancient heritage of philosophy, science, and education (2nd/8th cent. and long periods of the 3rd/9th cent.); a middle phase during which the two disciplines remained mostly separate and the characteristic system concepts of *kalām* were developed (4th/10th cent. and parts of the 5th/11th cent.); and a late period characterised by continuing reception of Ibn Sīnā's doctrine and a deliberate rapprochement between theology and philosophy (from the late 5th/11th cent.; regarding this arrangement cf. Frank 1978 [\*16: 1–7]).

Conceptual standards inherited from late antiquity played a major part during the early phase, as shown by many examples. The line begins with Ġahm b. Ṣafwān (d. 128/745–746), the first scholar known to us who engaged in systematic theology. In it, he emphasises the absolute transcendence and distinctness of God. For God, according to Ġahm's famous thesis, generated everything existent that we know, without being 'something' (*šay'*) Himself. Modern scholarship usually traces this position back to Neo-Platonic models. It strongly recalls Neo-Platonic metaphysics, which locates the highest principle of all things 'beyond the existent' (ἐπέκεινα τῆς οὐσίας) (Frank 1965 [\*7], van Ess 1991–1997 [\*34: II 499–500]; cf. Zimmermann 1986 [\*26: 135–136]). Alternatively, it has been pointed out that similar considerations are found in Christian debates over the Trinity, particularly with Arius and his followers (Schöck 2016 [88: 56–65. 76]).

Two generations after Ġahm b. Ṣafwān, we can observe ancient and Islamic thought converging in the works of ʿĪrār b. ʿAmr (d. 180/796 or 200/815). While

Ḍirār was primarily concerned with Quranic exegesis, central elements of his ontology, such as the idea that created existence does not consist of bodies but of 'bundles of accidents', can be understood only within a late ancient context (regarding his doctrine van Ess 1991–1997 [\*34: III 37–42]). Where precisely it should be located in this context, however, is once more difficult to determine. What scholarship has been able to establish so far is limited to vague references to Aristotle, certain similarities with Alexander of Aphrodisias, Porphyry, and John Philoponus, as well as an interesting parallel with the theology of Gregory of Nyssa (van Ess 1991–1997 [\*34: III 42–44], Schöck 2016 [\*88: 66–75]). Here, too, we must assume broad and diffuse transmission of ideas. In addition, Ḍirār explicitly distanced himself from Aristotle, as a work, unfortunately lost, entitled *al-Radd 'alā Aristālis fī l-ḡawāhir wa-l-a'rāḍ* (*Refutation of Aristotle Regarding Substances and Accidents*) is attributed to him.

The ambivalent relationship with antiquity, comprising adoption and rejection, appears to have been characteristic of early *kalām*. Like Ḍirār b. 'Amr, other theologians distanced themselves explicitly from the philosophical heritage of the Greeks as well. One of them, the Shiite Hišām b. al-Ḥakam (d. 179/795), wrote a *Refutation of Aristotle Regarding the Concept of God's Unity* (*al-Radd 'alā Aristālis fī l-tawḥīd*). Another, the Mu'tazili Bišr b. al-Mu'tamir (d. 210/825), was said to have written a book entitled *Refutation of the Philosophers* (*al-Radd 'alā l-falāsifa*) (references for all these titles in van Ess 1991–1997 [\*34: v 229 no. 8 for Ḍirār b. 'Amr; v 70 no. 8 for Hišām b. al-Ḥakam; v 285 no. 49 for Bišr b. al-Mu'tamir]). Even so, in parallel with this kind of polemic, the process of reception continued. Al-Nazzām (d. before 232/847), one of the most prominent Mu'tazilis of the 3rd/9th century, developed a doctrine that resonates with those of ancient thinkers, among them Damascius and Sextus Empiricus (Sorabji 1982 [\*20]). On the basis of his research into early theology, van Ess consequently reaches the conclusion that 'the Mu'tazilites were not only rooted in the tradition of the Quran but also moved within the framework of those problems that had been delimited by the ideas of late antiquity. [...] For all their fundamental differences, early Muslims were often as close to antiquity in their choice of topics as the Church Fathers. During antiquity, theology had rested on cosmology, and a *mutakallim* like Nazzām fitted this image well' (van Ess 1991–1997 [\*34: IV 359]).

Things began to change around the turn of the 4th/10th century, opening a new chapter in the relationship between theology and philosophy. The first indications emerged in the Mu'tazila, with new theological concepts harking back to the internal (school) heritage. Al-Ḡubbā'ī (d. 303/915–916) and his son Abū Hāšim b. al-Ḡubbā'ī (d. 321/933) systematised and profiled the teachings of the Basran Mu'tazila, Abū l-Qāsim al-Ka'bī al-Balḥī (d. 319/931) those of the

Baghdad Mu'tazila (Schmidtke 2016 [\*86: 159–165]). The Basran branch in particular developed a conceptual framework oriented towards intrinsic motifs of Islamic theology, of Quranic exegesis, and above all of Arabic grammar, dissociating itself to a considerable extent from anything that recalls late ancient thought (Frank 1978 [\*16: 4–5. 8–38]).

This trend becomes clearer still when we consider the contemporary developments in Sunni theological thought. While Abū Maṣṣūr al-Māturīdī (d. 333/944), after whom the Māturīdī school was named, does not reject all the elements of the philosophical heritage (Rudolph 1997 [\*40: 213. 272. 335; Engl. transl. 192. 246. 301], Wisnovsky 2003 [\*48: 156–158]), he does limit its relevance, accusing Aristotle in his *Kitāb al-Tawḥīd* (*Book on the Belief in the One God*) of having been the head (*ṣāhib*) of the materialists and the believers in the eternal duration of the world (Rudolph 1997 [\*40: 186–187; Engl. transl. 169–170]). Abū l-Ḥasan al-Aṣ'arī (d. 324/935–936), the founder of the largest of the Sunni schools, occupies an even more extreme position. His theological deliberations primarily serve a traditionalist understanding of Islam with the emphasis on God's omnipotence (Gimaret 1990 [\*29: 22]). This does not rule out interactions with philosophical concepts, but it does mean that explicit connections with philosophy, and with Aristotle in particular, play no part in his thought (with the exception of being referred to in a heresiographical context; cf. van Ess 2011 [\*68: 1 460]).

This statement does not imply a judgment of al-Aṣ'arī's rationality or the quality of his arguments. On the contrary: His observations are stringent and possessed of impressive coherence, which is why Gimaret (1990 [\*29: 23]) considered them to be equal to Ibn Sīnā's teachings at a systematic level. Al-Aṣ'arī's objective, however, was a different one. He formulated positions that contradicted the philosophers' ideas, with only a few overlaps (e.g. in the context of essence/existence; cf. Jolivet 1995 [\*36: 232–236], Wisnovsky 2003 [\*48: 145–153]). In his understanding, autonomous substances and natures are replaced by dependent atoms and accidents; objective ethical norms are superseded by their comprehensive dependency on God's decrees; worldly causation is replaced by the effective power of God alone, a position that would later be called 'occasionalism' (Gimaret 1990 [\*29: 43–97. 433–451], Rudolph 2016 [\*84: 354–357]). These and other distinctive teachings constituted a dogmatic system that distinguished 'classic' *kalām*, especially of the 4th/10th century, from contemporary philosophy (e.g. that of al-Fārābī), as expressed very clearly by later observers such as the Jewish scholar Mošeh ben Maimon (i.e. Maimonides; d. 601/1204; regarding Maimonides' description of *kalām* doctrines cf. Schwarz 1991–1992 [\*33]).

Only during the third phase, i.e. from the 5th/11th century onwards, did theology and philosophy grow noticeably closer. Noteworthy first indications are found in the works of the Mu'tazilī Abū l-Ḥusayn al-Baṣrī (d. 436/1044). Abū l-Ḥusayn modified the theology of the Basran Mu'tazila, introducing numerous philosophical elements into its ontology and doctrine of God. He did not yet refer to Ibn Sīnā, living in Iran at the same time, but to the Baghdad Aristotelians Ibn al-Samḥ (d. 418/1027) and Ibn al-Ṭayyib (d. 435/1043), under whom he had studied medicine as well as philosophy (Schmidtke 2016 [\*86: 169–172]; regarding Ibn al-Samḥ and Ibn al-Ṭayyib cf. PIW 1 § 7.5 and § 7.6).

Ibn Sīnā's influence on Islamic theology unfurled rapidly all the same, especially in the two Sunni schools. Interesting examples are the Māturīdī Abū l-Yusr al-Pazdawī (d. 493/1099–1100) and the Aṣ'arī Abū l-Ma'ālī al-Ḡuwaynī (d. 478/1085), as Wisnovsky (2004 [\*51: 65. 90–95]) was able to document. It is noticeable that al-Ḡuwaynī received the intellectual developments of his time particularly extensively, as his arguments not only display parallels with Ibn Sīnā but also with observations by Abū l-Ḥusayn al-Baṣrī, especially the re-formulation of the proof of the existence of God (cf. Rudolph 1997 [\*41], Madelung 2006 [\*59], Thiele 2016 [\*89: 235–236]).

A direct path leads from al-Ḡuwaynī to his pupil al-Ġazālī. The latter, as we have seen, attacked Ibn Sīnā in spectacular fashion. At the same time, though, he helped to integrate a number of philosophical ideas into *kalām* (Griffel 2009 [\*66: 5–12. 275–286]). By the 6th/12th century, hardly any theological discussion was conducted without reference to Ibn Sīnā. Even scholars who roundly rejected his doctrine, used terms and ideas coined by him (cf. § 4.2 below). Philosophy and theology became increasingly intermeshed, becoming each other's most important intellectual context. This ultimately led to a restructuring of the entire field at the hands of Faḥr al-Dīn al-Rāzī and his successors (Shihadeh 2005 [\*58], Eichner 2009 [\*65]).

#### 2.4 *Jurisprudence*

Within the field of Islamic law, the development is less clear-cut, as already stated by Ibn Ḥaldūn, the prominent historiographer and historian of science of the 8th/14th century. While, as we have seen, he distinguishes a period *before* al-Ġazālī and a period *after* al-Ġazālī in the case of theology, he does not apply a comparable periodisation either to the 'science of the principles of the law' (*ilm uṣūl al-fiqh*) or to applied 'jurisprudence' (*ilm al-fiqh*) (Ibn Ḥaldūn, *Muqaddima* [\*1: III 1–17. 17–26; Engl. transl. 3–23. 23–34]).

This assessment coincides with the observations of modern scholarship, which has emphasised for some time that Islamic law developed in continuous

rather than contrasting steps, with the beginnings of the formulation of theories probably datable to the 2nd/8th century. A decisive part was played by Muḥammad al-Šāfiʿī (d. 204/820) who succeeded in establishing the conceptual boundaries of jurisprudence. According to him there are two *material* sources from which law may be derived, namely the Quran and the Sunna (i.e. the prophetic tradition), and two *methodological* principles that may be applied in this process, namely the consensus of the legal scholars and the independent conclusion by analogy to reach a verdict (summarised by Hallaq 1997 [\*38: 21–29]; for detailed research on al-Šāfiʿī cf. Lowry 2007 [\*62]).

This division became the basis of all further efforts, and al-Šāfiʿī would later be called the founder of the ‘science of the principles of law’ with some justification. Faḥr al-Dīn al-Rāzī, who was as versed in *fiqh* as he was in theology and philosophy, went along with this assessment, declaring that al-Šāfiʿī occupied the same historical position in the *uṣūl al-fiqh* as Aristotle did in logic (Hallaq 1993 [\*35: 599–600]). This documents the profound esteem al-Rāzī felt for the founder of the Šāfiʿī school of law, but it also shows the clear distinction he made between the disciplines: the methodology and epistemology of *uṣūl al-fiqh* represented a separate intellectual tradition in his view, and one that should be distinguished from the philosophers’ syllogistic.

This assessment corresponds to the historical development observable in the centuries following al-Šāfiʿī. While individual scholars such as Abū Bakr al-Ğaṣṣāṣ (d. 370/980) and Ibn Ḥazm (d. 456/1064), whom we already mentioned above, expressed their interest in Aristotelian logic, the large majority of jurists ignored it. This is also true for the 5th/11th century, during which the science of the *uṣūl al-fiqh* experienced an unprecedented boost, and comprehensive handbooks were written, covering the subject in systematic and theory-oriented fashion, but without any recourse to logic (Hallaq 1997 [\*38: 36–39]; an overview of the extant works of legal literature may be found in Muranyi 1987 [\*28: 309–322]).

Whenever there were contacts between philosophy and jurisprudence in the centuries following al-Šāfiʿī, these were usually initiated by the philosophers. In the *Kitāb al-Qiyās al-ṣaġīr* (*A Little Book on the Syllogism*), al-Fārābī analysed the inferences drawn by theologians and jurists (cf. PIW 1 385. 420–421), and commented on the relation between ethics and the law in several works (Bouhafa 2019 [\*100]). Ibn Sīnā devoted a detailed discussion to the question of whether our ethical judgements (such as ‘good’, ‘bad’, ‘justice’, ‘injustice’) have objective ontological foundations or whether they are exclusively based on God’s commandments and prohibitions, which tied in with a well-known theological-legal debate (Erlwein 2019 [\*102]). Comparable initiatives from the

other side, i.e. the legal perspective, remained absent for a long time. We know of no substantive attempts by legal scholars at understanding philosophical theories until well into the 5th/11th century, whether within the fields of ethics, politics, or epistemology.

This only changed once Ibn Sīnā's works began to be received in legal scholarship. Once again it was al-Ġazālī who played a significant part. He advised not only the theologians but also the jurists to study philosophical logic, even introducing his main work on the *uṣūl al-fiqh* with an overview of the basic concepts of logic (cf. the description of the *Mustaṣfā* at § 3.3.3 below). This appeal, however, had no lasting effect in practice, a development to which al-Ġazālī himself contributed by distinguishing between theology and jurisprudence in the application of logic. While he called on the theologians to replace their traditional 'conclusion to the hidden from the manifest' with Aristotelian syllogisms, he merely recommended that jurists 'study' syllogistics. In practice, though, when deliberating and justifying verdicts he considered it advisable to recur to the classical conclusion by analogy (*qiyās*) of Islamic law and not to apply syllogistic procedures (El-Rouayheb 2016 [\*81: 412–414], Rudolph 2019 [\*105: 74–79]; on al-Ġazālī's demonstration of the validity of conclusions by analogy in detail Opwis 2019 [\*104: 100–112]).

The response to al-Ġazālī's promotion of logic among jurists was correspondingly muted. Some scholars followed his invitation and actively championed the study of syllogistics. It seems that no decisive role was played by membership in the various schools of law, as supporters of the study of logic included Šāfi'īs such as Sayf al-Dīn al-Āmidī (d. 631/1233) (regarding him in detail Endress 2005 [\*52]), Ḥanbalīs like Ibn Qudāma (d. 631/1233), and the Mālikī Ibn al-Ḥāḡib (d. 646/1248), whose works would be widely studied later on. Yet this positive view remained a minority one, as most jurists positioned themselves against the use of logic. Some rejected it altogether, while others were satisfied to restrict the application of logic to individual problems and topics of legal theory (cf. Hallaq 1997 [\*38: 140–143, 257–258]).

Even so, a certain rapprochement between philosophy and jurisprudence did take place. After all, Ibn Sīnā's teachings on logic contained more than just syllogistic, and offered conceptual tools that could be useful for jurists. One of these was his division of the relations conveyed by linguistic expressions into 'congruence' (*muṭābaqa*), 'inclusion' (*taḍammun*), and 'implication' (*luẓūm* or *iltizām*), which was taken up by Faḥr al-Dīn al-Rāzī and other scholars (Kalbarczyk 2018 [\*95], 2019 [\*103]). It played a certain part in legal thought, but more still in language theory, and will thus be discussed in more detail in the next section.



A further example is Ibn Sīnā's doctrine of the intellect. Mullā Ḥusraw (d. 885/1480–1481), an important Ottoman scholar, found an interesting application for it. He explained the different grades of a human's legal capacity by linking them to the corresponding mental development from 'material intellect' (*'aql hayūlānī*) to 'intellect possessing disposition' (*'aql bi-l-malaka*) (Rudolph 2019 [\*105: 85–88]). We do not yet know whether Mullā Ḥusraw was directly familiar with Ibn Sīnā's works, or whether he drew on a later Avicennan thinker. Such examples may be surprising, but they indicate that there were some points of contact and convergences of interests between philosophy and jurisprudence. We can assume that contacts between the two disciplines grew closer from the 5th/11th century onwards, with Ibn Sīnā's ideas once again acting as a catalyst, although they were probably not the only link with jurisprudence (regarding Ibn Ruṣd, another interesting case, cf. Bou Akl 2019 [\*99] with further references).

## 2.5 *Linguistic and Literary Theory*

The list of interactions between philosophy and other knowledge traditions could easily be continued. During the centuries following Ibn Sīnā, it kept growing, coming to include even seemingly remote fields such as later Persian poetry (cf. Ayada 2012 [\*71]). But it is not our aim here to list all intellectual contexts of philosophising after the 5th/11th century, not least because this topic will be discussed in greater detail in Volume 3 (13th–18th centuries). In the present context it will suffice to emphasise one further remarkable exchange, namely the increasing use of philosophical concepts in Arabic linguistic and literary theory from the 5th/11th century onwards.

This development is, first of all, remarkable because grammar and logic originally formed, as mentioned above, competing explanatory systems. Their rivalry concerned not only the level of syntax and the correct formation of statements, which we have already touched upon. It also involved semantics, which inquires into the meanings of individual signs and sequences of signs, and is thus fundamental to all study of language.

In this respect, the philosophers traditionally followed the theory of signs laid out by Aristotle in the first chapter of *On Interpretation*. According to it, three levels – besides written characters – must be distinguished when analysing linguistic content: (1) the words or sounds (*φωναί*) we pronounce, (2) the affections of our soul (*παθήματα τῆς ψυχῆς*) these words denote, i.e. our ideas and thoughts (*νοήματα*), and (3) the things (*πράγματα*) represented by these ideas (Aristotle, *De Int.* 1, 16a3–8; on the interpretation of this passage by different Arabic philosophers cf. Eichner 2011 [\*67: 205–235]). The Arabic grammarians and linguists preferred a bi-partite model, recurring to a dichotomy that

had apparently spread in Arabic tradition early on and evolved independently of Greek heritage. According to this model, a semantic analysis must distinguish only between (1) the linguistic expression (*lafẓ*) or its vocal form, and (2) the meaning (*maʿnā*), i.e. the idea or cognitive content expressed (Heinrichs 1987 [\*27: 186], 1998 [\*43]).

The two models were not necessarily incompatible. After all, the grammarians could not deny that there is a connection between words and things, which meant that ultimately their analysis had a comparable structure. The disagreement between the two parties is consequently likely to have been primarily an argument concerning the perspective to be applied in the investigation. The proponents of the bi-partite model took language as their starting point and clearly assumed that usage of language determined thought in a certain way. The proponents of the tri-partite model, on the other hand, took things as their starting point and asked how they are represented in our thoughts and words.

Despite the potential for convergence, the two models thus developed separately, and were even pitted against each other. Philosophers such as Abū Bīṣr Mattā, al-Fārābī, Yahyā Ibn ʿAdī (d. 363/974) and Ibn al-Ṭayyib (d. 435/1043) embraced Aristotelian tripartition, while grammarians, writers, theologians, and legal scholars such as al-Sīrāfī, al-Ġāḥiẓ (d. 255/868–869) and al-Šāfiʿī upheld the *lafẓ*–*maʿnā* dichotomy. They all formulated undeniably innovative arguments, but the tenor of their positions remained the same throughout. Representatives of the first group emphasised the primacy, correspondence to reality, and universal validity of the intelligibles (*maʿqūlāt*; νοήματα) as opposed to the particularity and conventionality of linguistic signs. The second group, by contrast, pointed to the way thoughts are tied to language, and to the fact that the connection between thoughts and words is by no means trivial but in fact a complex one (e.g. in the case of polysemy). According to them, we learn this not only from language usage, which plays an important part in legal decisions, but also from ancient Arabic poetry, and, above all, the text of the Quran. Consequently, the primary and only reliable path to truth leads via the understanding of linguistic expressions, i.e. the instruments of language theory such as grammar and lexicography (Adamson, Key 2015 [\*79: 76–89]).

The front lines between the two camps only began to shift when Ibn Sīnā intervened in the debate. While he was firmly rooted in Aristotelian tradition himself, and his interest in words and concepts had above all to do with their use in syllogisms, his studies of the issue show that he attributed a rather higher place value to linguistic expression (*lafẓ*) than his philosophical predecessors had done.

Evidence of this is provided by Ibn Sīnā's admission that linguistic expressions must be analysed exactly, because their relation with cognitive content

(*ma'ānī*) can vary depending on their usage. This addressed problems such as homonymy and ambiguity or polysemy, which later Avicennans like Nāṣir al-Dīn al-Ṭūsī (d. 672/1274) would investigate in detail. Moreover, Ibn Sīnā's definition of the remit of logic was narrower than that of his predecessors. In his view, logic should above all be concerned with conclusions, definitions, and descriptions, whereas the subject matter of the *Categories* was not really part of its remit. This allowed the linguistic disciplines such as grammar, literary theory, and lexicography sufficient space in which to strive for semantic clarification (Adamson, Key 2015 [\*79: 89–91. 94]).

Ibn Sīnā's discussion of indefinite nouns such as 'human' (with reference to Aristotle, *De Int.* 1, 16a20–21) provide a further instance. He allows a variety of legitimate relations between *alfāẓ* and *ma'ānī*, corresponding to one of the linguists' central concerns. In a concrete instance, the connection between two cognitive contents may be expressed either by a linguistic compound or phrase ('rational, mortal, animate being') or by a single word ('human') (Adamson, Key 2015 [\*79: 92–93]).

His most important contribution to language theory, however, was his famous classification of names, most memorably expressed in his last summa *al-Iṣārāt wa-l-tanbīhāt* (*Pointers and Reminders*), but mentioned in other parts of his oeuvre as well. As indicated above, Ibn Sīnā distinguishes between three types of reference: (1) One form is the *muṭābaqa*, usually translated as 'congruence' and sometimes as 'equivalence'. It describes a complete correspondence between the denotation (*dāll*) and that which it denotes (*madlūl*). Ibn Sīnā adduces the example of the expressions 'triangle' and 'figure with three sides' in the *Iṣārāt*, but it also applies to other definition-based equations such as 'woman' and 'adult female human'. (2) The second form is 'inclusion' (*taḍammun*), where the two expressions do not coincide, but one includes the other. This applies when a specific name refers to something more general, i.e. 'triangle' to 'figure', 'bird' to 'animal', or 'woman' to 'human', the relation between species and genus being presumed in these instances. (3) The third instance, however, is the most interesting: 'implication' or 'concomitance' (*iltizām*). It is no longer limited by the framework provided by the Aristotelian doctrine of definitions, but deliberately indicates elements that go beyond it. The range of examples we might give is correspondingly broad. It starts with logical implicatures such as 'ceiling' and 'supporting wall', or 'human' and 'capable of writing', mentioned by Ibn Sīnā in his *Iṣārāt*. The potential uses of *iltizām*, however, go much further. They include all forms of transferred or figurative expressions like metaphors (e.g. 'lion' and 'courageous human') and metonymies (e.g. 'laurel' and 'glory'), opening the door for linguistic references favoured by

literature and especially poetry (Ali 2-1021 [\*108: 276–277. 288–105], Street 2021 [\*112: 103–108. 124]; cf. Adamson, Key 2015 [\*79: 91–92]).

It was only a matter of time until these ideas made their way into the linguistic disciplines, although when and with which author their reception began is still a matter of controversy among scholars, as the evidence available is not unambiguous. One likely possibility is ‘Abd al-Qāhir al-Ġurġānī (d. 471/1078 or 474/1081), the ‘uncontested highpoint of all Arabic literary theory’ (Heinrichs 1987 [\*27: 184]). He composed *Asrār al-balāġa* (*Secrets of [the Art of] Eloquence*) (Germ. transl. Ritter 1959 [\*5]) and *Dalā’il al-iġāz* (*The Signs of the Inimitability [of the Quran]*) (Fr. transl. Rachad 2006 [\*60]), two works that would be fundamental for all later discussions of imagery and syntactic-stylistic structures (on his life and work cf. Harb, Key 2018 [\*94], Harb 2020 [\*107]). These texts are highly original and independent of Aristotle’s *Rhetoric* and *Poetics*. Some phrases, however, display parallels with Ibn Sīnā’s texts on logic. Whether this justifies the assumption that al-Ġurġānī read Ibn Sīnā’s works requires further investigation. Older scholarship tended to reject this assumption (above all Abu Deeb 1979 [\*17: 258–259. 310–317]), while more recent authors are inclined to accept it (Larkin 1995 [\*37: 145–149], Key 2018 [\*96: 203. 213–219. 237–243]; cf. Key 2021 [\*111: 96]).

Similar caveats are unnecessary in the case of later representatives of linguistic and literary studies, first and foremost Ḥāzim al-Qarṭaġannī (d. 684/1285), who deliberately chose the Aristotelian tradition of poetics and logic as the foundation for his own theory of poetry, explicitly referring to al-Fārābī and Ibn Sīnā (for further information regarding him cf. Heinrichs 1969 [\*8]; also Heinrichs 1987 [\*27: 185. 190]). However, Ḥāzim takes us into the 7th/13th century, a later phase of studies in linguistic and literary theory, on which we shall focus in Volume 3 rather than here.

### 3 Institutional Contexts

#### 3.1 Professions – 3.2 Princely Courts – 3.3 Madrasas

##### 3.1 Professions

As we have seen, the 5th/11th and 6th/12th centuries saw a change in the intellectual conditions under which philosophising took place. This is also true of the social and institutional contexts, which also underwent perceptible modifications during this time. In order to sketch them, however, we are reliant on preliminary considerations even more than in the intellectual contexts,

as these aspects of the history of philosophy in the Islamic world have been barely investigated so far.

To begin with, we can assert that philosophers were not regarded as a separate professional class in the Islamic world, any more than they were in Europe and other parts of the world. This is due to the fact that the understanding of wisdom and scholarship was not defined by a single discipline in 'pre-modern' societies but rather by a broad range of studies and knowledge. Furthermore, philosophical knowledge cannot be applied to a practical field of activity. In the Islamic world, someone who possessed legal knowledge could earn a living as a state-appointed judge (*qāḍī*), or as an independent jurist (*faqīh*) and jurisconsult (*muftī*). Someone who possessed philosophical knowledge had no comparable options, and neither, in fact, did an Islamic theologian (*mutakallim*). In order to make a living and be socially secure, one thus had to seek out some other, more 'respectable' profession.

So it was that the philosophers discussed in Volume 1 and here in Volume 2-1 did indeed have various professions, sometimes one, sometimes several. The fields of activity the sources attribute to them are not dissimilar to the biographies of scholars from late antiquity (cf. PIW 1 § 1.4). However, there is additional evidence suggesting that the range of professional options was broader in the Islamic environment.

The most common case was presumably for a philosopher to make a living as a physician. This corresponded with the image of the physician–philosopher significantly shaped by Galen and prevalent in late antiquity, for instance in Alexandria. Cases include many prominent names in the Islamic context, first and foremost Ibn Sīnā and Abu Bakr al-Rāzī, who was first head of the hospital in Rayy, and then of the hospital in Baghdad (cf. PIW 1 § 6.3). Other examples include Ibrāhīm al-Marwazī, Ibn al-Ḥammār, Abū l-Faraġ Ibn al-Ṭayyib (cf. PIW 1 § 7.1, § 7.4 and § 7.6), Šaraf al-Zamān al-Īlāqī, and Abū l-Barakāt al-Baġdādī (cf. § 4.1.2 and § 4.2.3 below). In the west of the Islamic world, which will be the subject of Volume 2-2, the combination of philosophy and medicine was also common, as witnessed by such names as Abū Bakr b. Ṭufayl and Ibn Rušd as well as his pupil Ibn Ṭumlūs (cf. PIW 2-2 § 2.2, § 3.2 and § 4.2). The close tie between the two subjects is furthermore confirmed by instances limited to the theoretical level – i.e. without a practical aspect. Thus, 'Abd al-Laṭīf al-Baġdādī, who made a name for himself as a philosopher and vocal critic of Ibn Sīnā, is said to have taught medicine in many places, but not practised as a physician anywhere (cf. § 4.2.7 below).

Another scholarly profile familiar from late antiquity, the mathematician–philosopher or astronomer–philosopher, is also found in Islamic culture. While the list of examples is not as long, it does include names such as Ṭābit b. Qurra,

a mathematician and astronomer of the 3rd/9th century from Harran (cf. PIW 1 § 9.2.3), al-Lawkarī, who carried out preliminary astronomical work for a Seljuk calendar reform, ‘Umar al-Ḥayyām, who became famous not only as a mathematician but above all as a poet (cf. § 2.2.2 and § 4.1.1 below), and Nāṣir al-Dīn al-Ṭūsī, the eminent mathematician–philosopher of the 7th/13th century (cf. PIW 3). In addition, most of the authors (al-Kindī, al-Fārābī, Ibn Sīnā, Ibn Ruṣd, and many more) who are presented in these volumes composed one or more works on mathematical and astronomical matters.

A novelty, or at any rate more prevalent than in late antiquity, was the trend for philosophical authors to make a living as jurists. The most striking example is Ibn Ruṣd who was successful not only in medicine and astronomy but above all in jurisprudence. He composed a fundamental compendium of the law that would find numerous readers, and was employed as chief judge first in Seville and later in Cordoba. Other authors discussed here also worked in the administration of justice. ‘Umar b. Sahlān al-Sāwī was a judge in his hometown Sāwa at the beginning of his career (cf. § 4.1.3.2 below). It was said of Ibn Zayla and al-Maṣūmī, two of Ibn Sīnā’s companions, that they each worked as an independent jurist (*faqīh*) (§ 2.1.5–6). Even Ibn Sīnā, whose name is not linked to jurisprudence at all in the collective memory, appears to have practised law for a time, as he was officially employed as a jurist during his time in Gurgānġ (§ 1.2.2).

Another novel field of professional activity emerged in the context of the development of the book market. The art of manufacturing paper had been known since the 2nd/8th century in the Islamic world. As a result, texts could be copied and disseminated much more quickly, and book shops and libraries opened to facilitate this process. This in turn provided various professional options for scholars, as the biographical sources document. Thus, we know that Ibn al-Samḥ owned a bookshop near the *Bāb al-Ṭāq* gate in Baghdad (cf. PIW 1 § 7.5). Yaḥyā b. ‘Adī, also resident in Baghdad, made a living as book dealer and copyist (ibid. § 7.2). Miskawayh was a librarian (and secretary) at the Būyid courts in Baghdad and Rayy (ibid. § 5.4.2), and ‘Umar b. Sahlān al-Sāwī worked as a copyist in Nishapur after he had resigned from his position as judge in his hometown (cf. § 4.1.3.2 below).

Besides the professions mentioned so far, other activities are also documented, but only in isolated cases. If a general pattern emerges, it might be that some philosophers earned money by teaching, such as Abū Zayd al-Balḥī at a school in his home city, while Ibrāhīm al-Marwazī and Abū Biṣr Mattā gave private lessons in logic (cf. PIW 1 § 5.1.2 and § 7.1). It is not possible to identify any further professions beyond these to which philosophers would have privileged access. On the contrary: in order to be financially secure, some of

them adopted entirely non-specific ‘respectable’ occupations. ʿĪsā b. Zur‘a, for instance, was a merchant by profession, which promptly brought him criticism of his ‘mercantile pettiness’ from the sharp-tongued writer and scholar Abū Ḥayyān al-Tawḥīdī (ibid. § 7.3).

The image conveyed by the sources is thus multi-faceted. However, it is not enough merely to list the various professions and occupations pursued by philosophical authors. Many of the activities just mentioned were not carried out independently, i.e. as the livelihood of one person only. Their foundation was a connection to a princely court where a scholar could live and earn his living. Consequently, courtly culture must be taken into consideration when describing the societal and institutional framework of philosophising. After all, until well into the 5th/11th century, philosophical, scholarly, and scientific activity took place mainly thanks to the patronage of ruling elites.

### 3.2 *Princely Courts*

Ibn Sīnā, Ibn Rušd, and many of their colleagues were not simply physicians but personal physicians to princes. Astronomical observations, which required costly equipment and instruments, were not carried out in private but at courts. Courts were also the places where large libraries were assembled. This made them even more attractive to scholars and scientists, as it was possible to consult rare books here – as, for instance, Ibn Sīnā did at the Samanid court in Bukhara (cf. § 1.2.2 below) – or to find employment as a librarian – such as Miskawayh at the Būyid courts in Baghdad and Rayy (cf. PIW 1 § 5.4.2).

Consequently, nearly all the authors mentioned so far were employed at one or more courts for at least some of their lives. Of course, the financial resources of the ruler played a decisive part, as did the specific interest he and his immediate circle took in scientific matters. The list of courts where philosophers were occupied as physicians, astronomers, secretaries, librarians, or tutors, is correspondingly lengthy and includes large, transregional ruler-ships as well as smaller, local ones. The highest-ranking of these is, of course, the Abbasid caliphs’ court in Baghdad, where al-Kindī and his pupil Aḥmad b. al-Ṭayyib al-Saraḥsī were employed as the princes’ tutors. It is followed by a long series of more or less important courts and dynasties listed here only with regard to the first centuries and without any claim to completeness: the Ḥamdanids in Aleppo (al-Fārābī), the Ziyārīds in Nishapur (Ibn Hindū) and in Ġurgān south-east of the Caspian Sea (Ibn Sīnā), the Samanids in Bukhara (Abū l-Ḥasan al-ʿĀmirī, Ibn Sīnā), the Maʾmūnids in Gurgān south of the Aral Sea (Ibn Sīnā), the Būyids in Rayy, Baghdad, and Hamadan (al-ʿĀmirī, Abū Sulaimān al-Siġistānī, Miskawayh, Ibn Hindū, Ibn Sīnā), the Seljuks in Isfahan, Marv, and other places (al-Lawkarī, al-Ġazālī in the early days of his

career, ‘Umar al-Ḥayyām, ‘Umar b. Sahlan al-Sāwī, Abū l-Barakāt al-Baġdādī), the Qarā-Ḥānids in Bukhara and Samarqand (Ibn Ġaylān al-Balḥī, Šaraf al-Dīn al-Mas‘ūdī), the Ḥwārazm-Šāhs south of the Aral Sea (Faḥr al-Dīn al-Rāzī), the Ġūrīds in Afghanistan (Faḥr al-Dīn al-Rāzī), the Ayyubids in Damascus, Aleppo, and Cairo (al-Suhrawardī, ‘Abd al-Laṭīf al-Baġdādī), the Banū Hūd and the Almoravids in Zaragoza (Ibn Bāġġa) and the Almohads in Marrakesh (Ibn Ṭufayl, Ibn Rušd, Ibn Ṭumlūs).

In later centuries, too, the princely courts remained places where philosophy and science could develop. We often hear of scholars who followed their calling there, partly in cooperation with other scientists, sometimes in competition, when the favour of the ruling elites was at stake. A notorious instance is the polemical debate between Sa‘d al-Dīn al-Taftāzānī (d. 793/1390) and al-Šarīf al-Ġurġānī (d. 816/1413) at Timur’s residence in Samarqand, which seems to have comprised several consecutive sittings (van Ess 2013 [\*74: 37–39], Rudolph 2016 [\*85]).

From the mid-5th/11th century onwards, princely courts were no longer the only place offering scholars an institutional environment for their activities. Around this time, another institution began its ascent, one that was to play a defining role in the subsequent history of scholarship. This was the *madrasa*, literally a ‘place of study’, which may be translated as ‘Islamic university’ or, better, ‘Islamic college’ (on the subject in general Pedersen, Makdisi 1986 [\*25], Brentjes 2018 [\*92: 67–70]; for a brief summary with emphasis on the more recent period cf. Abaza, Kéchéchian 2014 [\*75]).

### 3.3 *Madrasas*

As to their legal status, the madrasas were religious trusts (*waqf*) set up by a private person rather than by the state. The endowment usually comprised a building that served for teaching purposes as well as accommodation for teachers and students; the employment of at least one teacher (*mudarris*) whose task was to teach Islamic law according to the rite which the founder followed; a group of students; possessions to guarantee economic yield (agriculture, trade, etc.) to fund the employment of the teacher as well as grants for the students; and finally further staff to work to generate this yield and to manage the *waqf*, frequently members of the founder’s family (Brentjes 2018 [\*92: 68–69]). Madrasas with this basic set-up are already documented in Iran in the 4th/10th century. They were usually established for a particular scholar who either acted as the founder himself or was employed by a patron. The remarkable spread of the madrasa began in the mid-5th/11th century, in chronological and probably causal connection with the rise of the Seljuks, who held sway in Iran and Iraq at the time. Numerous dignitaries from their circles came to



prominence as founders of colleges, first and foremost the vizier Nizām al-Mulk (d. 485/1092) who founded a 'Madrasa Nizāmiyya' in many places (Baghdad, Nishapur, Mosul, Āmul, Marv, Herat, Balḥ, Isfahan, Basra; cf. Brentjes 2018 [\*92: 67], Yavari 2018 [\*97: 90]), but also Abū Ṣa'd al-Mustawfī (d. 494/1101), a finance minister in the service of the Seljuks, and other leading personalities at court (Makdisi 1981 [\*19: 27–32. 41. 302], 1990 [\*30: 24–26. 39–40], van Ess 1990 [\*31: 71–73]; regarding criticism of Makdisi's far-reaching theories cf. Yavari 2018 [\*97: 91 with n. 123], who provides further references).

The new colleges differed from the institutions dating from only for the Seljuk era in two respects above all. On the one hand, their endowments were usually more extensive, as was their staff (Makdisi 1981 [\*19: 188–196], van Ess 1990 [\*31: 73], Brentjes 2018 [\*92: 71–73]). On the other hand, madrasas were increasingly furnished with their own libraries, presumably in emulation of other institutional models such as the 'House of Knowledge' (*Dār al-ʿilm*) in Baghdad or the institution of the same name in Cairo (Makdisi 1990 [\*30: 54–55], Halm 1997 [\*39: 71–73]). This combined model was well received and would soon be exported into other regions of the Islamic world. In the 6th/12th century we already encounter it in Anatolia, Syria, Palestine, Egypt, and on the Arabian Peninsula (Mecca), later also in the Maghreb, in Central Asia, and in India (cf. Pedersen, Makdisi 1986 [\*25: 1127–1128], Brentjes 2018 [\*92: 67]).

In spite of the different perspectives concomitant with this growth, one constant remained: the madrasa's primary task was to educate Islamic jurists. Each college was affiliated with a particular school of law whose doctrine would be championed by the *mudarris* during lessons (later madrasas sometimes taught more than one). The students were taught the 'principles of law' (*uṣūl al-fiqh*) and 'law' itself (*fiqh*) by him, and after approximately four years received a licence to pass on his ideas and writings to others. The certificate documenting this graduation bore the title *ijāza li-l-tadrīs wa-l-iftā'*, i.e. 'permission to teach [jurisprudence] and to issue legal opinions (*fatwā*)' (Makdisi 1981 [\*19: 147–148. 270], 1990 [\*30: 26–29], van Ess 1990 [\*31: 73–74], Brentjes 2018 [\*92: 69–70]; regarding the much-debated question of whether the study was based on an individual relation between teacher and pupil or also on institutional components cf. Ragep 2016 [\*83: 563–568]).

Confident handling of Islamic law, however, presupposed a broad range of knowledge. One had to be familiar with the Quran, Quranic exegesis, *ḥadīth* science, Arabic grammar, legal debate, and Islamic history, above all the Prophet's biography. It is consequently unsurprising that these topics were included in the curriculum from early on (Makdisi 1981 [\*19: 80–81], cf. van Ess 1990 [\*31: 67] regarding the corresponding curricula in mosques). Disciplines not tied to religious hermeneutics, like mathematics, might also be beneficial for the

graduates. In principle, including these in the curriculum was possible. After all, the madrasa was not a university managed by the state but a private institution whose founder was entitled to appoint the staff and determine the orientation of his *waqf*.

The question of whether the non-religious sciences, called 'rational' or 'ancient' disciplines, were indeed incorporated into the course of study is difficult to answer. The very freedom enjoyed by the founder and his descendants makes it impossible for us to make general statements in this context, as the respective documents (foundation deeds, manuscripts, readers' notes etc.) that might illuminate the teaching practice at a particular madrasa would have to be investigated in each separate instance. Studies of this kind would be welcome, but have yet to be undertaken. Even so, we may attempt some preliminary assessments. We know, for instance, that the mathematical sciences were taught at several madrasas from a comparatively early date (Brentjes 2018 [\*92: 70. 73. 77–91]; cf. Ragep 2016 [\*83: 557–560]). Medicine, too, is likely to have found its way into the colleges as early as the 6th/12th century. It occasionally appears as a subject supplementary to the general curriculum. In some cases, we also learn that physicians donated their houses and libraries, transforming them into a madrasa (Brentjes 2018 [\*92: 91–98]; cf. Pedersen, Makdisi 1986 [\*25: 1127–1130]).

Philosophy, in comparison, is a particularly complicated case. We have reliable information only for the time to be discussed in Volume 3. These inform us that in later times, philosophical texts were read at the madrasas, above all in Iran (cf. Endress 2001 [\*44: 10–56, esp. 12] for the period beginning with the 7th/13th century), but also in the Ottoman Empire (from the 9th/15th century onwards; cf. İhsanoğlu 2001–2002 [\*45: 11 383–387], 2005 [\*53: 274–276] and the detailed information in Özyılmaz 2002 [\*47: 21–42. 143–151]) and other regions (North Africa, Central Asia, India). For the 5th/11th and 6th/12th centuries, however, on which our interest is focussed here, the information is sparse. Many documents that might provide information have been either lost or not yet evaluated. Consequently, it is advisable to refer only to a few preliminary observations that may serve as initial spotlights on this period.

One point concerns logic, as alluded to above. It seems to have been taught from an early date at several madrasas. This was linked to the fact that religious scholars such as al-Ġazālī, who taught as a Šāfi'ī *mudarris* at the Niẓāmiyya in Baghdad, advised that theologians and legal scholars should be versed in Aristotelian logic as well (cf. § 3.4.2 below). While this appeal did not remain unchallenged, it did find numerous supporters only a short time after al-Ġazālī, among them Faḥr al-Dīn al-Rāzī, who was presumably the most influential scholar of his generation. As a result, logic instruction became an established

part of the curriculum of many colleges, and continued to be taught for centuries (Street 2004 [\* 50: 524, 555, 558, 579–582], El-Rouayheb 2019 [\*101: 15–16, 29–30]; cf. Brentjes 2018 [\*92: 257–260]).

Not so the philosophers' physics and metaphysics. They, too, were met with interest by teachers and students, but in their case the opposition of the religious scholars was stronger, as the example of al-Ġazālī demonstrates (cf. § 3.4.4 below). Even so, it appears to have been possible to study these texts within a college or in its environment. This is true not only for the time after 1200, but also for the two centuries discussed in this volume. Evidence is provided by historical and biographical works reporting that philosophical books on physics and metaphysics were read *sirr<sup>an</sup>* at some madrasas. The Arabic *sirr<sup>an</sup>* literally means 'in secret', but in this instance it refers to the fact that the texts were not part of the official lectures but were discussed in private, among individual students. This approach is documented in several sources (Makdisi 1990 [\*30: 68], Endress 2001 [\*44: 13], İhsanoğlu 2005 [\*53: 270, 272]). We can probably presume it for al-Ġazālī as well, as there is sufficient evidence to suggest that he read Ibn Sīnā's works 'in private' with al-Ġuwaynī when he was his pupil at the Madrasa Nizāmiyya in Nishapur (Griffel 2009 [\*66: 29–30]).

The second piece of evidence is the fact that madrasa libraries included philosophical books. The Nizāmiyya in Nishapur, for instance, held Ibn Sīnā's writings on physics and metaphysics, as did some madrasas founded by the Ayyubids in Syria and Egypt (Brentjes 2018 [\*92: 70, 72]); similar remarks on other institutions are also found in some sources (Makdisi 1990 [\*30: 67–68]). Sometimes circumstances even permit verification of these remarks in a manuscript tradition. In 596–697/1199–1201, a manuscript was copied at the Madrasa Muğāhidiyya in Marāḡa that survives to this day. It contains philosophical texts by various authors, among them Ibn Sīnā, 'Umar b. Sahlān al-Sāwī, Šaraf al-Dīn al-Mas'ūdī, and Mağd al-Dīn al-Ġilī (regarding them see § 1, § 4.1.2, § 4.1.3, and § 4.2.4 below). The owner of the manuscript is not named in the colophon, but it would seem that it was copied by a pupil of Mağd al-Dīn al-Ġilī's, while the latter was employed as a lecturer at the Madrasa Muğāhidiyya (cf. the preface to the facsimile edition of the manuscript by Pourjavady 2002 [\*18]; for more details cf. § 4.1.2 below).

The last point we must mention in this context is in the nature of a hypothesis. It does not concern the question of whether and to what extent philosophical works were studied at madrasas, but the possibility that this process may in turn have had an effect on the form and content of philosophical discourse. In recent years, Frank Griffel has made several contributions concerning this topic (Griffel 2011 [\*69], 2018 [\*93: 48–59], 2021 [\*110: Part III, chap. 3]). In the chapters on Abū l-Barakāt al-Bağdādī (§ 4.2.3) and Faḥr al-Dīn al-Rāzī (§ 6)

below he presents the ideas he developed in the course of his research. They focus on the theory that under the influence of the madrasa, philosophy transformed from a demonstrative to a dialectic form of knowledge. First signs of this transformation may be distinguished around the middle of the 6th/12th century in the work of Abū l-Barakāt, who placed the focus of his philosophical writings on ‘careful consideration’ (*i’tibār*). Faḥr al-Dīn al-Rāzī fully implemented the dialectic approach, as he dissected every issue – as was customary in madrasa instruction – into every single aspect and aporia, but in fact often desisted from expressing his own position as, in his view, the deliberation was the major concern. In some contested questions, he was even prepared to allow more than one ‘correct’ solution (cf. § 4.2.3 and § 6.4.1 below).

It remains to be investigated whether and to what extent these observations concerning al-Rāzī may serve as an explanatory pattern for ‘post-classical’ philosophy. In this context, it will have to be considered on the one hand that dialectic procedures had long been among the recognised methods of philosophy (cf. Wisnovsky 2014 [\*78: 702–703] as well as § 1.4.5.1 [end] below concerning Aristotle and Ibn Sīnā; Ibn Rušd was of a different mind, regarding the application of dialectic as a rejection of the demonstrative ideal; cf. PIW 2-2, § 3). On the other hand, research in Volumes 1 and 2-1 so far has shown that where philosophy in the Islamic world is concerned, we can usually assume several parallel conceptual and methodological models. This suggests that we may presume a diversity of terms and approaches in philosophy in the later period as well. Even so, recognising that methodological access changed in the 6th/12th century is exceedingly important. It makes us realise that fundamental transformations were taking place during this period, and that the changing institutional context played a certain part in the process. Keeping this in mind and illuminating it in greater detail with regard to the period after 1200 will be one of the central tasks of Volume 3.

#### 4 Secondary Literature

1 Ibn Ḥaldūn, Waliyy al-Dīn ‘Abd al-Raḥmān b. Muḥammad. *Al-Muqaddima*, 3 vols. – Ed. by M. Quatremère. Paris, 1858. – Engl. transl. by Franz Rosenthal, *The Muqaddimah. An introduction to history*. New York, 1958.

2 Šā‘id b. Aḥmad al-Andalusī. *Kitāb (al-Ta‘rīf bi-) Ṭabaqāt al-umam*. – Ed.

by Luwīs Ṣayḥū (Louis Cheikho). Beirut, 1912. – French transl. by Régis Blachère, *Kitāb Ṭabaqāt al-Umam. Livre des Catégories des nations*, traduction avec notes et indices, précédée d’une introduction. Paris, 1935. – Joint reprint in *Publications of the Institute for the History of Arabic-Islamic Science. Islamic Philosophy* 1. Frankfurt a. M., 1999.

- 3 Goichon, Amélie-Marie. *La distinction de l'essence et de l'existence d'après Ibn Sīnā*. Paris, 1938.
- 4 Brunschvig, Robert and Gustav E. von Grunebaum, eds. *Classicisme et déclin culturel dans l'histoire de l'islam*. Actes du symposium international d'histoire de la civilisation musulmane, Bordeaux 25–29 juin 1956. Paris, 1957. – Repr. Westmead, 1977.
- 5 Ritter, Hellmut. *Die Geheimnisse der Wortkunst (Asrār al-balāġa) des Ab-dalqāhir al-Curcānī*, aus dem Arabischen übersetzt. Wiesbaden, 1959.
- 6 Walzer, Richard. "New studies on al-Kindī." In *Greek into Arabic. Essays on Islamic Philosophy*. Oxford; Cambridge, Mass., 1962, 1963 (2nd ed.), 175–205. – Extended version of the article originally published in *Oriens* 10 (1957): 203–232.
- 7 Frank, Richard M. "The Neoplatonism of Ġāhm Ibn Ṣāfwān." *Le Muséon* 78 (1965): 395–424.
- 8 Heinrichs, Wolfhart. *Arabische Dichtung und griechische Poetik. Ḥazim al-Qarṭāġannīs Grundlegung der Poetik mit Hilfe aristotelischer Begriffe*. Beirut, 1969.
- 9 van Ess, Josef. "The logical structure of Islamic theology." In *Logic in Classical Islamic Culture*. Ed. by Gustav E. von Grunebaum. Wiesbaden, 1970, 21–50.
- 10 Fakhry, Majid. *A History of Islamic Philosophy*. New York, London, 1970; 1983 (2nd ed.), repr. 1987; 2004 (3rd ed.).
- 11 Walzer, Richard. *L'éveil de la philosophie islamique*. *Revue des études islamiques* – Hors série 1 (Paris 1971). – Extrait du tome XXXVIII/1 et 2 (1970).
- 12 Koselleck, Reinhart. "Einleitung." In *Geschichtliche Grundbegriffe. Historisches Wörterbuch zur politisch-sozialen Sprache in Deutschland*, 1. Ed. by Otto Brunner, Werner Conze, Reinhart Koselleck. Stuttgart, 1972, XIII–XXVII.
- 13 Ivry, Alfred L. *Al-Kindī's Metaphysics. A translation of Ya'qūb b. Ishāq al-Kindī's treatise 'On First Philosophy' (fī al-Falsafah al-ūlā) with introduction and commentary*. Albany, 1974.
- 14 Shehaby, Nabil. "The influence of Stoic logic on al-Jaṣṣāṣ legal theory." In *The Cultural Context of Medieval Learning*. Ed. by John E. Murdoch, Edith D. Sylla. Dordrecht, Boston, 1975, 61–85.
- 15 van Ess, Josef. "Disputationspraxis in der islamischen Theologie. Eine vorläufige Skizze." *Revue des études islamiques* 44 (1976): 23–60.
- 16 Frank, Richard M. *Beings and Their Attributes. The Teaching of the Baṣrian School of the Mu'tazila in the Classical Period*. Albany, 1978.
- 17 Abu Deeb, Kamal. *Al-Jurjānī's Theory of Poetic Imagery*. Warminster, 1979.
- 18 Elamrani-Jamal, Abdelali. "Les rapports de la logique et de la grammaire d'après le Kitāb al-Masā'il d'Al-Baṭalyūsi." *Arabica* 26 (1979): 76–89.
- 19 Makdisi, George. *The Rise of Colleges. Institutions of Learning in Islam and the West*. Edinburgh, 1981.
- 20 Sorabji, Richard. "Atoms and time atoms." In *Infinity and Continuity in Ancient and Medieval Thought*. Ed. by Norman Kretzmann. London, 1982, 37–82.
- 21 Verbeke, Gérard. *Avicenna, Grundleger einer neuen Metaphysik*. Opladen, 1983.

- 22 Chejne, Anwar G. "Ibn Ḥazm of Cordova on logic." *Journal of the American Oriental Society* 104 (1984): 52–72.
- 23 Endress, Gerhard. "Grammatik und Logik. Arabische Philologie und griechische Philosophie im Widerstreit." In *Sprachphilosophie in Antike und Mittelalter*. Ed. by Burkhard Mojsisch. Amsterdam, 1986, 163–299.
- 24 Kühn, Wilfried. "Die Rehabilitierung der Sprache durch den arabischen Philologen al-Sirafi." In *Sprachphilosophie in Antike und Mittelalter*. Ed. by Burkhard Mojsisch. Amsterdam, 1986, 301–402.
- 25 Pedersen, Johannes and George Makdisi. "Madrasa. 1: The institution in the Arabic, Persian and Turkish lands." In *EI<sup>2</sup> = The Encyclopaedia of Islam*. New edition. Ed. by C. E. Bosworth et al., vol. 5. Leiden, 1986, 1123–1134.
- 26 Zimmermann, Friedrich W. "The origins of the so-called Theology of Aristotle." In *Pseudo-Aristotle in the Middle Ages. The Theology and Other Texts*. Ed. by Jill Kraye, William Francis Ryan, Charles B. Schmitt. London, 1986, 110–240.
- 27 Heinrichs, Wolfhart. "Poetik, Rhetorik, Literaturkritik, Metrik und Reimlehre." In *Grundriss der Arabischen Philologie, 11: Literaturwissenschaft*. Ed. by Helmut Gätje. Wiesbaden, 1987, 177–207.
- 28 Muranyi, Miklos. "Fiqh." In *Grundriss der Arabischen Philologie, 11: Literaturwissenschaft*. Ed. by Helmut Gätje. Wiesbaden, 1987, 299–325.
- 29 Gimaret, Daniel. *La doctrine d'al-Ash'arī*. Paris, 1990.
- 30 Makdisi, George. *The Rise of Humanism in Classical Islam and the Christian West. With Special Reference to Scholasticism*. Edinburgh, 1990.
- 31 van Ess, Josef. "Enseignement et «universités» dans l'islam medieval." *Diogenes* 150 (Avril–Juin 1990): 65–77.
- 32 Endress, Gerhard. "Der erste Lehrer'. Der arabische Aristoteles und das Konzept der Philosophie im Islam." In *Gottes ist der Orient – Gottes ist der Okzident. Festschrift für Abdoljavad Falaturi zum 65. Geburtstag*. Ed. by Udo Tworuschka. Cologne, Vienna, 1991, 151–181.
- 33 Schwarz, Michael. "Who were Maimonides' Mutakallimūn? Some remarks on Guide of the Perplexed, Part 1, Chapter 73." *Maimonidean Studies* 2 (1991): 159–209 and 3 (1992): 143–172.
- 34 van Ess, Josef. *Theologie und Gesellschaft im 2. und 3. Jahrhundert Hidschra. Eine Geschichte des religiösen Denkens im frühen Islam*, 6 vols. Berlin, New York, 1991–1997.
- 35 Hallaq, Wael B. "Was al-Shafī'i the master architect of Islamic jurisprudence?" *International Journal of Middle East Studies* 25 (1993): 587–605.
- 36 Jolivet, Jean. "Aux origines de l'ontologie d'Ibn Sīnā." In id., *Philosophie médiévale arabe et latine. Recueil d'articles*. Paris, 1995, 221–236. – First published in *Études sur Avicenne*. Ed. by J. Jolivet, R. Rashed. Paris, 1984, 19–28.
- 37 Larkin, Margaret. *The Theology of Meaning. 'Abd al-Qāhir al-Jurjānī's Theory of Discourse*. New Haven, 1995.

- 38 Hallaq, Wael B. *A History of Islamic Legal Theories. An Introduction to Sunnī uṣūl al-fiqh*. Cambridge, 1997.
- 39 Halm, Heinz. *The Fatimids and Their Traditions of Learning*. London, New York, 1997, 2001 (2nd ed.).
- 40 Rudolf, Ulrich. *Al-Māturīdī und die sunnitische Theologie in Samarkand*. Leiden, New York, Cologne, 1997. – Engl. transl. (by Rodrigo Adem): *Al-Māturīdī and the Development of Sunnī Theology in Samarqand*. Leiden, 2013.
- 41 Rudolph, Ulrich. “La preuve de l’existence de Dieu chez Avicenne et dans la théologie musulmane.” In *Langages et philosophie. Hommage à Jean Jolivet*. Ed. by Alain de Libera, Abdelali Elamrani-Jamal, Alain Galonnier. Paris, 1997, 339–346.
- 42 Gutas, Dimitri. *Greek Thought, Arabic Culture. The Graeco-Arabic Translation Movement in Baghdad and Early ‘Abbāsīd Society (2nd–4th/8th–10th centuries)*. London, 1998, repr. 2002.
- 43 Heinrichs, Wolfhart. “Lafz and ma’nā.” In *Encyclopedia of Arabic Literature*. Ed. by Julie Scott Meisami, Paul Starkey. London, New York, 1998, 461–462.
- 44 Endress, Gerhard. “Philosophische Ein-Band-Bibliotheken aus Isfahan.” *Oriens* 36 (2001): 10–58.
- 45 İhsanoğlu, Ekmeleddin. “Ottoman educational and scholarly scientific institutions.” In id. (ed.), *History of Ottoman State, Society & Civilisation*, vol. 2. Istanbul, 2001–2002, 361–516.
- 46 Pourjavady, Nasrollah, ed. *Maǧmū‘a-yi falsafī-yi Marāǧa/A philosophical anthology from Maragha. Containing works by Abū Hāmid Ghazzālī, ‘Ayn al-Qudāt al-Ḥamadānī, Ibn Sīnā, ‘Umar ibn Sahlān Sāvi, Majduddīn Jīlī and others*. Tehran, 2002.
- 47 Özyılmaz, Ömer. *Osmanlı Medreselerinin Eǧitim Programları*. Ankara, 2002.
- 48 Wisnovsky, Robert. *Avicenna’s Metaphysics in Context*. London, Ithaca (N.Y.), 2003.
- 49 Graf, Friedrich Wilhelm. “Sattelzeit.” In *Religion in Geschichte und Gegenwart. Handwörterbuch für Theologie und Religionswissenschaft*, 4., völlig neu bearbeitete Auflage, vol. 7. Ed. by Hans Dieter Betz et al. Tübingen, 2004, 847. – Engl. version: “Saddle Period”. In *Religion Past and Present*. Consulted online on 12 January 2023 <[http://dx.doi.org/10.1163/1877-5888\\_rpp\\_SIM\\_025223](http://dx.doi.org/10.1163/1877-5888_rpp_SIM_025223)>.
- 50 Street, Tony. “Arabic logic.” In *Handbook of the History of Logic, 1: Greek, Indian and Arabic Logic*. Ed. by D.M. Gabbay, J. Woods. Amsterdam, 2004, 523–596.
- 51 Wisnovsky, Robert. “One aspect of the Avicennian turn in Sunnī theology.” *Arabic Sciences and Philosophy* 14 (2004): 65–100.
- 52 Endress, Gerhard. “Die dreifache Ancilla. Hermeneutik und Logik im Werk des Sayfaddīn al-Āmidī.” In Perler, Rudolph 2005 [\*55: 117–145].
- 53 İhsanoğlu, Ekmeleddin. “Institutionalisation of science in the Medreses of Pre-Ottoman and Ottoman Turkey.” In *Turkish Studies in the History*

- and philosophy of Science*. Ed. by G. Irzik, G. Güzeldere. Amsterdam, 2005, 265–283.
- 54 Motzkin, Gabriel. “On the notion of historical (dis)continuity. Reinhart Koselleck’s construction of the ‘Sattelzeit.’” *Contributions to the History of Concepts* 1 (2005): 145–158.
- 55 Perler, Dominik and Ulrich Rudolph, eds. *Logik und Theologie. Das Organon im arabischen und im lateinischen Mittelalter*. Leiden, Boston, 2005.
- 56 Rudolph, Ulrich. “Die Neubewertung der Logik durch al-Ġazālī.” In Perler, Rudolph 2005 [\*55: 73–97].
- 57 Schöck, Cornelia. “Aussagenquantifizierung und -modalisierung in der frühen islamischen Theologie.” In Perler, Rudolph 2005 [\*55: 19–43].
- 58 Shihadeh, Ayman. “From al-Ghazālī to al-Rāzī. 6th/12th-century developments in Muslim philosophical theology.” *Arabic Sciences and Philosophy* 15 (2005): 141–179.
- 59 Madelung, Wilferd. “Abū l-Ḥusayn al-Baṣrī’s proof for the existence of God.” In *Arabic Theology, Arabic Philosophy. From the Many to the One. Essays in celebration of Richard M. Frank*. Ed. by James E. Montgomery. Leuven, 2006, 273–280.
- 60 Rachad, Hrazem. *Les signes d’inimitabilité en grammaire de l’expression*. Tangiers, 2006. [= French transl. of *Dalā’il al-i’ğāz* by ‘Abd al-Qāhir al-Ġurġānī].
- 61 Schöck, Cornelia. *Koranexegese, Grammatik und Logik. Zum Verhältnis von arabischer und aristotelischer Urteils-, Konsequenz- und Schlusslehre*. Leiden, Boston, 2006.
- 62 Lowry, Joseph E. *Early Islamic Legal Theory. The Risāla of Muḥammad ibn Idrīs al-Shāfi‘ī*. Leiden, 2007.
- 63 Rudolph, Ulrich. “Al-Fārābī und die Mu‘tazila.” In *A Common Rationality. Mu‘tazilism in Islam and Judaism*. Ed. by Camilla Adang, Sabine Schmidtke, David Sklare. Würzburg, 2007, 59–80.
- 64 Rudolph, Ulrich. “Reflections on al-Fārābī’s Mabādī’ ārā’ ahl al-madīna al-fāḍila.” In *In the Age of al-Fārābī. Arabic Philosophy in the Fourth/Tenth Century*. Ed. by Peter Adamson. London, 2008, 1–14.
- 65 Eichner, Heidrun. *The Post-Avicennian Philosophical Tradition and Islamic Orthodoxy. Philosophical and Theological Summae in Context*. Professorial dissertation. Halle, 2009.
- 66 Griffel, Frank. *Al-Ghazālī’s Philosophical Theology*. Oxford, 2009.
- 67 Eichner, Heidrun. “Das avicennische Corpus Aristotelicum. Zur Virtualisierung des Aristoteles-textes in der postavicennischen Tradition.” In *Entre Orient et Occident. La philosophie et la science gréco-romaines dans le monde arabe*. Ed. by Richard Goulet, Ulrich Rudolph. Vandœuvres-Genève, 2011, 197–239.
- 68 van Ess, Josef. *Der Eine und das Andere. Beobachtungen an islamischen häresiographischen Texten*, 2 vols. Berlin, New York, 2011.
- 69 Griffel, Frank. “Between al-Ghazālī and Abū l-Barakāt al-Baghdādī. The



- dial" Ectical turn in the philosophy of Iraq and Iran during the 6th/12th century." In *In the Age of Averroes. Arabic Philosophy in the Sixth/Twelfth Century*. Ed. by Peter Adamson. London, 2011, 45–75.
- 70 Koselleck, Reinhart and Michaela Richter. "Introduction" and "Prefaces" to the 'Geschichtliche Grundbegriffe'. *Contributions to the History of Concepts* 6 (2011): 1–5, 7–25, 27–37.
- 71 Ayada, Souâd. "Hafez, poet and philosopher." *Revue philosophique de la France et de l'étranger* 137 (2012): 61–76.
- 72 Jordheim, Helge. "Against periodization. Koselleck's theory of multiple temporalities." *History and Theory* 51 (2012): 151–171.
- 73 Pernau, Margrit. "Whither conceptual history? From national to entangled histories." *Contributions to the History of Concepts* 7 (2012): 1–11.
- 74 van Ess, Josef. *Die Träume der Schulweisheit. Leben und Werk des 'Alī b. Muḥammad al-Ġurġānī (gest. 816/1413)*. Wiesbaden, 2013.
- 75 Abaza, Mona. "Madrasas" (updated by Joseph A. Kéchichian). In *The Oxford Encyclopedia of Philosophy, Science, and Technology in Islam*, vol. 1. Oxford, 2014, 497–502.
- 76 Gutas, Dimitri. *Avicenna and the Aristotelian Tradition. Introduction to reading Avicenna's philosophical works. Second, revised and enlarged edition, including an inventory of Avicenna's authentic works*. Leiden, 2014.
- 77 Schulz-Forberg, Hagen. "Introduction. Global conceptual history. Promises and pitfalls of a new research agenda." In id. (ed.), *A Global Conceptual History of Asia, 1860–1940*. London, 2014, 1–24.
- 78 Wisnovsky, Robert. "Philosophy and theology. Islam." In *The Cambridge History of Medieval Philosophy*, vol. 2, revised edition. Ed. by Robert Pasnau. Cambridge, 2014, 698–706.
- 79 Adamson, Peter and Alexander Key. "Philosophy of language in the medieval Arabic tradition." In *Linguistic Content. New Essays on the History of Philosophy of Language*. Ed. by M. Cameron, R.J. Stainton. Oxford, 2015, 74–99.
- 80 Abrahamov, Binyamin. "Scripturalist and traditionalist theology." In Schmidtke 2016 [\*87: 263–279].
- 81 El-Rouayheb, Khaled. "Theology and logic." In Schmidtke 2016 [\*87: 408–431].
- 82 Fulda, Daniel. "Sattelzeit. Karriere und Problematik eines kulturwissenschaftlichen Zentralbegriffs." In *Sattelzeit. Historiographiegeschichtliche Revisionen*. Ed. by Elisabeth Décultot, D. Fulda. Berlin, Boston, 2016, 1–16.
- 83 Ragep, Sally P. "The teaching of the-oretical astronomy in pre-modern Islam. Looking beyond individual initiative." In *Schüler und Meister*. Ed. by Andreas Speer, Thomas Jeschke. Berlin, Boston, 2016, 557–568.
- 84 Rudolph, Ulrich. "Occasionalism." In Schmidtke 2016 [\*87: 347–363].
- 85 Rudolph, Ulrich. "Science as competition. The debate between Sa'daddīn al-Taftāzānī (d. 793/1390) and al-Sharīf al-Jurjānī (d. 816/1413)." In: *Arabic and Islamic Studies in Europe and Beyond. Proceedings of the 26th congress of the Union Européenne des Arabisants et*

- Islamisans*, Basel 2012. Ed. by Maurus Reinkowski, Monika Winet (in cooperation with Sevinç Yasargil). Leuven, Paris, Bristol (CT), 2016, xv–xxiii.
- 86 Schmidtke, Sabine. “The Mu‘tazilite movement (III): The scholastic phase.” In Schmidtke 2016 [\*87: 159–180].
- 87 Schmidtke, Sabine, ed. *The Oxford Handbook of Islamic Theology*. Oxford, 2016.
- 88 Schöck, Cornelia. “Jahm b. Šafwān (d. 128/745–6) and the ‘Jahmiyya’ and Ḍirār b. ‘Amr (d. 200/815).” In Schmidtke 2016 [\*87: 55–80].
- 89 Thiele, Jan. “Between Cordoba and Nisābūr. The emergence and consolidation of Ash‘arism (fourth–fifth/tenth–eleventh centuries).” In Schmidtke 2016 [\*87: 225–241].
- 90 von Kügelgen, Anke, ed. *Wissenschaft, Philosophie und Religion. Religionskritische Positionen um 1900*. Berlin, 2017.
- 91 Shihadeh, Ayman. “Al-Rāzī’s (d. 1210) commentary on Avicenna’s Pointers. The confluence of exegesis and aporetics.” In *The Oxford Handbook of Islamic Philosophy*. Ed. by Khaled El-Rouayheb, Sabine Schmidtke. Oxford, 2017, 296–325.
- 92 Brentjes, Sonja. *Teaching and Learning the Sciences in Islamicate Societies (800–1700)*. Turnhout, 2018.
- 93 Griffel, Frank. *Den Islam denken. Versuch, eine Religion zu verstehen*. Stuttgart, 2018.
- 94 Harb, Lara and Alexander Key. “‘Abd al-Qāhir al-Jurjānī. Introduction.” In A. Key, ed., *‘Abd al-Qāhir al-Jurjānī, special issue of Journal of Abbasid Studies* 5 (2018): 3–10.
- 95 Kalbarczyk, Nora. *Sprachphilosophie in der islamischen Rechtstheorie. Zur avicennischen Klassifikation der Bezeichnung bei Fahr ad-dīn ar-Rāzī (gest. 606/1210)*. Leiden, 2018.
- 96 Key, Alexander. *Language Between God and the Poets. Ma’nā in the Eleventh Century*. Oakland, 2018.
- 97 Yavari, Neguin. *The Future of Iran’s Past. Nizam al-Mulk Remembered*. Oxford, New York, 2018.
- 98 Adamson, Peter, ed. *Philosophy and Jurisprudence in the Islamic World*. Berlin, Boston, 2019.
- 99 Bou Akl, Ziad. “Splitting the process and the result. Philosophy from a legal perspective in Averroes’ Decisive treatise.” In Adamson 2019 [\*98: 129–144].
- 100 Bouhafa, Feriel. “Ethics and Fiqh in al-Fārābī’s philosophy.” In Adamson 2019 [\*98: 11–27].
- 101 El-Rouayheb, Khaled. *The Development of Arabic Logic (1200–1800)*. Basel, 2019.
- 102 Erlwein, Hannah C. “Ibn Sīnā’s moral ontology and theory of law.” In Adamson 2019 [\*98: 29–51].
- 103 Kalbarczyk, Nora. “In the footsteps of Ibn Sīnā? The Uṣūlī debate on the Argumentum e contrario.” In Adamson 2019 [\*98: 53–65].
- 104 Opwis, Felicitas. “Syllogistic logic in Islamic legal theory. Al-Ghazālī’s arguments for the certainty of legal analogy (qiyās).” In Adamson 2019 [\*98: 93–113].
- 105 Rudolph, Ulrich. “Al-Ghazālī on philosophy and jurisprudence.” In Adamson 2019 [\*98: 67–92].
- 106 Topal, Alp Eren and Einar Wigen. “Ottoman conceptual history. Challenges

and prospects." *Contributions to the History of Concepts* 14 (2019): 93–114.

107 Harb, Lara. "al-Jurjānī, 'Abd al-Qāhir." In *Encyclopaedia of Islam, THREE*. Ed. by Kate Fleet et al. [Consulted online on 26 November 2020 <[http://dx.doi.org/10.1163/1573-3912\\_ei3\\_COM\\_32887](http://dx.doi.org/10.1163/1573-3912_ei3_COM_32887)>].

108 Ali, Mohamed Mohamed Yunis. "Reclassification of linguistic meaning. An integrated approach." In Germann, Najafi 2021 [\*109: 275–305].

109 Germann, Nadja and Mostafa Najafi, eds. *Philosophy and Language in the Islamic World*. Berlin, Boston, 2021.

110 Griffel, Frank. *The Formation of Post-classical Philosophy in Islam*. Oxford, New York, 2021.

111 Key, Alexander. "Notes around ambiguity. Ibn Sīnā's logic, 'Abd al-Qāhir al-Jurjānī's poetics, Rāghib's

two-meanings-at-one-time, and the figures of ibhām, istikhdām, and tawriya." In Germann, Najafi 2021 [\*109: 77–99].

112 Street, Tony. "The reception of Pointers 1.6 in thirteenth-century logic. On the expression's signification of meaning." In Germann, Najafi 2021 [\*109: 101–128].

113 Zemmin, Florian and Henning Sievert. "Conceptual history in the Near East. The saddle period as a heuristic tool for interrogating the formation of a multi-layered modernity." *Contributions to the History of Concepts* 16 (2021): 1–26.

114 Kaukua, Jari. *Suhrawardī's Illuminationism. A philosophical study*. Leiden, Boston, 2022.

115 Rudolph, Ulrich, ed. *Abū Naṣr al-Fārābī: Die Prinzipien der Ansichten der Bewohner der vortrefflichen Stadt*. Berlin, 2022 (Klassiker Auslegen. 75).

# Ibn Sīnā

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1 Primary Sources – 2 Life – 3 Works – 4 Doctrine – 5 Influence – 6 Secondary Literature

## 1 Primary Sources

Bio-bibliographical Testimonies [\*1–\*10] – Lists of Works [\*15–\*18] – Works: Partial Collections [\*20–\*42] – Individual Editions: Philosophical Summae [\*50–\*61] – Logic and Linguistics [\*65–\*84] – Physics (Natural Philosophy) [\*91–\*104] – Mathematics [\*111–\*113] – Metaphysics (of the Rational Soul) [\*121–\*129] – Practical Philosophy [\*133–\*137] – Personal Writings [\*141–\*145] – Medicine [\*151–\*154] – Apocryphal and Pseudepigraphic Writings [\*161–\*174] – Spurious and Falsely Attributed Writings [\*181–\*183] – Reference Works by Other Authors [\*191–\*221]

Preliminary Remark: With very few exceptions, the editions of Ibn Sīnā's Arabic works are of a philological quality far beneath the minimum standard of scholarly precision and reliability. Few editions comprise a useful critical apparatus. Where this was added by the editor, readers would often have been better served if he had refrained from doing so. Most editions are careless transcriptions of one, usually unspecified, manuscript. If it is claimed that more than one manuscript was consulted, the selection of variants is on the whole accidental and subjective rather than based on systematic manuscript analysis. In many instances, however, these 'editions' are the only printed version of a work,

which is listed here for want of a better alternative. In a few cases where certain editions are clearly better than others, the less reliable ones have not been listed. For a complete list of all editions and printed versions with critical comments see the bibliographies by Janssens [\*10]. For the manuscripts containing the works listed as 'unpublished', see the list of Ibn Sīnā's works in Gutas 2014 [\*70: 411–528].

### *Bio-bibliographical Testimonies*

1 Autobiography and biography by al-Ġūzġānī. – Ed. and Engl. transl. by William E. Gohlman 1974 [\*117: 16–43]; to be read with the review by Manfred Ullmann. *Der Islam* 52 (1975):

148–151. – Ed. by Aḥmad Fuʿād al-Ahwānī 1952 [\*99]. – Ed. and Pers. transl. by Saʿīd Nafīsī 1952 [\*100]. – Ed. by S. Nafīsī 1954 [\*103]. – Germ. transl. by Paul Kraus, “Eine arabische Biographie Avicennas.” *Klinische Wochenschrift* 11 (1932): 1880a–1884b; repr. in: F. Sezgin et al. 1995 [\*40: III 185–197]. – Engl. transl. by Arthur J. Arberry, “Avicenna. His life and times.” In Arberry 1951 [\*29: 9–24]. – Engl. transl. of the autobiography by Gutas 2014 [\*70: 10–19].

2 Nizāmī ‘Arūḍī Samarqandī, Nağm al-Dīn Aḥmad b. ‘Umar (fl. 551/1156). *Čahār Maqāla*. Ed. by Muḥammad Muʿīn (Tehran 1333 h.š./1954). – Engl. transl. by E. G. Browne, *Chahār Maqāla (The Four Discourses) of Nidhāmī-i-‘Arūḍī-i-Samarqandī*. London, 1921.

3 al-Bayhaqī, Ṣaḥīr al-Dīn Abū l-Ḥasan ‘Alī b. Zayd Ibn Funduq (d. 565/1169–1170): *Tatimmat Šiwān al-ḥikma*. – Ed. by Rafīq al-‘Ağam. Beirut, 1994. – Ed. by Muḥammad Šafīʿ. Lahore, 1351/1932. – Ed. by Muḥammad Kurd ‘Alī, *Taʾrīḥ ḥukamāʾ al-islām*. Damascus, 1365/1946; repr. 1396/1976. – Ed. by Mamdūḥ Ḥasan Muḥammad. Cairo, 1996. – Abridged Engl. transl. by Max Meyerhof, “‘Alī al-Bayhaqī’s Tatimmat Šiwān al-ḥikma. A biographical work on learned men of the Islam.” *Osiris* 8 (1948): 122–217. – Repr. of both works in: Fuat Sezgin (ed.) *Historiography and classification of science in Islam*, vol. 8. Frankfurt a.M., 2005.

4 al-Qiftī, Ġamāl al-Dīn ‘Alī b. Yūsuf (d. 646/1248). *Taʾrīḥ al-ḥukamāʾ [Iḥbār al-‘ulamāʾ bi- aḥbār al-ḥukamāʾ, Epitome des Muḥammad b. ‘Alī az-Zawzanī]*. – Ed.

by Julius Lippert, *Ibn al-Qiftī’s Taʾrīḥ al-ḥukamāʾ*. Leipzig, 1903. – French transl. of Ibn Sīnā’s Auto-/Biography by M. Achena and H. Massé (1955–1958 [\*104: 12–30]).

5 Ibn Abī Uṣaybiʿa, Muwaffaq al-Dīn Aḥmad b. al-Qāsim (d. 668/1270). *Uyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ*. – Ed. by August Müller, 2 vols. Cairo, 1299/1882; Königsberg, 1884. – Ed. and engl. transl. by Emily Savage-Smith, Simon Swain and Geert Jan van Gelder, *A Literary History of Medicine. The ‘Uyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ of Ibn Abī Uṣaybiʿah*, 3 vols. Leiden, 2020. [The page numbers of Müller’s edition are included in the Arabic text in square brackets]. – Ed. of Ibn Sīnā’s Biography in *Tisʿ rasāʾil* [\*21: 1–5 (Introduction)].

6 Ibn Ḥallikān, Abū l-‘Abbās Šams al-Dīn Aḥmad b. Muḥammad (d. 681/1282). *Wafayāt al-aʿyān wa-anbāʾ abnāʾ al-zamān*. – Ed. by Iḥsān ‘Abbās, 8 vols. Beirut, 1968–1972. – Engl. transl. by William MacGuckin de Slane, *Ibn Khallikan’s Biographical Dictionary*, 4 vols. Paris, 1842–1871.

7 al-Šahrazūri, Šams al-Dīn Muḥammad b. Maḥmūd (d. after 687/1288). *Nuzhat al-arwāḥ wa-rawḍat al-afrāḥ fī taʾrīḥ al-ḥukamāʾ wa-l-falāsifa*. – Ed. by Ḥwaršid Aḥmad, 2 vols. Hyderabad, 1976.

8 Ibn al-Imād, Šihāb al-Dīn Abū l-Falāḥ ‘Abd al-Ḥayy b. Aḥmad b. Muḥammad al-Ḥanbalī al-Dimašqī (d. 1090/1679) *Šaḍarāt al-ḍaḥab fī aḥbār man ḍaḥab*. – Ed. by Ibn al-Imād al-‘Akri and ‘Abdalḥayy b. Aḥmad, 8 vols. Cairo, 1350/1931.

9 Ḥwāndamīr, Ġiyāt al-Dīn b. Humām al-Dīn (d. c. 942/1535–6). *Tārīḥ-i Ḥabīb al-siyar fī aḥbār-i aḥfād-i bašār*. – Ed. by Ġalāl al-Dīn Humāī, vol. 2. Tehran, 1333 h.š./1954, 443–449. – Pers. text and French transl. of Ibn Sīnā's biography by Amable Jourdain, "Biographie abrégée d'Abou Aly Synā, plus connu sous le nom d'Avicenne." *Fundgruben des Orients* (Wien) 3 (1813): 167–177; repr. in: F. Sezgin et al. 1999 [\*44: 11–15].

10 Ḥwāndamīr. *Dastūr al-wuzarā'*. – Ed. by Sa'īd Nafīsī. Tehran, 1317 h.š./1938, 124–136. – Ar. transl. by Ḥarbī Amīn Sulaymān, *al-Mu'arriḥ al-Īrānī al-kabīr Ġiyāt al-Dīn Ḥwāndamīr ka-mā yabdu fī kitābihi Dastūr al-wuzarā'*. Cairo, 1980, 225–233.

### Lists of Works

For an analysis and tabulation of the four oldest lists of Ibn Sīnā's works in chronological order cf. Gutas 2014 [\*70: 389–410].

15 References by Ibn Sīnā himself to his own books in the Autobiography and by al-Ġūzġānī in the Biography, in: Gohlman 1974 [\*117: 16–45, 50–89].

16 Shorter Bibliography by al-Ġūzġānī or a close collaborator, collated before 1159, in Gohlman 1974 [\*117: 46–49].

17 Longer Bibliography, collated before 1192 by an unknown author in the tradition of Ibn Sīnā's pupils, extant in MS Istanbul Üniversitesi 4755, and in Ibn Abī Uṣaybi'a [\*5: 11 18–20 Müller; Ar. 11.2 849–856, Engl. 111.2 943–952 Savage-Smith et al.].

18 Extended Bibliography, collated before 1242 by an unknown author, extant in: al-Bayhaqī [\*3: 187–190 Šafī'].

### Works: Partial Collections

20 *Avicennae philosophi praeclarissimae ac medicorum principis Compendium de anima. De mahad. i. de dispositione, seu loco, ad quem reuertitur homo, vel anima eius post mortem. Aphorismi de anima. De diffinitionibus, & quaesitis. De diuisione scientiarum.* Ab Andrea Alpagu Bellvnensi ... ex arabico in latinum versa. Cum expositionibus eiusdem Andreae collectis ab auctoribus arabicis. Omnia nunc primū in lucem aedita (Venice, Apud Iuuentas MDXLVI [1546]). – Repr. Farnborough, 1969.

21 *Tis' rasā'il fī l-ḥikma wa-t-ṭabī'yyāt, ta'līf al-Šayḥ al-Ra'īs ... Ibn Sīnā, wa-fī āḥirihā Qīṣṣat Salāmān wa-Absāl* (Qusṭanṭīniyya, 1298 H). – Repr. Bombay, 1318 H, Miṣr [Cairo] 1326/1908 [quoted here], Frankfurt a.M., 1999 [*Islamic Philosophy* 42]. – Ed. by Ḥasan 'Āṣī (Damascus, 1986). – Includes: Biography by Ibn Abī Uṣaybi'a; *al-Ṭabī'yyāt min 'Uyūn al-ḥikma* (GS 3); *al-Aḡrām al-'ulwīyya* (GP 6); *al-Quwā l-insāniyya wa-idrākātuhā* (= *Fuṣuṣ al-ḥikam*; G Spurious); *al-Ḥudūd* (GL 6); *Aqsām al-'ulūm al-'aqlīyya* (GS 1); *Iṭbāt al-nubuwwāt* (GM-Ps 2); *al-Nayrūziyya* (GPW 5k); *al-'Ahd* (GPP 1c); *Fī Ilm al-aḥlāq* (GPP 1b); *Qīṣṣat Salāmān wa-Absāl* (GM-Ps 8, cf. Gutas 2014 [\*70: 492 n. 46]).

22 *Traité mystiques d'Abou Alī al-Hosain ibn Abdallah ibn Sīnā ou d'Avicenne.* Ed. and partial French paraphrasing transl. by Michael August Ferdinand Mehren, 4 vols. Leiden, 1889–1899. – Repr. Frankfurt a.M., 1999 [*Islamic Philosophy* 35]. – Includes: Vol. 1:

*Risālat Ḥayy b. Yaqzān* (GM 7); Vol. 2: *al-Anmāṭ al-talāt al-āhira min al-Iṣārāt wa-l-tanbihāt* (GS 9); *Risālat al-Ṭayr* (GM 8); Vol. 3: *Risāla fī l-Ṭṣq* (GM 5); *Risāla fī Māhiyyat al-ṣalāt* (GM-Ps 3); *Kitāb fī Ma'nā l-Ziyāra* (GM-Ps 5); *Risāla fī Daf' al-ḡamm min al-mawt* (G Spurious); Vol. 4: *Risālat al-Qadar* (= *al-Qaḍā' wa-l-qadar*, GM 4).

23 *Maḡmū'at al-rasā'il*. – Ed. by Muḥyi al-Dīn Ṣabirī al-Kurdi (Miṣr [Cairo] 1328/1910). – Includes: *Ilm al-aḥlāq* (GPP 1b); *Risālat al-Ahd* (GPP 1c); *al-Quwā l-insāniyya wa-idrākātuhā* (= *Fuṣūṣ al-ḥikam*; G Spurious); *Aqsām al-'ulūm al-'aqliyya* (GS 1); *Risālat Sirr al-qadar* (GM-Ps 4); *Risālat al-Mabda' wa-l-ma'ād* (G Spurious); *Bayān al-ḡawhar al-nafīs* (= *al-Aḡrām al-'ulwiyya*) (GP 6).

24 *Manṭiq al-maṣriqiyyīn wa-l-Qaṣida al-muzdawīḡa fī l-manṭiq*. Cairo, 1910. – Repr. in: F. Sezgin (ed.): *Ibn Sīnā. Philosophical Treatises [Islamic Philosophy 42]*. Frankfurt a.M., 1999, 253–338. – Repr. Tehran, 1973; Qum 1985; [reset] ed. by Šukrī al-Naḡḡār (Beirut 1982).

25 *Ġāmi' al-badā'i'*. – Ed. by Muḥyi al-Dīn Ṣabirī al-Kurdi (Miṣr [Cairo] 1335/1917). – Includes: *Risālat al-Ṣalāt* (GM-Ps 3); *Tafsīr al-Ṣamadiyya* (GPW 5a); *Tafsīr al-Mu'awwiḍa al-ūlā* (GPW 5b i); *Tafsīr al-Mu'awwiḍa al-tāniya* (GPW 5b ii); *Risālat al-Ziyāra wa-l-du'a'* (GM-Ps 5); *Risālat al-Šifā' min ḥawf al-mawt* (G Spurious); *Risālat al-Qaḍā' wa-l-qadar* (GM 4); *Risālat al-Ṭṣq* (GM 5); *Risālat Ḥayy b. Yaqzān* (GM 7); *Risālat al-Ṭayr* (GM 8); *al-Aḡwiba 'an masā'il Abī l-Rayḥān al-Bīrūnī* (GP 8); *Risāla fī 'Illat qiyām al-arḍ fī wasa'at al-samā'* (GP 7).

26 *Maḡmū' rasā'il al-Šayḫ al-Ra'īs Abī 'Alī al-Ḥusayn b. 'Abdallāh Ibn Sīnā al-Buḥārī*. – Ed. by Zayn al-'Ābidīn al-Mūsawī. Hyderabad, 1353–54 [1934–35]. – Includes: *Risālat al-Fi'l wa-l-infi'āl* (GPP 1e); *Risāla fī Dikr asbāb al-ra'd* (G Spurious); *Risāla fī Sirr al-qadar* (GM-Ps 4); *al-'Arṣiyya fī l-tawḥīd* (GM-Ps 1); *Risāla fī l-Sa'āda* (= *al-Tuḥfa*, GM 6); *Risāla fī l-Ḥatt 'alā l-dikr* (GM-Ps 12); *Risāla fī l-Mūsīqā* (GS 6e).

27 *Büyük Türk Filozof ve Tıp Ustadı İbni Sina. Şasiyeti [sic] ve eserleri hakkında tetkikler*. [*Türk Tarih Kurumu Yayınları VII.1*]. Istanbul, 1937. – Repr. Istanbul, 2009. – Besides numerous studies on various aspects of Ibn Sīnā's life and works, this collection includes the following works: Turk. transl. of the Auto-/Biography from Ibn Abī Uṣaybi'a [\*5: II 2–9 Müller; Ar. II.2 809–828, Engl. III.2 896–917 Savage-Smith et al.]; Poetry (GPW 7) with Turk. transl.; Turk. transl. and Ar. text of *Ḥayy b. Yaqzān* (GM 7); Turk. transl. and Ar. text of *al-Adwīya al-qalbiyya* (GMed 2); Turk. transl. and Ar. text of *Risāla fī Māhiyyat al-ḥuzn wa-asbābihi* (GPP-Ps 2).

28 *Aristū 'inda l-'Arab*. – Ed. by 'Abd al-Raḥmān Badawī. Cairo, 1947. – Repr. al-Kuwayt, 1978. – Includes: *Šarḥ ḥarf Kitāb [sic] al-lām* (GS 11a); *Tafsīr/Šarḥ Kitāb Uṭlūḡiyā* (GS 11b); *al-Ta'līqāt 'alā ḥawāšī Kitāb al-Nafs li-Aristūṭālīs* (GS 11c); *Risāla ilā l-Kiyā* (GP 13); *al-Mubāḥaṭāt* (GS 14); *al-'Ahd* (GPP 1c).

29 *Avicenna on Theology*. – Transl. by Arthur J. Arberry. London, 1951. – Repr. Westport, CT, 1979. – Includes: Autobiography and Biography; *On the Nature of God* (Selection from *al-'Arṣiyya*,

GM-Ps 1); *Predestination* (*Sirr al-qadar*, GM-Ps 4); *On Prophecy* (Selection from the Metaphysics of *al-Nağāt*, GS 6); *On Prayer* (*Risāla fī l-Ṣalāt*, GM-Ps 3); *The After-Life* (Selection from the Metaphysics of *al-Nağāt*, GS 6); *Poem on the Soul* (*al-ʿAyniyya*, GP-Ps 4).

30 *Aḥwāl al-naḥs. Risāla fī l-Naḥs wa-baqāʾihā wa-maʿādiḥā ... wa-ṭalāt rasāʾil li-Ibn Sīnā*. – Ed. by Aḥmad Fuʾād al-Ahwānī. Cairo, 1371/1952. – Repr. Paris, 2007. – Includes: *Aḥwāl al-naḥs. Risāla fī l-Naḥs wa-baqāʾihā wa-maʿādiḥā* (= *al-Maʿād al-aṣḡar*, GM 3); *Mabḥaṭ ʿan al-quwā al-naḥsāniyya* (= *Kitāb fī l-Naḥs ʿalā sunnat al-iḥtiṣār*, GP 10); *Risāla fī Maʿrifat al-naḥs al-nāṭiqā wa-aḥwālīhā* (G Spurious); *Risāla fī l-Kalām ʿalā l-naḥs al-nāṭiqā* (GP 11).

31 *Panğ Risāla*. – Ed. by Ehsan Yarshater (Tehran, 1332 h.š./1953). – Repr. Hamadan, 2004. – Includes: *Lisān al-ʿArab* (GL 17); Pers. transl. of *Tafsīr-i sūra-yi Tawḥīd* (GPW 5a), *Tafsīr-i sūra-yi Falaq* (GPW 5b i), *Tafsīr-i sūra-yi Nās* (GPW 5b ii); *Risālat baʿd al-afāḍil ilā ʿulamāʾ madīnat al-salām* (GPW 1).  
32 *İbn Sina Risāleleri*. – Ed. by Hilmi Ziya Ülken, 2 vols. Istanbul, 1953. – Repr. Frankfurt a. M. 1999 [*Islamic Philosophy* 43]. – Includes: Vol. 1: *Uyūn al-ḥikma* (GS 3); *Risāla fī l-Radd ʿalā Abī l-Farağ Ibn al-Ṭayyib* (after Abū l-Farağ's *Risāla*) (GMed 11). – Vol. 2: *Ġawāb sitt ʿaṣar masʿala li-Abī Rayḥān* [sic] (= *al-Mubāḥaṭāt* §§ 142–209 Bidārfar, GS 14); *Ağwibat masʿal saʿala ʿanhā Abū Rayḥān* (GP 8); *Maktūb Abī Saʿīd ilā l-Ṣayḥ wa-ğawābuhu* (= *Ḥuṣūl ʿilm wa-ḥikma*, GM-Ps 7); *Aqwāl al-Ṣayḥ al-Raʿīs* (GPW 6i); *Risāla fī Intifāʿ ʿammā*

*nusiba ilayhi* (GPW 3); *Risāla ilā ʿAlāʾ al-Dawla b. Kākūya* (GPW 4d); *Risāla ilā Abī Ṭāhir b. Ḥassūl* (GPW 4c); *Ruqʿa katabahā ilā Ġaʿfar al-Qāṣānī* [sic] (GPW 4b); *Risāla ilā l-Ṣayḥ Abī l-Faḍl b. Maḥmūd* (GPW 4e); *Risāla ilā l-Ṣayḥ Abī l-Qasīm* [sic] b. *Abī l-Faḍl* (GPW 4f); *Risāla fī Ibṭāl aḥkām al-nuğūm* (GP 14); *Risāla ilā Abī Ubayd al-Ğūzğānī ... [fī] l-Muʿawwada fī amr al-naḥs* (GM-Ps 6); *Risāla fī Ġawāb al-masʿal* (= *Ğawhariyyat al-nār*, GP 5); *Ağwiba ʿan ʿaṣr masʿal* (GP 9); *Risāla fī l-Naḥs wa-baqāʾihā wa-maʿādiḥā* (= *al-Maʿād al-aṣḡar*, GM 3); *Risāla li-baʿd al-mutakallimūn* (GP 4).

33 *Avicenne et le récit visionnaire*. – Transl. by Henri Corbin. Tehran, 1954; Paris 1979 (2nd ed.). – Includes: French transl. of *Ḥayy b. Yaqzān* (GM 7), *Risālat al-Ṭayr* (GM 8), *Salamān wa-Absāl* (GM-Ps 8). – Engl. transl. by W. R. Trask in Corbin 1960 [\*34].

34 *Collected texts and papers on logic and language*. – Ed. by Mehdi Mohaghegh and Toshihiko Izutsu. Tehran, 1974. – Includes Engl. transl. of the Arabic introduction to *Logic* from *Dānišnāma* (GS 7); *Risāla fī Tūʿaqqub al-mawḍiʿ al-ğadalī* (GL 13); *al-Ağwiba ʿan al-masʿal ilā l-ğarība al-ʿišrīniyya* (GL 15).

35 *al-Tafsīr al-Qurʾānī wa-l-luḡa al-ṣūfiyya fī falsafat Ibn Sīnā*. – Ed. by Ḥasan ʿĀṣī. Beirut, 1402/1983. – Includes: *Tafsīr āyat al-nūr* (GPW 5e), *Tumma stawā ilā l-samāʾ* (GPW 5d), *Sūrat al-Aʿlā* (GPW 5c), *Sūrat al-Iḥlās* (GPW 5a), *Sūrat al-Falaq* (GPW 5b i), *Sūrat al-Nās* (GPW 5b ii); *Risāla fī l-Taṣawwuf* (= *Fuṣūṣ al-ḥikam*, G Spurious); *Fī Sirr al-ṣalāt wa-l-aʿāğib* (= *al-Nirānğāt*, GM-Ps 10);



*Fī l-Ṭṣq* (GM 5); *al-Ḥawf min al-mawt* (G Spurious); *al-Du‘ā’ wa-l-zīyāra* (GM-Ps 5); *Risāla fī l-Malā’ika* (GPW 6g); *Fī l-Du‘ā’* (GPW 6d); *Risāla fī Sirr al-qadar* (GM-Ps 4); *Kalām al-Ṣayḥ fī l-mawā‘iz* (GPW 6e); *Risāla fī Ḥatt ‘alā al-dīkr* (GM-Ps 12); *Fī Māhiyyat al-ḥuzn* (GPP-Ps 2); *al-Wird al-a‘zam* (GPW 6h); *Risālat Ḥayy b. Yaqzān* (GM 7); *Risālat al-Ṭayr* (GM 8).

36 *Min Mu‘allafāt Ibn Sīnā al-ṭibbiyya*. – Ed. by Muḥammad Zuhayr al-Bābā (Aleppo, 1404/1984). – Includes: *Daf‘ al-maḍārr al-kullīyya* (GMed 7); *Urġūza fī l-Ṭibb* (GMed 27); *al-Adwīya al-qalbiyya* (GMed 2).

37 *al-Maḍhab al-tarbawī ‘inda Ibn Sīnā*. – Ed. by ‘Abd al-Amīr Z. Šams al-Dīn (Beirut, 1988). – Includes: *al-Siyāsa al-manziliyya* (GPP-Ps 1); *Aqsām al-‘ulūm al-‘aqliyya* (GS 1); *Risālat al-Arzāq* (GM-Ps 11); *Tadbīr man-zil al-‘askar* (GMed 12); *Faḍā’il al-šarāb* (GMed 17); *Tadbīr al-musāfir* (GMed 13); *Naṣā’ih al-ḥukamā’ li-l-Iskandar* (G Spurious); *Itbāt al-nubuwwāt* (GM-Ps 2); *Ta’wīl al-aḥlām* (= *Ta’bīr al-ru’yā*, G Spurious); Excerpt on the different dominations from the Rhetoric of the *Šifā’* (GS 54.18); *al-Birr wa-l-iṭm* (GPP 1a); *Ilm al-aḥlāq* (GPP 1b); *Risāla fī l-Mawt* (G Spurious); *Māhiyyat al-ḥuzn* (GPP-Ps 2); *Risāla ilā Abī Sa‘īd b. Abī l-Ḥayr* (= *Ziyāra*, GM-Ps 5); *Risāla fī l-Du‘ā’* (GPW 6d); *Kalām fī l-mawā‘iz* (GPW 6e); *Brief letter to Abū Sa‘īd b. Abī l-Ḥayr* (Spurious); *Risāla ilā ‘Alā’ al-Dīn* [sic] *b. Kākūya* (GPW 4d); *al-Karamāt wa-l-mu‘ġizāt wa-l-a‘ġīb* (= *al-Niranġāt*,

GM-Ps 10); *al-Uqūl* (GL 6a); *al-Ahd* (GPP 1c); *Risāla fī l-Kalām ‘alā l-naḥs al-nāṭiqā* (GP 11).

38 *al-‘Ulūm al-‘aqliyya fī l-manẓūmāt al-‘arabiyya*. – Ed. by Ġalāl Šawqī. al-Kuwayt, 1990.

39 *Tres escritos esotéricos* (Avicena). Estudio preliminar, traducción y notas. By Miguel Cruz Hernández. Madrid, 1998; 2011 (2nd ed.). – Includes: *Ḥayy b. Yaqzān* (GM 7), 1–32; *Risālat al-Ṭayr* (GM 8), 33–48; *al-‘Aynīyya* (GP-Ps 4), 49–52; *Salāmān wa-Absāl* (GM-Ps 8), 55–59; *Anmāt* 9–10 of the *Išārāt* (GS 9), 61–106.

40 *Maġmū‘a-yi Falsafī-yi Marāġa. A Philosophical Anthology from Maraghah*. – Ed. by Nasrollah Pourjavady. Tehran, 2002. – Includes: *Risāla fī l-Sa‘āda wa-l-ḥuġaġ* (= *al-Tuḥfa*, GM 6); *al-Aḍḥawīyya* (GM 2); *Asbāb ḥudūt al-ḥurūf* (GL 16); *Faṣl fī l-ḥuzn wa-asbābihi* (GPP-Ps 2).

41 *Antologyah le-khitve Even Sina* (Anthology of the Writings of Avicenna in Hebrew translation). – Ed. by Steven Harvey, Engl. transl. by Avivah Shusman. Tel Aviv, 2009.

42 *Angeli. Ebraismo Cristianesimo Islam*. – Ed. by Giorgio Agamben and Emanuele Coccia. Vicenza, 2009.

#### Individual Editions:

##### *Philosophical Summae* (GS)

50 *Maqāla fī Aqsām al-ḥikma* (GS 1). – Ed. in *Tis‘ rasā’il* [\*21: no. 5, as *Aqsām al-‘ulūm al-‘aqliyya*]. – Repr. in *Maġmū‘at al-rasā’il* [\*23: 225–243]. – Ed. by ‘A. Šams al-Dīn 1988 [\*37: 261–272]. – Ed. by

Mohsen Kadivar, "Ibn Sīnā and the classification of philosophy." In Kherad, *Sophia Perennis* (Tehran) 5 (2009): 35–137. – Lat. transl. by Andrea Alpago 1546 [\*20: fol. 137<sup>v</sup> (=139<sup>v</sup>)–145<sup>v</sup>]. – French transl. of the text of the sections on physics and metaphysics, improved on the basis of five MSS in Michot 1980 [\*121: 64–71]. – Further French transl. by (a) Georges C. Anawati, "Les divisions des sciences intellectuelles d'Avicenne (traduction)." *Mélanges de l'Institut Dominicain d'Études Orientales* 13 (1977): 323–335; (b) Rabia Mimoune, "Épître sur les parties des sciences intellectuelles d'Abū 'Alī al-Ḥusain b. Sīnā." In J. Jolivet and R. Rashed 1984 [\*39: 143–151]. – Partial Ital. transl. with extensive bibliography by Olga Lizzini, "L'Epistola sulle divisioni delle scienze intellettuali di Avicenna." In *Ad ingenii acuitionem. Studies in Honour of Alfonso Maierù*. Ed. by Stefano Caroti, Ruedi Imbach, Zénon Kaluza, Giorgio Stabile and Loris Sturlese. Louvain-la-Neuve, 2006, 221–248. – Engl. transl. of the introduction and the part on practical philosophy by Muhsin Mahdi. In R. Lerner and M. Mahdi 1963 [\*36: 95–97]. – Ed. and Turk. transl. by Kaya 2020 [\*186].

51 *Kitāb al-Maǧmū' aw al-Ḥikma al-'arūḍiyya* (GS 2). – Ed. by Muḥsin Ṣāliḥ. Beirut, 1428/2007. – Ed. of the part on rhetoric by Muḥammad Salīm Sālīm, *Ibn Sīnā. Kitāb al-Maǧmū' aw al-Ḥikma al-'arūḍiyya fī ma'ānī Kitāb Riṭūriqā*. Cairo, 1950. – Ar. excerpt from the part on rhetoric with French transl. by Denise Remondon, "Al-Aḥlāq wa-l-infi'ālāt

al-nafsāniyya." In *Miscellanea [Mémoires d'Avicenne IV]*. Cairo, 1954, 19–29; repr. in F. Sezgin et al., vol. 5, 1999 [\*44: 247–257]. – Ed. of the part on poetics by Muḥammad Salīm Sālīm, *Ibn Sīnā. Kitāb al-Maǧmū' aw al-Ḥikma al-'arūḍiyya fī ma'ānī Kitāb al-Ši'r*. Cairo, 1969. – Partial Engl. transl. by G. van Gelder and M. Hammond, vol. 1, 2008 [\*397: 26–28].

52 *Uyūn al-ḥikma* (GS 3). – Ed. by 'Abd al-Raḥmān Badawī. Cairo, 1954. – Repr. al-Kuwayt, 1980. – Ar. text of the part on physics in *Tis' rasā'il* [\*21: 2–38].

53 *al-Hidāya* (GS 4). – Ed. by Muḥammad 'Abduh. Cairo, 1974. – Partial French transl. by Jean (Yahya) Michot, "L'eschatologie dans le «Livres de la Guidance» d'Avicenne. Présentation, traduction et index de la dernière section du Kitāb al-Hidāya." *Bulletin de Philosophie Médiévale* 30 (1988): 138–152. – Ital. transl. of the part on metaphysics by O. Lizzini 1995 [\*138].

54 *al-Šifā'* (GS 5)

54.1 *al-Manṭiq*

1. *al-Madḥal*. – Ed. by Georges C. Anawati, Maḥmūd al-Ḥuḍayrī and Aḥmad Fu'ād al-Ahwānī. Cairo, 1371/1952. – Ed. and Engl. transl. by Silvia Di Vincenzo 2021 [\*354]. – Engl. transl. by Allan Bäck, *Al-Madkhal. Avicenna on the Isagoge of Porphyry*. Munich, 2019.

2. *al-Maqūlāt*. – Ed. by Georges C. Anawati, Maḥmūd al-Ḥuḍayrī, Aḥmad Fu'ād al-Ahwānī and Sa'īd Zāyid. Cairo, 1378/1959. – Engl. transl. by Allan Bäck, *Al-Maqūlāt. Commentary on Aristotle's Categories*. Munich, 2016.

3. *al-ʿIbāra*. – Ed. by Maḥmūd al-Ḥudayrī. Cairo, 1390/1970. – Engl. transl. by Allan Bäck, *Avicenna's Commentary on Aristotle's De Interpretatione*. Munich, 2013.
4. *al-Qiyās*. – Ed. by Saʿīd Zāyid. Cairo, 1373/1964. – Partial Engl. transl. by Nabil Shehaby, *The Propositional Logic of Avicenna*. Dordrecht, Boston, 1973. – Germ. transl. of the section on the physiognomic syllogism by J. Thomann 1996 [\*302: 56–57].
5. *al-Burhān*. – Ed. by Abū-l-ʿAlā ʿAfīfī. Cairo, 1375/1956. – Ed. by ʿAbd al-Raḥmān Badawī. Cairo, 1954. – Engl. transl. of excerpts in J. McGinnis, D. Reisman 2007 [\*56: 147–156].
6. *al-Ġadal*. – Ed. by Aḥmad Fuʿād al-Ahwānī. Cairo, 1385/1965.
7. *al-Saḡṣaṭa*. – Ed. by Aḥmad Fuʿād al-Ahwānī. Cairo, 1958.
8. *al-Ḥiṭāba*. – Ed. by Muḥammad Salīm Sālim. Cairo, 1373/1954. – Partial Germ. transl. by R. Würsch 1991 [\*382: 140–174]. – Partial French transl. by M. Aouad and M. Rashed 1997 [\*388].
9. *al-Šiʿr*. – Ed. by ʿAbd al-Raḥmān Badawī. Cairo, 1953; Beirut 1973 (2nd ed.). – Ed. by ʿAbd al-Raḥmān Badawī. Cairo, 1386/1966 [two divergent editions]. – Older ed. by Margoliouth 1887 [\*370: 80–112 (Ar. pagination)]. – Engl. transl. by Dahiyat 1974 [\*116]. – Ed. and Turkish transl. by Ferruh Özpilavcı, *Kitābuʾl-Şifā . Poetika- Şiir*, Istanbul 2020. – New ed. by D. Gutas in preparation.  
Repr. of all nine parts of Logic (*al-Mantiq*) of the *Şifāʾ* in 4 vols. Qum, 1404–1405 H.
- 54.2 *al-Ṭabʿiyyāt*
  1. *al-Samāʾ al-ṭabīʿī*. – Lithographic print of the *Şifāʾ*, vol. 1. Tehran, 1886, 2–159. – Ed. by Saʿīd Zāyid. Cairo, 1983. – Ed. by Ġaʿfar Āl-Yāsīn. Beirut, 1417/1996. – Engl. transl. with Ar. text, based on Āl-Yāsīn with corrections from the 1886 Tehran and Zāyid editions, by Jon McGinnis, *Avicenna. The Physics of the Healing*. Provo, Utah, 2009. – Medieval Latin transl. of Book I, ed. by Simone van Riet, *Liber primus Naturalium. Tractatus primus. De causis et principiis naturalium*. Louvain-la-Neuve, Leiden, 1992. – Medieval Latin transl. of Book II, ed. by Simone van Riet, Jules Janssens and A. Allard, *Liber primus Naturalium. Tractatus secundus. De motu et de consimilibus*. Brussels, 2006. – Medieval Latin transl. of Book III, ed. by Jules Janssens, *Liber primus Naturalium. Tractatus tertius. De his qua habent naturalia ex hoc quod habent quantitatem*. Brussels, 2017.
  2. *al-Samāʾ wa-l-ʿālam*. – Ed. by Maḥmūd Qāsim. Cairo, 1389/1969. – Medieval Latin transl., ed. by M. Renaud, “Le <De caelo et mundo> d’Avicenne.” *Bulletin de Philosophie Médiévale* 15 (73): 92–130.
  3. *al-Kawn wa-l-fasād*. – Ed. by Maḥmūd Qāsim. Cairo, 1389/1969. – Medieval Latin transl., ed. by Simone van Riet, *Liber tertius Naturalium. De generatione et corruptione*. Louvain-la-Neuve, Leiden, 1987.
  4. *al-Afʿāl wa-l-infiʿālāt*. – Ed. by Maḥmūd Qāsim. Cairo, 1389/1969. – Medieval Latin transl., ed. by Simone van Riet, *Liber quartus Naturalium. De*

*actionibus et passionibus qualitatum primarum*. Louvain-la-Neuve, Leiden, 1989.

5. *al-Ma'ādin wa-l-āṭār al-'ulwīyya*. – Ed. by 'Abd al-Ḥalīm Muntaṣir, Sa'īd Zāyid and 'Abdallāh Ismā'īl. Cairo, 1385/1965. – Ed. and Medieval Latin and Engl. transl. by E.J. Holmyard and D.C. Mandeville, *Avicennae De congelatione et conglutinatione lapidum; being sections of the Kitāb al-ṣifā'*. The Latin and Arabic texts. Paris, 1927.
6. *al-Nafs*. – Ed. and French transl. by Ján Bakoš, *Psychologie d'Ibn Sīnā (Avicenne) d'après son œuvre al-ṣifā'*, 2 vols. Prague, 1956. – Criticised by Fazlur Rahman, *Bulletin of the School of Oriental and African Studies* (1958): 407–409, partially rehabilitated by Heinrich Simon, *Orientalistische Literaturzeitung* 55 (1960): 278–282; the only complete transl. into a modern European language to date. – Ed. by Fazlur Rahman, *Avicenna's De anima*. London, 1959 [criticised by H. Simon, loc. cit.]. – Ed. by Georges C. Anawati and Sa'īd Zāyid. Cairo, 1395/1975. – Ed. by Ḥasan Ḥasanzāda Āmulī. Qum, 1375 h.š. [1996–1997]. – Medieval Latin transl., ed. by Simone van Riet. *Liber de anima seu sextus de Naturalibus*, 2 vols. Louvain, Leiden, 1972). – Engl. transl. of excerpts in J. McGinnis and D. Reisman 2007 [\*56: 175–209]. – Engl. transl. of excerpts in T. Alpina 2021 [\*275: 190–238].
7. *al-Nabāt*. – Ed. by 'Abd al-Ḥalīm Muntaṣir, Sa'īd Zāyid and 'Abdallāh Ismā'īl. Cairo, 1384/1965.
8. *al-Ḥayawān*. – Ed. by 'Abd al-Ḥalīm Muntaṣir, Sa'īd Zāyid and 'Abdallāh Ismā'īl. Cairo, 1390/1970.

### 54.3 *al-Riyāḍiyyāt*

1. *Ilm al-Hay'a*. – Ed. by Muḥammad Riḍā Madwar and Imām Ibrāhīm Aḥmad. Cairo, 1401/1980. – Russ. transl. by A. Kubesova, *Kommentarii k «Almagestu» Ptolemeja*, 2 vols. Almaty, 1975. Incorrectly attributed to al-Fārābī based on MS London, BL, Or. 7368; cf. Janos 2012 [\*501: 24].
2. *al-Ḥisāb*. – Ed. by 'Abd al-Ḥamīd Luṭfi Maẓhar. Cairo, 1395/1975.
3. *Uṣūl al-handasa*. – Ed. by 'Abd al-Ḥamīd Ṣabra and 'Abd al-Ḥamīd Luṭfi Maẓhar. Cairo, 1397/1977.
4. *Mūsīqā*. – Ed. by Zakariyā Yūsuf, Ḡawāmi' *'ilm al-mūsīqā*. Cairo, 1956. – French transl. by d'Erlanger 1930–1959 [\*521: II 103–245]. – Partial Germ. transl. by Wright 2004–2005 [\*539].

### 54.4 *al-Ilāhiyyāt*. (a) Editions;

#### (b) Translations

#### (a) Editions.

Part 1: Ed. by Georges C. Anawati and Sa'īd Zāyid. Cairo, 1380/1960;  
Part 2: Ed. by Muḥammad Yūsuf Mūsā, Sulaimān Dunyā and Sa'īd Zāyid. Cairo, 1380/1960. – *al-Ilāhiyyāt min al-Ṣifā' li-l-Ṣayḥ al-Ra'īs Abī 'Alī Ḥusayn b. 'Abd Allāh Ibn Sīnā ma'a ta'līqāt*, vol. 1. Tehran, 1303 H [1885], 266–567. – *al-Ilāhiyyāt min Kitāb al-Ṣifā'*. – Ed. by Ḥasan Ḥasanzāda Āmulī. Qum, 1417 H/1375 h.š. [1997–1998]. – Ed. by Ḥ. Nāḡī Iṣfahānī, *Al-Ṣifā' (al-Ilāhiyyāt), with marginal glosses by Mullā Ṣadrā and others*. Tehran, 1383 h.š./2004 [Institute of Islamic Studies of Tehran, McGill University]. – *Ibn Sīnā, Metafizik*, 2 vols. Ed. by E. Demirli and Ö. Türker. Istanbul, 2004 [see (b) below]. – *al-Ilāhiyyāt*

*min Kitāb al-Šifāʾ*. Ed. by A. al-Sayāh and T. Wahba. Cairo, 2009. – *Avicenna (Ibn Sīnā). The Metaphysics of the Šifāʾ*. Facsimile edition of MS Malek Library (Tehran) 1085, dated 509H/1115, with introductions in English and Persian by Amos Bertolacci and Gholamreza Dakhah. Costa Mesa [CA], 2019. – [Online project of a new edition and Engl. transl. of the text:] PhiBor 2014–19: *Philosophy on the Border of Civilizations and Intellectual Endeavours. Towards a critical edition of the Metaphysics (Ilahīyyat of Kitāb al-Shifāʾ) of Avicenna (Ibn Sīnā)*. Scuola Normale Superiore di Pisa, IMT School for Advanced Studies, Lucca, <http://www.avicennaproject.eu/>.

(b) Translations. – Medieval Latin transl., ed. by Simone van Riet, *Liber de Philosophia prima sive Scientia divina*, 3 vols. (Books I–IV, v–x and *Lexiques*). Louvain, Leiden, 1977, 1978, 1983. – Germ. transl. by Max Horten, *Die Metaphysik Avicennas, enthaltend die Metaphysik, Theologie, Kosmologie und Ethik*. Leipzig, 1907; repr. Frankfurt a.M., 1960 [*Minerva*], Frankfurt a.M., 1999 [*Islamic Philosophy* 40–41]. – French transl. by Georges C. Anawati, *La métaphysique du Šifāʾ*, 2 vols. Paris, 1978–1985. – Partial Engl. transl. in: S.H. Nasr and M. Aminrazavi 1999 [\*43: 226–237]. – Turk. transl. by E. Demirli and Ö. Türker, *Metafizik*, 2 vols. Istanbul, 2004. – Engl. transl. with repr. of the 1960 Cairo ed. by Michael E. Marmura, *Avicenna. The Metaphysics of the Healing*. Provo, Utah, 2005. – Ital. transl. with repr. of the 1960 Cairo ed. by Olga Lizzini, *Avicenna. Metafisica*. Milan, 2002, 2006

(2nd ed.). – Partial Span. transl. by C.A. Segovia, *Avicenna. Cuestiones divinas (Ilāhiyyāt)*. Madrid, 2006. – Ital. transl. by Amos Bertolacci, *Libro della Guarigione. Le cose divine di Avicenna*. Turin, 2007. – Engl. excerpts in J. McGinnis, D. Reisman 2007 [\*51: 219–223]. – Partial Germ. transl. by Jens Ole Schmitt, *Avicenna. Grundlagen der Metaphysik. Eine Auswahl aus den Büchern I–V der Metaphysik. Arabisch – lateinisch – deutsch. Übersetzt, eingeleitet und mit Anmerkungen versehen*. Freiburg i.B., 2016. – [Online project of a new edition and Engl. transl. of the text:] PhiBor 2014–19: *Philosophy on the Border of Civilizations and Intellectual Endeavours. Towards a critical edition of the Metaphysics (Ilahīyyat of Kitāb al-Shifāʾ) of Avicenna (Ibn Sīnā)*. Scuola Normale Superiore di Pisa, IMT School for Advanced Studies, Lucca, <http://www.avicennaproject.eu/>.

55 *al-Naǧāt* (GS 6). – Ed. by Muḥyi al-Dīn Ṣabrī al-Kurdī. Cairo, 1331 [1913]. – Ed. by Muḥammad Taqī Dānišpažūh. Tehran, 1364 h.š./1985; repr. 2000. – Ed. by Maǧīd Faḥrī. Beirut, 1985. – Engl. transl. of the section on logic by Asad Q. Ahmed 2011 [\*166]. – Engl. transl. of the section on the soul from the Physics: (a) Fazlur Rahman, *Avicenna's Psychology. An English translation of Kitāb al-Naǧāt, Book II, Chapter VI*. London, 1952; repr. in F. Sezgin et al. 1999 [\*44: v 39–175]; (b) Muhammad Ali Khalidi, *Medieval Islamic Philosophical Writings*. Cambridge, 2005, 27–58. – Germ. transl. of the section on music from the chapter on mathematics by Mahmoud El Hefny 1931 [\*521]. – Modern

Latin transl. of the section on metaphysics by Nematallah Caramé, *Avicennae Metaphysices compendium*. Rome, 1926. – Partial Engl. transl. of the section on metaphysics by A.J. Arberry 1951 [\*29: 42–49. 64–76].

56 *Dānišnāma-yi 'Alā'ī* (GS 7)

56.1 *Manṭiq*. – Ed. by Aḥmad Ḥurāsānī. Tehran, 1315 h.š./1936. – Ed. by Muḥammad Miškāt. Tehran, 1331 h.š. [1952]; repr. Hamadan 2004. – Ed. of the Arabic text of the introduction to logic by Mohaghegh and Izutsu 1974 [\*34: do – seh]. – French transl. by Achena and Massé 1955–1958, 1986 (2nd ed.) [\*104]. – Engl. transl. by Farhang Zabeeh, *Avicenna's Treatise on Logic*. (Den Haag 1971).

56.2 *Ṭabṭ'iyyāt*. – Ed. by Muḥammad Miškāt. Tehran, 1331 h.š. [1952]; repr. Hamadan, 2004. – French transl. by Achena and Massé 1955–1958, 1986 (2nd ed.) [\*104]. – Engl. transl. of chapters 42–50 by Thomas Gaskill in: S.H. Nasr and M. Aminrazavi 1999 [\*43: 211–218].

56.3 *Riyāḍiyyāt*. – Ed. by Muḡtabā Mīnuwī. Tehran, 1331 h.š. [1952]. [This edition announced by Mīnuwī is frequently mentioned in bibliographies, but cannot be found in any library]. – French transl. by Achena and Massé 1955–1958, 1986 (2nd ed.) [\*104] [on the basis of several MSS].

56.4 *Ilāhiyyāt*. – Ed. by Aḥmad Ḥurāsānī. Tehran, 1315 h.š./1936. – Ed. by Muḥammad Mu'īn (Tehran, 1331 h.š./1952); repr. Hamadan 2004. – French transl. by Achena and Massé 1955–1958, 1986 (2nd ed.) [\*104]. – Engl. transl. by Parviz Morewedge, *The Metaphysica of*

*Avicenna (Ibn Sīnā)*. London, 1973. – Engl. transl. of chapters 28–37 by Thomas Gaskill in: S.H. Nasr and M. Aminrazavi 1999 [\*43: 198–211].

57 *al-Mašriqiyyūn* (GS 8)

57.1 Introduction and division of the sciences. – Ed. in *Manṭiq al-mašriqiyyūn* [\*24: 2–8]. – Engl. transl. of the introduction 2–4 by Gutas 2014 [\*70: 34–41].

57.2 Logic. – Ed. in *Manṭiq al-mašriqiyyūn* [\*24].

57.3 Physics. – Ed. by A. Özcan, *İbni Sina'nın el-hikmetu'l-meşrikiyye adlı eseri ve tabiat felsefesi*. Istanbul, 1993.

58 *al-Išārāt wa-l-tanbihāt* (GS 9). –

Ed. by Jacques Forget, *Ibn Sīnā. Le livre des théorèmes et des avertissements*. Leiden, 1892; repr. in F. Sezgin et al. 1999 [\*44]. – Ed. [with the commentary by Naṣīr al-Dīn al-Ṭūsī] by Sulaymān Dunyā, 4 vols. Cairo, 1968–1971 (2nd ed.); repr. 1983. – Ed. by Muḡtabā Zārī'ī.

Qum, 1381 h.š./2002. – French transl. by Amélie-Marie Goichon, *Ibn Sīnā. Livre des directives et remarques*. Beirut, Paris, 1951; repr. in F. Sezgin et al. 1999 [\*44]. – Pers. transl. by H. Malikšāhī.

Tehran, 1988–1989. – Engl. transl. of the first part on logic by Shams C. Inati, *Ibn Sīnā. Remarks and Admonitions. Part One: Logic*. Toronto, 1984. – Engl. transl. of chapters 1–7 (*anmāt*) of Part 2 by Shams C. Inati, *Ibn Sina's Remarks and Admonitions. Physics and Metaphysics*. New York, 2014. – Engl. transl. of chapters 8–10 (*anmāt*) of Part 2 by Shams C. Inati, *Ibn Sīnā and Mysticism. Remarks and Admonitions. Part Four*. London, New York, 1996. – Partial Ital. transl. of chap. 6 (*namaṭ*) of Part 2 by Olga Lizzini, *Angeli*

2009 [\*42: 1919–1944]. – French transl. of chap. 8 (*namaṭ*) of Part 2 by Jean (Yahya) Michot, “De la joie et du bonheur. Essai de traduction critique de la section 11 8 des «Ishârât» d’Avicenne.” *Bulletin de Philosophie Médiévale* 25 (1983): 49–60.

59 *al-Inṣāf* (GS 11). The extant parts are:  
59.1 *Šarḥ ḥarf kitāb* [sic] *al-lām* (GS 11a). – Ed. by ‘Abd al-Raḥmān Badawī 1947 [\*28: 22–33]. – Ed. and French transl. by M. Geoffroy, J. Janssens and M. Sebti, *Commentaire sur le Livre Lambda de la Métaphysique d’Aristote (Chapitres 6–10) par Ibn Sīnā (Avicenne)*. Paris, 2014.

59.2 *Tafsīr kitāb Uṭūlūḡiyyā* (GS 11b1) and *Šarḥ Uṭūlūḡiyyā* (GS 11b2). – Ed. by ‘Abd al-Raḥmān Badawī 1947 [\*28: 37–74]. – French transl. of Badawī’s ed. by G. Vajda, “Les notes d’Avicenne sur la «Théologie d’Aristote».” *Revue Thomiste* 51 (1951): 346–406; repr. in F. Sezgin et al. 1999 [\*44: IV 104–164].

59.3 *al-Ta’līqāt ‘alā ḥawāšī Kitāb al-Nafs li-Aristūṭālīs*. – Ed. by ‘Abd al-Raḥmān Badawī 1947 [\*28: 75–116]. – New ed. by D. Gutas in preparation.

60 *al-Ta’līqāt* (GS 12a). Extant in three (known) recensions:

60.1 ‘Abd al-Razzāq recension. – Ed. by ‘Abd al-Raḥmān Badawī. Cairo, 1973. – Repr. Qum 1379 h.š.

60.2 Indexed (Lawkarī-) recension. – Ed. by Sayyid Ḥusayn Mūsawīyān. Tehran, 2013.

60.3 Recension arranged according to topic. – Ed. by Ḥasan Maḡīd al-‘Ubaydī. Baghdad, 2002, Damascus, 2008 (2nd ed.).

61 *al-Mubāḥaṭāt* (GS 14). – Ed. by ‘Abd al-Raḥmān Badawī 1947 [\*28: 122–246]. – Ed. by Muḥsin Bīdārfar. Qum 1371 h.š./1992. – Partial French transl. by Jean (Yahya) Michot 1997 [\*142].

## *Logic and Linguistics (GL)*

### *A. General*

65 *Kitāb al-Ḥudūd* (GL 6). – Ed. and French transl. by Amélie-Marie Goichon, *Avicenne. Livre des définitions*. Cairo, 1963. – Latin transl. by Andrea Alpago 1546 [\*20: fol. 121<sup>r</sup>–137<sup>v</sup>]. – Ed. by ‘Abd al-Amīr al-A’sam, *Al-Muṣṭalaḥ al-falsafī ‘inda l-‘Arab*. Baghdad, 1985; Cairo 1989 (2nd ed.) 229–263. – Ital. transl. by Olga Lizzini in *Angeli* 2009 [\*42: 1875–1882].

### *B. Syllogistic Logic*

66 *al-Muḥṭaṣar al-awsaṭ fi l-manṭiq* (GL 1), ed. H. Takci (Sakarya University). Haziran, 2009. – Ed. by Yūsufṭānī Sayyid Maḥmūd. Tehran, 2017. – Partial ed. (*Kitāb al-Maqūlāt*) by A. Kalbarczyk 2012 [\*330].

67 *al-Risāla al-Mūḡaza fi uṣūl al-manṭiq* (GL 2). – Inedited.

68 *al-Manṭiq al-mūḡaz* (GL 3). – Ed. by M.F. Demirci, “İbn Sīnā’nın «al-Mūceẓ fi’l-mantık» risālesi.” *Marmara Üniversitesi İlahiyat Fakültesi Dergisi* 36 (2009): 151–206.

69 *Urḡūza fi ‘ilm al-manṭiq* (GL 4) – Ed. in *Manṭiq al-Mašriḡiyyīn* [\*24: 1–18]; repr. in: Ğ. Šawqī 1990 [\*38: 149–161]. – Ed. with annotations and modern Latin transl. by Augustus Schmoelders, *Documenta philosophiae Arabum ex codd.*

*mss. primus edidit, Latine vertit, commentario illustravit.* Bonn, 1836, 26–42. 70–87. 11–23 (Ar. pagination). – Engl. transl. of the section on the Categories by Gutas 1993 [\*299: 64].

70 *Maqāla fī l-Išāra ilā ‘ilm al-manṭiq* (GL 5). – Inedited. – Facsimile edition of the text of MS Āstān-i Quds 11083/2 in Zaynab Barkhūrdārī and Nağafqalī Ḥabībī “Ḥikmat-i Sinawī.” *Miškāt al-Nūr* 12, no. 40 (1387 h.š.): 145–156.

71 *Risāla fī Ḥaṭa’ man qāla inna l-kammiyya ḡawhar* (GL 8). – Inedited.

72 *Risāla fī Ḥaṭa’ man qāla inna l-šay’ ḡawhar wa-‘araḍ* (GL 9). – Inedited.

73 *Bayān ḍawāt al-ḡiḥa* (GL 10). – Inedited.

74 *al-Nukat fī l-manṭiq* (GL 11). – Edited in the margin of Mullā Ṣadrā, *Šarḥ al-Hidāya al-aṭirīyya*. Tehran, 1313, 327–329, entitled *Fī Ma’rifat al-ašyā’*. – Ed. by Sayyid Ḥusayn Mūsawīyān. “Taḥqīq wa-tašḥīḥ intiqādī risālā-yi Nukat al-manṭiq.” In *Jāvidān Kherad. Sophia Perennis* (Tehran) 6 (2009): 131–157.

75 *Fī Uṣūl ‘ilm al-burhān / Kitāb al-Mūḡaz fī l-manṭiq* (GL 12). – Inedited.

76 *Maqāla fī Ta’aqub al-mawḍi’ al-ḡadalī* (GL 13). – Ed. by Muḥammad Taqī Dānišpažūh in: Mohaghegh and Izutsu 1974 [\*34: 61–77].

77 *al-Aḡwiba ‘an al-masā’il al-‘iṣrīniyya* (GL 15). – Ed. by Muḥammad Taqī Dānišpažūh in: Mohaghegh and Izutsu 1974 [\*34: 79–103].

### C. Rhetoric and Poetics

Ibn Sīnā’s extant works on rhetoric and poetics are all either part of the

sections on logic in the summae or of his more extensive works on logic; cf. the summae and writings on syllogistic logic listed above. An independent work dedicated to only these two subjects is so far not known.

### D. Linguistics

82 *Risāla fī Maḥārīḡ al-ḥurūf* (GL 16). – Ed. by Parwīz Nātil Ḥānlārī. Tehran, 1333 h.š./1954, 1970 (2nd ed.). – Ed. by Muḥammad Ḥassān al-Ṭayyān and Yaḥyā Mīr ‘Alam, *Risālat Asbāb ḥudūt al-ḥurūf li-l-Šayḥ ... Ibn Sīnā*. Damascus, 1983. – Facsimile in *Maḡmū’a-yi Falsafī-yi Marāḡa* [\*40: fol. 432–442]. – Engl. transl. by Khalil I. Semaan, *Arabic Phonetics. Ibn Sīnā’s Risālah on the Points of Articulation of the Speech-sounds*. Lahore, 1963. – French transl. by Nebil Radhouane, *Les causes de la production des lettres*. Carthage, 2002. – Ed. (repr. of the ed. al-Ṭayyān and ‘Alam) and Engl. transl. by Solomon I. Sara, *A Treatise on Arabic Phonetics*. Munich, 2009.

83 *Kitāb Lisān al-‘arab* (GL 17). – Ed. by E. Yarshater in *Panḡ Risāla* [\*31: 7–18]; includes a facsimile edition of MS Malik 2013 [\*31: 19–23].

84 *Qaḍā’ Allāh ta’ālā* (GL 17a). – Ed. and French transl. by Michot 2000 [\*144: 103–15].

### Physics (Natural Philosophy) (GP)

91 *Kalām fī Ḥadd al-ḡism* (GP 1). – Inedited.

92 *Fī anna Ab’ād al-ḡism ḡayr dātīyya lahu* (GP 2). – Inedited.

93 *al-Ḥukūma* (GP 3). – Ed. by Mehdi Mohaghegh, *Ḥudūt al-‘ālam*,



*Afḍal-al-Dīn ... Ibn Ḡaylān; al-Ḥukūma ...*,  
*Ibn Sīnā*. Tehran, 1377 h.š./1998, 131–152.

94 *Risāla fī l-Wuṣʿa* (GP 4). – Ed. by  
Hilmi Ziya Ülken 1953 [\*32: II 155–159].

95 *Ḡawharīyyat al-nār* (GP 5). – Ed. by  
Hilmi Ziya Ülken 1953 [\*32: II 73–75].

96 *Fī l-Aḡrām al-ʿulwiyya* (GP 6). –  
Ed. in *Tisʿ rasāʾil* [\*2r: 39–59]. – Ed. in  
*Maḡmūʿat al-rasāʾil* [\*23: 257–79].

97 *Risāla fī ʾllat qiyām al-arḍ fī*  
*ḥayyizihā* (GP 7). – Ed. in *Ḡāmiʿ al-badāʾiʿ*  
[\*25: 152–164].

98 *al-Aḡwiba ʿan masāʾil Abī Rayḥān*  
*al-Bīrūnī* (GP 8). – Ed. by Seyyed Hossein  
Nasr and Mehdi Mohaghegh as *Abū*  
*Rayḥān Bīrūnī wa Ibn-i Sīnā. Al-Asʿila*  
*wa l-aḡwiba*. Tehran, 1352 h.š./1974. –  
Ed. by ʿAbd al-Karīm al-Yāfi as *Ḥiwār*  
*al-Bīrūnī wa-Ibn Sīnā*. Damascus,  
2002. – Partial Germ. transl. by  
Gotthard Strohmaier, *Al-Bīrūnī. In den*  
*Gärten der Wissenschaft*. Leipzig, 1991,  
49–65. – Engl. transl. by Rafiq Berjak  
and Muzaffar Iqbal, “Ibn Sīnā – al-Bīrūnī  
Correspondence.” *Islam & Science* 1  
(2003): 91–98. 253–260; 2 (2004): 57–62.  
181–187; 3 (2005): 57–62. 166–170; 4  
(2006): 197–201; 5 (2007): 53–60.

99 *al-Aḡwiba ʿan al-masāʾil al-ʿaṣr* 1  
(GP 9). – Ed. by Mubahat Türker Küyel,  
“İbn Sīnā’nın <On sorunun> karşılıkları.”  
*Beyruni’ye Armağan* (Ankara, 1974):  
103–112. – Repr. of the Türker ed. with  
additions and variants from the MS  
Teheran Maḡlis 625, and Ital. transl. by  
Francesca Lucchetta, “Le dieci questioni  
di Avicenna.” *Quaderni di Studi Arabi* 19  
(2001): 101–134. – Partial Latin transl. by  
Andrea Alpago 1546 [\*20: fol. 137<sup>v</sup>–137<sup>v</sup>  
(= 139<sup>v</sup>)]; repr. in Luchetta 2001.

100 *Kitāb fī l-Nafs ʿalā sunnat al-iḥtiṣār*  
(GP 10). – Ed. and Germ. transl. by

Samuel Landauer, “Die Psychologie  
des Ibn Sīnā.” *Zeitschrift der Deutschen*  
*Morgenländischen Gesellschaft* 29 (1875):  
335–418. – Repr. in F. Sezgin et al. 1995  
[\*40: I 65–148]. – Ed. by Edward Abbot  
van Dyck, *Ḥadiyyat al-Raʾīs ... wa-ḥiya*  
*Mabḥaṭ ʿan al-quwā n-naḥsāniyya aw*  
*Kitāb fī n-Nafs ʿalā sunnat al-iḥtiṣār*.

Cairo, 1325/1907; repr. Paris, 2005, 1–87. –  
Engl. transl. by E. A. van Dyck, *Avicenna’s*  
*Offering to the Prince. A Compendium on*  
*the Soul*. Verona, 1906. – Latin transl. by  
Andrea Alpago 1546 [\*20: fol. 1<sup>r</sup>–39<sup>v</sup>].

101 *Risāla fī l-Kalām ʿalā l-naḥs al-nāṭiqā*  
(GP 11). – Ed. by Aḥmad Fuʾad al-Ahwānī,  
*al-Kitāb* 5 (1952): 419–423; repr. without  
the apparatus in: al-Ahwānī 1952 [\*30:  
195–199]; repr. in ʿA. Šams al-Dīn 1988  
[\*37: 425–429]. – Engl. transl. by Gutas  
2014 [\*70: 67–75].

102 *Al-Ḡumal min al-adilla*  
*al-muḥaqqāqa li-baqāʾ al-naḥs al-nāṭiqā*  
(GP 12). – Inedited.

103 *Iḥtilāf al-nās fī amr al-naḥs wa-amr*  
*al-ʿaql (Risāla ilā l-Kiyā)* (GP 13). – Ed.  
by ʿAbd al-Raḥmān Badawī 1947 [\*28:  
119–122]. – French transl. by Pines 1952  
[\*101: 6–9]. – Engl. transl. by Gutas 2014  
[\*70: 53–58].

104 *al-Iṣāra ilā ʾilm fasād aḥkām*  
*al-nuḡūm* (GP 14). – Ed. and French  
transl. by Yahya (Jean) Michot, *Avicenne.*  
*Réfutation de l’astrologie. Édition et tra-*  
*duction du texte arabe, introduction, notes*  
*et lexique*. (Beirut, Paris, 1427/2006. –  
Partial Ital. transl. by Olga Lizzini in  
*Angeli* 2009 [\*42: 1886–1888].

*Mathematics (GMath)*

- 111 *Risāla fī l-Zāwiya* (GMath 1). – Ed. by Muṣṭafā Mawāldī. “Risāla fī l-zāwiya li-Ibn Sīnā.” *Maǧallat Maʿhad al-Maḥṭūṭāt al-ʿArabīyya* 42 (1998): 33–93.
- 112 *Maqāla fī Kayfiyyat al-raṣad wa-taṭābuqihi maʿa l-ʿilm al-ṭabīʿī* (GMath 3). – Ed. by M. R. Madwar and I. I. Aḥmad. *Šifāʾ, Hayʾa* [\*54.3.1: 651–659].
- 113 *al-Ālāt al-raṣadiyya* (GMath 4). – Ed. and Germ. transl. by E. Wiedemann 1926/1984 [\*520]. – Facsimile edition of MS Leiden Warn. Or. 184, fol. 49–62, by F. Sezgin 1985 [\*528].

*Metaphysics (of the Rational Soul) (GM)*

Ibn Sīnā did not write any independent works on *Metaphysica generalis*; all his texts on the subject were incorporated into more comprehensive works, especially his *summae* (cf. the list and the brief descriptions with bibliographical references in Bertolacci 2006 [\*442: 581–591, Appendix C]). His writings on *Metaphysica specialis* concern capacity, actions, and the destiny of the rational human soul in its interrelation with the celestial world, i.e. the metaphysics of the rational soul.

121 *Kitāb al-Mabḍaʾ wa-l-maʿād* (GM 1). – Ed. by ʿAbdallāh Nūrānī. Tehran, 1984. – French transl. by Yahya (Jean) Michot. *Avicenne. Livre de la genèse et du retour. Version exploratoire*. Oxford, 2002. – Online pdf at <http://www.muslimphilosophy.com/sina/works/AN195.pdf> [viewed on 5 Sept. 2020]. – Portuguese transl. by

Jamil Ibrahim Iskandar. *Avicena (Ibn Sīnā). A origem e o retorno*. São Paulo, 2005.

- 122 *al-Aḍḥawīyya fī l-maʿād* (GM 2). – Ed. and Ital. transl. by Francesca Lucchetta. *Avicenna. Epistola sulla vita future*. Padua, 1969. – Ed. by Ḥasan ʿĀṣī. Beirut 1404/1984, 1407/1987 (2nd ed.). – Facsimile edition in *Maǧmūʿa-yi Falsafī-yi Marāǧa* [\*40: fol. 360–402]. – Anonymous old Pers. transl., ed. by Ḥusayn Ḥadiw Ğam. Tehran, 1972, 1985 (2nd ed.). – Lat. transl. by Andrea Alpago 1546 [\*20: fol. 40<sup>r</sup>–102<sup>r</sup>].
- 123 *al-Maʿād [al-aṣḡar] (Hāl al-naḥs al-insānīyya)* (GM 3). – Ed. by Aḥmad Fuʾād al-Ahwānī 1952 [\*30: 43–142]. – Anonymous old Pers. transl., ed. by ʿAlī Awǧabī, *Ǧanǧīna-yi Bahārīstān. Maǧmūʿa-yi 18 risāla dar maṭṭiq, falsafa, kalām wa-ʿirfān*. Tehran, 1379 h.š., 129–164. – French transl. of Chap. 1 by Jean (Yahya) Michot, “Avicenne. La définition de l’âme. Section I de l’Épître des états de l’âme. Traduction critique et lexicque.” In A. de Libera et al. 1997 [\*42: 239–256]. – French transl. of Chap. 10 by Guy Monnot, “La transmigration et l’immortalité.” *Mélanges de l’Institut Dominicain d’Études Orientales* 14 (1980): 149–166, esp. 156–158. – French transl. of Chap. 13 by Michot 1985 [\*207]. – Engl. transl. of Chap. 16 by Gutas 2014 [\*70: 22–24].
- 124 *Fī l-Qaḍāʾ wa-l-qadar* (GM 4). – Ed. and French paraphrase by A. Mehren 1889–1899 [\*22: iv]. – Old Pers. transl., ed. by Muḥammad Taqī Dānišpażūh, in

*Farhang-i Īrān zamīn* 24 (1979): no. 4. – French transl. by Tahani Sabri, “Traité d’Avicenne sur le destin (al-qadar). Traduction et commentaire.” *Revue des Études Islamiques* 55–57 (1987–1989 [1992]): 181–204.

125 *Risāla fī l-ʿIṣq* (GM 5). – Ed. and French paraphrase by A. Mehren 1889–1899 [\*22: III 1–27]. – Ed. and Turk. transl. by Ahmed Ateş, *İbn Sina. Aşkın mâhiyeti hakkında risâle*. Istanbul, 1953. – Ed. by H. ʿĀṣī 1983 [\*35: 241–269]. – Engl. transl. by E. L. Fackenheim 1945 [\*94: 208–228]. – Engl. transl. of the first section by F. Rundgren 1978–1979 [\*205].

126 *Risālat al-Tuḥfa* (GM 6). – Ed. by Z. Mūsawī, in *Maǧmūʿ rasāʾil* [\*26: no. 5]. – Facsimile edition in *Maǧmūʿa-yi Falsafī-yi Marāǧa* [\*40: fol. 226–243]. – French transl. of some passages by Michot 1986 [\*209: Index, s.v. “Bonheur”].

127 *Risālat Ḥayy b. Yaqẓān* (GM 7). – Ed. by A. Mehren 1889–1899 [\*22: I]. – Ed. by Aḥmad Amīn, *Ḥayy b. Yaqẓān li-Ibn Sīnā wa-Ibn Ṭufayl wa-l-Suhrawardī*. Cairo, 1958, 43–53. – Old Pers. transl., possibly by al-Ġūẓġānī, transl. into French by Henry Corbin 1954/1979 [\*33: 154–165]; Engl. transl. of Corbin’s French transl. by W.R. Trask in Corbin 1960 [\*34: 137–150]; repr. in S.H. Nasr and M. Aminrazavi 1999 [\*43: 260–268]. – French transl. by Amélie-Marie Goichon, *Le récit de Ḥayy Ibn Yaqẓān commenté par des textes d’Avicenne*. Paris, 1959.

128 *Risālat al-Ṭayr* (GM 8). – Ed. and French paraphrase by A. Mehren 1889–1899 [\*22: II 42–48]. – Ed. by H. ʿĀṣī 1983 [\*35: 336–343]. – French transl. ‘on the basis of the Arabic texts and the two

versions by Sāwāǧī and Suhrawardī” by H. Corbin 1954/1979 [\*33: 203–209]. – Engl. transl. of Corbin’s French transl. by W.R. Trask in Corbin 1960 [\*34: 186–192]. – Engl. transl. by P. Heath 1990 [\*211].

129 *al-Ġumāna al-ilāhiyya fī l-tawḥīd* (GM 9). – Inedited.

### *Practical Philosophy (GPP)*

133 *Kitāb al-Birr wa-l-iṭm* (GPP 1a). – Ed. by ʿA. Šams al-Dīn 1988 [\*37: 353–368].

134 *Risāla fī l-Aḥlāq* 1 (GPP 1b). – Ed. by ʿA. Šams al-Dīn 1988 [\*37: 369–377].

135 *al-ʿAhd* (GPP 1c). – Ed. by ʿAbd al-Raḥmān Badawī 1947 [\*28: 247–249 (original version)]. – French transl. (original version) by Michot 2000 [\*144: 116\*–126\*].

136 *Risāla fī l-Aḥlāq* 2 (GPP 1d). – Ed. and French transl. by Bekir Karlıǧa, *Un nouveau traité de morale d’Ibn Sīnā inconnu jusqu’à maintenant*. Istanbul, 1995. – Ed. and Turk. transl. by Bekir Karlıǧa, *İbn Sina’nın şimdiye kadar bilinmeyen yeni bir ahlâk risalesi*. (Manuscript for publication in the Turkish journal Erdem).

137 *al-Afʿāl wa-l-infiʿālāt* (GPP 1e). – Ed. by Zayn al-ʿĀbidīn al-Mūsawī in *Maǧmūʿ rasāʾil* [\*26: no. 1]. – Partial French transl. by Michot, cf. Janssens 1991 [\*10: 62].

### *Personal Writings (GPW)*

141 *Risāla ilā ʿUlamāʾ Baǧdād yasʿaluhum al-inṣāf baynahu wa-bayna raǧul Hamadanī yaddaʿ l-ḥikma* (GPW 1). – Ed. by Ehsan Yarshater 1953 [\*37: 73–90]. – French transl. of the Introduction by Michot 2000 [\*144:

10\*–14\*]. – Germ. transl. by Rüdiger Arnzen, *Platonische Ideen in der arabischen Philosophie*. Berlin, 2011, 355–370.

**142** *Risāla ilā Ṣadiq yas'aluhu l-inṣāf baynahu wa-bayna l-Hamadānī alladī yadda' l-hikma* (GPW 2). – Ed. and French transl. by Michot 2000 [\*144].

**143** *Risāla fī Intifā' ammā nusiba ilayhi min mu'araḍat al-Qur'ān* (GPW 3). – Ed. and French transl. by Michot 2007 [\*160].

**144** *Tafsīr ba'ḍ suwar kalām Allāh* (GPW 5).

For a complete list of extant exegeses of Quranic verses see Gutas 2014 [\*70: 506–508]. The following have been edited:

**144.1** *Sūrat al-Ihlāṣ* (Q 112) (GPW 5a). – Ed. by Ḥasan 'Āṣī 1983 [\*35: 104–113]. – Ed. by 'Abdallāh 'Abd al-Raḥmān al-Ḥaṭīb, "Tafsīr Sūrat al-Ihlāṣ li-ṣ-Ṣaiḥ al-Ra'īs Abī 'Alī al-Ḥusain b. 'Abdallāh Ibn Sīnā." *al-Machriq* 75 (2001): 383–433; 76 (2002): 121–158. – Engl. transl. with repr. of 'Āṣī's edition by Joseph Kenny, "Sūra 112. Commented by Ibn-Sīnā." *Orita* 36 (2004): 1–17.

**144.2** *al-Mu'awwiḍatāni*: i. *Sūrat al-Falaq* (Q 113); ii. *Sūrat al-Nās* (Q 114) (GPW 5b). Ed. by Ḥasan 'Āṣī 1983 [\*35: 114–125]. – Engl. transl. with repr. of 'Āṣī's edition by Joseph Kenny, "Sūras 113 & 114. Commented by Ibn-Sīnā." *Orita* 35 (2003): 1–16.

**144.3** *Sūrat al-A'lā* (Q 87) (GPW 5c). – Ed. by Ḥasan 'Āṣī 1983 [\*35: 94–103]. – Engl. transl. by 'Abdul Ḥaq 1988 [\*132].

**144.4** *Tafsīr qawlihi ta'ālā: Tamma stawā ilā l-samā'i wa-hiya duḥān* (Q 41:11) (GPW 5d). – Ed. and French transl. by

J. Michot 1980 [\*206]. – Ed. by Ḥasan 'Āṣī 1983 [\*35: 89–93].

**144.5** *Tafsīr āyat al-nūr* (Q 24:35) (GPW 5e). – Ed. by Ḥasan 'Āṣī 1983 [\*35: 84–88].

**144.6** *al-Risāla al-Nayrūziyya fī ma'ānī al-hurūf al-ḥiḡā'iyya* (GPW 5k) – Ed. by 'Abd al-Salām Hārūn, *Nawādir al-maḥṭūṭāt*, vol. 2. Cairo, 1393/1973 (2nd ed.), 27–44.

**145** *al-Ḥuṭba al-tawḥīdiyya* (GPW 6a). – Ed. and Engl. transl. by Kazi Ahmad Mian Akhtar, "A tract of Avicenna (translated by Umar Khayyam)." *Islamic Culture* 9 (1935): 218–233. – Ed. with the old Pers. transl. (by Ḥayyām?) by Nafīsī 1954 [\*103: 260–265].

For a list of further homiletic texts attributed to Ibn Sīnā but of doubtful authenticity see Gutas 2014 [\*70: 509–511].

### *Medicine (GMed)*

Of Ibn Sīnā's medical works, only those with philosophical import have been listed here.

**151** *al-Qānūn fī l-ṭibb* (GMed 1). – Ed. Rome 1593. – Ed. Būlāq 1877; repr. Beirut 1970; repr. Baghdad 1975. – Ed. by Edouard (Idwār) al-Qāṣṣ and 'Alī Zay'ūr, 4 vols. Beirut, 1413/1993 [repr. of the text of the Būlāq edition in a new layout and with indices]. – Ed. by Institute of the History of Medicine and Medical Research of New Delhi under the direction of Hakeem Abdul Hameed, 5 vols. Delhi, 1982–1996. – Engl. transl. published by the Hamdard Foundation. Delhi, 1993–2002. – Medieval Latin transl. by Gerard of Cremona. Venice, 1507; repr. Hildesheim, 1998; ed. in *Liber*

*Canonis Medicinae*. Venice, 1527; repr. Brussels 1971. – Partial Engl. transl. of Book I by Oskar Cameron Gruner, *A Treatise on the Canon of Medicine of Avicenna*. London, 1930; repr. 1973; revised repr. by Laleh Bakhtiar. Chicago, 1999.

**152** *Maqālat al-Adwiya al-qalbiyya* (GMed 2). – Ed. by M. al-Bābā 1984 [\*36: 221–294]. – Medieval Latin transl. by Arnold of Villanova in *Liber Canonis Medicinae*. Venice, 1527; repr. Brussels, 1971, 421–428. – Engl. transl. by Hakeem Abdul Hameed 1983 [\*525].

**153** *Fī Naqḍ Risālat Ibn al-Ṭayyib fī l-quwā l-ṭabīʿiyya* (GMed 11). – Ed. by Ülken 1953 [\*32: 1 66–71].

**154** *Urǧūza fī l-ṭibb* (GMed 27). – Ed. and French transl. by Henri Jahier and Abdelkader Noureddine, *Avicenne. Poème de la médecine*. Paris, 1956. – Ed. by Muḥammad Zuhayr al-Bābā 1984 [\*36: 89–194]. – Medieval Latin transl. in *Liber Canonis Medicinae*. Venice, 1527; repr. Brussels, 1971, 429–438. – Engl. transl. by Haven C. Krueger, *Avicenna's Poem on Medicine*. Springfield, Ill., 1963. – Ital. transl. by Andrea Borruso, *Avicenna. Il poema della medicina*. Turin, 1996.

### *Doubtful and Pseudepigraphic Writings (GX-Ps Nr.)*

Many books of doubtful authenticity as well as clear pseudepigraphs have been attributed to Ibn Sīnā. In this list, we have included only those that were traditionally believed to be by Ibn Sīnā or can lay some claim to authenticity. Clear fakes, demonstrably false attributions and fragments

scattered across manuscripts have not been included, and neither have works attributed to Ibn Sīnā in single manuscripts that have not yet been edited. For a complete list of doubtful and pseudepigraphic works (with manuscript references) cf. the information in Gutas 2014 [\*70: 411–528 (Inventory) and 529–540 (Conspectus)].

**161** *ʿUyūn al-masāʾil* (GS-Ps 1). – Ed. by Friedrich Dieterici 1890 [\*197: 56–65 with attribution to al-Fārābī]. – Germ. transl. by F. Dieterici 1892 [\*198: 92–107]. – Span. transl. by Manuel Alonso Alonso, “Las ‘Uyūn al-masāʾil’ de al-Fārābī.” *Al-Andalus* 24 (1959): 251–273.

**162** *al-Maǧālis al-sabʿa bayn al-Šayḥ wa-l-ʿĀmirī* (GS-Ps 3). – Ed. and transl. by M. Cüneyt Kaya (in preparation); cf. Kaya 2015 [\*178].

**163** *al-Qaṣida al-ʿayniyya* (GP-Ps 4). – Ed. in *Manṭiq al-mašriḡiyyīn* [\*24: kb – kǧ]. – Ed. by Ğ. Šawqī 1990 [\*38: 775–776]. – Ed. and French transl. by D. De Smet in J. Janssens and D. De Smet 2002 [\*49: 1–20]. – Engl. transl. by A.J. Arberry 1951 [\*29: 77–78]. – Engl. transl. by G.J. van Gelder, *Classical Arabic Literature*. New York, London, 2013, 73–74.

**164** *Risāla fī Infisāḥ al-šuwār al-mawǧūda fī l-naḥs* (GP-Ps 5). – Ed. and French transl. by Jean (Yahya) Michot, “L'Épître sur la disparition des formes intelligibles après la mort d'Avicenne. Édition critique, traduction et index.” *Bulletin de Philosophie Médiévale* 29 (1987): 152–170. – Engl. transl. by J. Michot, “Avicenna's ‘Letter on the

disappearance of the vain intelligible forms after death». Presentation and translation.” *Bulletin de Philosophie Médiévale* 27 (1985): 94–103.

**165** *Ta'alluq al-nafs bi-l-badan*

(GP-Ps 6). – Ed. and French transl.

by Meryem Sebtı, “Une épître inédite d'Avicenne. Ta'alluq al-nafs bi-l-badan (De l'attachement de l'âme et du corps). Édition critique, traduction et annotation.” *Documenti e Studi sulla Tradizione Filosofica Medievale* 15 (2004): 141–200.

**166** *Risāla fī Amr mastūr* (GP-Ps 9). –

Ed. by Ahmed Ateş, “İbn Sīnā. Risālat al-iksīr.” *Türkiyat Mecmuası* 10 (1951/1953): 27–54. – Engl. transl. by H.E. Stapleton, R.F. Azo, M. Hidāyat Ḥusayn and G.L. Lewis, “Two alchemical treatises attributed to Avicenna.” *Ambix* 10 (1962): 41–82. – Repr. of the Ateş edition (without the apparatus) with a Renaissance Latin translation (in the editions by Zetzner and Manget) and with the French transl. by Georges C. Anawati, “Avicenne et l'alchimie.” *Convegno Internazionale 9–15 Aprile 1969, Oriente e Occidente nel Medioevo. Filosofia e Scienze, Roma 1971*, 286–341.

*al-Risāla al-'Arşīyya* → *Fī Ḥaqā'iq 'ilm al-tawḥīd*.

**167** *Fī Ḥaqā'iq 'ilm al-tawḥīd*

(*al-'Arşīyya*?) (GM-Ps 1). – Ed. by Zayn al-'Abidīn al-Mūsawī in *Mağmū' rasā'il* [\*26: no. 4]. – Ed. by Ibrāhīm Ibrāhīm Hilāl. Cairo, 1400/1980. – Paraphrasing partial Germ. transl. by Egbert Meyer, “Philosophischer Gottesglaube. Ibn Sīnā's Thronchrift.” *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 130 (1980): 226–278. – Partial Engl. transl. by

A.J. Arberry 1951 [\*29: 25–37]. – Partial Ital. transl. by Olga Lizzini in *Angeli* 2009 [\*42: 1889–1893].

**168** *Fī Itbāt al-nubuwwa*

(GM-Ps 2). – Ed. by Michael E. Marmura. Beirut, 1968. – Engl. transl. by Marmura in R. Lerner and M. Mahdi 1963 [\*36: 112–121]. – Ital. transl. by Olga Lizzini in *Angeli* 2009 [\*42: 1894–1918].

**169** *Risāla fī l-Ṣalāt* (GM-Ps 3). – Ed. by A. Mehren 1889–1899 [\*22: III 28–43]. – Ed. by Ḥasan 'Āṣī 1983 [\*35: 203–222]. – Engl. transl. by A.J. Arberry 1951 [\*29: 50–63].

**170** *Risāla fī Sirr al-qadar*

(GM-Ps 4). – Ed. and Engl. transl. by George F. Hourani, “Ibn Sīnā's 'Essay on the secret of destiny'.” *Bulletin of the School of Oriental and African Studies* 29 (1966) 25–48. – Engl. transl. by A.J. Arberry 1951 [\*29: 38–41].

**171** *Fī Sabab iğābat al-du'ā' wa-kayfiyyat al-zīyāra* (GM-Ps 5). – Ed. by A. Mehren 1889–1899 [\*22: III 44–48]. – Ed. by Ḥ. 'Āṣī 1983 [\*35: 281–288]. – Ed. by 'A. Šams al-Dīn 1988 [\*37: 388–391].

**172** *Ḥuṣūl 'ilm wa-ḥikma* (GM-Ps 7). – Ed. in the introduction to *al-Nağāt* 1913 [\*55: 11–15 al-Kurdi]. – Partial French transl. by Michot 2000 [\*144: 120\*–129\*].

**173** *Salāmān wa-Absāl* (GM-Ps 8). – For translations and discussions cf. Corbin 1960 [\*34].

**174** *Risāla fī l-Sīyāsa* (GPP-Ps 1). – Ed. by L. Cheikho in *Maqālāt falsafīyya qadīma*. Beirut, 1911, 2–17. – Ed. by 'A. Šams al-Dīn 1988 [\*37: 232–260]. – Engl. transl. by McGinnis and Reisman 2007 [\*56: 224–237].

*Spurious and Falsely Attributed Writings (Spuria)*

- 181 *Ta'bir al-ru'yā*. – Ed. and Engl. transl. by M. 'Abdul Mu'īd Khan, "A unique treatise on the interpretation of dreams by Ibn Sina. Edited with an introduction." In *Avicenna Commemoration Volume* 1956 [\*31: 257–307]; also "Kitabu Ta'bir-ir-Ruya of Abu 'Ali b. Sina." *Indo-Iranica* 9 (1956): 15–57.
- 182 *al-Nukat wa-l-fawā'id*. – Cf. Yahya (Jean) Michot 2007 [\*159].
- 183 *Fuṣūṣ al-ḥikam*. – Ed. by F. Dieterici 1890 [\*197: 66–83 with attribution to al-Fārābī]. – Germ. transl. by F. Dieterici 1892 [\*198: 108–138]. – Partial Ital. transl. by Olga Lizzini, in *Angeli* 2009 [\*42: 1945–1963].

*Reference Works by Other Authors*

- 191 Aristotle. *Poetics* (Greek). – Tarán, Leonardo and Dimitri Gutas. *Aristotle, Poetics. Editio maior of the Greek text with historical introductions and philological commentaries* (Greek and Latin, edition of the Greek text by Leonardo Tarán; Arabic and Syriac by Dimitri Gutas). Leiden, Boston, 2012. – *Fī l-Šī'r*. Cairo, 1953. – Germ. transl. by Manfred Fuhrmann. Munich, 1976; including the Greek text, Stuttgart, 1982 and several repr. – Engl. transl. by Richard Janko. Indianapolis, Cambridge, 1987. – Germ. transl. by Arbogast Schmitt, 2nd revised and amended ed. Berlin, 2011.
- 192 Aristotle. *Rhetoric* (Greek). – Ed. by W.D. Ross. Oxford, 1982; several repr. – Ed. by Malcolm C. Lyons, *Ars Rhetorica. The Arabic version*. Cambridge, 1982. – *Rhetorik*. Transl., with a

bibliography, explanation, and afterword by Franz G. Sieveke. Munich, 1980.

- 193 Aristotle. *al-Ṭabī'a* [*Physics*, Arabic]. – Ed. by 'Abd al-Raḥmān Badawī. Cairo, 1964–1965, 1984 (2nd ed.).
- 194 Alexander of Aphrodisias. *On the Principles of the Universe* [Arabic]. – Ed. and Engl. transl. by Charles Genequand, *Alexander of Aphrodisias on the Cosmos*. Leiden, 2001.
- 195 Johannes Philoponos. In *Aristotelis Physicorum Libros Quinque Posteriores Commentaria*. – Ed. by H. Vitelli, in *Commentaria in Aristotelem Graeca*, 16. Berlin, 1887.
- 196 John Philoponos. In *Aristotelis Physicorum Libros Tres Priores Commentaria*. – Ed. by H. Vitelli, in *Commentaria in Aristotelem Graeca*, 17. Berlin, 1887.
- 197 John Philoponos. *Commentary on the Physics of Aristotle* [Arabic]. – Ed. by 'Abd al-Raḥmān Badawī with the commentaries by Ibn al-Samḥ, Ibn 'Adī, Mattā b. Yūnus and Ibn al-Ṭayyib, 2 vols. Cairo, 1964–1965, 1984 (2nd ed.).
- 198 *Alfārābī's Philosophische Abhandlungen*, aus Londoner, Leidener und Berliner Handschriften hg. von Friedrich Dieterici. Leiden, 1890.
- 199 *Alfārābī's Philosophische Abhandlungen*, aus dem Arab. übers. von Friedrich Dieterici. Leiden, 1892.
- 200 *Al-Fārābī. Philosophes à Bagdad au X<sup>e</sup> siècle*. Présentation et dossier par Ali Benmakhlouf. Traduit de l'arabe par Stéphane Diebler. Glossaire par Pauline Koetschet. Paris, 2007.
- 201 al-Fārābī. *Didascalía in Rethoricam* [sic] *Aristotelis ex glosa Alfarabii*. – Ed.

by M. Grignaschi, *Deux ouvrages inédits sur la rhétorique*, vol. 2. Beirut, 1971, 149–252. – A new edition by Maroun Aouad and Frédérique Woerther is in preparation.

202 al-Fārābī. *al-Ḥiṭāba*. – Ed. and French transl. by J. Langhade, *Deux ouvrages inédits sur la rhétorique, I: Kitāb al-Ḥaṭāba*. Beirut, 1971, 30–121. – Ed. by Muḥammad Taqī Dānišpažūh 1408 h.š. [1987] [203: I 456–492].

203 al-Manṭiqiyyāt li-l-Fārābī. – Ed. by Muḥammad Taqī Dānišpažūh, 3. vols. Qum, 1408–1410 h.š. [1987–1989].

204 al-Fārābī. *Risāla* (or *Maqāla*) *fī Qawānīn šināʿat al-šuʿarāʾ*. – Ed. by Muḥammad Taqī Dānišpažūh 1408 h.š. [1987] [\*203: I 493–499]. – Ed. and Engl. transl. by A.J. Arberry, “Fārābī’s Canons of poetry.” *Rivista degli Studi Orientali* 17 (1938): 266–278; repr. in *Islamic Philosophy* 9 (Frankfurt a.M., 1999): 296–308. – French transl. by S. Diebler 2007 [\*200: 119–129].

205 al-Fārābī. *al-Šiʿr*. – Ed. by Muhsin Mahdi in *Shiʿr* 3/12 (1959): 91–95. – Ed. by Muḥammad Taqī Dānišpažūh 1987 [\*203: I 500–503]. – French transl. by S. Diebler 2007 [\*200: 112–118]. – Engl. transl. by G. van Gelder and M. Hammond 2008 [\*397: I 15–18].

206 Ibn al-Ṭayyib. *Tafsīr kitāb Isāgūghī li-Farfūriyūs*. – Ed. and Engl. transl. by K. Gyekye. Beirut, 1986.

207 Abū l-Barakāt al-Baḡdādī. *Kitāb al-Muʿtabar*, 3 vols. Hyderabad, 1357–1358 [1938–1939]. – Repr. Iṣfahān, 1415 H [1994]; Ġubayl, Paris, 2012.

208 Ibn Rušd. *Averroes’ three short commentaries on Aristotle’s Topics, Rhetoric,*

*and Poetics*. – Ed. and Engl. transl. by Charles E. Butterworth. Albany, 1977.

209 Ibn Rušd. – Ed. by Maruon Aouad, *Commentaire moyen à la «Rhétorique» d’Aristote, introd. générale, éd. critique du texte arabe, trad. française, comm. et tables*, 3 vols. Paris, 2002. – Ed. by Muḥammad Salīm Sālim, *Talḥiṣ al-ḥiṭāba*. Cairo, 1967.

210 Ibn Rušd. *Tafsīr Mā ba’d al-ṭabīʿa*. – Ed. by Maurice Bouyges. Beirut, 1953.

211 Ibn Ṭumlūs, *Le livre de la rhétorique du philosophe et médecin Ibn Ṭumlūs (Alhagiag bin Thalmus)*. – Ed. by Maroun Aouad. Paris, 2006.

212 al-Rāzī, Faḥr al-Dīn. *Manṭiq al-Mulaḥḥaṣ*. – Ed. by Aḥmad Farāmarz Qarāmalikī and Ādīna Aṣḡarīnīzād. Tehran, 2002.

213 al-Ḥūnaḡī, Afḍal al-Dīn. *Kašf al-asrār ʿan ḡawāmiḍ al-afkār*. – Ed. by Khaled El-Rouayheb. Tehran, Berlin, 2010.

214 al-Ṭūsī, Naṣīr al-Dīn. *Ḥall muškilāt al-Išārāt wa-t-tanbihāt*. – Ed. by Sulaymān Dunyā, 4 vols. Cairo, 1971 (2nd ed.). – Ṭūsī’s commentary is printed underneath the text of Ibn Sīnā’s *Išārāt* [\*58].

215 al-Ṭūsī, Naṣīr al-Dīn. *Asās al-iqtibās*. – Ed. by Mudarris-i Raḍawī. Tehran, 1947, 1376/1998 (5th ed.).

216 al-Kātibī, Naḡm al-Dīn. *al-Risāla al-šamsiyya*. Lemmas in al-Taḥṭānī, *Tahrīr* [220].

217 Bar Hebraeus. [*Ḥewaṭ ḥekmtā, Rhētoriḡē*] *Aristotelian Rhetoric in Syriac*. – Ed. and Engl. transl. by John W. Watt, *Barhebraeus, Butyrum sapientiae, Book of Rhetoric*. Leiden



2005. – Ed. by D.S. Margoliouth 1887 [*Ḥewaṭ ḥekmtā, Poʿētiqē*] [\*370: 114–139].
- 218 Thomas Aquinas. *Summa theologiae* in *Opera omnia*. Ed. Leonina, vols. 4–12. Rome 1888–1906.
- 219 al-Allāma al-Ḥillī. *al-Ġawhar al-naḍīd fī šarḥ manṭiq al-Taḡrīd*. – Ed. by Muḥsin Bidārfar. Tehran, 1363 h.š./1984.
- 220 al-Taḥṭānī, Muḥammad b. Muḥammad Quṭb al-Dīn. *Taḥrīr al-qawāʿid al-manṭiqiyya fī šarḥ al-Risāla al-Šamsiyya*. Cairo, 1948.
- 221 Ibn Ḥaldūn. *al-Muqaddima*. – Ed. by M. Quatremère, 3 vols. Paris, 1858.

## 2 Life

### *Dimitri Gutas*

#### 2.1 Biographical Sources – 2.2 Biography

##### 2.1 *Biographical Sources*

The following two sections (2.1 and 2.2) are based on and partly reproduce, modify, update, and expand upon material that appeared in Gutas (2014 [\*70] and 2016 [\*73]).

*The Autobiography/Biography complex.* The sources for Ibn Sīnā's biography are more numerous than is average for medieval Muslim scholars. Most importantly, we have the Autobiography/Biography complex (henceforth: the Auto-/Biography) and its recensions and derivatives. At some point in his later years, Ibn Sīnā wrote for or dictated (al-Qiftī, *Taʾrīḥ al-ḥukamāʾ* [\*4: 413]) to his student, companion, and amanuensis, Abū ʿUbayd al-Ġūzġānī (Wisnovsky 2009 [\*164]), his Autobiography, reaching until the time in his middle years when they first met; al-Ġūzġānī continued the biography after that point and completed it some time after the master's death in 428/1037. This auto-/biographical complex, which also contains bibliographies and has been transmitted as a single document (Gohlman 1974 [\*117]), is an early representative of an Arabic literary genre much cultivated by scientists and scholars in medieval Islam (Gutas 2015 [177]). It is also our most extensive source about Ibn Sīnā's life and times, something that was already acknowledged by medieval biographers, notably Ibn Abī Uṣaybiʿa in the middle of the 7th/13th century who commented that Ibn Sīnā 'mentioned his personal circumstances and described his own life in a way that relieves others of describing it again' (*ʿUyūn al-anbāʾ* [\*5: II 2–9]).

This Auto-/Biography in Arabic exists in at least two recensions. One is embedded in the bibliographies of Ibn Sīnā by al-Qiftī (*Taʾrīḥ al-ḥukamāʾ* [\*4:

413–26]) and Ibn Abi Uṣaybi‘a (‘*Uyūn al-anbā*’ [\*5: 11 2–9]), and the other exists independently in various manuscripts, in some of which it is also given the Persian title, *Sargudašt*. The relationship of the two recensions to al-Ġūzġānī’s text and to each other is not entirely clear. W. E. Gohlman, the editor of the *Sargodašt*, tends to think that it is closer to the original (Gohlman 1974 [\*117: 6]). Al-Ġūzġānī’s edition of this complex forms the only demonstrable and verifiable source for all subsequent narrative accounts of Ibn Sīnā’s life. There is no indication that there ever was an original rival biography, while all later retellings merely repeat al-Ġūzġānī’s account in different degrees of fidelity to his (and Ibn Sīnā’s) wording. These retellings differ only in the various details they introduce, some of which are manifestly legendary, and have to be proven authentic in each case before they can be accepted.

The most important retelling of this auto-/biographical complex, which sometimes is erroneously treated as an independent source, is that by Zāhīr al-Dīn Abū l-Ḥasan al-Bayhaqī in the *Tatimmat šiwān al-ḥikma* (*The Completion of the ‘Depository of Wisdom’* [\*3]). Bayhaqī recasts the Autobiography in the third person, slightly paraphrases the Biography, omits certain details, mostly of a bibliographic nature, and adds some others. These additions, which in Šafī’s edition are conveniently enclosed in double brackets, occur mostly in the Autobiography part, and are informative (provide names of personalities mentioned, refer to historical events), bibliographic (report on the fate of some of Ibn Sīnā’s lost books), calumnatory (blame Ibn Sīnā for indulging in wine and sex, and for frequenting royal courts), and anecdotal (e.g., the story of ‘Alā’ al-Dawla’s sister and the Ghaznavid Sultan Mas‘ūd [\*3: 55–56], and Ibn Sīnā and the youth from Ray [\*3: 59–61]). Except possibly for the bibliographic reports about the survival of some of Ibn Sīnā’s books, not much of this additional information can be taken at face value. Al-Bayhaqī’s gratuitous comments on Ibn Sīnā’s alleged debauchery (something which appears to have been interpolated in the manuscript tradition of al-Ġūzġānī’s account: see Lameer 2013 [174]) and the insertion of other anecdotal material merit little credence, as does, notoriously, his arbitrary and unwarranted addition that Ibn Sīnā would read and reflect on the *Rasā’il Iḥwān al-Šafā’* (*The Epistles of the Pure Brethren*; cf. PIW 1, 9.4.2), which caused many a misunderstanding and generated the myth of the Ismā‘īlī Ibn Sīnā (Gutas 1987–88 [\*131: 323–324]). Ibn Sīnā nowhere indicates that he had any interest in the doctrine or in the kind of thinking it involved.

Similar criticism must be applied to all details added in the derivatives of al-Ġūzġānī’s edition of the Auto-/Biography. These derivatives are the accounts of Ibn Sīnā’s life by subsequent biographers, from Ibn Ḥallikān (*Wafayāt al-a’yān* [\*6]) and Šahrazūrī (*Nuzhat al-arwāḥ* [\*7]) to Ibn al-‘Imād

(*Šaḍarāt al-ḡahab* [\*8]) and Ḥwāndamīr (*Ḥabīb al-siyar* and *Dastūr al-wuzarā'* [\*9], [\*10]).

**Analysis of the Autobiography.** For the first part of Ibn Sīnā's life, our sole source of information is the Autobiography, which is also intended to serve a philosophical purpose: While purporting to give details about his early life – details which, in the absence of contrary, or any other, evidence, may have to be taken at face value – Ibn Sīnā is providing a concrete illustration of his epistemological theory. This centres on the ability of some individuals with powerful souls to acquire intelligible knowledge all by themselves, and *without* the help of a teacher, through their ability to hit spontaneously upon and to guess correctly the middle terms of syllogisms, what he termed *ḥads*; a theory ultimately based on Aristotle's definition of acumen (ἀγχινοια, *ḡakā'*) as the ability to guess or hit correctly upon (ἐύστοχία, *ḥads*) the middle term (*Posterior analytics* 89b10–11) (analysis and discussion in Gutas 2014a [\*70: 179–201]). The Autobiography is written from the perspective of a philosopher who does not belong by training to any school of thought and is therefore not beholden to defending it blindly, who established truth through his independent verification and found that for the most part this truth is contained in the philosophical sciences as classified and transmitted in the Aristotelian tradition, and who is therefore in a position both to teach this more accurate version of truth – or revised Aristotelian philosophy – and to judge the attainment in philosophy of others.

For this reason, when the Autobiography is reduced to its bare essentials, it appears as a transcript of Aristotelian studies and a model *curriculum vitae* in a Peripatetic programme. Ibn Sīnā reports in it basically that he studied the philosophical sciences according to their classification in the Aristotelian tradition, and that he studied them in three successive stages at increasingly advanced levels. Everything else that Ibn Sīnā says he studied was studied not for its own sake but for that of the philosophical sciences, in whose terms it is to be seen. The elementary courses in the Quran, literature, and arithmetic are preparatory subjects for the philosophical sciences. Ibn Sīnā's rejection of the Ismā'īlī teachings is intended to indicate that already at an early age he could refuse, through his own reflection, authoritative knowledge (*taqlīd*). His study of *fiqh* with the Ḥanafī jurist Ismā'īl al-Zāhid (d. 402/1012) is mentioned only to refer to the method of the discipline and to justify his knowledge of and practice in Aristotelian dialectics (as expounded in Aristotle's *Topics*, Book 8). On this basis is Ibn Sīnā then able to analyse the question 'What is it?' and amaze his teacher al-Nātīlī (Gohlman 1974 [\*117: 20–23]). Medicine, finally, though it belongs to the canon of sciences in the Greek Aristotelian tradition, is not a theoretical, but a practical science. Therefore it is easy (Gohlman 1974 [\*117: 24–27]), i.e., its acquisition does not require the solution of syllogisms

by guessing correctly middle terms, but merely reading the texts and medical practice. Ibn Sīnā then says that he studied the philosophical sciences – logic, mathematics, physics, metaphysics, in that order – in three stages: first, initially with al-Nātilī and finally on his own, second, entirely on his own, and third, at a research level, in the palace library of the Samanid ruler.

The systematic nature of Ibn Sīnā's presentation of the actual course of his studies, and its close correspondence to the theoretical classification of the philosophical sciences, raise the question whether Ibn Sīnā presented a stylised Autobiography in which the chronology of events is bent to fit the theoretical classification of the sciences. The issue cannot be resolved, insofar as the classification of the sciences in the Aristotelian tradition influenced actual educational practice which in turn is presented in an autobiographical account reproducing that very classification in order to promote it. However, the exact historical sequence of events in Ibn Sīnā's studies is not as important as the epistemological point which the Autobiography intends to make.

*Other Sources.* In addition to the Auto-/Biography, a comprehensive and critical study of Ibn Sīnā's life can draw on the following three categories of sources:

- 1) Private writings by Ibn Sīnā and his disciples. These constitute a reliable source about numerous details of Ibn Sīnā's life. They consist of his many autobiographical references in the prologues, epilogues, and occasionally even in the body of his own works, of personal writings in the form of correspondence, accounts of controversies in which he was involved, homilies and devotional pieces, and possibly even poetry (see the list of such writings in the inventory of his works in Gutas 2014 [\*70: 502–511]), and of similar writings by his disciples, including al-Ġūzġānī's introduction to the *Šifā'* ([\*54.1.1: 1–4]; Engl. transl. in Gutas 2014 [\*70: 29–34]). Such material is preserved partly also in the collection of his *Nachlass* known under the title of *Discussions* (*al-Mubāḥaṭāt*, GS 14), two recensions of which were edited by 'A. Badawī and M. Bīdārfar [\*61], and partly independently in the manuscripts, yet to be fully researched (for which see Reisman 2002 [\*150]).
- 2) Historical works. As a rule they have little information to add to Ibn Sīnā's life as such, but they are useful for providing the background for many of the social and political events referred to or hinted at in the Auto-/Biography and elsewhere, and especially for establishing the chronology of many events (cf., for instance, the chronology of the loss of some of Ibn Sīnā's books, Gutas 2014 [\*70: 130–137]).
- 3) Legendary and hagiographic stories. Ibn Sīnā was the most famous and most popular philosopher and physician in the Islamic world, and his persona and image underwent radical transformations in popular

tradition after his death. This played a role in the reception of his authentic works in the Persian- and Turkish-speaking areas of the Islamic world and has yet to be comprehensively studied. The pride of place among the legendary material belongs to Nizāmī 'Arūḍī's *The Four Discourses* (*Čahār maqāla* [\*2]). For Persian traditions see the work of Nafīsī (1954/2009 [\*103]). For later material see the articles by A. Süheyl Ünver, Şerefeddin Yaltkaya, and Abdülbaki (1937 [\*27: section on İbni Sina Folklorları]).

## 2.2 *Biography*

According to his Autobiography, Ibn Sīnā was born in Afšana, a village in the outskirts of metropolitan Bukhara, some time in the early 70's of the tenth century, if not earlier. It has not yet been possible to determine the year of his birth with greater precision; there are enough inconsistencies and contradictions in the transmitted chronology to make the traditional date of 370/980, given by al-Ğüzğānī at the end of the Biography (Gohlman 1974 [\*117: 88–89]), quite untenable (see the discussion in Achena, Massé 1955–1958 [\*104: I 261 n. 18]; Sellheim, review of Ergin [\*8: 238]; Gutas 1987–88 [\*131: 334–336]). The date of his death is relatively well established, which is given by most sources as being in Ša'bān or Ramaḍān 428 (Gohlman 1974 [\*117: 137 n. 113]), which is June 1037. A later source, cited by Ĥwāndamīr (*Ĥabīb al-sīyar* [\*9: 11 448 Homā'ī; 163 Jourdain, French transl. 176 Jourdain]; *Dastūr al-wuzarā'* [\*10: 133]), records that Ibn Sīnā lived sixty-three solar years and seven months, which makes the date of his birth December 973, or Rabī' I, 363, as it is also calculated in Ĥwāndamīr (*Ĥabīb al-sīyar* [\*9: 163 Jourdain, French transl. 176 Jourdain; ed. Homā'ī 448 misprints the date as 365]). December 973, even if not exact, must be closer to the actual date of his birth.

Ibn Sīnā's father, originally from Balkh farther to the southeast from Bukhara, had moved north as a young man apparently in search of (better) employment. He was a state functionary, a governor of the nearby district Ĥarmaytan. He was in the employ of the Persian Samanid dynasty that ruled Transoxania and Khurasan with Bukhara as its capital (819–1005), where the family moved when Ibn Sīnā was still a boy. Ibn Sīnā grew up and was educated there and began his philosophical career as a member of the educated elite in political circles close to the Samanids.

Bukhara lies on one of the main trade routes of the Silk Road between Samarqand and Marv, and like these and other cities along the Silk Road, had been economically and culturally active from pre-Islamic times. Under the Samanids in the ninth and tenth centuries, who followed a deliberate agenda of Persian linguistic revival as well as promotion of the high Arabic-Islamic culture radiating from the centre of the Islamic world, Baghdad, it provided

a sophisticated and refined milieu for the cultivation of the arts and sciences. The palace library of the Samanids, where the teenager Ibn Sīnā was allowed to visit and study following his successful treatment of the ailing ruler, contained such books on all subjects, including books by the ancient Greeks in Arabic translation, as he had never seen before nor since (Gohlman 1974 [\*117: 37]). This was the result of the cultural, scientific, and philosophical effervescence taking place in Baghdad due to the rationalistic outlook in political and social affairs espoused by the ‘Abbāsīd dynasty upon its accession to power in 750 and the attendant Graeco–Arabic translation movement (PIW 1 § 3; Gutas 2014 [\*70: 359–62]). Bukhara was no backwater provincial town, teeming as it was with scholars in residence and visiting intellectuals.

Ibn Sīnā had an excellent education on all subjects. He mentions specifically, by way of preliminary instruction, his study of the Quran, literature, and arithmetic, and later, of jurisprudence and medicine, both of which he claims to have mastered by the time he was sixteen. Philosophy he had started studying earlier, but it was between the ages of sixteen and eighteen that he devoted himself completely to it. He is, however, reticent about his teachers, wishing to project the image of an autodidact in order to support and illustrate his core epistemological theory of acquiring the intelligible concepts without instruction but syllogistically by guessing correctly the middle terms (*ḥads*), as discussed above. He thus dwells at length not on his teachers (he mentions just one teacher of philosophy, al-Nātīlī, only in order to record his own superiority to him), but on the subjects he studied. These are the intellectual sciences, that is, the philosophical curriculum in practice in the Hellenic schools of higher education in late antiquity, notably in Alexandria. The curriculum consisted of logic as the instrument of philosophy (the *Organon*), the theoretical sciences – physics (the natural sciences), mathematics (the *quadrivium*: arithmetic, geometry, astronomy, and music), and metaphysics – and the practical sciences – ethics, oeconomics (household management), and politics. Ibn Sīnā makes a point to say that he studied these subjects all by himself, in this order, at increasing levels of difficulty, and that he achieved proficiency by the time he was eighteen.

At about that time he was allowed to visit the palace library following his successful treatment of the ailing Samanid ruler, Nūḥ b. Maṣṣūr (r. 365–387/976–997). In the library, Ibn Sīnā says, he ‘read those books, mastered their teachings, and realised how far each man had advanced in his science’ (Gutas 2014 [\*70: 18]). Shortly thereafter he wrote his first work, *Kitāb fī l-naḥs ‘alā sunnat al-ih̥tiṣār* (*Compendium on the Soul*; GP 10), dedicated to the ruler, in whose medical staff he was now enrolled, in apparent gratitude for the permission to visit the library (Gutas 2014 [\*70: 83]). His fame grew, and when he

was twenty-one he was asked by a neighbour named Abū l-Ḥasan al-ʿArūḍī to write a ‘comprehensive work’ on all philosophy, which he did (*Philosophy for ʿArūḍī*, GS 2), treating all subjects of the philosophical curriculum except mathematics. Another neighbour, a noted scholar with philosophical interests, Abū Bakr Aḥmad al-Baraḳī, asked for commentaries on the books of philosophy on all these subjects – essentially the works of Aristotle – and Ibn Sīnā obliged with a twenty-volume work he called *al-Ḥāṣil wa-l-maḥṣūl* (*The Available and the Valid [of Philosophy]*) (GS 10), and a two-volume work on the practical sciences, *al-Birr wa-l-iṭm* (*Piety and Sin*) (GPP 1).

After the death of his father some time later – according to the chronological sequence of the events as described in the Autobiography, after he was twenty-one or twenty-two, following his composition of these works – he was also given a post in the financial administration of the Samanids. The fact that in the Autobiography the death of his father and his assumption of administrative duties are mentioned in close sequence justifies the speculation that he may have succeeded his father as governor of Ḥarmaytan. By a relatively early age Ibn Sīnā was established, in his twin capacity as physician and political administrator, in a profession that he was to practice for the rest of his life. But his idyllic existence of secure employment, intellectual renown, and the admiration of his compatriots in Bukhara came to an end soon thereafter with the collapse of the Samanid state in 999 and his forced exile. Thus began Ibn Sīnā’s lifelong itinerant career and the attendant quest for patronage and employment (Reisman 2013 [\*175]) in the courts of various Iranian rulers, heads of the numerous successor states that emerged during the period of the disintegration of centralised ‘Abbāsīd authority.

Ibn Sīnā served these local rulers certainly in his dual capacity as physician and political counsellor, but also as scientist in residence. Engaging in science and philosophy during the first three ‘Abbāsīd centuries (132/750–442/1050) in Islam was done mostly under the political patronage of the rulers and the ruling elite who were the sponsors and also among the consumers of the scientific production. It was certainly a matter of prestige for a ruler to be flanked by the top scientists of his day, but patronage of the sciences was also seen, politically more importantly, as legitimising his right to whatever throne he was occupying. As a result, many a ruler evinced sheer interest in science itself out of a desire to appear knowledgeable and participated in scientific debates, usually conducted in political fora. It is for this reason that we find Ibn Sīnā, involved in certain political/intellectual controversies in some of the cities in which he lived, addressing to political elites a scientific treatise instead of political oratory in his defence (Michot 2000 [\*144]; Reisman 2013 [\*175: 14–22]; Gutas 2014 [\*70: 503, list of personal writings]). Science was much more integrally related

to the social and political life and discourse during this period, which is also a significant factor in its rapid spread and development in the Islamic world.

Ibn Sīnā left Bukhara, never to return, some time in his mid-twenties, when, he says, ‘necessity led me to abandon Bukhara’ (Gutas 2014 [\*70: 19]). In the Autobiography he provides no context for his decision, though the nature of this ‘necessity’ could hardly be mistaken by his contemporaries and even by us. Leaving Bukhara he moved north to Gurgānġ in Ḥwārizm, where he stayed (389/999[?]-402/1012) at the court of the ruler there, ‘Alī b. Ma’mūn. Since the latter reigned from 387/997 to 399/1009, Ibn Sīnā could have moved to Gurgānġ at any time between these two dates; but the fact that the ‘necessity’ to which he refers can be interpreted in any satisfactory way only in political terms suggests the following. The Samanid state was overthrown by the Turkic Qara-Ḥānids who entered Bukhara in 389/999 and took ‘Abd al-Malik II, the last ruler, prisoner. Ibn Sīnā, a high functionary of the fallen state and strongly affiliated with the Samanid dynasty, may have found his position, to say nothing of his job, difficult to maintain. Furthermore, it may not be entirely fortuitous that soon after the fall of Bukhara to the Qara-Ḥānids, Ismā’īl Muntaṣir, the Samanid prince, also went to Ḥwārizm to seek support for a political comeback. Ibn Sīnā may or may not have been involved in the undertaking, but it appears that it was the events of 389/999 and those immediately following them that generated the circumstances which made Ibn Sīnā’s departure from his home town necessary (cf. Lüling 1977 [\*118: 499]).

In Gurgānġ Ibn Sīnā was formally employed, with a monthly salary, in a legal capacity, reports about his proficiency in jurisprudence and forensic debates while in Bukhara manifestly having preceded him. But it was the patronage of Abū l-Ḥusayn Aḥmad al-Sahlī (or al-Suhaylī as in some biographical sources), ‘Alī b. Ma’mūn’s minister, that made his stay in Gurgānġ scientifically productive. Al-Sahlī was ‘a lover of the philosophical sciences’, as Ibn Sīnā calls him (Gutas 2014 [\*70: 19]), and he commissioned a number of works from him on various subjects – logic, cosmology, medicine, and possibly alchemy being those about which we have some information (Gutas 2014 [\*70: Index s. n. al-Sahlī]). In the early stages of his stay in Gurgānġ, around 390/1000, Ibn Sīnā had what ended up as an acrimonious debate with the other great scientist of his day, al-Bīrūnī (d. 1048). This debate on Aristotelian natural philosophy survives in the form of correspondence (though it may have been originally a transcript of a live debate; cf. Strohmaier 1992/1996 [\*135: 116/343]) with the title, *Answers to Questions Posed by Bīrūnī* (GP 8; Strohmaier 1992/1996 [\*135] and Reisman 2013 [\*175: 11–12] for details); cf. also § 2.1 [al-Ma’šūmī] below).

Eventually, Ibn Sīnā had to leave Gurgānġ, again because ‘necessity’ forced him. This time, later reports give as reason the Ghaznavid Maḥmūd’s desire to



have him, along with other famous men of learning, in his court, something which Ibn Sīnā clearly wished to avoid (Niẓāmī ‘Arūḍī [\*2: 119–121 Browne]). In Ḥwāndamīr’s retelling of the story, Maḥmūd is said to have wanted to kill Ibn Sīnā because of his alleged ‘heretical views’ (*bad-i maḏhab*) (*Ḥabīb al-siyar* [\*9: 444 Homā’i; 166, 170 Jourdain]; repeated in *Dastūr al-wuzarā’* [\*10: 126]). Leaving Khwārizm, manifestly again in search of political cover and patronage, Ibn Sīnā travelled south into Khurasan and then west, arriving in Ġurġān, off the south-eastern shores of the Caspian, after a lengthy odyssey (in the Autobiography he mentions the following cities that he passed along his way: Nasā, Bāward, Tūs, Samanqān, and Ġāġarm). His purpose was to seek refuge in Ġurġān with the Ziyarid ruler Qābūs b. Wušmgīr, an ally of the Samanids, whom he had met earlier, but to his bad luck he found that Qābūs had died in the meantime (winter months of 403/January – March 1013) as a result of political turmoil. This gives us the first ascertainable date in Ibn Sīnā’s life: he arrived in Ġurġān in early 1013. As for the duration of his travels, Ibn Sīnā does not mention that he stayed or worked in any of these locations, so in all likelihood he left Gurgānġ some time in 402/1012. In Ġurġān Ibn Sīnā met al-Ġūzġānī, and it is from this point on that the latter begins his Biography.

Ibn Sīnā remained in Ġurġān for a little less than two years (403/1013–404/1014), for the next ascertainable date that we have for him is the battle between the Būyid Šams al-Dawla and Hilāl b. Badr, the local Kurdish ruler, which took place in Dū l-qa’da 405/April 1015, and by that time Ibn Sīnā had already moved to Rayy (Gutas 2014 [\*70: 106]). In Ġurġān, Ibn Sīnā was apparently in the employ of Manūčehr b. Qābūs, who succeeded his father as the ruler, and lived in the house of a private patron. Short though his stay there was, it was productive, and Ibn Sīnā wrote a number of works, notably *al-Mabda’ wa-l-ma’ād* (*The Provenance and Destination*) (GM 1), and he also began working on his medical magnum opus *al-Qānūn fī l-ṭibb* (*Canon of Medicine*) (GMed 1).

From Ġurġān Ibn Sīnā moved westwards into the Ġibāl (northern Iran), now under Būyid domination, a country different from his equally Persian-speaking central Asian homeland. He went to Rayy, where he joined the service of the Buyid Maġd al-Dawla Rustam and the Lady, his mother al-Sayyida, the power behind the throne. Although he had with him letters of recommendation for his new employers, it appears that he gained access to the Buyid political elite of the Ġibāl again through his skill as a physician. He treated Maġd al-Dawla who was suffering from a black bile disease, or psychological disorders. During the brief period that he was in Rayy (late (?) 1014 – early 1015), Ibn Sīnā composed a major treatise on the rational soul, parts of which he was to copy in his later works, *al-Ma’ād [al-ašġar]* (*The [‘Lesser’] Destination*), also known as

*Ḥāl al-naḥs al-insāniyya (The State of the Human Soul)* (GM 3; cf. Gutas 2014 [\*70: 477]).

Ibn Sīnā stayed in Rayy until the Buyid Šams al-Dawla, Mağd al-Dawla's brother, attacked the city after Dū l-qa'da 405/April 1015. Then he left for Qazwīn, again for reasons unspecified, and finally arrived in Hamadan where he was summoned to treat Šams al-Dawla. Inevitably, Ibn Sīnā became also Šams al-Dawla's vizier and acted in this capacity (with an occasional conflict with the *amīr's* troops) until the latter's death in 412/1021. Upon his arrival in Hamadan, where he was employed in the Buyid civil administration, Ibn Sīnā was soon involved in intellectual/political controversies, notably with a certain Abū l-Qāsim al-Kirmānī, a philosopher of some stature (a 'philosophaster', Ibn Sīnā would have said) who had been schooled in the tradition of the Baghdad Aristotelians (Reisman 2002 [\*150: 166–185]). Their first encounter took the form of a public debate, a practice current at the time as a means of testing and proving the scientific mettle of people in the governing elite and hence enhancing the prestige of the rulers in whose service they worked. Ibn Sīnā found the man's positions scientifically unacceptable, and al-Kirmānī, the local luminary who claimed the uncontested authority of the Baghdad Aristotelians for his positions, manifestly felt slighted by this upstart newcomer to town. The debate, about whose outcome we have no independent information, must not have gone well, at least as far as Ibn Sīnā's expectation to be declared right by all observers was concerned. Unrelenting, he wrote a *Letter to the Scholars in Baghdad requesting they judge fairly between him and a man from Hamadān* [al-Kirmānī] *claiming to know philosophy* (GPW 1). In the letter, speaking about himself in the third person (as was customary), he described al-Kirmānī and the situation as follows: 'Once he [i.e. Ibn Sīnā] had learnt about the [scientific] opinions of the wise man [i.e. al-Kirmānī], he found them perturbing, strange, and deviating from that which he [himself] had understood of [the teachings of] the ancients'. For, Ibn Sīnā continues, neither in logic nor in physics, metaphysics, or geometry did he embrace the usual opinions or notations. Moreover he protested against every differing opinion, invoking the philosophers of Baghdad. Consequently he, Ibn Sīnā, decided to send al-Kirmānī's disquisitions together with his own commentary to the colleagues in Baghdad, requesting them to 'announce the truth clearly, for either all [his] views are true, or they are false' (Arnzen 2011 [\*141: 360–361]; cf. Reisman 2013 [\*175: 16]).

Ibn Sīnā's request for adjudication must have fallen on the deaf ears of the Baghdad Aristotelians, for we hear of no reply having come forward. This must have been the main reason for the contempt with which he eventually held

them as philosophers, and the major turning point in his thinking of his own philosophy as a revision of Aristotelianism and an improvement over that of the school tradition current in Baghdad (Reisman 2013 [\*175: 17]). It was in Hamadan, not very long after these events, that when Ibn Sīnā was asked by al-Ġūzġānī and others to ‘comment on the books of Aristotle’, he responded that he had neither the time nor the inclination for such a task, offering instead the following: ‘But if you would like me to compose a book in which I will set forth what, in my opinion, is sound of these [philosophical] sciences, *without debating with those who disagree or occupying myself with their refutation*, then I will do that’ (Biography, Gohlman 1974 [\*117: 54, 1–5]; Gutas 2014 [\*70: 103–104], emphasis added). Thus was born *The Cure* (*al-Šifāʾ*, GS 5) a colossal work in twenty-two volumes, which re-sets Aristotelian philosophy with its Neoplatonic head in Ibn Sīnā’s own elaborate synthesis. Refutations in *The Cure* of earlier philosophical theories abound, but they are substantive and relevant for an analytical discussion of the subject, without wasting time and effort in dealing with idiots like al-Kirmānī (in another letter written at a later time [GPW 3], Ibn Sīnā actually refers to al-Kirmānī as an ‘idiot’ (*aḥmaq*) (Michot 2007 [\*160: 103. 112–113]).

The incident with al-Kirmānī made Ibn Sīnā smart, both because of the shadow it may have cast upon his scientific integrity and because of its possible negative effects on his employment by the Būyid rulers. He dispatched another letter to the vizier of Maġd al-Dawla, Abū Saʿd al-Hamaḍānī, ‘requesting that he judge fairly between him and a man from Hamadan who claims [to know] philosophy’ (GPW 2; Michot 2000 [\*144]). Again, we have no knowledge of any resolution brought forward by Abū Saʿd, but Ibn Sīnā continued his administrative duties in Hamadan. For his part, al-Kirmānī ‘seems to have retaliated in a more vicious manner’ (Reisman 2013 [\*175: 17]). He began to spread malicious rumours about Ibn Sīnā, and there was eventually an incident, possibly instigated by him, in which Ibn Sīnā was accused of trying in some of his homilies to imitate the style of the Quran, an offense that was considered blasphemous. In his defence, Ibn Sīnā penned yet another letter *Repudiating Charges of Imitating the Qurʾān* (GPW 3; Michot 2007 [\*160]). Though sorely tried by the confrontation with al-Kirmānī, which continued for years beyond Ibn Sīnā’s stay in Hamadan, and despite the difficulties he had in the fluid political situation among the Būyid rulers, Ibn Sīnā’s scholarly productivity never flagged; he continued working on the *Šifāʾ* and the *Qānūn* in Hamadan, and composed some other treatises as well.

After Šams al-Dawla’s death, the new ruler in Hamadan, Samāʾ al-Dawla, asked Ibn Sīnā to stay on as vizier, but, as al-Ġūzġānī reports, ‘Ibn Sīnā saw fit

not to remain in the same state nor to resume the same duties, and trusted that the prudent thing for him to do ... would be to hide in anticipation of an opportunity to leave that region' (Gutas 2014 [\*70: 32]). He secretly corresponded with the Kakuyid ruler 'Alā' al-Dawla in Isfahan about this matter. The Būyid court in Hamadan, and especially Tāğ al-Mulk, the Kurdish vizier, suspected Ibn Sīnā of treachery because of these moves, and they arrested and imprisoned him in a castle outside of Hamadan called Fardağān. Ibn Sīnā availed himself of the occasion to compose three further works while in captivity, *Hayy b. Yaqzān* (*Alive, Son of Awake*) (GM 7), *al-Hidāya* (*The Guidance*) (GS 4), and *al-Qawlanğ* (*The Colic*) (GMed 3). He remained in prison for four months until 'Alā' al-Dawla marched toward Hamadan and ended Samā' al-Dawla's rule there (414/1023) (Gohlman 1974 [\*117: 58–61]). Released from prison in the wake of these developments, Ibn Sīnā was again offered an administrative position in Hamadan, but he declined. Some time later he decided to move to Isfahan and he secretly left Hamadan with his brother, two slaves, and al-Ğüzğānī, dressed like Sufis.

In Isfahan, 'Alā' al-Dawla received Ibn Sīnā with honors, and gave him, in al-Ğüzğānī's words, 'the respect and esteem which someone like him deserved' (Gohlman 1974 [\*117: 65]). Ibn Sīnā finally settled there and remained in 'Alā' al-Dawla's employ until his death. His productivity continued unabated, even during these years that were militarily and politically turbulent. In a major incident that occurred in January of 1030, during the attack of the Ghaznavid Mas'ūd's troops on Isfahan, Ibn Sīnā lost the only copy that he had of another multi-volume work of his, *Fair Judgment* (*al-Inṣāf*, GS 11), a detailed commentary on all of Aristotle to whose views he juxtaposed his own. He completed there his major work, *The Cure* (*al-Šifā'*, GS 5) and four further summae of philosophy, notably the *Philosophy for 'Alā' al-Dawla* written in Persian (*Dānišnāma-yi 'Alā'ī*) (GS 7), and his very last one, the inimitable *Pointers and Reminders* (*al-Išārāt wa-l-tanbīhāt*) (GS 9), which was to constitute the basis for much philosophical discussion after his death (cf. § 1.5 on their posthumous effect). He also wrote a number of shorter treatises, and conducted a vigorous philosophical correspondence with students and followers in response to questions they raised about sundry points in logic, physics, and metaphysics, some of which material was later assembled into the collection known as *Discussions* (*al-Mubāḥaṭāt*) (GS 14). He accompanied his master in most of his campaigns and trips, and indeed it was during one such trip to Hamadan that he died of colic, in 428/1037, after a protracted series of recoveries and relapses. He was buried in Hamadan. A mausoleum in that city today purports to be his.

### 3 Works

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3.1 Lists of Works – 3.2 Philosophical Summae (GS) – 3.3 Logic and Language (GL) – 3.4 Physics (GP) – 3.5 Mathematics (GMath) – 3.6 Metaphysics (GM) – 3.7 Practical Philosophy (GPP) – 3.8 Personal Writings (GPW) – 3.9 Medicine (GMed) – 3.10 Lost Works – 3.11 Disputed and Spurious Works

The following list comprises all the known authentic works of Ibn Sīnā except for selections or fragments from the works circulating independently and other scattered pieces which may have not yet been identified. The main pseudepigraphic works that still need to be verified are listed in a separate section at

the end. The works are presented here according to the order in which they are listed in Gutas 2014 [\*70: 411–528 and 77–165] and are identified by the same serial number (Gx) given there. The reader is referred to this publication for all further details of the transmission and contents of each work.

#### 3.1 *Lists of Works*

There are four separate medieval sources that list the works of Ibn Sīnā, dating from his lifetime to about the middle of the thirteenth century, as follows (Gutas 2014 [\*70: 389–410]):

- (a) The Autobiography with Biography complex. The Autobiography was dictated to al-Ġūzġānī (cf. § 2.1 above), and it was completed, as Biography, by al-Ġūzġānī himself. Strictly speaking neither of these are primarily bibliographies, but they include organically a listing of Ibn Sīnā's works as part of the narrative of the surrounding circumstances that led to their composition. They were thus not intended to be complete, reporting some twenty titles only, though they are clearly the most authentic and reliable. The titles omitted are mostly the early works of Ibn Sīnā before he met al-Ġūzġānī, as well as those which al-Ġūzġānī chose not to mention (including the *Iṣārāt*), for his own reasons.
- (b) The Shorter Bibliography. Although in some sources it appears in al-Ġūzġānī's biography as if it were compiled by him, it appears more likely that it was compiled in the circles of Ibn Sīnā's

disciples and followers some time during the century following his death, and that it was later artificially embedded in al-Ġūzġānī's Biography. It contains some forty treatises, apparently all that was known to exist among Ibn Sīnā's disciples not long after his death. Not included are correspondence and occasional pieces, works that had not yet taken their final shape or were in the possession of private owners and only later came in circulation, and pseudepigraphic works that began to circulate within a century after his death.

- (c) The Longer Bibliography. A list compiled some time in the second half of the twelfth century but before 1192 on the basis of Ibn Sīnā's works and their manuscripts that the compiler could locate, manuscripts which derived from the tradition of Ibn Sīnā's disciples and followers, to which he added bibliographical details circulating also in the same tradition. It contains some 95 titles, including, this time, some that are pseudepigraphic.
- (d) The Extended Bibliography. This is an extended, or padded, longer bibliography containing some 115 titles,

compiled before the middle of the thirteenth century – before 1242 – by someone working in the Persian-speaking world. It was intended to supersede all existing bibliographies, even if it omits some established titles from the earlier lists, adding numerous titles which are not all pseudepigraphic.

These bibliographies were overall responsibly compiled and they provide not only accurate and reliable information about Ibn Sīnā's works that were in circulation in the two centuries following his death, but also a means whereby to discriminate between his authentic works from the spurious.

### 3.2 *Philosophical Summae (gs) – Works Comprising All of Philosophy*

The works in this section are listed in what is their most likely chronological order of composition. The parts of philosophy treated in these comprehensive works are according to the classification and number of the sciences adopted by Ibn Sīnā, as listed in his *Divisions of Philosophy* presented next.

#### *Maqāla fī Aqsām al-ḥikma (gs 1)* *The Divisions of Philosophy*

An introductory essay on the classification of the sciences written apparently in Ibn Sīnā's early (according to Kaya 2020 [\*186]: late) period in response to a request by an anonymous person 'to point out the divisions of the intellectual sciences' (text in [\*21: no. 5 and \*23: no. 4]).

After a brief definition of philosophy as a theoretical discipline imparting knowledge of all being and what is necessary for action, Ibn Sīnā divides it into two major categories, theoretical and practical, the former aiming at the truth and the latter at the good. Thereafter he proceeds to list the divisions of each as follows:

- A. Theoretical philosophy – I. Physics – 1. Fundamental sciences – a: Physics (Aristotle's *Physics*); – b: Cosmology (Aristotle's *De caelo*); – c: Generation and corruption (Aristotle's *De generatione et corruptione*); – d: Meteorology (Aristotle's *Meteorology*, Books I–III); – e: Mineralogy (Aristotle's *Meteorology*, Book IV); – f: Botany (*De plantis*); – g: Zoology (Aristotle's *Historia animalium*); – h: On the soul (Aristotle's *De anima* and *De sensu et sensato*). – 2. Corollary sciences – a: Medicine; – b: Astrology; – c: Physiognomy; – d: Dream interpretation; – e: Talismanic magic

(*ilm al-ṭilasmāt*); – f: Magic (*nirāṅgāt*); – g: Alchemy. – II. Mathematics – 1: Arithmetic, with the corollary sciences a: Indian arithmetic; – b: algebra; – 2: Geometry (Euclid's *Elements*), with the corollary sciences a: geodesy; – b: mechanics; – c: lifting of loads; – d: weights and measures; – e: particular instruments; – f: optics and catoptrics; – g: hydraulics. – 3: Astronomy (Ptolemy's *Almagest*), with the corollary sciences a: astronomical handbooks; – b: calendars; – 4: Music, with the corollary science a: use of unusual instruments. – III. Metaphysics (*ilāhī*), or first philosophy (Aristotle's *Metaphysics*) – 1: Fundamental sciences – a: metaphysica generalis; – b: the principles of the sciences; – c: metaphysica specialis: establishing the First Real and its oneness; – d: the primary and secondary spiritual substances; – e: the connection of subjugation between the supernal and sublunar worlds, issues of providence and evil. – 2: Corollary sciences – a: revelation; – b: eschatology.

- B. Practical philosophy. – I. Ethics (Aristotle's *Nicomachean Ethics*). – II. Economics (household management; Bryson's *Oeconomica*). – III. Politics – a: relating to government (Plato's and Aristotle's books on government [if the transmitted text is correct, it is not clear whether the reference is to Plato's *Republic* only, or to the *Republic* and Aristotle's *Politics*]); – b: relating to prophetic law (two books on laws [apparently the reference is to two (?) Platonic pseudepigrapha entitled *Laws*]).
- C. Instrument of philosophy. – Logic. – 1: *Eisagoge* (by Porphyry); – 2: *Categories* (Aristotle); – 3: *De interpretatione*

(Aristotle); – 4: *Analytica priora* (Aristotle); – 5: *Analytica posteriora* (Aristotle); – 6: *Topica* (Aristotle); – 7: *Sophistical Refutations* (Aristotle); – 8: *Rhetoric* (Aristotle); – 9: *Poetics* (Aristotle).

A similar work transmitted without a title was recently published by Biesterfeldt and Kaya 2020 [\*185]. In the introductory paragraph, written by a third person, we learn that the text discusses ‘all parts of the sciences of the ancients’ (*ġāmi‘ aqsām ‘ulūm al-awā’il*) and was composed by Ibn Sīnā. The contents and possible authorship of the text are discussed in Biesterfeldt 2020 [\*184].

*Kitāb al-Mağmū‘* or *al-Ḥikma al-‘Arūḍiyya* (GS 2)

*The Compilation or Philosophy for ‘Arūḍī*

This work is a summa of theoretical philosophy commissioned from Ibn Sīnā when he was a young man by a scholar neighbour of his in Bukhara, al-‘Arūḍī. It has survived in direct transmission only in fragmentary form in a single ms (Uppsala 364, printed text in the edition by Šāliḥ [\*57]), and in excerpts and paraphrases of some of its parts in the works by Ibn Sīnā and others (Janssens 2016 [\*179]). In logic, the surviving parts include most of the *Posterior Analytics* and then the *Topics*, *Sophistics*, *Rhetoric*, and *Poetics*. In the fields of natural science we have the *Physics* and *Meteorology*; and in Metaphysics, in *metaphysica generalis*, there are sections on potentiality, necessity, possibility, pre-existence and (essential) creation, perfection and imperfection, the four causes, and priority and posteriority, whereas in *metaphysica specialis* there survive only four pages on the necessary existent. There is nothing in the extant manuscript on mathematics or practical philosophy, presumably because Ibn Sīnā did not include these parts in the first place.

*‘Uyūn al-ḥikma* (GS 3)

*Elements of Philosophy*

This is a lapidary treatment of theoretical philosophy comprising three sciences (logic, physics, and metaphysics) while excluding mathematics. The work itself appears to have been generated by conflating two

independent parts, one on logic, and the other on physics and metaphysics. The section on logic, which includes all nine parts of logic (from *Eisagoge* to *Poetics*), was originally composed independently and circulated under the title *al-Mūǧaz al-ṣaǧīr fī l-manṭiq* (*Shorter Epitome on Logic*) (GS 3a).

*al-Hidāya* (GS 4)

*The Guidance*

According to al-Ġūzǧānī’s biography (Gohlman 1974 [\*117: 58–60]), Ibn Sīnā wrote this book while imprisoned in the castle of Fardaǧān outside of Hamadan in 414/1023. In the brief introduction addressed to a ‘dear brother’ (*al-aḥ al-‘azīz*), who may be his real brother, ‘Alī, he says that he will include in the book ‘synopses (*ġawāmi‘*) of the philosophical sciences expressed as concisely and clearly as possible’ (*bi-awǧāz lafẓī<sup>in</sup> wa-awḍaḥ ‘ibārat<sup>in</sup>*). The philosophical sciences he treats are logic (all nine parts), physics (only six parts, omitting zoology and botany), and metaphysics, concluding with the metaphysics of the rational soul. Mathematics is again not included. The style, in addition to its brevity, is also literary and is distinguished by its avoidance of technical terms, to the extent possible given the nature of the subject, and by its use of metaphors. It may be thought that Ibn Sīnā adopted a more literary style because he may not have had access to his philosophical books and notes in prison and was writing from memory; or that he expected his ‘brother’ to appreciate and understand philosophy better if it were put in less technical terms which he would find more appealing; or that, as Michot (1988 [\*53: 138]) suggested, he employed an extremely concise style as an exercise intended to distract and amuse him during his imprisonment. Perhaps all of these factors were operative; the result was that the *Hidāya* and its literary style prefigure the later *Pointers and Reminders*.

*Kitāb al-Šifā’* (GS 5)

*The Cure*

Ibn Sīnā wrote his magnum opus after his move to Iran’s Būyid principalities upon the request, it appears, of his companions and

students who did not have access to some of his earlier major works written in central Asia. He worked on it in Hamaḍān and Iṣfahān for a period of about eight years, from roughly 411/1020 to 418/1027 (Gutas 2014 [69: 103–115]), 421/1030 also having been suggested as the year of its completion (Gohlman 1974 [\*117: 132–133, n. 89]; McGinnis 2010 [\*62: 22–24]). – Regarding the partial Latin translation entitled *Liber sufficientiae* cf. the information in the editions by S. van Riet et al. [\*54.2.1–6 and 54.4(b)] as well as the contributions by D'Alverny 1961–1972 [\*662], Janssens 2011/2020 [\*670], Daiber 2012 [\*671], Bertolacci 2013 [\*675], Hudry 2018 [\*680], Bertolacci 2023 [\*684].

Although the original request appears to have been for a conventional exposition of, or even a commentary on, the Aristotelian philosophical curriculum of late antiquity and early Islam, Ibn Sīnā took the opportunity to present his own synthesis of the material. In the introduction to the completed work he set forth his purpose and method, by and large accurately, as follows: 'Our purpose in this book ... is to set down in it the gist of the fundamental principles which we have ascertained – both the fundamental principles contained in the philosophical sciences attributed to the ancients and based on methodical and verified theoretical analysis, and the fundamental principles discovered by [a series of] acts of comprehension cooperating in the attainment of truth which was diligently pursued for a long time until it culminated in a correct body [of such principles] which gained the agreement of most views and helped dispel the veils of fanciful notions. I sought to set down in it most of the discipline, indicate in every passage where ambiguity may occur, and solve it by setting forth clearly the correct answer to the extent of my ability. [I also sought] to supply the corollary principles along with the fundamental ones. There is nothing of account to be found in the books of the ancients which we did not include in this book of ours; if it is not found in the place where it is customary to record it, then it will be found in another place which I thought more appropriate for it. To this I added some of the things which

I perceived through my own reflection and whose validity I determined through my own theoretical analysis, especially in physics and metaphysics – and even in logic, if you will ... In the first part of this book I began with logic. I strove to have it run parallel to the order of Aristotle's books [on logic], supplying in addition [discussions on] hidden and subtle issues which are lacking in available books. Logic is then followed by physics, but [here] I was mostly unsuccessful in pursuing a course parallel to the systematic treatise and the [additional] memoranda of Aristotle, the paradigmatic master in this discipline.

Physics is then followed by geometry: I made a brief summary of Euclid's *Elements* in which I restricted myself to the solution of its ambiguities. I then complemented geometry with a similar summary of [Ptolemy's] *Almagest* on astronomy, which, despite the abridgment, contains explanations and instructions. After I finished this, I appended to it such additions as are necessary for the student to know in order to complete thereby [his study of] this discipline and bring into conformity astronomical observations with the laws of physics. Astronomy is then followed by a brief summary of the *Introduction to Arithmetic* [by Nicomachus of Gerasa]. I then concluded the discipline of mathematics with an abridgment of the science of music in a manner which was disclosed to me after long research and detailed theoretical analysis. Finally, I concluded the book with the science that belongs to metaphysics in accordance with its parts and aspects, while referring in it [only] to the essential elements of ethics and politics, in anticipation of a comprehensive and separate book which I will write on these subjects' (Gutas 2014 [\*70: 41–46]).

This work comprises 22 volumes in the Cairo edition (1952–1983), and contains the following parts, chapters, and sections:

#### Logic

A: *al-Madḥal* (*Isagoge*) after Porphyry, in two treatises (*maqāla*) – 1. treatise in 14 sections (*faṣl*) – 1: General remarks on the subject of the book – 2: Sciences and logic – 3: The purpose of logic – 4: The subject matter (*mawḍūʿ*)



of logic – 5: The simple (*mufrad*) and compound (*mu'allaf*) linguistic expression (*lafẓ*) [i.e. term]; the universal, the particular, the accidental one; the essential one; that which is given in response stating what it is and what it is not – 6: What people say of the essential and the accidental – 7: What they say of that which indicates the quiddity (*māhiyya*) – 8: Division of the universal simple term into five kinds [i.e. the predicables] – 9: The genus (*ǧins*) – 10: The species (or kind) (*naw'*) and how the universal is divided into it – 11: The descriptions (*rusūm*) of the species – 12: The natural, the rational, the logical; what (chronologically) precedes multiplicity (*kaṭra*), exists within and succeeds multiplicity – 13: Difference (*faṣl*) – 14: The proprium (*ḥāṣṣa*) and the general accident (*al-'araḍ al-'āmm*) – II. treatise in four sections – 1: Shared properties and differences of these five concepts, first: between genus and differentia – 2: Between genus and species – 3: Further shared properties and differences – 4: Interrelations (*munāsaba*) of these five concepts.

B: *al-Maqūlāt* (*Categories*) in seven treatises – I. treatise in six sections – 1: The goal (*ǧaraḍ*) of the categories – 2: Homonyms (*muttafiqa*), synonymous (*mutawāti'a*) and paronymous (*muštaqqa*) concepts (*alfāẓ*) and suchlike – 3: What can and what cannot be stated concerning a subject (*mawḍū'*), and what is inherent in it and what is not – 4: Definition of accident (*'araḍ*), namely that it is inherent in a subject – 5: Pairings (*muzāwaǧāt*) that occur between 'statement concerning' and 'inherent in', and where they lead – 6: Demolishing (*ifsād*) the theory that one single entity may be accident and substance in twofold respect (*min waǧhayn*) – II. treatise in five sections – 1: General remarks on the ten genera (*aǧnās*): that there are ten of them, no more and no fewer, and that all that exists is divided among them – 2: The accident (*'araḍ*) is not a genus (*ǧins*) of the nine – 3: Further statements by people who encourage (*awǧaba*) lack (*nuqṣān*) or doubt (*mudāḥala*) concerning them [the genera] – 4: Whether there are general terms that are not among the

ten – 5: Concluding remarks on the number of the categories (*maqūlāt*) – III. treatise in four sections – 1: On the first, second, and third substances; the degrees (*marātib*) of the general and particular substances regarding the substantiality (*ǧawhariyya*) – 2: Further remarks on the first, second, and third substances – 3: Descriptions (*rusūm*) and specific properties (*ḥawāṣṣ*) of substance – 4: Initial considerations on quantity (*kammīyya*) – IV. treatise in five sections – 1: Another division (*qisma*) of quantity; accidental quantity – 2: The specifics of quantity – 3: The relative (*mudāf*); its previous definition complete with an explanation; the classes (*aqsām*) of the relative – 4: The specifics of the relative – 5: The relative as a category (*maqūla*) and its specifics; distinction between the essentially relative and the accidental, or between the concomitant (*lāzim*) possessed of relation – V. treatise in six sections – 1: The quality (*kayfiyya*) and its primary classes – 2: The aspects (*wuǧūh*) on the basis of which quality is divided into four species (*amwā'*) – 3: [Namely:] State (or condition) (*ḥāl*), habit (*malaka*), capacity (*quwwa*), incapacity (*lā-quwwa*) – 4: Doubt concerning the species (*naw'*) connected with capacity or incapacity – 5: Passive qualities and suffering (*infī'ālāt*) – 6: Resolving remaining doubts – VI. treatise in six sections – 1: Species of the fourth genus of quality – 2: The angle (*zāwiya*) and the degree to which it occurs with quantity, quality, or position (*waḍ'*) etc.; outward appearance (*ḥilqa*) in connection with the composition (*tarkīb*); remaining doubts concerning this genus together with the four genera (*aǧnās*) – 3: The difference between a quality and the owner of the quality; states occurring between the two; accidents and specifics of the quality – 4: Resolution of a doubt concerning the intrusion (*mudāḥala*) of genera of quality etc. into genera of the relative – 5: 'Where', 'When' – 6: The remaining ones of the ten categories – VII. treatise in four sections – 1: On oppositions (*mutaqābilāt*) – 2: Doubt concerning that which was said on oppositions – 3: Judgments (*aḥkām*) and specifics with reference to the contrary

(*mutaḍāddāt*) – 4: That which comes earlier (*mutaqaddim*) and later (*muta'ahhīr*).

C: *al-'Ibāra* (*On Interpretation*) in two treatises – I. treatise in ten sections – 1: The mutual correspondence (*tanāsub*) between real things (*umūr*), concepts (*taṣawwurāt*), linguistic expressions (*alfāz*), and the written word (*kitābāt*); simple and compound with regard to what it [the mutual correspondence] implies – 2: The noun (*ism* = ὄνομα) – 3: The verb (*kalima* = ῥήμα) – 4: The verbal noun (*maṣdar*); combining (*ta'alluq*) the verb and the derived noun [i.e. the sentence]; the verb determined [as regards tense] (*muḥaṣṣala*, ὁρισμένος) and undetermined (*gayr muḥaṣṣala*, ἀόριστος); inflected (*muṣarrafā*) and uninflected verb – 5: What is a predicate (*ḥabar*) and what is not – 6: Simple primary and non-primary apophantic (*ḡāzim*) statements; affirmation (*iḡāb*), negation (*salb*); the conditions for their being contrary (*taqābul*) – 7: Definite (*maḥṣūra*), indefinite (*muhmala*), and specified (*maḥṣūša*) sentences (*qaḍāya*); opposition (*taqābul*) in the sense of contradiction (*tanāquḍ*) and contrariety (*taḍādd*); subalternation (*tadāḥul*); corresponding sentence rules – 8: Singular (*ṣaḥṣiyya*) oblique (*munḥarifa*) [statements] – 9: Truth and untruth of definite sentences – 10: Degrees of contradiction (*tanāquḍ*) with reference to the classes of definite (*muta'ayyin*) or indefinite truth and untruth – 11. treatise in five sections – 1: Bipartite and tripartite sentence, metathetic (*ma'dūla*), simple, and privative (*'adamiyya*) sentence; more on contradiction – 2: Relations between definite contrary statements; concluding remarks on 'udūl and simplicity (*basāṭa*); the 'natural locations' (*mawāḍi' ṭabī'iyya*) of the concomitants (*lawāḥiq*) of the sentences – 3: Sentences expressing multiplicity, and sentences expressing unity; further remarks on truth or untruth; erroneous opinions concerning these – 4: The modified (*munawwa'a*) sentences, i.e. the 'quadripartite' ones (*rubā'iyya*), their rules, their connection (*talāzum*), their opposition (*ta'ānud*) – 5: Whether the contrast (*taqābul*) is greater between the affirmative

and the negative sentence, or between two affirmative sentences whose predicates (*maḥmūl*) are contrary to each other.

D: *al-Qiyās* (*Prior Analytics*) in nine treatises – I. treatise in seven sections – 1: The form (*ṣūra*) of the absolute syllogism – 2: Logic as an indispensable tool (*āla*) for studying the philosophical sciences – 3: The premises (*muqaddimāt*) and their parts; what can be stated affirmatively or negatively about the entirety (*kull*) – 4: The modes (*ḡihāt*), i.e. absoluteness (*iṭlāq*), necessity (*darūra*), possibility (*imkān*), impossibility (*imtinā'*) – 5: Contradiction in modal premises – 6: Definition of the general, absolute syllogism – 7: Doubt concerning the abovementioned definition of the syllogism, and how to allay it – 11. treatise in four sections – 1: Absolute conversion (*'aks*) of the premises – 2: Conversion of the absolute premises – 3: Conversion of the necessary and the possible premises – 4: The conjunctive (*iqtirāniyya*) syllogisms; the three figures (*aṣkāl*) in the two states (*ḥāla*) of absoluteness and necessity – 111. treatise in 5 sections – 1: Syllogisms that combine (*muḥtaliṭa*) absoluteness and necessity – 2: The arguments (*huḡaḡ*) with reference to the conclusion's (*natīḡa*) being absolute – 3: Further remarks on the combination of the two – 4: Definition of the possible; the universal, possible premise, and its conversion – 5: Description (*rasm*) of the possible and further considerations concerning it – 1111. treatise in six sections – 1: The possible syllogisms in the first figure – 2: Syllogisms combining possibility and absoluteness in the first figure – 3: Syllogisms combining possibility and absoluteness in the first figure that are possible and necessary (*iḡṭirāriyya*) – 4: The possible syllogisms in the second figure – 5: Syllogisms combining possibility and absoluteness in the second figure – 6: The classes of the possible simple and combined syllogisms in the third figure – 11111. treatise in five sections – 1: The hypothetical (*ṣarṭiyya*) syllogisms and their classes – 2: The disjunctive-hypothetical syllogisms – 3: Forming simple and combined hypothetical syllogisms as well as categorical

ones (*ḥamlīyya*) – 4: Universal, particular, indefinite, and singular ones among the hypothetical syllogisms – 5: What universal-negative means in the context of hypothetical syllogisms – VI. treatise in six sections – 1: Syllogisms consisting of conditional-hypothetical premises in the three figures – 2: Syllogisms consisting of conditional-hypothetical and disjunctive-hypothetical premises – 3: Syllogisms consisting of disjunctive-hypothetical premises – 4: Syllogisms consisting of a categorical and a hypothetical premise in the first figure, in which the categorical one is in the position of the major term (*kubrā*), in the three figures – 5: Syllogisms consisting of a categorical and a hypothetical premise, in which the categorical one is added to the preceding (*muqaddim*) [by means of a shared middle term], in the three figures – 6: The syllogism arranged according to the form (*namat*) of the three figures – VII. treatise in three sections – 1: Concatenation (*talāzum*) and opposition of conditional-hypothetical syllogisms – 2: Disjunctive-hypothetical premises and their opposition to each other as well as to the conditional-hypothetical ones, and the way in which they are concatenated – 3: Conversion of the conditional-hypothetical premise – VIII. treatise in three sections – 1: Reiterative (*istiṭnāʾī*) hypothetical syllogism – 2: The classes of reiterative hypothetical syllogisms – 3: The syllogism *per impossibile* (*qiyās al-ḥulf*) – IX. treatise in 24 sections – 1: Reiterative syllogisms only result from conditional-hypothetical syllogisms – 2: A syllogism only results if it includes the meaning of the universal [premise] and of the affirmation – 3: On syllogisms consisting of more than two premises (*muʿallafa*) – 4: How one acquires premises, and that they are achieved in accordance with the respective desired objective (*maṭlūb*) – 5: The error of those who believe that the diaphesis (*qisma*) is a syllogism – 6: Analysis (*taḥlīl*) of syllogisms, and pertinent advice – 7: Syllogistic formations that are difficult to analyse, and presentation of the method using which it is easy – 8: Other considerations (*iʿtibārāt*) drawn from the definitions (*ḥudūd*) and

the judgement (*ḥukm*) itself – 9: Obstacles to the analysis according to the form (*ṣakl*) of the syllogism and the form of the premises – 10: Induction (*istiqrāʾ*) of the conclusions (*natāʾiḡ*) that follows the first desired through the composite syllogism – 11: The true conclusion follows of necessity (*talzamu*) from true (*ṣādiqa*) premises – 12: The circular argument (*qiyās al-dawr*) – 13: The conversion (*ʿaks*) of the syllogism – 14: Reduction (*radd*) of the syllogism *per impossibile* to the straight (*mustaqīm*) syllogism, and vice versa – 15: Syllogisms consisting of opposing (*mutaqābila*) premises – 16: The *Petitio principii* (*muṣādara ʿalā maṭlūb al-awwal*) – 17: Positing (*waḍʿ*) that which cannot be the cause (*sabab*) of a conclusion (*natiḡa*) in the actual sense – 18: Advice by means of which the questioner and the answerer may make use of premises (*taslīm*), and how it is impossible to make use of them – 19: How something may at the same time be known and not known, and how it may be known and the opposite of what is known be believed at the same time – 20: The conversion of the conclusions (*natāʾiḡ*) – 21: Syllogisms that are part of jurisprudence (*fiqhīyya*) and reasoning ones (*taʿaqquliyya*) – 22: Induction (*istiqrāʾ*) – 23: The conclusion by analogy (*tamṭīl*) – 24: The conclusion based on evidence and indications (*dalīl*, *ʿalāma*); the conclusion based on physiognomy (*firāsa*).

E: *al-Burhān (Posterior Analytics)* in four treatises – 1. treatise in 12 sections – 1: Indicating (*dalāla*) the objective (*ḡaraḍ*) of this discipline – 2: Rank of the book on proof – 3: All instruction and learning is intellectual (*dīhni*) due to preceding knowledge (*ʿilm*) – 4: List of the principles (*mabādī*) of the syllogisms – 5: On the things sought for (*maṭālib*) and that which is linked to them; presentation of the kinds (*aṣnāf*) of the principles of the sciences and the kinds of middle terms (*ḥudūd wuṣṭā*) – 6: How one arrives at the unknown (*maḡhulāt*) from the known (*maʿlūmāt*) – 7: The absolute proof (*burhān muṭlaq*) and its two kinds (*qism*), namely the proof of ‘Why’ (*demonstratio propter quid*) and the proof of ‘That’ (*demonstratio quia*), called *dalīl* –

8: That knowledge based on certainty (*yaqīnī*) includes the cause of what is known – 9: How one investigates something the predicate (*maḥmūl*) of which has no [conceptual] cause within its subject (*mawḍūʿ*); induction (*istiqrāʾ*) and its conditions; methodic experience (*taḡriba*) and its conditions – 10: How the more specific (*aḥaṣṣ*) is the cause (*ʿilla*) for the deduction (*intāḡ*) of something more specific from the more general (*aʿamm*); explanation of the difference between [the body as] genus (*aḡnās*) and matter (*mawādd*), and between [the rational soul as] form (*ṣuwar*) and specific difference (*fuṣūl*) – 11: Consideration (*iʿtibār*) of the premises of proof with regard to their priority (*taqaddum*), causality (*ʿillīyya*), and further preconditions – 12: The principle (*mabdaʾ*) of proof – II. treatise in 10 sections – 1: Knowledge of the principles of proof and their universality (*kullīyya*) and necessity (*ḍarūrīyya*) – 2: The essential predicates (*maḥmūlāt ḍātīyya*) that are a condition of proof – 3: That the apodictic (*burhānīyya*) premises are universal; on the meaning of the primary; conclusion of the discourse on the essential – 4: How we recognise (*nuʿī*) the universal and primary as given: we deny that we do so – 5: Verification (*taḥqīq*) of the necessity of the premises of proof and their correspondences (*munāsabāt*) – 6: Subjects (*mawḍūʿāt*), principles, and questions of the sciences; connecting (*iqtirān*) of their principles and questions with regard to their predicative terms (*ḥudūd maḥmūla*) – 7: Differences and similarities (*istirāk*) of the sciences in detailed presentation – 8: Transition (*naql*) of proof from one science to another; the fact that it subsumes (*tanāwul*) particulars (*ḡuzʿīyyāt*) under (*taḥta*) the universals, as well as the definition (*ḥadd*) – 9: Verification of the relation (*munāsaba*) between the apodictic (*burhānīyya*) and dialectic (*ḡadaliyya*) premises and their objectives; difference between the two disciplines when achieving ‘Why’ and ‘That’ – 10: [no title] In the sciences, proof cannot be based on the principles (of the same sciences) – III. treatise in nine sections – 1: Corresponding (*munāsiba*) and non-corresponding principles and questions,

and how the sciences are positioned (*taqaʿu*) – 2: Difference of the mathematical (*riyāḍīyya*) and non-mathematical sciences compared to dialectics; mathematics is removed from error as opposed to everything else; that which he (Aristotle) remarked on analysis (*taḥlīl*) and composition (*tarkīb*) – 3: Resumption of the discourse on the proof of “Why” and the proof of “That”, their similarities and differences with regard to the definitions; their differences with regard to one science and two sciences – 4: Precedence (*faḍīla*) of some figures (*aṣkal*) over others; how a fallacy occurs with regard to the figures – 5: How the soul benefits from sensory perception (*ḥiss*) in the context of the intelligibles (*maʿqūlāt*); the simple terms (*mufradāt*) of the meanings and how they are acquired; primary composition and how the analysis of syllogisms ultimately arrives at it – 6: Account of what is said in the First Instruction regarding the limitation (*tanāhī*) of the parts of syllogisms and the middle terms (*awsāt*) of the affirmative (*mūḡīb*) and the negative (*sālib*) – 7: That the universal and affirmative and straightforward (*mustaqīm*) proof is more excellent than its opposite (*muqābil*) – 8: Revisiting the discussion of the differences between the sciences and their correspondences regarding principles and topics – 9: Knowledge (*ʿilm*) and opinion (*ḡann*), their shared properties and differences; explanation (*tafḥīm*) of ‘spirit’ (*dīhn*), ‘understanding’ (*fahm*), ‘intuition’ (*ḥads*), ‘intelligence’ (*ḡakā*), ‘art’ (*ṣināʿa*), and ‘wisdom’ (*ḥikma*) – IV. treatise in 10 sections – 1: The desired/sought things (*maṭālīb*) and those intellected (*maʿqūlāt*) through the desire (*ṭalab*) – 2: The definition is not arrived at by means of proof and division (*qisma*) – 3: And not by means of division and induction, either; confirmation of what has been argued about these chapters (*abwāb*); correspondence (*munāsaba*) between some proofs and the definitions, and that some proofs indicate (*tanbīh*) the definitions – 4: Shared properties of the parts (*aḡzāʾ*) of the definition and the parts of some proofs; the middle position (*tawsīt*) of the terms and that of the classes of the causes (*ʿilal*) – 5: Detailed

presentation that the classes of the causes are contained (*duḥūl*) in the definitions and the proofs, to the effect that the study of the similarity of that which is between the definition and the proof, is completed – 6: Indication that one arrives at the definition by means of composition (*tarkīb*) – 7: The method of division (*qisma*, διαίρεσις) is also useful when establishing a definition (*taḥdīd*, κατασκευάζειν ὅρον); how this is done; detailed presentation of the method of composition, and that it barely causes one to be led astray (*taḍlīl*) by a homonym – 8: How one benefits from dividing the whole into parts; concluding remarks on the middle position of the converted (*munʿakisa*) and the unconverted causes, and what the situation is – 9: Verification of what Aristotle said about causes as middles, and of whether his teachings on the subject correspond to the explanation [given here] – 10: Conclusion of the book on proof.

F: *al-Ġadal* (*Dialectic*) in seven treatises – I. treatise in ten sections – 1: Knowledge of the dialectical syllogism (*qiyās ḡadalī*) and its usefulness – 2: Why these syllogisms are called 'dialectical' – 3: Definition of dialectic; it is carried out by question and answer; exhaustive presentation (*išbāʿ al-qawl*) on the questioner and the answerer – 4: Errors committed by some regarding the dialectical syllogism; explanation of the topos (*mawḍīʿ*), the premise (*muqaddima*), the reasons (*asbāb*) for the universal recognition (*šuhra*); why this book is called 'topics' (literally 'places') – 5: Distinction between dialectical and other syllogisms; the usefulness of dialectics – 6: Primary parts of dialectical syllogisms, i.e. genus, definition (*ḥadd*), proprium (*ḥāṣṣa*), species (*nawʿ*), and accident (*ʿaraḍ*) – 7: How one can benefit from the topics arranged (*muʿadda*) according to these things, and how one considers them in the context of the categories (*maqūlāt*) – 8: Detailed presentation of the universally recognised (*mašhūra*) dialectical premises and of the things sought in dialectics (*maṭlūbāt*) – 9: By means of which four instruments (*ālāt*) the habit (*malaka*) and the search for the topic are achieved – 10: The usefulness of these

instruments – II. treatise in six sections – 1: The topics of affirmation (*itbāt*) and denial (*ibtāl*) taken from the substance of the setting (*waḍʿ*). – 2: Further remarks on this. – 3: The topics of affirmation (*itbāt*) and denial (*ibtāl*) taken from outside things (*ḥāriḡa*) – 4: Further remarks on this – 5: The more suitable (*awlāʾ*) and the more preferred (*āṭar*) – 6: [Further remarks] on the topics – III. treatise in four sections – 1: The topics belonging to the genus (*ḡinsīyya*) – 2–4: Further remarks on this – IV. treatise in three sections – 1: Whether in topics the proprium is distinguished (*uḡīdat*) or not – 2: Whether the proprium is given (*uʿṭiyat*) or not – 3: Application of topics that have a share in the proprium – V. treatise in five sections – 1: The primary conditions (*šurūṭ*) of definition (*taḥdīd*); topics of considering (*ʿtibār*) the benefit (*ḡūda*) of definition – 2: The topics of affirming the definition and of declaring the proprium void – 3–5: [Further] similar topics – VI. treatise in one section: The topics of identity (*huwa huwa*) and of differentness – VII. treatise in four sections – 1: Instructions (*waṣāyā*) for the questioner [in the dialectical process], mostly regarding the premises – 2: Instructions for the questioner, mostly regarding the circumstances (*aḥwāl*) of the syllogism and the induction; concerning that for which a syllogism is difficult to find, while the cause for it is easily determined – 3: Instructions for the answerer [in dialectic] – 4: Instructions applying to both, after elucidating the excellent (*fāḍil*) syllogism, the syllogism that requires (*muṣtaḥiqq*) the elenchus, its kinds, among them begging the question (*muṣādara ʿalā l-maṭlūb al-awwal*) and positing the opposite of what is to be shown (*muṣādara ʿalā l-muḡābil al-maṭlūb*).

G: *al-Saṣṣaṭa* (*Sophistical Refutations*) in two treatises – I. treatise in four sections – 1: Definition of the false syllogism/sophistry (*muḡālaṭa*) and list of the parts of the eristic (*muṣāḡibīyya*) art – 2: The argument contained in an expression (*lafẓ*) that refutes another one by proving the opposite of its conclusion (*tabkīt* for ἑλεγχος) – 3: How error (*ḡalaṭ*) arises from the meaning (*maʿnā*) in sophistical

arguments (*tabkītāt*) – 4: Reduction (*radd*) of all sophistic kinds (*wuǧūh*) to one origin, and of their causes to one single cause – II. treatise in six sections – 1: Refutation of the one who believes that all fallacies occur only because of homonymy (*ism muštarak*) – 2: Presentation of the parts of the eristic art – 3: How the [arguments of] the Sophists are to be resolved, and how one fights them – 4: Resolution of sophisms involving linguistic expressions (*alfāz*) – 5: Resolution of sophisms involving content (*ma'nawīyya*), and capacity to fight the various kinds of sophisms – 6: Conclusion of the discourse on sophism (*sūfiṣṭā'yya*) and the First Teacher's apology in case something was presented all too briefly.

H: *al-Ḥitāba* (*Rhetoric*) in four treatises – I. treatise in seven sections – 1: Presentation of which syllogistic disciplines are suited for the practical application of assent (*taṣḍīq*): apodictic (for the educated) and rhetoric (for the common people); reasons why the others are omitted – 2: Shared properties of rhetoric and dialectic; different kinds of orators; 'pillar' (*'amūd*) and 'aids' (*a'wān*) of rhetoric; testimony (*ṣahāda*) as an essential means of persuasion – 3: The orator's evaluation of the facts under discussion; the enthymeme (rhetorical syllogism) as the core of rhetoric; similarity between the enthymeme composed of premises recognised by general opinion and the dialectical syllogism composed of genuinely recognised premises – 4: The alignment of rhetoric and dialectic towards opposites, but with differing objectives: rhetoric is concerned with convincing, dialectic with drawing conclusions; genuinely and seemingly convincing arguments are both part of rhetoric; the starting point of rhetoric may be insight and knowledge but also error and malice – the last named produce a base variant of rhetoric that must be counted among sophism – 5: Definition of rhetoric (following Aristotle, *Rhet.* 1355b 26–27), technical and non-technical means of convincing the listener; the technical ones are divided into a) demonstration, b) demeanour of the orator, c) guiding the listeners to the desired goal; the

need for the orator to be familiar with human character traits, and the resulting proximity between rhetoric and dialectic and politics – 6: Rhetorical demonstration; enthymeme and paradigm. Modality of the specifically 'rhetorical' premises; the signs: eight ways of forming enthymemes – 7: A ninth type of enthymeme, consisting of premises possible in the same way as their opposite (*mutasāwī*); topics (*mawāḍī'*) and species (*anwā'*) as essential elements of rhetorical and dialectical discourse – II. treatise in nine sections – 1: The orator's primary objectives; the three genres of rhetoric (advisory, forensic, and panegyric oratory); the three kinds of listeners; the three factors generating rhetoric: orator, oration, addressee; the specific purpose of the respective genres of oratory – 2: Subjects of the advisory oration – 3: More (*aṣḍadd*) and less (*aḍ'af*); the different forms of government – 4: Panegyric oratory; praise and criticism; virtues and vices – 5: Forensic oratory; accusation and defence; definition of legal wrong; motivation of human actions – 6: Desire – 7: Motivation to do wrong – 8: Arguing for the prosecution and for the defence – 9: The non-technical means of substantiation: laws, witness statements, treaties and contracts, torture, oaths – III. treatise in eight sections – 1: Oratory that lures (*yustadraǧu*) the judge and audience (to the orator's purpose); definition and elucidation of various affects and their opposites: anger and calming anger – 2: Kinds of friendship (*ṣadāqa*); enmity; fear; courage – 3: Shame and embarrassment; goodwill (*minna*) – 4: Compassion; envy; hot-headedness; jealousy – 5: Differences between human character traits based on age, disposition, social position etc. – 6: The 'species' (*anwā'*) shared by all genres of oratory: possibility and impossibility; what will and will not be; two types of the means of substantiation shared by (all genres of oratory): example (*miṭāl*) and enthymeme (*tafkīr*); fable; maxim (*ra'y*) – 7: The difference between dialectical and rhetorical premises; argumentation when applying enthymemes, elucidation of various

topoi – 8: Seeming enthymemes or fallacies; the refutation (*al-munāqaḍa*, λύσις); the different kinds of enthymemes and how to disprove them; amplification (*takbīr*) and depreciation (*tašgīr*) – iv. treatise in 5 sections – 1: Means of sophistication (*taḥsināt*); choice of linguistic expression; modulating the voice; importance of all these factors in poetics, too; elucidations on the methods used by poets; metaphor; frosty expressions (*al-alfāz al-bārīda*, τὸ ψυχρόν), their four kinds; kinship of parable (*tašbīh*) and metaphor (*isti'āra*) – 2: Further remarks on the choice of language; what is good in poetry but not in rhetoric, and what is good in both; necessity of using correct language; mistakes in this context that must be avoided; the rhythm of language; metre – 3: Further considerations of this and of metaphor – 4: The parts of speech and their order; proem; narrative; their specific application in the respective genres of oratory – 5: The rhetorical question; the epilogue as the conclusion of oratory.

I: *al-Ši'r* (*Poetics*) in eight 'sections' (*faṣl*) – no division into 'treatises'. After general introductory remarks on poetry, in the first section of the paraphrase (pp. 26–33) Ibn Sīnā repeats, as Gutas 2012 [\*402: 104] has pointed out, almost word by word the passage on correspondence (*tanāsib*) from the poetics in *Ḥikma 'Arūḍiyya* (pp. 23–31). – 1: Definition of the term 'poetry'; relation to logic; basic concepts of poetics; shared characteristics with rhetoric; image evocation with or without applying (rhetorical) stratagems, i.e. rhetorical figures; examples of the latter: correspondence (*nisba*); the genres of Greek poetry – 2: Poets' objectives; imitation (*muḥākāt*); definition of comedy – 3: What causes poetry to be created; psychological preconditions for it in humans; the joy of imitation connected to the enjoyment of images; impersonation (*al-aḥḍ bi-l-wuḡūh*); his own definition of the *rubā'īyyāt* (p. 40, because of the tetrameter mentioned at 1449a21); the origin of tragedy and comedy – 4: On the relation between metre and the objectives of poetry, especially in the context of tragedy; definition of tragedy

(after chap. 6 of the *Poetics*, 1449b24); awakening 'pity' (*raḥma*, for ἔλεος) and 'fear' (*taqwā*, for φόβος, 1449b27) in the soul; definition of 'fable' (*ḥurāfa*, for μῦθος, 'plot', p. 45); the six parts of tragedy (p. 46, after 1450a7–10); this is not the imitation of humans as such but rather of their habits, actions, etc.; the two parts of fable (p. 47–48 and 57: *istidlāl*, inference, and *istīmāl*, implication, for peripeteia and anagnorisis); characterisation of the six parts of tragedy – 5: Good composition in poetry, especially tragedy (after chap. 7 of the *Poetics*, 1450b22); medium length as the ideal; Homer exemplary in implementing his objective (p. 53, based on 1451a24); the parts of the oration that evoke images and are part of the fable (*ḥurāfi*) within tragedy; imitation by means of parables (*amṭāl*) and stories (*qīṣaṣ*) is not poetry (p. 54); poetry is concerned with that which can be or that which is and may be counted among that which is necessary (p. 54, 4–5, deviating from 1451a36–38); example of what is not poetry: *Kalīla wa-Dimna*; further remarks on the characterisation of poetry; its points of contact with philosophy; simple fables; supplementary remarks on *istīmāl* and *istidlāl* – 6: The formal structure of tragedy (after chap. 12 of the *Poetics*); introduction (*madḥal*), corresponds to *nasīb* in the poetry of the Arabs (p. 58); the appearance (*maḥraǧ*) of the dancers; transition (*maǧāz*); development (*taqwīm*); proceeding when composing (*tarkīb*) tragedy; debate poetry (p. 60); on characters (*aḥlāq*); further remarks on *istidlāl*; tying and untying – 7: The sounds of speech (*alfāz*) (according to Arabic phonology!); definition of the term *luǧa* (referring to loan words, e.g. Persian into Arabic); basic grammatical concepts of Arabic; reference to Greek, in which there is a 'middle' besides masculine and feminine (p. 67, after 1458a8–9); on 'narrative' poetry – 8: Comparing the poet with a painter (p. 71, after chap. 25 of the *Poetics*); mistakes a poet might make; mistakes in imitation, explained with, among others, the example of the hind who is given antlers (p. 72, based on 1460b32–33); comparison between tragedy and epic. – In the concluding

remark, Ibn Sīnā hints at the possibility that he might compose a summary yet detailed treatise on poetics “according to the custom of this time” (a plan he never carried out), but that for the time being he confined himself to the foregoing.

#### Physics

A: *al-Samāʾ al-ṭabīʿī* (*De physico auditu*) in four treatises – 1. treatise in 15 sections – 1: Explanation of the method by means of which one will arrive at knowledge of natural phenomena (*ṭabīʿīyyāt*) through their principles (*mabādīʾ*) – 2: List of the principles of natural phenomena via statement (*muṣāḍara*) and assumption (*waḍʿ*) – 3: To what degree these principles are shared – 4: What Parmenides and Melissus say about the principles of being – 5: Explanation of the term ‘nature’ – 6: Relation between nature and matter (*mādda*), form (*ṣūra*), and motion (*ḥaraka*) – 7: On the linguistic expressions/terms (*alfāz*) derived from ‘nature’ and their rules (*aḥkām*) – 8: In what the study of knowledge concerned with nature consists, and what it might have in common with other sciences – 9: Definition of the causes most essential for investigating natural phenomena – 10: Definition of each of the four kinds of causes – 11: The mutual relations (*munāsabāt*) of the causes – 12: The classes (*aḡsām*) of cause-relations – 13: Chance (*baḥṭ*) and coincidence (*ittiḡḡāq*), the difference between the two and an explanation of the true situation regarding them – 14: Refutation (*naqḍ*) of the arguments of those who erred regarding coincidence and chance, and of their doctrine – 15: How the causes are brought into play in investigations (*mabāḥiṭ*) and the question of ‘Why’ (*al-lima*) as well as the answer to it – II. treatise in 13 sections – 1: On motion (*ḥaraka*) – 2: The relation between motion and the categories – 3: Presentation of only those categories within which motion takes place (*yaqaʿu*) – 4: Opposition (*taqābul*) of motion and rest (*sukūn*) – 5: Beginning of the discourse on place (*makān*, for τόπος), adducing arguments that deny (*mubṭilīyya*) or affirm it – 6: What various

philosophical schools say on place, and presentation of their arguments – 7: refutation of the doctrine of those who believe that place is material (*ḥayūlī*) or a form, or a surface in some kind of contact (*mulāqin*), or a distance (*buʿd*) – 8: Refutation of those who claim that vacuum (*ḥalāʾ*) exists – 9: Verification (*taḥqīq*) of the doctrine (*qawl*) on place, and refutation of arguments denying it, and of those who are in error concerning it – 10: Beginning of the discourse on time, and disagreement among people in this matter, and refutation of those who are in error concerning it – 11: Verification (*taḥqīq*) and confirmation of the quiddity (*māhiyya*) of time – 12: Explanation of the ‘now’ (*al-ʾān*) – 13: Resolution (*ḥall*) of doubts concerning time, and conclusion of the discussion of things related to time such as being (*kawn*) within time, out of time, within eternity (*dahr*) and within sempiternity (*sarmad*), the expressions ‘suddenly’ (*baḡʾatan*), ‘right away’ (*ḥurwa dā*), ‘just before’ (*qubayla*), ‘just after’ (*buʿayda*), and ‘since forever’ (*qadīm*). – III. treatise in 14 sections – 1: The kind of investigation (*baḥṭ*) specific to this treatise – 2: On succession (*tatālī*), contiguity (*tamāss*), juxtaposition (*tašāḡfu*), interpenetration (*tadāḡul*), cohesion (*talāṣuq*), connectedness (*ittiṣāl*), central position (*wasat*), side (*ṭaraf*), (being) together and (being) separate – 3: The state of bodies (*aḡsām*) with regard to their division (*inqisām*), presentation of various arguments made by those who talk nonsense on this matter – 4: Affirmation (*itbāt*) of the correct opinion (*al-raʾy al-ḥaqq*) on this matter, and refutation of false views – 5: Resolution of the doubts of those who talk nonsense (*mubṭilīn*) about the atom (*ḡuzʾ*) – 6: Relations between distances (*masāḡfāt*), motions, and times (*azmīna*) in this respect, and an explanation of the fact that none of them possess a first part (*awwal ḡuzʾ*) – 7: Start of the discourse on the limitation (*tanāḡhī*) and limitlessness (*lā-tanāḡhī*) of bodies, and people’s opinions (*ẓunūn*) on this matter – 8: Neither a body nor a quantity (*miqdār*) or a number (*ʿadad*) that are ordered (*dū tartīb*) can be unlimited, and no body that moves in part or as a whole can



be unlimited – 9: Presentation of the extent to which the infinite is a part of existence (*wuğūd*) or not, and refutation of the arguments of those who maintain the existence of something actually (*bi-l-fi'l*) unlimited – 10: The bodies are limited with regard to exerting influence (*ta'tīr*) and undergoing influence (*ta'attur*) – 11: Only the essence (*dāt*) of God, the creator, precedes motion and time; the two do not have a beginning (*awwal*) as regards their essence – 12: On the theory that the forms (*ṣuwar*) of natural bodies can dissolve (*tanḥali'u*) with extreme reduction in size (*taṣagğur mufriṭ*), and that each of them has a minimal boundary (*ḥadd*) below which its form cannot be retained; on the theory that there are motions so small that no smaller ones are possible – 13: The directions (*ḡihāt*) of the parts (*aqsām*) – 14: Theory on the directions of motions, i.e. the straight ones (*mustaqīma*) – iv. treatise in 15 sections – 1: Objectives (*ağrād*) of this treatise – 2: Numerical unit of motion (*al-ḥaraka al-wāhida bi-l-'adad*) – 3: The motion which is one due to genus (*ḡins*) and species (*naw'*) – 4: Resolution of doubts expressed concerning whether the motion is one (*wāhida*) – 5: Comparable (*muḍamma* in the sense of *mutaqāyisa*) motions and those that are not comparable – 6: Contrast (*taḍādd*) and opposition (*taqābul*) of motions – 7: Contrast between motion and rest (*sukūn*) – 8: Whether motions can in fact be connected [immediately], or whether this is impossible, meaning that there must be rest between them – 9: The naturally preceding motion, and summarising list of the specific differences of motions – 10: How a certain region (*ḥayyiz*) may be natural for the body, and what else is natural for it – 11: Affirmation that every body has a natural region, and how the region exists for the whole and the parts of the body, and for the simple as well as the composite – 12: Each natural body has a principle of motion regarding its position (*waḍ'iyya*) and locality (*makāniyya*) – 13: Accidental motion – 14: Forced (*qasrīyya*) motion and that of the independently moving entity (*min tilqā'i l-mutaḥarrik*) – 15: The circumstances

of the causes that produce motion (*al 'ilal al-muḥarrika*), and the relations between these causes and the moved (*mutaḥarrika*).

B: *al-Samā' wa-l-'ālam* (*On the Heavens*), a treatise in ten sections – 1: Powers (*quwā*) and effects (*aḡāl*) of simple and of composite bodies – 2: The classes (*aṣnāf*) of primary, simple powers and motion; that heavenly nature exists beyond the natures based on the elements (*'uṣūriyya*) – 3: Substances (*a'yān*), order, properties (*awṣāf*), and forms (*aṣkāl*) of the simple bodies, which they possess by nature (*bi-l-ṭab'*), and the contrast (*muḥālafa*) of the heavenly sphere (*ḡalak*) with these – 4: Conditions of the body performing circular motions (*bi-l-istidāra*); which kinds of changes (*tağayyur*) it can undergo, and which it cannot – 5: Conditions of the celestial bodies (*kawākib*) and the axis (*miḥwar*) of the moon – 6: Motion of the celestial bodies – 7: That which fills (*ḥaṣw*) the celestial body; what people say about the conditions of the earth and the other elements – 8: Refutation of the abovementioned nonsensical opinions as to the reason (*ta'līl*) for the earth's rest (*sukūn*) – 9: Disagreement among people concerning the light and heavy, and discovery of the correct opinion – 10: The totality (*ḡumla*) of all bodies that are in contact with one another (*mulāqī*), down to the last one (*āḡir*), is one single whole.

C: *al-Kawn wa-l-faṣād* (*On Generation and Corruption*), a treatise in 15 sections – 1: Different views of the ancients about becoming (*kawn*) and transformation (*istiḥāla*) and their basic materials (*'anāṣir*) – 2: Presentation of the arguments of every single group (*farīq*) – 3: Refutation of erroneous arguments – 4: Demolishing the doctrine of the people of becoming (*aṣḥāb al-kawn*) and those who likewise deny (*naḡy*) transformation – 5: Refutation of the followers of [the principles of] love (*maḥabba*) and strife (*ḡalaba*), and of those who claim that becoming and transformation can only occur by means of indivisible parts of surfaces uniting and separating – 6: The difference (*farq*) between becoming and passing away – 7: Refuting

a new doctrine (*maḏhab muḥdaṭ*) on mixture (*mizāḡ*) – 8: On growth (*numuwu*) – 9: On the number of elements (*uṣtuquṣṣāt*) – 10: Listing doubts that are tied to what has been said – 11: Resolution of part (*ṣaṭr*) of these doubts – 12: Resolution of another segment (*qit'a*) of these doubts – 13: Resolution of the remaining doubts – 14: The mutual influences (*infī'ālāt*) and changes (*istiḥālāt*) of the basic materials (*'anāṣir*) in the simple as well as the composite state; how they are under the control (*taṣarruf*) of the influence of the celestial bodies – 15: The cycles (*adwār*) of becoming (*kawn*) and passing away.

D: *al-Af'āl wa-l-infī'ālāt* (actions and passions) in two treatises – 1. treatise in nine sections – 1: The classes (*ṭabaqāt*) of the elements (*'anāṣir*) – 2: General conditions of the sea (*baḥr*) – 3: Why heat and cold follow one another – 4: Explanation of the dictum that bodies when they increase in size (*'iẓam*) also increase in force (*ṣidda*) and strength (*quwwa*) – 5: [Instances of] causing and undergoing an influence that are ascribed to the four qualities (*kayfiyyāt*) – 6: Maturing (*naḡḡ*), immaturity (*nuḥū'a*), rotting (*'ufūna*), and being burnt (*iḥtirāq*) – 7: Boiling (*ṭabḥ*), roasting (*ṣayy*), frying (*qaly*), evaporating (*ṭabḥīr*), smoking (*tadḥīn*), boiling off (*taṣ'īd*), melting (*dawb*), softening (*taḥīn*), burning (*iṣṭi'āl*), cooking on coal (*taḡmīr*), charring (*taf-aḥḥum*), and what undergoes these (*yaqbalu*) and what does not – 8: Dissolving (*ḥall*) and binding (*'aqd*) – 9: The ways (*aṣnāf*) in which what is moist (*raṭb*) and dry (*yābis*) undergo influence – 11. treatise in two sections – 1: Difference between humans in the occurrence (*ḥudūt*) of the qualities perceived by the senses which follow the four [elementary qualities], and on their relation with the mixture (*mizāḡ*), and refutation of those who talk nonsense – 2: Verification of the discourse on those things that follow (*tawābi'*) the mixture.

E: *al-Ma'ādin wa-l-Ātār al-'ulwīyya* (on minerals and meteorologica) in two treatises – 1. treatise in 6 sections – 1: The mountains (*ḡibāl*) and how they are formed (*takawwun*) – 2: Usefulness of mountains, formation

of clouds (*suḥub*) and of dew (*andā'*) – 3: Water springs – 4: Earthquakes (*zilzāl*) – 5: The formation of minerals (*ma'daniyyāt*) – 6: Conditions of the inhabited world (*maskūna*) and mixtures (*amziḡa*) of countries – 11. treatise in six sections – 1: The clouds, what falls down out of them, and what is similar to it – 2: Preliminaries (*muqaddimāt*) to prepare the instruction on the cause of the halo (*ḥāla*), the rainbow (*qaws quzaḥ*) etc. – 3: On the halo and the rainbow – 4: The winds (*riyāḥ*) – 5: Thunder and lightning, lightning bolts (*ṣawā'iq*), shooting stars (*kawākib al-raḡm*), meteors (*ṣuḥub dā'ira*), and comets (*dawāt al-aḏnāb*) – 6: The great events (*ḥawādīṭ kibār*) that occur in the world.

F: *al-Nafs (On the Soul)* in 5 treatises – 1. treatise in five sections – 1: Explanation and definition of the soul, insofar as it is the soul – 2: What the ancients said about the soul and its substance (*ḡawhar*), and refutation thereof – 3: That the soul belongs in the category of substance – 4: Presentation of the fact that the difference of actions (*af'āl*) of the soul is caused by the difference of their powers (*quwāhā*) – 5: Classifying list of the powers of the soul – 11. treatise in five sections – 1: The powers ascribed to the vegetative (*nabā-tīyya*) soul – 2: Kinds of perceptions (*idrākāt*) we have – 3: The sense of touch – 4: Tasting and smelling – 5: Hearing – 111. treatise in eight sections – 1: Light (*daw'*), transparent things (*ṣafīf*), colour (*lawṇ*) – 2: Doctrines and doubts regarding the issue of light (*nūr*) and rays (*ṣu'ā'*), and concerning light not being a body (*ḡism*) but a property (*kayfiyya*) manifesting itself in it (*taḥduṭu*) – 3: Conclusion of the refutation of doctrines denying that light is externally colourless, and discourse on transparency (*ṣafāf*) and the luminous (*lāmi'*) – 4: Observations on doctrines that have been expressed concerning the colours and their origin (*ḥudūt*) – 5: Various doctrines on sight (*ru'ya*), and refutation (*ibṭāl*) of the false (*fāsida*) doctrines on accordance with things themselves – 6: Refuting their doctrines by means of things stated (*maqūla*) in their teachings (*maḏāhib*) – 7: Resolution of their doubt they raised at the end of the discussion

of specific objects of vision (*mubṣarāt*) which have different places (of images) (*awḍāʾ*) in transparent (*muṣṣiffāt*) and reflective (bodies) (*ṣaqilāt*) – 8: Why it is possible to see one thing as if it were two – iv. treatise in four sections – 1: General discourse on the inner senses (*ḥawāss bāṭina*) of living beings – 2: Actions (*afʿāl*) of the imaginative (*muṣawwira*) and the cognitive (*mufakkira*) powers of these internal senses – 3: Effects of the forces based on recollection (*mutaḍakkira*) and those belonging to estimation (*wahmīyya*), and that the effects of all these forces are brought about by bodily instruments (*ālāt ḡismāniyya*) – 4: Conditions of the moving (*muḥārrika*) forces and a form (*ḍarb*) of prophecy (*nubuwwa*) linked to them – v. treatise in eight sections – 1: Peculiarities (*ḥawāss*) of actions and passions that are particular to humans, and presentation of the powers of speculation (*naẓar*) and of the action of the human soul – 2: Affirmation that the subsistence (*qiwām*) of the rational (*nāṭiqa*) soul is not imprinted (*munṭabiʿ*) onto physical matter – 3: Two questions: how the human soul benefits from sensory perceptions; affirmation of its origination (*ḥudūt*) – 4: Human souls do not perish and do not enter into a new body (*lā tatanāsaḥu*) – 5: The active intellect (*al-ʿaql al-faʿāl*) in our souls, and the intellect that suffers because of (*ʿan*) our souls (*munfaʿil*) – 6: Degrees of the effects of the intellect: the highest being the holy intellect (*al-ʿaql al-qudsī*) – 7: Enumeration (*ʿadd*) of the doctrines transmitted from the ancients on the matter of the soul and its effects – 8: Presentation of the instruments (*ālāt*) of the soul.

G: *al-Nabāt* (after *On Plants* by Nicholas Damascus), one treatise in seven sections – 1: Origin (*tawallud*) and nourishment (*iḡtidāʾ*) of plants, that which is male or female in them; the basis (*aṣl*) of their mixture (*mizāḡ*) – 2: Organs (*aʿḍāʾ*) of plants at the beginning of growth (*nuṣūʾ*) and afterwards – 3: The principles of nourishment (*taḡḍīya*), generation (*tawlīd*) and growth in plants – 4: Origin of the parts of plants, differences (*iḥtilāf*) between them, and differences between

plants in various countries (*bilād*) – 5: Trunks (*sūq*), branches (*ḡuṣūn*), leaves (*waraq*) – 6: What emerges from plants: fruit (*tamar*), seeds (*budūr*), thorns (*ṣawk*), resin (*ṣumūḡ*) and suchlike – 7: General remarks on the classes (*aṣnāf*) of plants, then on the mixtures (*amziḡa*) of things that possess a vegetative (*ḡāḍiya*) soul.

H: *al-Ḥayawān* (after *History of Animals, Parts of Animals, and Generation of Animals*) in 19 treatises – 1. treatise in three sections – 1: On general differences as regards shelter (*maʿwan*), nourishment, character, actions, and organs (*aʿḍāʾ*) – 2: The universal organs – 3: List of the instrumental (*ālīyya*) organs and their locations – II. treatise in two sections – 1: Continuation of the discussion of the difference between creatures as regards their external (*ẓāhira*) organs – 2: Difference between creatures as regards their internal (*bāṭina*) organs – III. treatise in three sections – 1: Anatomy (*taṣrīḥ*) of the internal organs, and disagreement between philosophers and physicians on this matter – 2: Horns, bones, hair, feathers, etc. – 3: Blood and milk; sperm – IV. treatise in two sections – 1: Special position of water creatures; the organs of some insects (*muḥazzazāt*) – 2: Sensation (*ḥiss*), motion, noises (*taṣwīt*) made by creatures; sleep and waking state; male and female – v. treatise in two sections – 1: Copulation (*sifād*) and fertilization (*waḍʿ*) – 2: Seed (*zarʿ*) and sperm (*minan*) – VI. treatise in two sections – 1: Eggs and brood of birds – 2: Copulation, eggs, and generation (*tawlīd*) of fish – VII. treatise in two sections – 1: Difference between creatures with regard to their shelter, depending on their age (*aʿmār*) and character (*aḥlāq*) – 2: Continuation of the preceding section; indications of the illnesses (*amrād*) of creatures – VIII. treatise in four sections – 1: That creatures also, and frequently, differ as to their character – 2: Further remarks on this matter – 2: Similar matters; on bees (*naḥl*) and hornets (*zanābīr*); differences between the characters of creatures – 4: Character of various beasts of prey (*sibāʾ*), of water creatures, of birds – IX. treatise in six sections –

1: Puberty (*idrāk*); sperm; menstruation (*ṭamt*) – 2: Galen's argumentation (*ihṭijāğ*) against the philosopher (i.e. Aristotle), criticism of this argumentation – 3: Adoption (*ma'ḥad*) of the first (i.e. Aristotelian) teaching that woman possesses no sperm – 4: Further remarks on sperm, and on the leading (*rā'isa*) organs – 5: Transformations (*istiḥālāt*) of the matter (*mādda*) of the foetus (*ḡanīn*) until its completion – 6: Child (*walad*) and mother (*wālida*) – x. treatise in one section: Pregnancy (*ʿulūq*) and spontaneous abortion – xi. treatise in one section: General connecting remark referring to the classification of creatures – xii. treatise in 15 sections – 1: Composition of the body (*badan*) – 2: Mixture (*mizāj*) – 3: Mixture of the organs – 4: Mixtures (*amziğā*) of the teeth (*asnān*) – 5: The transformation (*istiḥāla*) of food (*ḡidā'*) into humours (*aḥlāt*) – 6: The classes of humours – 7: Aristotle's presentation on that which is moist (*ruṭūbāt*) and on the brain (*amḥāḥ*, *admiğā*) – 8: The brain and the spinal cord growing out of it (*nuḥā'*) – 9: The use of the nerves (*ʿaṣab*) and especially the cranial nerve – 10: Further nerves, i.e. those of the spinal column – 11: Bones – 12: Joints (*awṣāl*) of the bones, and especially the highest among them, i.e. that of the head and its bones – 13: Instruments of sight (*baṣar*) and their musculature (*ʿadal*) – 14: Hearing, smelling, sense of taste – 15: Motion of the parts of the head, with the exception of the eyes, and their musculature – xiii. treatise in seven sections – 1: Teeth, mouth, horns, and suchlike – 2: General remarks on the internal organs (*aḥṣā'*); beginning of the presentation on the respiratory organs, the windpipe (*qaṣaba al-rī'a*), the larynx (*ḥanğara*), the lungs (*rī'a*); organs of the abdominal cavity (*ğawf*) – 3: The heart and the arteries emerging from it (*ṣarāyīn*) – 4: The path taken by food: oesophagus (*marṛ*), stomach (*ma'ida*), intestines (*am'ā*), and the layers of skin around them (*ṣifāqāt*); gluteal muscles – 5: Specific remarks on the intestines – 6: Liver, pylorus (*bawwāb*), and veins (*awrida*) – 7: Gall bladder (*marāra*) and urinary bladder

(*maṭāna*), and the surplus (*faḍl*) flowing into them – xiv. treatise in 9 sections – 1: Aristotle's presentation on the gall bladder, the kidney (*kulya*); on the internal organs and the remaining organs of insects (*muḥazzazāt*) – 2: Collarbone (*tarquwa*), shoulder blade (*katif*), hands – 3: Spine (*ṣulb*), neck (*ʿunuq*), and their parts – 4: Vertebrae of the neck and back; chest (*ṣadr*) and posterior (*ʿağuz*) – 5: Ribs (*aḍlā'*) – 6: The musculature that moves the organs mentioned – 7: The leg (*riğl*) and its musculature; differences between creatures in this respect – 8: Aristotle's presentation on the causes of the difference of the limbs (*aṭrāf*) of living beings; remarks on the jaw (*fakk*) – 9: Cheek and lip (*ṣafa*); further remarks on the limbs of the creatures – xv. treatise in three sections – 1: Generation and procreation of creatures; genital member and womb – 2: Causes of the circumstances of the matter (*mādda*) that induces giving birth (*ilād*) – 3: Sperm and menstrual blood – xvi. treatise in two sections – 1: How creatures are generated out of the sperm and the egg, and differences between them in this respect – 2: Organs that resemble one another with regard to their substance (*ğawāhir*); sterility of women and men (*ʿaqm*, *ʿuqr*); what causes male and female (*idkār*, *ināt*) – xvii. treatise in one section: Creatures that lay many eggs, and those that lay few; further remarks on giving birth – xviii. treatise in one section: Causes (*ʿilal*) of masculinisation and femininisation and of similarity (*muṣābaha*); causes for differences in growth (*nuṣū*) and the length of life (*āğāl*) – xix. treatise in one section: Various remarks on humans.

#### Mathematical Sciences

A: *al-Handasa* (Geometry, after Euclid, *Elements*), in 15 treatises (corresponding to the 15 books of the *Elements*) – 1: On the triangle (*muṭallat*), especially the equilateral (*mutazāwī l-aḍlā'*) – 2: The straight line (*ḥaṭṭ mustaqīm*), its division (*taqsīm*), and the (figures) erected on it (*mutaṭābiqāt*) – 3: Circles (*dawā'ir*) – 4: Operations (*ʿamaliyyāt*) with triangles and circles – 5: Proportions (*nisab*) –

6: Similar areas (*suṭūḥ mutašābiḥa*) – 7: Numbers composite to each other (*ištirāk*) and prime to each other (*tabāyun*), and what is connected to them – 8: Numbers in geometrical sequences (*mutawālīyāt*) – 9: Ditto, and factors (*ʿawāmil*) and other things connected with them – 10: Rationality (*ištirāk*) and irrationality (*tabāyun*) of numbers, and what is connected with both – 11: Stereometry (*handasa farāġīyya*) – 12: Regular polyhedra (*kaṭīrāt al-suṭūḥ*) – 13: The golden section (*al-qisma dāt al-wasaʿ wa-l-ṭaraḥayn*), and regular polyhedra (*muġassamāt muntaziḥa*) – 14: The golden section (*al-qisma dāt al-wasaʿ wa-l-ṭaraḥayn*), and regular polygons (*muḍallaʿāt muntaziḥa*) – 15: Drawing (*rasm*) of polygons inscribed in one another (*dāḥil baʿḍuhā*).

B: *al-Ḥisāb* (Arithmetic, after Nicomachus of Gerasa, *Introduction*), in 4 treatises – 1: Special features (*ḥawāṣṣ*) of the number (*ʿadad*) [cf. *Introduction* 1.8ff.] – 2: The circumstances of a number when it is in relation to another [*Intro.* 1.19ff.] – 3: The circumstances of a number when considering its being composed of units (*waḥdāniyyāt*) [*Intro.* 11.6ff.] – 4: The ten (kinds of) continuous (proportions) (*al-mutawālīyāt*) [*Intro.* 11.21ff.].

C: *Mūsīqā* (Music, only in part after Aristoxenus, possibly also after the lost great book on music by Nicomachus; according to Ibn Sīnā in the *Madḥal* ‘composed after long research and precise theoretical analysis’ [\*54.1.1: 11,10–11]; in contrast to the other mathematical parts, this is a freely composed work), in 6 treatises. – 1. treatise, includes a preface, in 4 sections – 1: Nominal description (*rasm*) of music and the causes (*asbāb*) of sound (*ṣawt*), high notes (*ḥidda*) and low notes (*tiql*) – 2: Knowledge of consonant and dissonant intervals (*abʿād*) – 3: That which is consonant owing to the first class of consonance (*al-muttafiq bi-l-ittifāq al-awwal*) – 4: That which is consonant owing to the second class of consonance (*al-abʿād al-muttafiqa bi-l-ittifāq al-tānī*) – 11. treatise, includes a preface, in 2 sections – Preface (*muqaddima*). – 1. Adding (*ġamʿ*) intervals

together, and subtracting them from each other – 2. Doubling (*taḍʿīf*) and dividing in half (*tanṣīf*) – 111. treatise, in 4 sections – 1: Genus (*ġins*) and its division into kinds (*anwāʿ*) – 2: The number of genera – 3. The strong (*qawīyya*) genera – 4: The genera of the soft (*layyīna*) intervals – 1v. treatise, in 2 sections – 1: The system (*ġamāʿa*) – 2: The evolution (*intiḳāl*) (of the melody) – v. treatise, in 5 sections – 1: Notes (*naġam*) [rhythmical (*īqāʿīyyan*)] – 2: Language (*lisān*) imitating rhythm – 3: The number of genera of connected (*muwaṣṣal*) and unconnected (*mufaṣṣal*) (rhythm) – 4: Rhythms in four (*rubāʿīyyāt*), five, and six parts – 5: Poetry and its metres (*awzān*) – vi. treatise, in 2 sections – 1: Composition of the melody (*taʿlīf al-laḥn*) – 2: The musical instruments (*al-ālāt al-mūsīqīyya*).

D: *al-Hayʾa* (Astronomy, after Ptolemy, *Almagest*), in 13 treatises. – 1. treatise, in 10 sections – 1: The sky is spherical (*kuriyya*) as to its motion and form (cf. *Almagest* 1.3) – 2: The earth is spherical according to sensory perception (*ḥiss*) (*Alm.* 1.4) – 3: The earth is fixed (*mustaqirra*) at the centre (*wasaʿ*) (*Alm.* 1.5) – 4: The earth has no extension (*miqdār*) compared to the (outermost) sphere (*falak*) (*Alm.* 1.6) – The earth does not own motion that causes a change of location (*intiḳāl*) (*Alm.* 1.7) – 6: The universe (*kull*) has one single motion; it encompasses it and guides it from east to west (*Alm.* 1.8) – 7: Knowledge of the chords (*awtār*) of the arc of a circle (*aġzāʿ al-dāʿira*) (*Alm.* 1.10) – 8: Knowledge of the declination (*mayl*) – 9: Knowledge of the sinuses (*ġuyūb*) (not in *Alm.*!) – 10 The risings (*maṭālīʿ*) in sphaera recta (*kura muntaṣiba*) (*Alm.* 1.16) – 11. treatise, in 8 sections – 1: Eastern amplitude (*saʿūt al-mašriq*) (of the sun on the horizon) (*Alm.* 11.2) – 2: Knowledge of the proportions (*nisab*) of the gnomons (*maqāyīs*) with their shadows (*aẓlāl*) on the two equinoxes (*ʿitidālāyn*) and the two solstices (*inqilābayn*) (*Alm.* 11.5) – 3: Special characteristics (*ḥawāṣṣ*) of the circles (*dawāʾir*) parallel with the equator (*muʿaddil al-nahār*) (*Alm.* 11.6) – The risings with reference to the latitudes (*ʿurūd*) (*Alm.* 11.7) – 5: Special (tasks)

resolved by the risings (*Alm.* II.9) – 6: Knowledge of the angles (*zawāyā*) that result from the point of intersection (*taqāṭu*) of the two orbits (*dā'iratay*) of the ecliptic (*al-burūḡ*) and the meridian (*niṣf al-naḥār*) (*Alm.* II.10) – 7: Knowledge of the angles that result from the point of intersection of the two orbits of the ecliptic and the horizon (*ufuḡ*) (*Alm.* II.11) – 8: Knowledge of the angles that result from the point of intersection of the ecliptic and the circles passing through both of the poles of the horizon (*quṭbay al-ufuḡ*) (*Alm.* II.12) – III. treatise, in 4 sections – 1: The hypotheses (*uṣūl*) of the equal (*mustawīya*) motion on circles (*Alm.* III.3) – The seeming anomaly (*ihṭilāf al-ḥaraka*) of the sun (*Alm.* III.4). – 3: Knowledge of the anomaly in detail (*Alm.* III.5) – 4: Disparity between the days and their nights (*Alm.* III.9) – IV. treatise, in 8 sections – 1: Knowledge of the periodic times (*azmān adwār*) of the moon (*Alm.* IV.2) – 2: The uniform motions of the moon in detail (*Alm.* IV.3) – 3: The anomaly of the moon is the same whether it is generated by means of an eccentric (*al-falak al-ḥāriḡ al-markaz*) or an epicycle (*falak al-tadwīr*) (*Alm.* IV.5) – 4: Explanation of the simple (or) first anomaly of the moon (*Alm.* IV.6) – 5: Correction of the uniform motions of the moon in longitude (*tūl*) and anomaly (*ihṭilāf*) (*Alm.* IV.7) – 6: The epoch (*ḥāṣil*) of the uniform motions of the moon longitudinally and in anomaly (*Alm.* IV.8) – 7: Correction of the transits (*maḡāzāt*) of the moon (through the ecliptic) in latitude (*'arḍ*) and their epoch (*Alm.* IV.9) – 8: Concerning the fact that Hipparchus' deviation (*ḥilāf*) in measuring (*miqdār*) the anomaly is not due to the hypotheses (*uṣūl*) based on which he worked, but to the calculation (*ḥisāb*) (*Alm.* IV.11) – V. treatise, in 13 sections – 1: Description of an instrument (*āla*) for measuring the stars (*kawākib*) (*Alm.* V.1) – 2: The hypothesis (*aṣl*) applied regarding the double (*muḍa'af*) anomaly of the moon (*Alm.* V.2) – 3: Knowledge of the anomaly (*ihṭilāf*) of the moon that results from calculating (*ḥisāb*) its distance (*bu'd*) from the sun (*Alm.* V.3) – 4. Knowledge of the direction (*nāḥiya*) to

which the moon's epicycle is parallel (*Alm.* V.5) – 5: How one may recognise the moon's true course (*masīr*) through its uniform motions (longitudinally and in anomaly) by means of the lines (*ḥuṭūt*) in geometrical construction (*Alm.* V.6) – 6: Knowledge of producing (*'amal*) tables (*ḡadāwil*) for the entire anomaly of the moon (*Alm.* V.7) – 7: The difference coming from the eccentric has no magnitude (*qadr*) in the times of conjunctions (*iḡtimā'āt*) and oppositions (*istiḡbālāt*) (*Alm.* V.10) – 8: The parallax (*ihṭilāf al-manẓar*) that arises with the moon (*Alm.* V.11) – 9: Explanation of the distances (*ab'ād*) of the moon (*Alm.* V.13) – 10: The sums (*maḡādīr*) of the apparent diametres (*aqtār*) of the sun, the moon, and the shadow (*ẓill*) visible on the occasion of conjunctions and oppositions (*Alm.* V.14) – 11: Knowledge of the distance of the sun and that which becomes clear by presenting it (*Alm.* V.15) – 12: The individual (sums) of the parallaxes of the sun and the moon (*Alm.* V.17) – 13: Equation (*ta'dīl*) of the parallax and detailed description (*tafṣīl*) on the subject (*Alm.* V.19) – VI. treatise, in 7 sections – 1: Knowledge of the calculation of the middle (*wuṣṭā*) conjunctions and oppositions and (its) argument (*ḥiṣṣa*) (in the table) (*Alm.* VI.2) – 2: Presentation of the boundaries (*ḥudūd*) of the eclipses (*kusūfāt*) of sun and moon (*Alm.* VI.5) – 3: Intervals between the months (*ṣuhūr*) during which the eclipses take place (*Alm.* VI.6) – 4: Description for producing tables of eclipses (*Alm.* VI.7) – 5: The calculation and equation of lunar eclipses (*Alm.* VI.9) – 6: The calculation of solar eclipses (*Alm.* VI.10) – 7: The directions (*ḡithāt*) in relation to the horizon with which the eclipses are parallel, and their equation (*Alm.* VI.11) – VII. treatise: Summary (*ḡawāmi'*) on the fixed stars (*Alm.* VII.1–2) – VIII. treatise, in 2 sections – 1: The conjunction (*muḡāraṇa*) between the fixed stars and the sun when rising (*ṭulū*), in the culmination (*tawassuṭ al-samā*), or when setting (*ḡurūb*) (*Alm.* VIII.5) – 2: How the fixed stars (*ṣuhūr li-l-ru'ya*) rise and set heliacally (*Alm.* VIII.6) – IX–XI. treatise summarising remarks on the planets

(*al-kawākib al-mutaḥayyira*), in 20 sections – 1: Sequences (*marātib*) of the spheres (*ukar*) of the seven celestial bodies (*Alm.* IX.1) – 2: The hypotheses (*uṣūl*) that are applied when studying the five celestial bodies (*Alm.* IX.2) – 3: The cyclical recurrences (*ʿawdāt adwār*) of the five celestial bodies (*Alm.* IX.3) – 4: Necessary preliminary remarks regarding the hypotheses that are applied when studying the five celestial bodies (*Alm.* IX.5) – 5: Types (*aṣnāf*) of hypotheses that are applied, and their sections (*fuṣūl*) (*Alm.* IX.6) – 6: Knowledge of the apogee (*abʿad al-buʿd*) of Mercury and Venus (*Alm.* IX.7+X.1) – 7: During one orbit (*dawra*), Mercury is twice (*marratayn*) in a perigee (*Alm.* IX.8) – 8: Knowledge of the apogee of Venus (*Alm.* X.1) – 9: Knowledge of the extent (*miqdār*) of the epicycle of Venus (*Alm.* X.2) – 10: Knowledge of the distance of the centre (*markaz*) of the equant (*muʿaddil*) from the centre of the signs of the zodiac for Mercury and Venus (*Alm.* IX.9+X.3) – 11: Knowledge of the distance of the centre of the deferent from the centre of the equant of Mercury (*Alm.* IX.9) – 12: Correction of the cyclical motions of Mercury (*Alm.* IX.10) – 13: Correction of the cyclical motions of Venus (*Alm.* X.4) – 14: Necessary preliminary remarks to the explanation of the circumstances of the other celestial bodies (*Alm.* IX.6) – 15: Explanation of eccentricity (*al-ḥurūġ ʿan al-markaz*) in the three higher celestial bodies and their apogees (*Alm.* X.7+XI.1+X.5) – 16: Knowledge of the extent (*maqādir*) of the epicycles of the three celestial bodies (*Alm.* X.8+XI.2+XI.6) – 17: Correction of the circular motion of these celestial bodies (*Alm.* X.3+XI.3+XI.7) – 18: Knowledge of the true motions from the periodic motions (*Alm.* XI.9) – 19: Knowledge of how to produce tables of the anomalies (*iḥtilāfāt*) (*Alm.* XI.10) – 20: Calculation of the course (*masīr*) of the five celestial bodies in longitude (*tūl*) (*Alm.* XI.12) – XII. treatise, in 3 sections – 1: Knowledge of the retrogradations (*ruġūʿāt*) of the five celestial bodies (*Alm.* XII.1) – 2: Knowledge of how to produce tables of the stations (*wuqūfāt*) of these celestial bodies (*Alm.* XII.7) – 3: Knowledge of the

greatest elongations of Venus and Mercury from the sun (*Alm.* XII.10) – XIII. treatise, in 6 sections – 1: Knowledge of the measurements of these angles of inclination (*muyūl*) and slant (*inḥirāfāt*) that occur in the hypotheses concerning motion in latitude (*Alm.* XIII.2) – 2: Description of producing tables of individual positions (*al-mamarrāt al-ġuzʿiyya*) in latitude (*ʿarḍ*) (*Alm.* XIII.4) – 3: Calculation of the mutual deviation (*tabāʿud*) of the five celestial bodies in latitude (*Alm.* XIII.6) – 4: Heliacal risings and settings of the five celestial bodies (*Alm.* XIII.7) – 5: That which is visible of the particular features of heliacal risings and settings of Venus and Mercury, agrees with the hypotheses (*uṣūl*) determined for them (*Alm.* XIII.8) – 6: Method (*maslak*) for knowing the elongations of the sun on the occasion of the heliacal risings and settings of these celestial bodies – Appendix: Beginning of a treatise adding to the summary of the *Almagest* topics not discussed there.

#### Metaphysics

In 10 treatises. – I. treatise, in 8 sections – 1: Beginning of the search for the subject (*mawḍūʿ*) of the First Philosophy in order that its existence (*innīyya*) is clear within the sciences – 2: Achieving (*tahṣīl*) the subject matter of this science – 3: Benefit, rank, and name of this science – 4: That which is discussed in this science overall – 5: Reference to the existent (*mawġūd*) and the thing (*ṣayʿ*) and their first divisions (*aqsām*) by means of a reminder (*tanbīh*) of the goal (*ġaraḍ*). – 6: Beginning of the discourse on the necessary existent (*wāġib al-wuġūd*), the possibly existent, and on the fact that the necessary existent does not have a cause (*ʿilla*) and that the possibly existent does have a cause (*maʿlūl*), and that the necessary existent is not equal (*mukāfiʿ*) in existence to any other, and is not connected to any other in this respect – 7: That the necessary existent is one (*wāḥid*) – 8: Presenting the true (*ḥaqq*) and correct (*ṣidq*); defence (*dabb*) of the primary statements (*awwal al-aqāwīl*) among true premises (*al-muqaddimāt al-ḥaqqā*) – II. treatise, in 4 sections – 1: Explanation of

substance (*ḡawhar*) and its divisions (*aqsām*) in universally comprehensible language – 2: Determining (*taḥqīq*) physical substance and that which is composed of it – 3: Physical matter (*mādda*) cannot be denuded of form (*ṣūra*) – 4: In the rank of existence (*wuḡūd*), form takes precedence over matter – III. treatise, in 10 sections – 1: Indication regarding what needs to be investigated in the context of the state (*ḥāl*) of the nine categories and their accidentality (*ʿaraḍiyya*) – 2: Discourse on the one (*wāḥid*) – 3: Determining the one and the many (*kaṭīr*) with an explanation that number is an accident – 4: That measures (*maqādir*) are accidents – 5: Determining the quiddity (*māhiyya*) of number and defining its kinds (*amwā*); presentation of its (possible) beginnings (*awāʾil*) – 6: The one and the many are opposites – 7: Qualities (*kayfiyyāt*) are accidents – 8: Knowledge, and that it is an accident – 9: The qualities contained in quantities (*kammīyyāt*) and proof (*iṭbāt*) of the former – 10: The relative (*muḍāf*) – IV. treatise, in 3 sections – 1: The earlier and later, and on generation – 2: Power (*quwwa*), action (*fiʿl*), force (*qudra*), incapacity (*ʿaḡz*); proof that everything that is generated (*mutakawwin*) possesses matter (*mādda*) – 3: That which is perfect (*tāmm*) and imperfect (*nāqis*) and that which is above (*fawqa*) perfection (*tamām*); the whole (*kull*) and the entirety (*ḡamīʿ*) – v. treatise, in 9 sections – 1: General things (*umūr ʿamma*) and the quality of their existence – 2: To what extent the universal natures (*ṭabāʾiʿ kulliyya*) are universal; difference between the whole and the part; the universal and the particular – 3: Difference (*faṣl*) between genus (*ḡins*) and matter (*mādda*) – 4: How the meanings (*maʿānī*) beyond the genus join the nature (*ṭabīʿa*) of the genus – 5: Species (*nawʿ*) – 6: Difference (*faṣl*) and its determination – 7: Relation between definition (*ḥadd*) and defined (*maḥdūd*) – 8: The definition – 9: Relation between the definition and its parts – VI. treatise, in 5 sections – 1: The divisions (*aqsām*) and circumstances (*aḥwāl*) of causes (*ʿilal*) – 2: Resolving the doubt concerning that which the representatives of

truth (*ahl al-ḥaqq*) believe, that each cause exists together with that which it causes; verification of the discourse on the efficient cause (*al-ʿilla al-fāʾiliyya*) – 3: Relation between the efficient causes and the things caused by them (*maʿlūlāt*) – 4: The remaining causes: material (*ʿunṣuriyya*), formal (*ṣuwariyya*), and final (*ḡāʾiyya*) – 5: Proof of the goal (*ḡāya*) and resolution of the doubts expressed regarding its being declared null and void (*ibṭāl*); difference between the goal and that which is necessary (*ḍarūrī*) and explanation of the aspect (*waḡḥ*) due to which the goal precedes the other causes, and the aspect due to which it follows (them) – VII. treatise, in 3 sections – 1: The concomitances (*lawāḥiq*) of unity (*waḥda*) regarding the essence (*huwiyya*) and its classes (*aqsām*), and the concomitances of multiplicity (*kaṭra*) regarding differentness (*ḡayriyya*) and difference (*ḥilāf*), and the universally recognised (*maʿrūfa*) classes of opposition (*taqābul*) – 2: Report of the dogmas of the ancient sages regarding the models (*muṭul*) and the principles of the mathematical (disciplines) (*taʿlīmīyyāt*), what inspired them, and presentation of the basis (*aṣl*) of the ignorance (*ḡahl*) that became manifest in them, because of which they diverged from the right road – 3: Declaring the dogmas concerning the models and the mathematical (disciplines) null and void (*ibṭāl*) – VIII. treatise, in 7 sections – 1: The finiteness (*tanāḥī*) of efficient and receptive causes (*ʿilal*) – 2: Doubts linked to that which has been said, and their resolution – 3: Explanation of the finiteness of the final and form-related causes, and evidence (*iṭbāt*) of the absolute first principle; discourse on the absolute first cause and about the limited (*muqayyad*) first cause; demonstration that that which is the absolute first cause, is the cause of the other causes – 4: Primary qualities of the necessarily existent principle – 5: Affirmation and repetition of the earlier explanation that the necessary existent is one and that all its qualities may be deduced only by way of negation (*via negationis*) – 6: It is perfect (*tāmm*), indeed, higher than perfect (*fawq al-tāmm*); good (*ḡayr*); beneficial



(*muḥīd*) to everything after it; true (*ḥaqq*); pure intellect; intellecting (*yaʿqilu*) everything. How so? How does it recognise its essence (*ḡāt*)? How does it recognise the universals? How does it recognise the particulars? And in what respect is it unsuitable to say that it comprehends them (*yudrikuhā*)? – 7: The intelligibles' (*maʿqūlāt*) connection with it; explanation that its affirmative and privative qualities do not result (*tūǧību*) in multiplicity in its essence; it possesses the greatest splendour and the highest sublimity (*ǧalāl*) and infinite glory (*maǧd*); detailed demonstration of what spiritual delight (*al-ladda al-ʿaqliyya*) consists in – IX. treatise, in 7 sections – 1: Description (*ṣifa*) of the efficient causation (*fāʿiliyya*) of the first principle – 2: The mover (*muḥarrik*) close to the celestial bodies (*samāwīyyāt*) is not nature and not intellect, but soul (*naḥs*); the more distant (*abʿad*) principle is intellect – 3: How the effects (*afʿāl*) emerge (*ṣudūr*) from the supernal (*ʿālīya*) principles, in order that we should know that which is necessary about the separately movers (*muḥarrikāt muḥāriqa*) that are intellects by their essence and are the object of love (*maʿšūqa*) – 4: Arrangement (*tartīb*) of the existence of the intellect, of the celestial souls and the supernal bodies (*aǧrām ʿulwīyya*) based on the first principle – 5: The way in which the elements are generated (*takawwun*) from the first causes – 6: Divine providence (*ʿināya*); to what extent evil (*ṣarr*) is included in the divine decree (*qaḍāʾ ilāhī*) – 7: The place of return (*maʿād*, i.e. the afterlife) – X. treatise, in 5 sections – 1: Summary remarks on the beginning (*mabdaʾ*) and the return; inspirations (*ilhāmāt*) and dreams; answered prayers (*daʾawāt mustaǧāba*); divine punishment; prophecy (*nubuwwa*); astrology (*ahkām al-nuǧūm*) – 2. Proof (*iṭbāt*) of prophecy; how the Prophet calls (*daʿwa*) people to God; the return to him – 3: Services to the divine (*ʿibādāt*) and their benefit in this world and the afterlife (*āḥira*) – 4: Covenant (*ʿaqd*) of the state (*madīna*) and covenant of the house, i.e. marriage (*nikāḥ*) and the universal rules (*sunan kullīyya*) regarding it – 5: On the caliph and the imam and that they must be

obeyed; reference to politics (*siyāsāt*), social intercourse (*muʿāmalāt*), and ethics (*aḥlāq*).

#### *Kitāb al-Naǧāt* (GS 6)

##### *The Salvation*

This is a collage of texts written earlier, which includes a description of logic, physics, metaphysics, and mathematics (cf. the description in Gutas 2014 [69: 115–117. 422–424]). – According to al-Ǧūzǧānī the section on logic, listed in the bibliographies separately as *al-Muḥtaṣar al-aṣḡar fī l-manṭiq* (*Shorter Compendium on Logic*) (GS 6a) but not separate in any of the known manuscripts, is an earlier work by Ibn Sīnā that was included into *al-Naǧāt*. It includes only the *Isagoge*, *On Interpretation*, *Prior Analytics* (including a short section on the *Categories*), *Posterior Analytics*, and *Sophistical Refutations*. *Topics*, *Rhetoric*, and *Poetics* are not included. – The part on physics consists of passages copied from Ibn Sīnā's earliest summa, *The Philosophy for ʿArūḍī* (GS 2), except for the section on *On the Soul*, which was originally part of *al-Maʿād [al-aṣḡar]* (*The [Lesser] Destination*) (GM 3). Zoology and botany are not included. – Most of the part on metaphysics is taken from *al-Mabdaʾ wa-l-maʿād* (*The Provenance and Destination*) (GM 1). – Al-Ǧūzǧānī compiled the part on mathematics at Ibn Sīnā's request, from the following texts: for arithmetic he summarised Ibn Sīnā's book on arithmetic from the *Šifāʾ* (abstract in Al-Daffa and Stroyls 1984 [\*526: 79–88]). For the parts on geometry, astronomy, and music, he used short versions composed by Ibn Sīnā on these topics: *Muḥtaṣar Auqlidis = Uṣūl al-handasa* (*Compendium of Euclid = The Principles of Geometry*; GS 6b); *al-Arṣād al-kullīyya = Muḥtaṣar al-Maǧisṭī* (*Comprehensive Observations = Compendium of the Almagest*; GS 6d); *Risāla fī l-Mūsīqā* (*Treatise on Music*; GS 6e).

#### *Dānišnāma-yi ʿAlāʾī* (GS 7)

##### *Philosophy for ʿAlāʾ al-Dawla*

Written in Persian at the request of ʿAlāʾ al-Dawla, the ruler of Isfahan, at whose court Ibn Sīnā was active towards the end of his

life (414/1023–428/1037). It was intended to cover in an abridged manner five sciences: logic, physics, astronomy, music, and metaphysics. Ibn Sīnā actually wrote the parts on logic (omitting the *Categories*, *Topics*, *Rhetoric*, *Poetics*), on metaphysics, and on physics (omitting botany and zoology) in this order. Al-Ġūzġānī added the parts about astronomy and music, also providing sections on arithmetic and geometry. He essentially translated the description of the mathematical sciences in *al-Nağāt* (or its model texts) into Persian.

*al-Mašriqiyyūn* (GS 8)  
*The Easterners*

This is a late summa, also known under the title *al-Ḥikma al-mašriqiyya* (*The Eastern Philosophy*). In this text, Ibn Sīnā presents his systematisation, emendation, and updating of all philosophy in a substantive manner, without regard to the historical developments of the theories and their refutation, as he explicitly states in his introduction. He calls his revised philosophical system ‘Eastern’ to reflect his own origins in Transoxania, *Mašriq*, in deliberate opposition to the traditional Arabic Aristotelianism of the ‘West’ in Baghdad and Iran. He also mentions in the introduction, consonant with his systematic approach, that he would not deal with all the philosophical sciences (referring implicitly to his complete summa, *al-Šifāʾ*), but only those which give rise to disagreement, namely logic, physics, metaphysics, and only ‘that part of practical philosophy as is needed by the person who seeks salvation’ (Gutas 2000 [\*143: 168]). In essence, Ibn Sīnā continues his customary practice, with the exception of the *Šifāʾ*, of excluding from his discussion the mathematical sciences and practical philosophy, and paying scant attention, within logic, to the *Categories* and the last four books of the *Organon*, and, in physics, to zoology and botany. But this time he offers a justification for this neglect, that these subjects do not contain unresolved problems. At the same time he innovates in the practical sciences, where he adds a fourth, the discipline of prophetic

legislation, to the traditional three of ethics, economics, and politics.

The book is not extant in its entirety. The first half of the section on logic (from the *Isagoge* to the *Prior Analytics*) and physics from the beginning to *On the Soul* have survived. Ibn Sīnā rewrote the text for the section on logic, although it is overall parallel with his other works on logic. In contrast, the section on physics has been copied almost word for word from the *Šifāʾ*, with only such changes as are consistent with his aim of avoiding the discussion and refutation of doctrines by others, and presenting the true view, i.e. his own, in precise fashion (Gutas 2000 [\*143: 172–180]).

*al-Išārāt wa-l-tanbīhāt* (GS 9)  
*Pointers and Reminders*

This is Ibn Sīnā’s final summa, though it is a *summa philosophiae* in a restricted sense in that it deals philosophically with a limited number of subjects in logic, physics, and metaphysics that are essentially of theological interest. They are all focused on a presentation and exposition, by way of indirect references to his earlier works and maieutic hints expressed in an allusive language incorporating religious terminology, of the nature and structure of the universe and man’s place in it, in particular of the agency of man’s rational soul in the process and its posthumous fate. In a way it may be considered an expanded version of the subject indicated by the title of his earlier composition, *al-Mabdaʾ wa-l-maʿād* (*The Provenance and Destination*; GM 1) – that is, of the rational soul – for it is a sustained discussion, in Aristotelian terms, of all aspects involved in the Neoplatonic theme of emanation and return. As he says at the very beginning of the seventh *naṣṭ*: ‘Reflect on how existence began from the noblest and then [proceeded] to the increasingly [less] noble until it ended in matter; then it returned from the basest and then the [less] base, etc., to the increasingly nobler until it reached the rational soul and the acquired intellect.’

It is divided into two parts, each containing ten chapters, called ‘method’ (*naḥğ*) in

the first part on logic, and ‘form’ (i.e. kind of subject matter or exposition), *namaṭ*, in the second one. The part on logic treats the *Isagoge*, *On Interpretation*, and *Prior and Posterior Analytics*, with a brief final chapter on *Sophistics*, omitting the *Categories*, *Topics*, *Rhetoric*, and *Poetics*. The second part, consonant with its purpose to talk about the universe and humans’ place in it (provenance and destination), treats the following subjects, with material relating essentially to Aristotle’s *Physics*, *On the Heavens*, and *On the Soul*, but greatly expanded. The individual topics are as follows (each number corresponds to one *namaṭ* of the second part):

1: Existents: bodies, form and matter – 2: Motion (supra- and sublunar), change, and place, with a concluding section on the four elements – 3: Terrestrial and celestial souls – 4: Existence, essence, and the necessary existent – 5: Creation – 6: Agency of the first cause and the celestial bodies – 7: Agency of the human rational soul: intellection without the body, with a concluding section on divine providence and the problem of evil – 8: Those who know (*al-ʿarifūn*) that pleasures and pains of the intellect are superior to those of the body and of the senses, are distinguished from those who do not, and experience happiness both before and after the rational soul’s separation from the body – 9: The modalities and stages of the path to intellectual perfection of those who know – 10: Agency of the human rational soul in extraordinary knowledge (veridical dreams, prophecy, soothsaying) and feats (telekinesis, extreme fasting) by means of the motive faculties and internal senses of the soul.

#### *al-Inṣāf* (GS 11)

##### *Fair Judgment*

A commentary on all the works of Aristotle in twenty volumes, presented as an adjudication (hence ‘fair judgment’) between the views of Greek and Arabic commentators in the Aristotelian tradition on the one hand, and Ibn Sinā’s own doctrine on the other, in the guise of the *Eastern Philosophy*. The only manuscript of the extensive work was lost in the course of a

military engagement in January 1030, and only two sections of it survive, recovered from copies apparently made by pupils:

- (a) *Šarḥ kitāb al-lām* (Commentary on Book Lambda of Aristotle’s *Metaphysics*)
- (b1) *Tafsīr kitāb Uṭlūḡiyyā*, (b2) *Šarḥ Uṭlūḡiyyā* (Commentary on the *Theologia Aristotelis*, i.e. the well-known paraphrase by Plotinus that was attributed to Aristotle; cf. PIW 1 § 4.3). A characteristic of Ibn Sinā’s commentary is that he Aristotelianises Plotinus in some instances (Adamson 2004 [\*254]).

Related to these is a third work:

- (c) *al-Taʿlīqāt ʿalā ḥawāšī Kitāb al-Nafs li-Aristūṭālīs* (Marginal Glosses on Aristotle’s *De anima*). This work is not part of the original *al-Inṣāf* but, as the title indicates, a transcription of Ibn Sinā’s glosses in the margins of his own copy of Aristotle’s *De anima*. Still it is similar to it in style, contents, and approach (Gutas 2004 [\*154]).

#### *al-Taʿlīqāt* (GS 12a)

##### *Notes*

A collection of notes on logic, physics, and metaphysics that arose as a result of live discussions between Ibn Sinā and one or more of his pupils, primarily Abū Maṣṣūr Ibn Zayla, in whose transcription they are most probably preserved. There are numerous indications of joint authorship (Janssens 1997 [\*141], 2012 [\*169]). There are three edited versions of the *Taʿlīqāt* [\*60. 1–3], as well as several partial editions and excerpts.

#### *al-Mubāḥaṭāt* (GS 14)

##### *Discussions*

A posthumous collection of philosophical correspondence on questions of logic, physics, and metaphysics, between Ibn Sinā and his disciples, primarily Bahmanyār and Ibn Zayla, dating from the last period of his life. Bahmanyār initially collected the majority of these texts, but due to the lengthy posthumous compilation process of the collection, which was later named *Mubāḥaṭāt*, various passages from the material that eventually

formed it appear independently in the manuscripts and were also incorporated in pseudo-pigraphic compilations, like the Ibn Sīnā – Ibn

Abī l-Ḥayr correspondence. For detailed analysis of the formation of the collection and its various stages see Reisman 2002 [\*150].

### 3.3 *Logic and Language (GL)*

#### 3.3.1 *Logic*

*al-Muḥtaṣar al-awsaṭ fī l-manṭiq* (GL 1)  
*Middle Summary on Logic*

As noted by Eichner (2010 [\*321: 73 n. 9]) and demonstrated by Kalbarczyk (2012 [\*330: 306–309]), the text is not identical with the section of logic in *al-Nağāt* (contrary to Mahdawī's claim 1954 [\*7: 217]), although some sections correspond. In some respects, *al-Muḥtaṣar al-awsaṭ* is more detailed than the description in *al-Nağāt*. It contains the first five books of the *Organon*, while the *Topics*, *Sophistics*, *Rhetoric*, and *Poetics* are not discussed. A chapter on the *Topics* appears to have been added to the collection at a later date.

*al-Risāla al-Mūğaza fī uṣūl al-manṭiq* (GL 2)  
*Epitome of the Principles of Logic*

The text contains two treatises (*maqāla*), the first one on the *Isagoge*, *Categories*, and *On Interpretation*, the second on the *Prior Analytics* (cf. Eichner 2010 [\*321: 73 n. 10]), also with respect to the *Šifā'*, *Burhān*). The title well reflects the contents. From late antiquity onwards, in the classification of the *Organon* the first four books (from the *Isagoge* to the *Prior Analytics*) were considered preliminary to demonstration and hence the principles of logic (*uṣūl al-manṭiq*), while the fifth, *Posterior Analytics*, represented demonstration of proof (*burhān*) itself, and the remaining four that which protects the demonstration (cf. Gutas 1983 [\*125]).

*al-Manṭiq al-mūğaz* (GL 3)  
*Logic Epitomised*

A brief essay on logic in three treatises (*maqāla*) (Eichner 2010 [\*321: 73 n. 10]): (a) preliminaries, covering matters in the *Isagoge* and *On Interpretation*; (b) declaration

of desired goals with respect to syllogisms and their figures; and (c) concluding remarks on demonstrative, dialectical, rhetorical, sophistical, and poetic syllogisms.

*Urğūza fī 'ilm al-manṭiq* (GL 4)  
*The Science of Logic, in Verse*

A didactic poem in the meter known as *rağaz*, numbering 290 verses and covering all nine parts of the *Organon*.

*Maqāla fī l-Iṣāra ilā 'ilm al-manṭiq* (GL 5)  
*Pointer to the Science of Logic*

A brief discussion of the benefits of logic (similar to prosody and grammar), the categories, the five predicables, and the modal concepts of possibility and necessity. Aristotle, Plato, and Porphyry are referred to by name. This is probably an early work.

*al-Ḥudūd* (GL 6)  
*The Definitions*

A booklet of 72 brief philosophical definitions ranging from 'definition' (*ḥadd*) to 'pre-eternity' (*qidam*).

*Risāla fī Ḥaṭa' man qāla inna l-kammiyya ġawhar* (GL 8)

*On the Error of Those Who Hold that Quantity is Substance*

Brief disquisition the subject of which refers to the categories of quantity, measure, and number in the fourth chapter of the third book of the *Ilāhiyyāt* of the *Šifā'* [\*54.4b: 84–90 Marmura] (cf. Mahdawī 1954 [\*7: 97]).

*Risāla fī Ḥaṭa' man qāla inna l-ṣay' ġawhar wa-'araḍ* (GL 9)

*On the Error of Those Who Hold that Something can be Substance and Accident Simultaneously*

Brief treatise on the subject (cf. also the preceding entry). It remains to be determined how and to what degree the text is connected with the *Šifā'*, *Maqūlāt* 1 6 ('Demolishing [*ifsād*] the theory that a single thing may be in two-fold respect (*min waḡhayn*) accident as well as substance'); cf. the analysis by Benevich (2017 [\*345]).

*Bayān dawāt al-ḡiha* (GL 10)

*Explanation of Modal Propositions*

Detailed study on modal syllogistics (*Prior Analytics* 1 1–27) in three treatises (*maqāla*) with references to tradition (Theophrastus, Alexander, Themistius). In *al-Aḡwiba 'an al-masā'il al-ḡarība al-'išrīniyya* (*Responses to Twenty Remarkable Questions*), this text is referred to at the end of *mas'ala* 12 [\*34: 97, 20].

*al-Nukat fī l-manṭiq* (GL 11)

*Subtle Points in Logic*

Brief discussion of the 'principles of syllogisms,' which here are given as four: sensory perception, estimation, faculty of conventional knowledge, i.e. of things commonly accepted (*ḡvḡoḡā*; *al-quwwa al-ta'arufiyya*), and the theoretical faculty, followed by a discussion of the kinds of propositions, categorical and conditional, both conjunctive (*muttaṣila*) as well as disjunctive (*munfaṣila*). An early work, its enumeration of the principles of syllogisms is much shorter than the list provided in later works (cf. Gutas 2012 [\*263: 394–398] and § 4.3.2) below.

*Fī Uṣūl 'ilm al-burhān / Kitāb al-Mūḡaz fī*

*l-manṭiq* (GL 12)

*On the Principles of Demonstration / Epitome of Logic*

A collage of disparate pieces from Ibn Sīnā's other works into a treatise comprising all nine parts of logic. Only the part on the *Posterior Analytics*, i.e. *al-Burhān*, is 'original' in the sense that it is neither copied from nor constitutes another treatise. This justifies the title of this part, *Fī Uṣūl 'ilm al-burhān*, which appears to indicate that it was intended to be

a sequel to the preceding treatise, *al-Risāla al-Mūḡaza fī uṣūl al-manṭiq*. The authenticity of the *Burhān* part is established by its close relationship to the text of the *Burhān* in the *Šifā'*, as demonstrated by Eichner 2010 [\*321: 73 n. 10]. The question of the author of this collage remains to be investigated, although it seems unlikely that it was Ibn Sīnā himself (Mahdawī 1954 [\*7: 223]).

*Maqāla fī Ta'aqqub al-mawḡdī' al-ḡadalī* (GL 13)

*On the Investigation of the Dialectical Commonplace (Topos)*

The full title of this treatise is 'Investigation of the dialectical topos, in which it is attempted to pronounce, on the basis of a derivative case, a judgment similar to the one pronounced on the basis of a normative case by means of a cause (*'illa*) uniting the two, a topos which our contemporary theologians call syllogism (*qiyās*).' As Hasnawī 2007 [\*313: 210–215] explains, the treatise is mainly concerned with proving that the dialectic 'inference from that which is observed to that which is absent' (*al-istidlāl 'alā l-ḡā'ib min al-ṣāhid*), which was common among theologians, is non-demonstrative. In the first part of the treatise, Ibn Sīnā refutes the demonstrative character of this topos. In the following he develops the conditions that must first be satisfied in order to prove the demonstrative character of the topos. Hasnawī concludes that this argument derives from Themistius' original work on Aristotle's *Topics* (cf. Janssens 2017 [\*10: 91]).

*al-Aḡwiba 'an al-masā'il al-'išrīniyya* (GL 15)

*Responses to Twenty Questions [on Logic]*

Ibn Sīnā's responses to twenty questions asked by scholars in Shiraz when they read his *Shorter Compendium on Logic* (GS 6a), which was later incorporated into *al-Naḡat*. The questions cover material that corresponds to the subjects discussed in the *Prior Analytics*. For a complete list of the questions see Street 2010 [\*324: 104–110].

### 3.3.2 Language

*Asbāb ḥudūt al-ḥurūf* (GL 16)

*On the Causes of the Articulation of the Letters*

A treatise on the physiology of the production of sound and the phonetics of the Arabic letters, with frequent comparison with the sounds of Persian and Turkish letters.

*Lisān al-ʿarab* (GL 17)

*The Language of the Arabs*

A lexicographic work, described as follows by a scribe in a manuscript: ‘Ibn Sīnā had composed a lexicographic work, which he

called *The Language of the Arabs*, in a number of books, each book containing several [separate] topics (*funūn*). ... He avoided listing the terms in the manner customary with lexicographers, instead stating clearly the significations they express (*muqtaḍayāt*) and the difference in meaning they express’ (Yarshater *Panğ Risāla* [\*37: 7]). The work is structured according to key terms indicating a topic, and then words falling under that category are listed and distinguished from one another.

### 3.4 Physics (Natural Science) (GP)

*Kalām fī Ḥadd al-ġism* (GP 1)

*On the Definition of the Body*

In the introduction Ibn Sīnā says that he saw a treatise by the chief judge (*qāḍī al-quḍāt*) Abū Naṣr al-Ḥusayn b. ‘Ubayd Allāh on the definition of the body which he found not to be in keeping with the rules of logic, and that this prompted him to discuss the subject himself.

*Fī anna Ab’ād al-ġism ġayr dātiyya lahu* (GP 2)

*That the Dimensions of a Body Are not of Its Essence*

The beginning of the text in the Leiden manuscript 1477, fol. 89b–94b, reads: ‘A treatise by Ibn Sīnā in response to criticism of his opinion that the actual transparent (*al-muṣṭaff*) does not contain light by which it is qualified, and that the body *qua* body need only have density, not any specific three dimensions.’

*al-Ḥukūma fī ḥuḡaġ al-muṭbitīn li-l-māḍī mabdaʿ<sup>an</sup> zamāniyy<sup>an</sup>* (GP 3)

*Judgment of the Arguments of Those Who Maintain that the Past Has a Temporal Beginning*

An essay in eleven sections, on the subject indicated by the title. The first section contains a detailed enumeration of the principles of syllogisms, as set forth in numerous other works (cf. Gutas 2012 [\*263: 394–398]). On

this basis Ibn Sīnā proceeds in the remaining sections to assess the syllogistic validity of the arguments of the creationists. A brief summary of the arguments is provided by Pines 1972 [\*114: 321–326], who also suggests that Ibn Sīnā may have been responding to John Philoponus’ arguments against the eternal duration of the world.

*Risāla fī l-Wus’a* (GP 4)

*Epistle on Space*

A brief essay in response to the following question asked by an unidentified theologian (*mutakallim*): ‘What is this expanse which extends over all things? Some of the ancients called it *ilāh* (God) and worshipped it; others called it *faḍā*, still others called it *makān* or *markaz*, while the *mutakallimūn* called it *ġiḥa* and *ḥayyīz*, and the Muʿtazila called it *muḥādāt*. ... Qāḍī ‘Abd al-Ġabbār relates: By the term *faḍā*, the proponents of *faḍā* mean the same thing which we mean by the term *muḥādāt*. ... the difference between us and them is merely in the use of terms (*fī l-lafẓ*) not in their meaning (*fī l-ma’nā*).’ At the end of his discussion, Ibn Sīnā finds ‘Abd al-Ġabbār mistaken because *muḥādāt* (something facing something else) is a correlative term while *faḍā* (empty or wide and boundless space) is not (Dhanani 2003 [\*485: 127–128]).

*Ġawhariyyat al-nār* (GP 5)  
*That Fire Is a Substance*

Brief response to a question on the subject by Ġa'far al-Kiyā (apparently al-Kiyā Abū Ġa'far Muḥammad b. al-Ḥusayn b. al-Marzubān). Ibn Sīnā refers to his remarks on the *Physics* in the course of the discussion.

*Fī l-Aḡrām al-ʿulwīyya* (GP 6)  
*On the Supernal Bodies*

A brief treatise in six sections on the nature and generation of the heavenly bodies through emanation (*ḥayḍ*) of one from the other (outermost sphere, sphere of the fixed stars, Saturn, Jupiter, Mars, Sun, Venus, Mercury, Moon) and their influence on the world and on the human souls, presented as the true opinion of the ancients. It is extant in two recensions (Gutas 2010 [\*61: 60–61]), one simpler and briefer in its expression (in *Maḡmūʿat al-rasāʾil* [\*23: 257–79]), which appears to be the original, the other more elaborate and possibly interpolated (in *Tisʿ rasāʾil* [\*21: 39–59]).

*Risāla fī ʾllat qiyām al-arḍ fī ḥayyizihā* (GP 7)  
*On the Cause of the Earth's Remaining in Its Position*

In the introduction Ibn Sīnā declares that he wrote this treatise at the request of the vizier of the Ma'mūnids in Gurgānġ, Abū-l-Ḥasan Aḥmad b. Muḥammad al-Sahli, as a briefer version of a commentary on Aristotle's *On the Heavens* that he had written for the same patron. The text is divided in ten sections, the argument proceeds from the doctrine of natural motions, drawing on Aristotle's *On the Heavens* I,8–9 and II,13–14.

*al-Aḡwiba ʿan masāʾil Abī Rayḥān al-Bīrūnī*  
 (GP 8)

*Answers to Questions Asked by al-Bīrūnī*

A debate (by correspondence?) with al-Bīrūnī, dated to around 390/1000, based on eighteen questions on Aristotle's *Physics* and *On the Heavens* put forward by al-Bīrūnī. Strohmaier (1992 [\*135]) provides a summary of the question and answers, suggesting in

addition that the text of the extant questions and answers may be a transcript of an actual debate rather than a stylised subsequent composition [\*135: 116; repr. 1996: 343]. Cf. also the considerations at § 2.1 below regarding al-Maʿšūmī.

*al-Aḡwiba ʿan al-masāʾil al-ʿašr* I (GP 9)  
*Answers to Ten Questions I*

Brief answers to ten questions on physics and cosmology asked by someone whom some manuscripts identify as Abū l-Qāsim al-Ġurgānī or al-Kirmānī, while in some others he is said to be al-Bīrūnī. This, however, seems unlikely. The questions are the following:

1: Is the first cause separate from other causes through itself or through others? – 2: What is the true meaning of [nature (*ṭabʿ*), and what is the meaning of nature (*ṭabīʿa*) according to the physicists? – 3: What is the true meaning of universal soul, universal intellect, and universal spirit? Are they substances or not; are they all alive or not? Are they all separate from others in their modalities and attributes of themselves or through others? – 4: Are the sun, the moon, and the rest of the stars alive or not? Do they revolve by being attached to something or anchored in something, or without being attached to anything? – 5: Is it possible for the pre-eternal (*qadīm*) to be more than one? And if it is one only, is it pre-eternal through itself or through others? If it is more than one, what is their mutual association? – 6: What is the true meaning of the one? – 7: What is the difference between an act of will (*irāda*), an act of [essential] nature (*ṭabʿ*), and an act based on a cause (*ʿilla*)? – 8: What is the non-existent? – 9: What is the definition of the existent? – 10: What is the connection between the act and the agent?

*Kitāb fī l-Nafs ʿalā sunnat al-iḥtišār* (GP 10)  
*On the Soul, in the Style of a Compendium*

Ibn Sīnā's first work, which he wrote at the age of eighteen in Bukhārā dedicated to the local Samanid ruler. It is divided into ten chapters, listed in the introduction after the

dedication. Chapter 8, which describes the stages of the rational human soul from inception to perfection, i.e. from pure potentiality to total actuality, constitutes a blueprint or outline of all the philosophical knowledge Ibn Sīnā would later treat in his *summae* (Gutas 2014 [\*70: 80–86]).

1. Establishing the existence of the faculties of the soul – 2. Primary division of the faculties of the soul; absolute definition of the soul through its genus – 3. None of the faculties of the soul originates from the mixture of the four elements; instead it acquires the faculties independently of the elements – 4. Detailed explanation of the vegetative faculties – 5. Detailed explanation of the animal faculties – 6. Detailed explanation of the external senses; differences of opinion concerning vision – 7. Detailed explanation of the internal senses and of the faculty that moves the body – 8. The stages of the human soul from inception to perfection – 9. That the rational soul is a substance: the demonstrative proofs regarding it – 10. Setting up the argument for the existence of an intellective substance separable from corporeal entities, which functions like a source for the rational faculties or like light for vision; explanation that the rational soul remains safe from corruption and change beyond the death of the body: it is called ‘universal intellect.’

*Risāla fī l-Kalām ‘alā l-naḥs al-nāṭiqa* (GP 11)  
*Epistle on the Doctrine of the Rational Soul*

In all probability Ibn Sīnā’s last work; it presents in a few pages the gist of his philosophical system structured around the central concept of the rational soul and its progression from potentiality to actuality (through study and the acquisition of the philosophical sciences or the intelligibles eternally thought by the intellects of the celestial spheres). This is accomplished when humans acquire a balanced temperament by means of religious and ethical practices that enable their rational souls to function unhindered by the bodily faculties and the internal senses. The rational soul then becomes like a polished mirror in

which are reflected the forms of things as they are in themselves without distortion. This is how humans achieve happiness in this world and bliss after the separation from the body, as the rational soul becomes like the eternal souls of the celestial spheres.

*al-Ġumal min al-adilla al-muḥaqqqa li-baqā’ al-naḥs al-nāṭiqa* (GP 12)

*The Main Points of Verified Proofs on the Survival of the Rational Soul*

This brief treatise offers seven arguments for the survival of the rational soul, in response to the question indicated by the title posed by ‘one of the chiefs’ (*ba’d al-ru’asā’*). This treatise may have been an occasional piece, related to the *Mubāḥaṭāt* (Reisman 2002 [\*150: 50–51]), which achieved independent status in the manuscript transmission some time after Ibn Sīnā’s death.

*Iḥtilāf al-nās fī amr al-naḥs wa-amr al-‘aql*  
(*Risāla ilā l-Kiyā*) (GP 13)

*Dispute among People on the Subject of Soul and Intellect (Letter to Kiyā)*

An independent work on the subject, addressed to the otherwise unknown al-Kiyā Abū Ġa’far Muḥammad b. al-Ḥusayn/al-Ḥasan b. al-Marzubān, that is extant in three versions (Reisman 2002 [\*150: 63–66. 258]). The dispute concerns the correct interpretation, concerning which there was a controversy between the commentators in the Aristotelian tradition and Ibn Sīnā, of Aristotle’s *On the Soul* on the nature of the soul and the intellect, especially the material intellect, and the derivation of corollary principles from the *Physics* and *On the Heavens* in the course of the presentation.

*al-Iṣārāt ilā ‘ilm fasād aḥkām al-nuġūm* (GP 14)  
*Pointers to Knowing the Fallacy [of the Stars or] of Astrology*

The essay begins with an epistemological introduction: the subsequent pointers do not regard the fallacy of astrology but the question of how one can *know* it. Its fallacy or inanity is a given, as in the case of the science of amulets,



scapulimancy, and other vile and degenerate sciences (Michot 2006 [\*104: 3, 51]). Ibn Sīnā proceeds by criticising the astrological theories about the characters and qualities of the planets, the characters and qualities of the signs of the zodiac and constellations, lunar mansions and ascendants, etc., as unfounded

and unproven. He concludes by stating that even if it were possible to calculate the effect of individual celestial bodies on earth, it would be impossible to calculate after all, because of their large number and complexity, and that consequently this knowledge would remain inaccessible to humans in any case.

### 3.5 Mathematics (GMath)

*Risāla fī l-Zāwiya* (GMath 1)

*On the Angle*

A treatise on the angle in four chapters. – 1. Enumeration of the teachings on the angle – 2. Consideration of the major teachings on the angle – 3. Elucidation of the true conception of the angle – 4. Concerning the correctness of the statement that an angle is enclosed by two boundaries. – The text discusses the philosophical principles of medieval Arabic geometry and provides information on the foundation of early Arabic mathematics as compared to later developments (Luther 2004 [\*51: 118–125]).

*Maqāla fī Kayfiyyat al-raṣad wa-taṭābuqihi ma'a l-'ilm al-ṭabī'ī* (GMath 3)

*On the Nature of [Astronomical] Observations and their Conformity with the Science of Physics*

Brief essay intended as a corrected and updated appendix to Ibn Sīnā's treatment of the *Almagest* in the *Šifā'*. His opening statement reads: 'It is incumbent upon us to bring what is mentioned in the *Almagest* into

conformity with what is intellectually comprehended from the science of Physics, and to describe the way in which these [celestial] motions occur.' Topics discussed include: (1) the dynamics of celestial motion; (2) a mathematical examination of the discrepancies between Ptolemy and ninth-century astronomers; (3) the motion of the solar apogee; (4) the problem of latitude brought about by the epicycle poles (Ragep and Ragep 2004 [\*156: 6]).

*al-Ālāt al-raṣadiyya* (GMath 4)

*Instruments of Astronomical Observation*

In the Biography, al-Ġuzġānī describes the circumstances of the origin of this treatise as follows: 'In the course of his astronomical observations [in Isfahan], he invented instruments which had never before existed and wrote a treatise about them' (Gohlman 1974 [\*117: 81,4–6]). See Wiedemann (1926/1984 [\*520]) for a translation of the treatise with discussion of the instruments and a reconstruction of the instrument invented by Ibn Sīnā.

### 3.6 Metaphysics (GM)

Ibn Sīnā wrote no independent works on metaphysics as universal science (*metaphysica generalis*); all his texts on the subject were embedded in larger works, and especially in his summae. The *Šifā'*, the most extensive and elaborate of these summae, 'constitutes the first concrete replacement of this work [Aristotle's *Metaphysics*] with an original treatment on metaphysics, thus allowing metaphysics the possibility of an autonomous progress' (Bertolacci 2006 [\*442: viii]).

By contrast, Ibn Sīnā wrote much on the extended and 'derivative' (*furū'*) – as he called it in the *Maqāla fī aqsām al-ḥikma* (in *Tis' Rasā'il* [\*2r: 114–116]) – part of metaphysics which he originated and incorporated into the traditional part; we might call it the 'metaphysics of the rational soul' (discussed in § 1.4.2). It concerns divine providence and the problem of evil, the life of the human rational soul after death and its bliss or misery, as well as the communication of the human rational

soul with its congeneric celestial intellects and the effect of the latter on the former. On the one hand this leads us to prophecy, inspiration, veridical dreams, and the 'miraculous' power of the human soul to act upon not only its own body but other bodies as well. On the other hand, it makes the efficacy of prayer and other forms of religious practice ontologically possible and philosophically meaningful. This latter aspect of the communication between the celestial and human souls is what ultimately provides the ground for and sustains practical philosophy and its branches of ethics, household management, and politics. Ibn Sīnā discusses all of this in the last part of the *Ilāhiyyāt* of the *Šifā'*, Books IX 6–7 and X.

Bertolacci (2006 [\* 439: 581–591, Appendix C]) provides a list of the most important writings on metaphysics.

*Kitāb al-Mabda' wa-l-ma'ād* (GM 1)  
*The Provenance and Destination*

Ibn Sīnā's first major work on what he calls the 'fruit' (*ṭamara*) of metaphysics and physics, which discusses the emanation of the universe from the necessary existent, the place of humans in it, and the fate of the human rational soul in the afterlife. In the introduction he remarks: 'This treatise of mine contains the fruits of two great sciences, one of which is characterised by concerning metaphysical, and the other physical, matters. The fruit of the science dealing with metaphysical matters is the part known as *theologia*, which studies [the subjects of] divine rule, the first principle, and the relationship of living beings with it according to their rank. The fruit of the science studying physical matters is the knowledge that the human soul lives on and that it has a destination. I have divided this book into three parts: (I) Establishing the first principle of the universe and its oneness; enumeration of its attributes. (II) Indicating the order of the emanation of being from the being [of the first principle], beginning with the first being [that emanates] from it and ending with the last beings after it. (III) Indicating the survival of the human soul; the

true bliss in the hereafter, and that which is a certain kind of bliss but not true bliss; the real misery in the hereafter, and that which is a certain kind of misery that is not real. In these parts I strive to clarify what they [the Peripatetic philosophers] obscured, proclaim what they concealed and suppressed, collect what they dispersed, and expand what they summarised' (Gutas 2014 [\*70: 20–21]).

Ibn Sīnā was satisfied with his formulation of these issues in this work, and he repeated them in later works. The first two parts, dealing with the first principle and the emanation from it, were copied in the metaphysics parts of both the *Šifā'* and *al-Nağāt*, with only some omissions, rearrangement, and additions. They constitute most of the second chapter (*maqāla*) of the metaphysics of *al-Nağāt* [\*55: 366–464 al-Kurdī / 546–666 Dānišpažūh], as well as most of books 8 and 9 of the *Šifā'* (*Ilāhiyyāt* [\*54.4a: 355–413 Mūsā et al.]). The subject of the third part of *al-Mabda' wa-l-ma'ād*, the continued existence of the human soul, was treated more extensively by Ibn Sīnā in *al-Ma'ād* (*al-aṣṣḡar*), and the relevant passages from this work that were later incorporated in the *Šifā'* and *al-Nağāt*.

The chapter headings in each part provide detailed information about the contents of the work; they are presented here following the edition by Nūrānī [\*121] and the corrections by Michot 2002 [\*121].

1. treatise – 1. The necessary existent and the possible existent. – 2. The necessary existent cannot be [necessary] simultaneously through its essence and through something other than it. – 3. The necessary existent through something else is a possible existent through its essence. – 4. The possible existent through its essence exists only insofar as its existence becomes necessary through something other than it. – 5. There cannot be two [things] from which a single necessary existent emerges, nor can each one of the two [things] become necessary existent through something other than it, nor that there be multiplicity in the necessary existent in any way. – 6. The necessary existent through its essence is necessary

existent in all its aspects. – 7. The necessary existent is intelligible in essence and intellect in essence. – 8. The necessary existent through its essence is pure good. – 9. The necessary existent through its essence is the pure real. – 10. The species of the necessary existent cannot be said of many things, and on this account its essence is complete. – 11. The necessary existent is one under many aspects. Demonstration that there cannot be two necessary existents. – 12. The necessary existent through its essence is both loving and beloved, both pleasing and pleased, pleasure being the experience of the good that is appropriate [to the One]. – 13. How the necessary existent intellects its essence and the things. – 14. Verification of the oneness of the necessary existent in that its knowledge is not at variance conceptually with its power, its will, its wisdom, and its life, as all these are one, the essence of the pure one not being divisible on their account. – 15. Establishing [the existence of] the necessary existent. – 16. It is impossible for every possible existent to have an equally possible cause ad infinitum. – 17. It is impossible for the things that are possible with regard to existence to be causes of each other at any given moment, even if they are finite in number. – 18. Establishing the necessary existent. That things that come into being are generated by motion, but need permanent causes; declaration of the proximate motive causes and that they are all variable. – 19. That the stability of everything that comes into being is due to a cause (premise in support of the preceding proposition). – 20. The first principles of beings terminate in causes which produce circular motion (introductory discussion on how nature produces motion, that it produces motion for additional causes, and how these latter come about). – 21. Another introduction: what produces motion through will is of changeable essence; how its change is generated. – 22. Forcible power brings about variation of conditions in order to produce motion. – 23. On all the attributes of the necessary existent. – 24. On the difference between the two methods to be followed in this discussion (i.e. Aristotle's and Ibn Sīnā's). –

25. Establishing the mover of every motion, and that it is unmoved. – 26. Establishing the existence of an unmoved and invariable mover. – 27. Summary establishment of permanent motion. – 28. Detailed exposition of the preceding. – 29. Everything that comes into being has a matter that precedes its existence. – 30. Related discussion. – 31. That there is no moment more appropriate than another for something to come into being. – 32. The position of the *mu'attila* (those who divest God of all attributes) entails that the first principle precede time and motion in time. – 33. That there cannot be a first moment. – 34. The position of the *mu'attila* forces them to assume one point in time preceding another ad infinitum, and to assume that time extends infinitely into the past. – 35. Solution of their sophistries concerning the finitude of pre-eternity. – 36. Solution of their sophistries according to which it is either necessary to divest God of all his attributes or to assume God and the creation to be equal. – 37. Motion is local and endures only by being continuous, not by one succeeding after the other. – 38. The first motion is not rectilinear but circular. – 39. The immediate agent of the first motion is a soul; heaven is a living being obeying God. – 40. How it can be said that the motion of heaven is natural even though it is produced by a soul. – 41. The most proximate (or immediate) mover of the heavens cannot be a pure intellect abstracted from matter. – 42. Which bodies are predisposed for life and which are not. – 43. Before [it acquires] a soul, the [heavenly] sphere has a mover of infinite power that is free of corporeal matter and indivisible; the mover of the heavens can be neither a finite power nor an infinite power inhering in a finite body. – 44. How the prime mover produces motion; it produces motion by means of the desire [the spheres have] to imitate its status, not to actually attain the object of their desire. – 45. Each individual sphere has a separate prime mover, even before its soul, which produces motion by being the object of love; the prime mover of the universe is the first principle. – 46. Refuting the view of those who

think that the variety of heavenly motions is due to what is beneath the celestial spheres. – 47. The objects of desire mentioned above are neither bodies nor souls of bodies. – 48. The motion of the spheres is of position, not location; the motion of the stars is of location if they move of themselves. – 49. How the spheres that fall under the prime motion follow it. – 50. How fire follows the sphere with regard to motion. – 51. The bodies of the spheres are of different species, every soul [of the spheres] is different from the other in species, and every intellect [of the spheres] is different from the other in species. – 52. Description of the body of the universe; of the soul of the universe, and that it is potential in a certain respect; of the intellect of the universe and that it is perpetually actual.

II. treatise. – 1. How existing things come into being from the first; description of its agency. – 2. The meaning of 'origination' or 'generation' (*ibdā'*) according to the philosophers. – 3. The first is one; it is intellect. – 4. How the secondary [caused existing things] come into being from the first caused. – 5. How what is beneath the spheres is generated by the spheres. – 6. The generation of the elements. – 7. Providence and guidance. – 8. The principle guiding the terrestrial beings and the species that are spontaneously generated. – 9. It is possible that rare things that change their nature are generated by this soul. – 10. How this principle intellects that which occurs here now and in the future, and how it exerts its influence. – 11. Pointer to the maker's providence, justice, and the traces of its wisdom in heaven and on earth.

III. treatise – 1. Description of the theoretical investigation concerning the provenance, and of the theoretical investigation concerning the destination. – 2. How recurrent things are generated from the elements, beginning with vegetation. – 3. Generation of animals and the faculties of the animal soul. – 4. Generation of humans and the faculties of their soul. – 5. The material intellect is potentially an intellectual world. It proceeds to actuality only through the Active Intellect, becoming first dispositional intellect, then actual intellect, and

finally acquired intellect. – 6. The intelligibles do not inhere in a body, nor in a faculty that is in a body, but in a self-subsisting substance. – 7. The sensibles qua sensibles cannot be intellect at all, but require a bodily organ that can sense or imagine them, the intellectual faculty transporting them to intelligibility. – 8. The levels of abstracting the forms from matter. – 9. Detailed discussion about the intellect not intellecting by means of an instrument, and that the human soul does not decay as its instrument decays. – 10. Resolution of the aporetic argument employed by those who hold that the rational soul is a perfection inseparable from the body. – 11. How the rational soul becomes the cause of the other faculties of our soul. – 12. The rational soul comes into being simultaneously with the body. – 13. Refutation of the transmigration of souls. – 14. Evidence of true bliss in the afterlife. How it is realised through the theoretical intellect and the practical intellect together. How bad morals oppose it, and why we have an obligation to be just. Pointer to the misery that complements bliss. – 15. On imaginary but not real bliss and misery. – 16. Discussion of prophecy. How the intelligibles are revealed to the prophets without human instruction. – 17. How there is revelation of unseen things, i.e. past, present, and future particular things on earth, generated by the souls of the celestial spheres. How veridical dreams come about and what constitutes the difference between prophecy and dreaming. – 18. Marvels seen and heard by the prophets which are concealed from our sensation. – 19. How it happens that the mentally ill can report about unseen things. – 20. How prophets can perform miracles; on the evil eye and delusions.

*al-Adḥawīyya fī l-ma'ād* (GM 2)

*The Immolation on the Destination* (i.e. *On the Destination as the Occasion of the Feast of Immolation*)

A detailed discussion of the concept or reality of the Destination, the afterlife, introduced by the presentation and refutation of various doctrines about it, and subsequently

focussed on the solution of the problem of personal identity. If the Quranic doctrine of the bodily resurrection cannot be maintained, then the posthumous survival of the rational soul in bliss or misery can have meaning only if the rational soul is immortal and has a specific personal identity for which it will be rewarded or punished (Jaffer 2003 [\*216]; regarding the general problem of individuation see Druart 2000 [\*213]). – The treatise has seven chapters:

1. On what the Destination is. – 2. On the various opinions about it. – 3. On refuting false opinions about it. – 4. On the stable concrete essence (*annīyya*) of humans that constitutes their identity (*huwīyya*), i.e. their rational soul. – 5. On the immortality of this *annīyya*. – 6. On the necessary (existence) of the Destination. – 7. What we know about the states of the [different] classes of humans after death; verification of the resurrection of the dead.

*al-Ma'ād* [*al-aṣṣār*] (*Hāl al-naḥs al-insānīyya*) (GM 3)

*The* ['Lesser'] *Destination* (*The State of the Human Soul*)

This treatise on the human soul and its destiny, written for one or a number of unspecified friends 'of pure heart' (*ḥullāṣ*), was written in Rayy in about 404/1014. Ibn Sīnā describes its purpose in his introduction as follows (\*30: 45.4–7): '[This treatise] contains the marrow [of the theory] about the state of the human soul arrived at through demonstrative proofs, the heart of the matter about its continued existence after the disintegration of the [physical] temperament and the decay of the body, provided by unequivocal research, and an examination of [the question of] resurrection and the circumstances that lead to it in the afterlife.'

The work is thus part of the same transitional period as *al-Mabda' wa-l-ma'ād* and acts as its complement. Just as *al-Mabda' wa-l-ma'ād* establishes the definitive version of Ibn Sīnā's doctrine of the 'fruit' of metaphysics, so this *al-Ma'ād* establishes the valid

version of his doctrine of the 'marrow' of physics, i.e. his theory of the soul and its afterlife. Where the former treatise was copied extensively in the metaphysics part of the *Šifā'* and *al-Naḥāt*, this one was copied in the *De anima* parts of both works. – The treatise contains sixteen chapters, which correspond to the following pages of *al-Naḥāt* (in the Kurdi ed. [\*55]; cf. Goichon 1937 [\*420: 499–500], Michot 1985 [\*207: 532–534], and Sebtī 2012 [\*171: 353–354]).

Introduction: Contents of the treatise. – 1: Definition of the soul. – 2: Brief description of the faculties of the soul [= \*55: 258–272. 274–275]. – 3: Various functions of the perceptive faculties of the soul [\*55: 275–279]. – 4: The faculties can perceive particular forms only by means of a physical organ [\*55: 279–285]. – 5: The faculties cannot perceive universal forms by means of an organ; they do not subsist by means of a body [\*55: 285–292]. – 6: How and when the soul uses the body; when it can dispense with the body, or rather, how the body harms it [\*55: 297–299]. – 7: The soul does not need the body in order to subsist [\*55: 292–297]. – 8: The soul comes into existence along with the body [\*55: 300–302]. – 9: The continued existence of the soul [\*55: 302–309]. – 10: There is no transmigration of souls [\*55: 309–310]. – 11: All the faculties belong to a single soul [\*55: 313–315]. – 12: The actualisation of the theoretical intellect [\*55: 315–316]. – 13: On prophecy. – 14: The purification of the soul [\*55: 272–274]. – 15: Eschatology (bliss and misery of the soul after death) [\*55: 477–490]. – 16: The occasion of the treatise.

*Fī l-Qaḍā' wa-l-qadar* (GM 4)

*On the* [Divine] *Decree and Predestination*

A philosophical tale on the subject of divine providence and theodicy presented in the form of parables. It begins with the narrator, Ibn Sīnā, arguing with a theologian on the subject. The theologian, manifestly a Mu'tazilī, clings to the belief that human actions are not divinely predestined but are freely willed. The argument evolves into a shouting match,

when all of a sudden a venerable figure appears who turns out to be Ḥayy b. Yaqzān, often employed by Ibn Sīnā to represent the Active Intellect. Ibn Sīnā seeks his help in the discussion and asks him to resolve the theologian's doubts concerning the divine decree and predestination. Ḥayy b. Yaqzān complies with the request presenting the parable of the two wealthy and generous men. In it, divine and human acts are contrasted by comparing the generous deeds of two wealthy men who each determines to build, for the benefit of all travellers, an elaborate and fully equipped compound in an arid but frequented desert through which passes the shortest path to the coast and trading ports. The motivations of these two men are completely altruistic and neither desires any compensation, gratitude, or acknowledgment. However, the first man knows that in this world conflicting causes generate unintended consequences and that the lodging, though intended for the comfort of wayfarers, would in time become a lair of brigands and robbers and a den of debauchery and drunkenness. By contrast, the second man believes that the building would fulfil its promise and that its benefits would spread in the world. The buildings are constructed, and in time the knowledge (*ʿilm*) of the first man turns out to be true, while the assumption (*ẓann*) of the second does not come to pass. Ḥayy then asks the narrator (Ibn Sīnā) the rhetorical question, if it were possible to liken human acts to God's, which of the acts of the two men would be like God's – would it not be the first man's? (As presented by Dubé 2019 [\*232]).

Further discussion eventually gives rise to the problem of reward and punishment in the afterlife. Ḥayy proceeds to explain this by another parable, of the rich man who gave some orders to his retinue and promised to reward those who obeyed them and punish those who did not. In the event, some obeyed and some disobeyed, as the rich man foresaw, and he accordingly rewarded and punished them twice as much as he had promised. Asked why he had not been more merciful

he replied by saying that it was necessary in order for the rewards and punishments to act as an incentive to his servants to do good and avoid evil, even if their actions in themselves, whether good or bad, were of no interest, consequence, or benefit to him personally.

The tale presents Ibn Sīnā's core theory of predestination and theodicy. It rests on the deterministic emergence of all being from the necessary existent, including that which is viewed as evil in human terms, but which is in brought about by the privation of good due to secondary causes or intentions. Written in a flowery, allusive, and difficult language that at times allows double entendres (which have given rise to some mistranslations), it is probably intended to soften the impact of the harsh determinism of this theory.

*Risāla fi l-T̤šq* (GM 5)

*Epistle on Love*

A treatise on the nature and agency of love as a universal power, in seven sections, listed as follows by Ibn Sīnā in his introduction: – 1. On the power of love that pervades all beings. – 2. On the existence of love in simple and inanimate substances. – 3. On the existence of love in those existents which possess nutritive, i.e. vegetative, faculties. – 4. On the existence of love in animal beings insofar as they possess their animal faculties. – 5. On the love for the beautiful faces of those who are refined (*ẓurafāʾ*) and attractive (*fityān*). – 6. On the love of the divine souls. – 7. Concluding section (Fackenheim 1945 [\*94: 211, amended]).

Ibn Sīnā's analysis is based on the axiomatic premises with which he starts the discussion: 'Since every being that is not self-determined (*mudabbbar*) strives by nature for perfection – which is the good aspect of its being as it derives from the pure good – and desires to avoid the defects that are specific to it – which is the evil aspect that accrues to it from materiality and privation, as all evil comes from being entangled with matter and privation – it is evident that every one of the existents that are not self-determined possesses a natural yearning and an innate

love; and it follows necessarily that love is a cause of their existence' (cf. Bell 1986 [\*208: 76], Rundgren 1978–79 [\*205: 52–53, 59–61]). In the rest of the discussion Ibn Sīnā analyses how this principle is deployed in the different categories of beings he enumerated.

*Risālat al-Tuhfa* (GM 6)

*The Present*

The extended title of this treatise announces its contents: 'On happiness and ten arguments that the human soul is a substance and that it does not admit of corruption; that it receives support from the divine effluence; that the celestial bodies have rational souls; and on the states [of the human souls] upon separation [from the body].'

The text is in the form of a response to a 'loving friend' who had asked Ibn Sīnā's advice on the means of achieving happiness in the afterlife. In the introduction Ibn Sīnā distinguishes between happiness that is wanted for itself and happiness that is wanted for something else. The former, he says, is true happiness as opposed to the latter, adding that true happiness is the eternal existence of the soul in the company of the divine. He intends to verify this after providing clear demonstrations and satisfactory arguments that the rational soul is immortal, that its home in the afterlife will be more distinguished than its earthly home, and that the pleasures in its [true] abode will be more precious than the pleasures it seeks in its [earthly] exile. He goes on to offer ten brief arguments that prove that the rational soul is neither corporeal nor does it reside in a corporeal faculty. After this Ibn Sīnā returns to the discussion of the subject announced in the title, and concludes by stating that the way to eternal happiness in the afterlife is to lead a virtuous and philosophical life on earth, following the rules of religion (devotional observances) and reason (ethical principle of the mean).

*Risālat Ḥayy b. Yaqzān* (GM 7)

*Ḥayy Ibn Yaqzān*

An allegorical tale of the rational soul's ascent from the sublunar world to the realm of

the necessary existent beyond the outermost sphere of the universe. The soul is guided by the Active Intellect which is presented as a sage called Ḥayy b. Yaqzān, or 'Alive, son of Awake' (i.e. of the necessary being). Written in a flowery style, the journey is described in phantasmagoric detail that corresponds to the various elements, stages, and signposts along the way: the rational soul's struggles to dominate the lower parts of the soul, the concupiscent and the irascible, and to subdue the demand for attention of both the five external senses and the five internal senses (common sense, imagery, imagination, estimation, memory). This will enable the intellect to concentrate on the supernal world of the intellects of the spheres as their glories gradually come into sight until the final epiphany of the necessary existent. Following the advice of an early commentator, that a complete explanation of the meanings of the symbols and images in the tale can be found in Ibn Sīnā's systematic prose works, Goichon (1959 [\*108]) compared all the concepts referred to 'phrase for phrase and frequently word for word' with these works and discovered the correspondences (Gutas 2014a [\*70: 343]). See also Goichon's extensive summary of the text in the article "Ḥayy b. Yaqzān" in *ET*<sup>2</sup> (Goichon 1966 [\*13: III 330–334]).

*Risālat al-Tayr* (GM 8)

*The Bird*

A brief allegory about the human rational soul, represented by a bird flying with a flock. It is trapped in the nets and snares set up by hunters in the material world, and gradually frees itself, following an exhortation from the Active Intellect in the guise of the 'herald of God' (*munādī llāh*). It flies over eight mountain tops, the intellects of the celestial spheres, until it attains the city of the king, is admitted to his presence, and its 'eyes behold his beauty,' which is described in conclusion. See the discussion and analysis by Heath (1990 [\*211]).

*al-Ġumāna al-ilāhīyya fī l-tawhīd* (GM 9)

*The Divine Pearl: On Professing the Unity of God*

An ode of 334 verses rhyming in *-nī* (and hence the alternate title, *Ode with the rhyme*

*n[ūn]*, i.e. *Nūniyya*), on God and the emanated creation.

### 3.7 *Practical Philosophy (GPP)*

Ibn Sīnā showed little interest in the three traditional branches of practical philosophy – ethics, economics (household management), politics. His interest was directed primarily at a fourth branch which he founded, and which he called the ‘discipline of [religious] legislating’ (*al-ṣināʾa al-šarʿiʾa*). In conjunction with his main focus on the metaphysics of the rational soul, this left little room for the theoretical study of traditional practical philosophy. Accordingly, he wrote little on the subject; the forthcoming ‘comprehensive’ book on ethics and politics he announced in the introduction to the *Šifāʾ* (see Gutas 2014a [\*70: 46]) never materialised. Other than the mostly lost *al-Birr wa-l-iṭm* (*Piety and Sin*) which he wrote while still in Bukhara, and about whose precise contents we have insufficient information, there is little if any evidence that he composed independent treatises on the traditional branches of practical philosophy. The few treatises, or the few overlapping fragments of texts collectively presented below, are not only of doubtful authenticity in some cases but also difficult to piece together into a meaningful whole of Ibn Sīnā’s views on these subjects.

*al-Birr wa-l-iṭm* (GPP 1a); *al-Ahd* (GPP 1c);  
*Risāla fī l-Ahlāq* 1 (GPP 1b); *Risāla fī l-Ahlāq* 2  
 (GPP 1d); *al-Aḥwāl wa-l-infiʾālāt* (GPP 1e)  
*Piety and Sin*; *The Pledge*; *On Ethics* 1; *On Ethics* 2; *Actions/Effects and Affections*

*Al-Bir wa-l-iṭm* was written in two volumes in Bukhara at the request of Ibn Sīnā’s neighbour Abū-Bakr al-Baraḡī. It does not survive whole, and the forty or so extant pages of various texts that appear to derive from it cannot account for the two-volume work. We do have a brief description of it by Ibn Sīnā himself who, after discussing the celestial influences on the world and the concept of providence at the end of the metaphysics of the *Šifāʾ*, says the following: ‘Know that most of the matters which the masses affirm, resort to, and profess are true; it is only those who act as if

they were philosophers that reject them out of ignorance of their causes and reasons. As a matter of fact, we wrote on this subject the book *Piety and Sin*. You should carefully study the exposition of these matters there, count as true the stories about divine punishments descending upon corrupt cities and tyrants, and consider how truth emerges victorious. You should also know that the reason for [the efficacy of] our praying, almsgiving, etc., as well as for the occurrence of wrongdoing and sin, is only from There, for the first principles of all these matters are ultimately reducible to nature, will, and chance. ... When matters are resolved [into their constituent components], they are [found to be] dependent on the first principles that necessitate them, which descend from God’ (Gutas 2014a [\*70: 95]; *Ilāhiyyāt* [\*54.4(a): 11 439,6–17 Mūsā et al.; cf. \*54.4(b) Marmura: 362–363]).

Most of the topics mentioned in this passage are indeed found in a short text transmitted in the manuscripts under the title *al-Birr wa-l-iṭm* [\*37: 353–368]. As analysed by Janssens (2012 [\*223]), this text is divided into three parts, the first of which deals with the concept of the mean in human actions as the only way to acquire a good moral disposition. This part draws upon al-Fārābī’s *al-Tanbih ʿalā sabīl al-saʿāda* (cf. PIW 1 § 8.3.3), even reproducing some sections of it. The second part of *al-Birr wa-l-iṭm* consists of passages later reproduced in the metaphysics of the *Šifāʾ*, book x, chapters 1 and 3, as well as of a passage on the ability of the soul to affect souls and bodies other than its own, which was later reproduced in the *Išārāt*, *namaṭ* 10, sections 26–29. The third part consists of abbreviated selections from another work by al-Fārābī, *Fuṣūl muntazaʾa* (cf. PIW 1 § 8.3.8). They deal with such subjects as the analogy between the soul and the body (‘the soul has health and sickness just as the body does’), the major parts and faculties of the soul (nutritive, perceptive, imaginative, appetitive, and rational), moral and intellectual virtues, the ‘mean’ as



the position between two vices, the virtues of the theoretical and practical intellects, and the nature and function of rhetoric (persuasion) and poetry (evocation of images, *taḥyīl*).

The *Ahd* [\*135; \*21: 142–151] consists of three segments, the first of which contains brief discussions and definitions of moral virtues: keeping secrets, prudence, veracity, etc. The second segment, which also draws upon al-Fārābī's *al-Tanbīh 'alā sabīl al-sa'āda*, discusses the acquisition of moral habituation, which results from the frequent repetition of the same act; in this way, the habits of the ruler influence the character of his subjects. The third segment is identical with the first of the three parts of the fragment transmitted with the title of *al-Birr wa-l-iṭm*, discussed above (Janssens 2012c [\*223]). At some point, this text was also included in the spurious Ibn Sinā – Ibn Abī l-Ḥayr correspondence.

*Aḥlāq* 1 [\*37: 369–377] consists of two segments, the first of which contains a list of the definitions of virtues and vices, while the second conflates the second segment of the *Ahd* on moral habituation with the beginning of the first part of *al-Birr wa-l-iṭm* on the mean (Karḥḡa 2002 [\*214: 21–24]).

*Aḥlāq* 2 [\*136] consists of a catalogue of virtues, discussed as the mean between two extremes, and their corresponding vices. It draws on the anonymous *al-Madḥal ilā 'ilm al-aḥlāq* (*Introduction to the Science of Ethics*), attributed to a certain Nicolaus in a manuscript from Fez, and on the *Iḥtiṣār*

*al-Iskandarāniyyīn* (*Compendium of the Alexandrians*), both derived from the *Nicomachean Ethics* (text in Badawī [\*90: 389–445]). *Aḥlāq* 2 was also used by al-Ġazālī in the *Mizān al-'amal* and the *Iḥyā'* (Karḥḡa 1997 [\*212], Karḥḡa 2002 [\*214: 27–35]).

*Al-Af'āl wa-l-infi'ālāt* [\*26: no. 1] presents an analysis of the mutual effects that souls and bodies exert on each other. Ibn Sinā distinguishes four kinds of such effects: souls on souls, souls on bodies, bodies on souls, and bodies on bodies. On this basis, he is able to provide a natural background for such seemingly supernatural phenomena as prophetic inspiration, miracles, veridical dreams, the evil eye, telekinesis, and amulets and magical practices. The text is related to the tenth *namaṭ* of the *Iṣārāt*, and especially to one of its sources, the passage in the second part of *al-Birr wa-l-iṭm* that talks about the ability of the soul to affect souls and bodies other than its own.

It is possible that all these different parts were connected in a coherent way in the original *al-Birr wa-l-iṭm*, in which the young Ibn Sinā seems to have drawn on and copied from all available ethical literature, Arabic translations from Greek as well as original compositions in Arabic. However, for some as yet unexplained reason, subsequent tradition saw fit to cannibalise and fragment the text into a variety of treatises, only some of which have survived.

### 3.8 *Personal Writings (GPW): Controversies, Letters, Homilies, Poetry*

Ibn Sinā's personal circumstances forced him into public life, seeking patronage whenever it was lacking, and making efforts to maintain it when he had achieved it (cf. Reisman 2013 [\*175]). These circumstances led to his producing various writings which could be called 'personal', as they are not laid out as philosophical treatises, although they incorporate and discuss many theoretical subjects. These writings include:

- (I) Correspondence recording the controversies in which he was involved and seeking arbitration (GPW 1–3).

- (II) Private letters (GPW 4). – Letters to various individuals are preserved in manuscript form. They started circulating by the end of the 6th/12th century, when they were first listed in the bibliographies. The authenticity of the letters themselves and the identity of some of their addressees remain to be investigated. For a listing of the surviving letters known so far see Gutas (2014 [\*69: 504–505]).
- (III) Exegesis of some Quranic verses (GPW 5). – Ibn Sinā used allegorical

interpretation of some Quranic verses, notably the Light Verse (sura 24:35), in several of his authentic works. This procedure is very much in keeping with his understanding of the revelation as an imaginative 'translation' of demonstrable truths in figurative language accessible to the masses. Accordingly he may have engaged in such allegorical exegeses independently of his treatises, and some interpretations of this kind are indeed transmitted in the manuscripts and listed in the bibliographies. For the most part their authenticity as well as their philosophical value remain to be established. There are preliminary reviews of the published exegeses by Janssens (2004 [\*155]) and Heath (2016 [\*227]), which arrive at mixed results: some texts may be authentic, others not. Analyses of specific verses have been undertaken by Michot (1980 [\*206]), De Smet and Sebtī (2009 [\*220]), and Marjani (2018 [\*230]). For a list of the titles known to date see Gutas (2014 [\*69: 506–508]).

- (iv) Homiletic literature, artistically expressing religious sentiment: homilies and exhortations (GPW 6). – In his *Risālat al-Intifāʿ ʿammā nusiba ilayhi min muʾaraḍat al-Qurʾān* (*Epistle on Rejecting the Accusation of Imitating the Quran*; GPW 3, see below), Ibn Sīnā says that he composed certain homilies (*ḥuṭab*) on various religious subjects and that his detractors interpreted these as attempts at imitating the style of the Qurʾān because of the rhymed prose (*sağʿ*) in which they were composed (cf. Mahdawī 1954 [\*7: 98] and Michot 2007 [\*160: 94–96]). (Regarding the topics mentioned in the *Risāla* in this context, cf. the description of the work below.) Most of these subjects are treated in the homiletic works that have come down to us in manuscript, although in some cases it is difficult to decide on their authorship as they are couched in generic pietistic language.

For a list of the titles known to date see Gutas (2014 [\*69: 508–511]).

- (v) Poetry (GPW 7). Ibn Sīnā was certainly an author of verses, using the *rağaz* meter to compose didactic poems presenting his theories, in particular on logic and medicine. In this regard he was following a practice already established not only in Arabic but also in the emerging neo-Persian literature. Whether he was also a poet, however, composing or reciting poetry in the traditional Arabic metres in both Arabic and Persian, has yet to be established. The bibliographies refer in generic terms to poems attributed to him – *qaṣāʾid*, odes – while numerous such lines are credited to him in the manuscripts. No properly critical study has been conducted on them so far. See the references in Mahdawī (1954 [\*7]) and Anawati (1950 [\*5]) for the manuscripts, Lazard (1963 [\*110: 63 n. 2]) for the earlier literature, and the entries in the bibliographies in Janssens (1991–2017 [\*10]).

Among the personal writings outlined above, two correspondences on controversies (i) and a letter regarding homilies (iv) are of philosophical interest:

*Risāla ilā ʿUlamāʾ Bağdād yasʿaluhum al-inṣāf baynahu wa-bayna rağul Hamaḍānī yaddaʿ l-ḥikma* (GPW 1)

*Letter to the Scholars of Baghdad, requesting they judge fairly between him and a man from Hamadan claiming [to know] philosophy*

Letter describing the philosophical controversy between Ibn Sīnā and Abū l-Qāsim al-Kirmānī which took place shortly after Ibn Sīnā's arrival in Hamadan in 1015, addressed in all probability to the Baghdad Aristotelians of the generation of Yaḥyā b. ʿAdī's students (Reisman 2002 [\*150: 174–175], Michot 2000 [\*144: 10\*ff., 21\*]).

According to Arnzen (2011 [\*141: 356–357]), the letter can be divided into three sections. In the first part, Ibn Sīnā describes the situation that gave rise to the letter, a philosophical

debate with an aged scholar in Hamadan; followed by his request to the scholars of Baghdad to examine and evaluate the positions presented in the debate. The second section is dedicated to presenting Abū l-Qāsim al-Kirmānī's position, which concerns the question of the kind of existence that is 'being human' (*insāniyya*), discussed here in illustration of general concepts of essence or universals. According to Ibn Sīnā, the old man from Hamadan teaches a triple existence of the general concept of the essence of 'human': a separate existence apart from all multiplicity, an intellectual or intellect-informed existence qua concept of species or genus, and a concrete existence connected with the many qua the nature (*ṭabīʿa*) of the individual. Ibn Sīnā appears to refer to a text written by his opponent, not quoting it verbatim but summarising it in his own words. In the third section, Ibn Sīnā presents his own position. He comments only briefly and apodictically on the first of the three postulated kinds of existence of the general concept of essence: outside the mind this exists only as a multitude, not as a separate unity. He then focusses on the two other kinds of existence, in particular the intellectual kind of being of the general concept of essence and on the question of what constitutes the relation of the unity of definition to the multiplicity of defined individuals.

*Risāla ilā Ṣaḍīq yasʿāluhu l-inṣāf baynahū wa-bayna l-Hamaḍānī alladī yaddaʿ l-ḥikma*  
(GPW 2)

*Letter to a Friend requesting he judge fairly between him and a man from Hamadan who claims [to know] philosophy*

A letter to the vizier Abū Saʿd describing the same philosophical controversy between Ibn Sīnā and al-Kirmānī, which took place shortly after Ibn Sīnā's arrival in Hamadan in 405/1015 (Michot 2000 [\*144]).

The problems discussed are the essential attributes of bodies and whether finiteness is one of them, as well as related issues regarding the difference between a thing's

existence in the intellect and in the internal sense of estimation, the substantiality of the soul, the nature of infinity, and the continuity of bodies and their divisibility. Ibn Sīnā reports the discussions that he and al-Kirmānī had on these subjects, registers his exasperation at al-Kirmānī's misinterpretation of Aristotle and his inability to comprehend his (Ibn Sīnā's) explanations and corrections of al-Kirmānī's errors, and requests that the vizier arbitrate impartially between them on these issues.

*Risāla fī Intifāʿ ʿammā nusiba ilayhi min muʾaraḍat al-Qurʾān* (GPW 3)

*Epistle on Rejecting the Accusation of Imitating the Quran*

Letter addressed to an anonymous friend or disciple, who in some manuscripts is said to be al-Ġūzġānī, though it has been argued in recent studies that Bahmanyār was the recipient and the letter written in Isfahan after 415/1024 or after 421/1030 (Reisman 2002 [\*150: 178], Michot 2007 [\*160: 84]), with the aim of repudiating the accusation of having imitated the Quran. The accusation had been levelled at him by another anonymous person, but who was without a doubt Abū l-Qāsim al-Kirmānī with whom he had had an altercation some ten or fifteen years previously (see the preceding two entries here). In the course of the letter, which contains a lot of invective against the slanders of the 'fool' (*al-aḥmaq*) al-Kirmānī, Ibn Sīnā mentions as the cause of the accusation his having composed a number of homilies (*ḥutab*) on religious subjects. Among these were the oneness of God and His glorification, the proof of prophecies and the signs of Muhammad's prophethood, the verses of the Quran and their wisdom, a thorough study of the configuration of the heavens, the state of the foetus and its birth. Others were concerned with the refutation of Sabians, Zoroastrians, Christians, and Jews, and of those who deny divine predestination (*qadar*) and believe in compulsion (*iğbār*). Some of these were lost, he continues, but he hopes

to find some copies with his friends so he can send them to the people of Rayy who might read them and see for themselves whether

they contain anything objectionable to reason or religion (Michot 2007 [\*160: 98–114]).

### 3.9 *Medicine (GMed)*

Besides purely medical contents, Ibn Sīnā's medical works also treat subjects relating to epistemology, physics, biology, and related fields, as well as the theory and physiology of the animal and vegetative soul which is bound to the body. These await more in-depth investigation, to provide additional and more precise information Ibn Sīnā's theories on these subjects.

#### *al-Qānūn fī l-ṭibb* (GMed 1) *The Canon of Medicine*

Al-Ġūzġānī reports (Gohlman 1974 [\*117: 44,7–74,2]) that Ibn Sīnā began writing the *Qānūn* in Ġurġān (c. 403/1013). He went on writing it throughout his career until he finished it some time during his last stay in Isfahan, completing it after 415/1024, and perhaps significantly later than that. Organised in five books, it is a clear and ordered summa of Galenic medicine adjusted within an Aristotelian theoretical frame.

In the introduction, Ibn Sīnā takes pains to delineate precisely the areas within which a physician must operate: he should accept the first principles and elements of medicine and physiology – the elements, temperaments, humours, faculties, pneumata, and causality – on the authority of the higher discipline of natural science or physics (and ultimately from metaphysics). He must be responsible for familiarising himself with the organs through anatomy and personal palpation, for forming concepts and providing proofs for diseases and their causes and symptoms, and for knowing how to eliminate disease and preserve health (Gutas 2003 [\*537: 149–151]; Pormann 2013 [\*543: 92–95]). The first book treats the general principles of theoretical and practical medicine: elements and humours that determine temperament, anat-

omy, physiology, general pathology, preventive medicine, and regimen. The second book contains the first part of pharmacology on simple drugs, describing some eight hundred vegetable, animal, and mineral substances. The third book discusses systematically the diseases of particular organs from head to toe, while the fourth deals with medical conditions and lesions that affect the body as a whole or are not specific to a particular organ. The fifth book, finally, contains the second part of pharmacology on compound drugs with some six hundred and fifty prescriptions.

To the extent that the *Qānūn* deals with the structure, function, and malfunction of bodily parts and faculties, it agrees with the discussion of these subjects in other works by Ibn Sīnā, notably on the natural sciences. These correspondences concern mainly, but not exclusively, the following areas (further areas remain to be investigated). The physiology and function of the senses, both internal and external, and their interaction with the rational and practical intellects are treated mainly in the book on the soul (*Kitāb al-Nafs*) of the *Šifā'* (cf. Pormann 2013 [\*543: 102–108, includes a bibliography]), but also in treatises dealing with the metaphysics of the rational soul, such as in ethics and the last chapter of the *Išārāt*. Anatomy and the physiology of the generation of the embryo permeate the discussions in the *Qānūn* and the zoological treatises (*al-Ḥayawān*; cf. Musallam 1987 [\*9: 94–99 and no. x]). Medical epistemology and the questions of experience and induction, dealt with in the *Qānūn* in relation to pharmacology, find fuller treatment in logic and elsewhere (Gutas 2012 [\*263: 398–400], Pormann 2013 [\*543: 96–102]; Karimullah 2017 [\*547]; for Ibn Sīnā's pharmacology see Pormann 2011 [\*542: 503–506]).

*Maqālat al-Adwiya al-qalbīyya* (GMed 2)  
*Treatise on Cardiac Remedies*

The fourth section of the fourth book of Ibn Sīnā's *Kitāb al-Nafs* (*On the Soul*) in the *Šifā'* discusses the motive faculties of the animal soul, primarily desire and its two subdivisions, namely the irascible and appetitive faculties which are responsible for sundry affections like joy, anger, etc., that befall them. After an extensive discussion of such affections and their causes, Ibn Sīnā concludes with the following reference to his medical works: 'We have discussed in our medical books the cause of the predispositions of individuals [i.e. four particular character traits, choleric, sanguine, phlegmatic, and melancholic], which vary according to their innate nature and according to their various states that are due to joy, worry, anger, forbearance, envy, peacefulness, etc. There is nothing among the ancient [authors] that resembles our discussion in wealth of detail and accomplishment, so let the reader study [this subject] there (*Šifā'*, *al-Nafs* [\*54.2.6: 201 Rahman]).

The reference is to his work on cardiac remedies, which discusses the physiology and

pathology of the heart as well as the effect on it of the affections in detail in the first part. In the second part it describes the medications that are to be prescribed in alphabetical order, together with the efficacy of each (Ullmann 1970 [\*523: 155–156]). The text is considered a major work on psychopharmacology.

*Fi Naqd Risālat Ibn al-Ṭayyib fi l-quwā l-ṭabīʿiyya* (GMed 11)  
*Refutation of Ibn al-Ṭayyib's Epistle on the Natural Faculties*

This brief treatise is a refutation of Abū-l-Farağ Ibn al-Ṭayyib's (d. 435/1043) essay on *al-Quwā l-arba'a* or *al-Quwā l-ṭabīʿiyya*, i.e. the natural faculties of nutrition and growth, or the bodily functions of attraction, retention, digestion, and excretion (cf. PIW 1 § 7.6). In the introduction Ibn Sīnā refers to his own remarks on the subject in the *Šifā'*.

*Urǧūza fi l-ṭibb* (GMed 27)  
*Medicine, in rağaz verse*

The contents of the *Qānūn* in verse, comprising 1326 lines. See Ullmann (1970 [\*523: 154–155]).

### 3.10 *Lost Works*

*al-Ḥāšil wa-l-maḥṣūl* (GS 10)  
*The Available and the Valid [of Philosophy]*

In his Autobiography, Ibn Sīnā says that he wrote a twenty-volume work commenting on (Aristotle's) philosophy at the request of his neighbor in Bukhara, Abū-Bakr al-Baraḳī, which he called *al-Ḥāšil wa-l-maḥṣūl*. It seems that the only manuscript was the one in al-Baraḳī's possession because he never lent it to anybody to copy. This may explain the fact that the book, voluminous though it was, is not extant. In a number of his other works, Ibn Sīnā refers to a commentary on Aristotle's *Physics* (GS 10a), a commentary on *On the Heavens* (GS 10b), a commentary on *On the Soul* (GS 10c), and a commentary on the *Metaphysics* (GS 10d). All of these were in all probability parts of *al-Ḥāšil wa-l-maḥṣūl*, now lost. There is no record or any surviving manuscript evidence of any other commentary on the Aristotelian texts from his early period.

*al-Inṣāf* (GS 11)  
*Fair Judgment*

Late in his life (in 422/1029), Ibn Sīnā wrote a commentary on all the works of Aristotle, including the (Plotinian) *Theology* by Pseudo-Aristotle. This is lost, except for the surviving sections listed above under Philosophical Summae.

*Lawāḥiq* (GS 12b)  
*Appendices*

Description in Gutas (2014 [\*69: 160–164]). The *Lawāḥiq* are listed separately here because in conception they appear to have been different from what is now extant in the *Ta'liqāt*. The number (GS 12b) remains the same, as these 'appendices' presumably existed only in conception. But if they were indeed written down, then it seems that they were entirely incorporated in the *Ta'liqāt*.

*Masā'il tud'ā l-Buḍūr* (GS 13)

Topics called *Seeds*

The title *al-Buḍūr* occurs a number of times in the discussions between Ibn Sīnā and Bahmanyār, and the text itself appears to have been a collection of 'fragments' or philosophical 'jottings'; cf. Reisman (2002 [\*150: 254–258]). The collection of these texts itself is unlikely to have survived independently but was scattered among Ibn Sīnā's papers after his death, or may have been partially incorporated into the *Mubāḥaṭāt*; there are certainly no known extant manuscripts.

*Masā'il tarǧamahā bi-l-Taḍkīr* (GS-Ps 4)

Questions which he entitled *Reminder*

Only the Longer Bibliography lists this title, specifying that the text was given the title *al-Taḍkīr*. There are no other references to this title and no text with this title is known to exist in manuscript. In the *Iṣārāt* Ibn Sīnā uses the word to introduce three sections in the second half of the book, *namaṭ* 2.8 and 6.41, *taḍkīr*, and 10.26, *taḍkīra*. It is not known whether the references in *Iṣārāt* references were linked to the title by Ibn Sīnā himself or a compiler or forger, nor which was the collection of texts in question (Gutas 2014a [\*70: 432]).

*Risāla fī Ḍamm māḍiǧ al-ḥarā'* (GS 14d–e)

*Epistle on Reproaching the Dung-eater*

Ibn Sīnā calls Abū-l-Qāsim al-Kirmānī by this name in at least two places in letters to Bahmanyār included in the *Mubāḥaṭāt*: *Mubāḥaṭa I* [\*6r: 39,1 and n. 15 Bidārfar], and *Mubāḥaṭa III* [\*6r: 69,4 Bidārfar]; see Michot 1997 [\*142: 155, 183], and Reisman 2002 [\*150: 206]. No letter bearing this title is extant in the manuscripts. It is likely that one of the two letters (to Bahmanyār) may have at one point circulated independently under this title.

*Maqāla fī Ġaraḍ Qātīǧūrjūyās* (GL 7)

*Treatise on the Purpose of the Categories*

The two reliable bibliographies of Ibn Sīnā's works, the Shorter and the Longer, report this title but it appears not to be extant in any known manuscript. Ibn Sīnā's critical

attitude toward the *Categories* developed early and he consequently soon excluded the subject from his treatment of logic (Gutas 2014a [\*70: 300–303]). Incidental remarks in some other works aside, his most extensive discussion of the nature and purpose of the *Categories* is in the *Šifā'*, which makes the loss of *Treatise on the Purpose of the Categories* deplorable, unless it is an extract from the *Šifā'* itself that circulated independently under this title at an earlier stage.

*Fī anna 'ilm Zayd ġayr 'ilm 'Amr* (GL 14)

*That the Knowledge of Zayd Is Other than the Knowledge of 'Amr*

This title, given in all the bibliographies, is not extant in any known manuscript.

*Muḥtaṣar fī anna l-zāwiya allatī min al-muḥīṭ wa-l-mumāss lā kammīyya laḥā* (GMath 2)  
*Compendium Regarding That the Angle which Is Formed by the Perimeter and the Tangent Has No Magnitude*

This treatise is separate from the one *On the Angle* (GMath 1). Although no manuscript of it appears to be extant at present, it was manifestly in circulation in the 6th/12th and 7th/13th centuries as Qutb al-Dīn al-Šīrāzī commented on it (see Luther 2004 [\*538: 124–125], who identified it) and the compiler of the Longer Bibliography included it in his list.

*Maqāla fī Hawāṣṣ ḥaṭṭ al-istiwā'* (GMath 5)  
*On the Characteristics of the Equator*

This title, listed only by the Longer Bibliography, is not extant in any known manuscript. On the subject cf. Ragep and Ragep (2004 [\*156: 8, no. 9]).

*Fī Ṭul Ġurǧān* (GMath-Ps 1)

*On the Longitude of Ġurǧān*

This title was reported and discussed by al-Bīrūnī in his *Taḥdīd al-amākin* (see Ragep and Ragep 2004 [\*156: 5, 7]), but is not listed in any bibliography nor extant in any known manuscript. If not a part of the correspondence between the two men, its nature and authenticity remain to be verified.

*Maqāla fī l-Masālik wa-biqāʿ al-arḍ*  
(GMath-Ps 2)

*Treatise on Roads and Provinces*

Only the Longer Bibliography lists this work as 'a treatise which he mentioned in his works that it is on roads and provinces.' There seem to be no other references to this title or the work in the manuscripts (Gutas 2014a [\*70: 461]).

*al-Madḥal ilā šināʿat al-mūsīqā* (GMath- Ps 3)  
*Introduction to the Science of Music*

There are two known works by Ibn Sīnā on music: a brief treatise composed independently and found in the possession of al-Ġūzġanī (GS 6e), who calls it a 'compendium' (*muḥtaṣar*) and later incorporated it into the mathematics of *al-Naǧāt*; and a monograph on the subject, called 'epitome' (*ǧawāmiʿ*) by Ibn Sīnā, which constitutes the music part of the *Šifāʿ*. The Longer Bibliography, which lists the music part of neither *al-Naǧāt* nor the *Šifāʿ* but only this title of the *Madḥal*, adds the comment that this text is not the music part of the *Naǧāt*. Since this *Madḥal* can hardly be the chapter on music of

the *Šifāʿ*, either (which includes an extensive treatment of the subject and cannot rightly be called an 'introduction'), the question remains whether the *Madḥal* may be a separate, now lost, treatise by Ibn Sīnā on music.

*al-Birr wa-l-iṭm* (GPP 1)  
*Piety and Sin*

Of this work on ethics, according to the Shorter Bibliography in two volumes, only some few dozen pages are extant in fragments, discussed at 7 above. The rest of this possibly extensive work is lost.

*Masāʾil ǧārat baynahu wa-bayna baʿḍ*  
*al-fuḍalāʾ* (GPW 3.1)  
*Issues between Ibn Sīnā and Some of His*  
*Eminent Contemporaries*

No text in the known manuscripts bears such a title. Its presence in both the Shorter and Longer Bibliographies indicates that texts relating to the controversies to which Ibn Sīnā alludes in some his 'Private Writings' (see above) at some point bore this title. The question remains whether the reference is to one of the extant letters or to another one, now lost.

### 3.11 *Disputed and Spurious Works*

Numerous works either of doubtful authenticity or certainly spurious are linked to Ibn Sīnā. Only those which have been traditionally taken to be by Ibn Sīnā or which may have a claim to represent, at least partially, authentic works, are considered here. These include a number of writings that appear in the pseudepigraphic correspondence of Ibn Sīnā with the Sufi Abū Saʿīd b. Abī l-Ḥayr. These texts may be based on Ibn Sīnā's philosophical notes that were collected in the *Mubāḥaṭāt* and *Taʿlūqāt*, and possibly from other occasional pieces, but were redacted and edited at will when incorporated into the correspondence. The task of separating the amended texts from the authentic passages remains. Patent forgeries, demonstrable misattributions, and stray fragments strewn in the manuscripts have not been included in the following list. For a full list of pseudepigraphic and spurious works see

Gutas (2014 [\*69: 444. 451. 453–457. 459–461. 468–469. 484–496. 500–501. 523–527]). For apocryphal treatises in Persian attributed to Ibn Sīnā see Achena (1987 [\*128: 103–104].

*ʿUyūn al-masāʾil* (GS-Ps 1)  
*The Main Issues of [Philosophy]*

Collection of brief discussions of twenty-two philosophical topics of logic, physics, and metaphysics. In the manuscripts it is attributed to al-Fārābī, Ibn Sīnā, and Abū-l-Barakāt al-Baǧdādī, among others (cf. the description in PIW 1 § 8.3.11). It is almost certain that the text is not by al-Fārābī, as demonstrated independently of each other by both Janos (2012 [\*501: 383–396]) and Kaya (2012 [\*170]). The treatise displays distinctive features of Ibn Sīnā's theories, again as demonstrated by both Janos and Kaya, who suggest Ibn Sīnā's circle as the probable milieu of its composition.

*al-Mağālis al-sabʿ bayn al-Šayḥ wa-l-ʾĀmirī*  
(GS-Ps 3)

*Seven Sessions between the Šayḥ and al-ʾĀmirī*

An intriguing collection of forty-one questions and answers on metaphysics and physics in seven sessions between al-ʾĀmirī and another philosopher. Both in the title and at the end of the text in the sole known manuscript (Istanbul, Ragıp Paşa 1461<sub>28</sub> fol. 150a–62b), the interlocutor of al-ʾĀmirī is referred to only as ‘al-Šayḥ’, not ‘al-Šayḥ al-Raʾīs’, which is the title commonly used for Ibn Sīnā. Each question-and-answer is introduced by *qāla l-sāʾil* (‘the inquirer said’) and *qāla l-muʿīb* (‘the answerer said’), never using a name. This raises the problems of who al-ʾĀmirī’s interlocutor is, and which of the two is asking and who is responding.

This title appears only in an addition to the Longer Bibliography as copied by Ibn Abī Uṣaybīʿa. Kaya 2017, who is preparing an edition of the text [\*162], presents convincing evidence that the doctrinal content of the answers is generally consistent with the views of al-ʾĀmirī, who was in Bukhara in 375–376/985–986 and could have met the young Ibn Sīnā, and argues with great probability that the questioner is indeed Ibn Sīnā. However, to verify the identity of the questioner, further investigation is needed regarding the other personalities in al-ʾĀmirī’s circle, like his student and *famulus* (*ḡulām*) Abū l-Qāsim al-Kirmānī (Reisman 2002 [\*150: 166–185]), as well as the social contexts in which these sessions took place, in which they were originally recorded, and in which they were later transmitted in manuscript copies.

*Risāla fī l-Ḥadaṭ* (GP-Ps 1)

*Epistle on Origination*

This treatise is listed only in the late Extended Bibliography. It starts by defining *ḥadaṭ* as ‘something coming to be after it had not existed’ (*kawn al-šayʿ baʿda an lam yakun*), and then defines ‘pre-eternity’ or ‘pre-existence’ (*qidam*). The provenance of this piece and its authenticity remain to be verified. Unpublished; for the manuscripts see Gutas (2014 [\*69: 451]).

*Masʾalatān* (GP-Ps 2)

*Two Questions*

On the occupation of space by existents and the void. The provenance of this piece and its authenticity remain to be verified. Unpublished; for the manuscripts see Gutas (2014 [\*69: 451]).

*al-Qaṣīda al-ʾaynīyya* (GP-Ps 4)

*Poem Rhyming in ʾayn*

A poem in the *kāmil* metre in 20 verses rhyming in *-ī* (i.e. the letter *ʾayn*; hence the name *ʾaynīyya*). The poem’s main point, the descent of the soul from its heavenly abode to the body at the time of birth, is a distinctly Ismāʿīlī tenet which Ibn Sīnā had rejected ever since his childhood. Later he would explicitly base his theory of the soul on the soul being generated simultaneously with the body. A manifest forgery, it seems most likely that this text originated some time before the end of the twelfth century in Ismāʿīlī circles, where its first commentary appears to have been composed as well (Madelung and Mayer 2016 [\*180]).

*Risāla fī Infiṣāḥ al-ṣuwar al-mawǧūda fī l-naḥs*

(GP-Ps 5)

*On the Disappearance of the Intelligibles in the Soul [After Death]*

The treatise is not mentioned in any bibliography. Michot (1985 [\*164: 96]) reports that of the twelve manuscripts he used for his translation only three attribute the work to Ibn Sīnā, with one ascribing it to ‘some of the philosophers’. According to its introduction, the treatise is dedicated to, or occasioned by a question from, an anonymous *al-ustād al-raʾīs*, a form of address not known to have been used for Ibn Sīnā. Michot (1985 [\*164: 96]) raises the possibility of its being a pseudograph, but nevertheless regards the ‘attribution to Ibn Sīnā as the most reasonable one’. Black (1997 [\*248]), who devotes a study to the subject, presumes the authenticity of the treatise. She admits that there are many philosophical ‘difficulties’ with the text and provides a list of these (Black 1997 [\*248: 435 and 446]). Instead of challenging the authenticity



of the text, however, she prefers to pronounce Ibn Sīnā incoherent: 'To admit an exception to this account of intellectual knowledge is to threaten the overall coherence of Ibn Sīnā's epistemology. And yet this would seem to be precisely what Ibn Sīnā's views on unreal forms require' (Black 1997 [\*248: 446]).

*Ta'alluq al-naḥs bi-l-badan* (GP-Ps 6)

*The Association of the Soul with the Body*

This treatise is transmitted in the form of a response by Ibn Sīnā to the following question by the Sufi Abū Sa'īd b. Abī l-Ḥayr: 'Is the soul connected to the body through all of the soul's faculties or through one of them? If it is through all of the faculties of the body [as they realise the faculties of the soul], then the loss of even one of the faculties will cause the loss of the connection. But this doesn't happen, as we may find most of the external senses absent, and indeed some of the internal senses, and yet life continues. If it is through just one of the faculties of the body, then which one is it; is it one of the natural [i.e. vegetative] faculties, the animal faculties, or the faculties of the [human, rational] soul?' After a lengthy discussion, Ibn Sīnā concludes: 'Our statement that the faculties of the soul emanate from the soul means that the soul coming to a given body is a condition for the body's complete predisposition to receive the faculties; and because it is a condition for this complete predisposition, the faculties are among the soul's concomitants (*lawāzim*) and its branches which come into being through the soul's origination' (text in Sebtī 2004 [\*165: 4–8, 169–171], with the referents of the attached pronouns interpreted according to sense).

The core of this treatise may have been part of the exchange between Ibn Sīnā and Bahmanyār that eventually – and posthumously – came to be the collection known as the *Mubāḥaṭāt*. In the form in which the treatise is extant, incorporated into the pseudepigraphic Ibn Sīnā – Ibn Abī-l-Ḥayr correspondence, however, it is certainly spurious. It is not listed in any bibliography, it is not known to any of Ibn Sīnā's followers or critics who studied his works intensively up

to Mullā Ṣadrā. All the extant manuscripts that contain it date from the 16th century or later. Most importantly, the treatise itself contains an explicit reference to the *Mubāḥaṭāt*, a title that was first used for this collection long after Ibn Sīnā's death (Reisman 2002 [\*150: 141–144]). The transmission history argues heavily against its authenticity, and Sebtī (2004 [\*165]), who attributes the work to Ibn Sīnā himself, answers none of these questions, arguing solely on the basis of its contents which she finds compatible with Ibn Sīnā's ideas.

*Risāla fī Amr mastūr, ilā l-Sahlī* (GP-Ps 9)

*On the Occult, to al-Sahlī*

A treatise on alchemy attributed to Ibn Sīnā, but all Arabic and Latin treatises on alchemy attributed to him should be considered spurious (Ruska 1934 [\*92]), as his refutation of alchemy is quite categorical and well known (cf. Gutas 2012 [\*263: Section VIII]). However, this title is remarkable because of its age. It is listed in the Longer Bibliography and the text itself is included in the Istanbul MS Üniuersite 4755, fol. 250b–260b, under the title given above. It was also translated into Latin within 150 years of Ibn Sīnā's death (Stapleton et al. 1962 [\*166: 42]), which proves that it was in circulation and attributed to Ibn Sīnā before the end of the 6th/12th century. This has led a number of scholars to argue in favour of its authenticity, primarily on the basis that it was an early work by Ibn Sīnā, written for al-Sahlī in Gurgānġ, and that he later changed his mind in the *Šifā'* (Ateş 1951/1953, Stapleton 1962, and Anawati 1971 [all in \*166]). The treatise is important not because of the question of its spuriousness – which appears quite beyond doubt – but because of the light its transmission history sheds on the emergence of Ibn Sīnā pseudepigrapha within a century of his death.

*Ḥaqā'iq 'ilm al-tawḥīd (al-Arṣiyya?)* (GM-Ps 1)

*The Real Meaning of Theological Truths (Throne Philosophy?)*

A theological treatise on the necessary existent, its oneness, its attributes, and acts, preliminary research on which has raised

serious doubts concerning its authenticity (expressed by Reisman 2002 [\*150: 21 n. 2] and reported by Wisnovsky 2003 [\*432: 65 n. 32 and 67 n. 35]).

In his letter to an anonymous pupil (Bahmanyār), Ibn Sīnā refers to a work with what appears to be a title rather than a description of contents or method of discussion, *al-Ḥikma al-ʿaršīyya* (*Philosophy of the Throne*), and says that some passages from it written on slips of paper were lost during the raid of 1034 (Gutas 2014a [\*70: 50–51]). This was clearly a work in progress, as other indications also show (Reisman 2002 [\*150: 228–230]), and it is not clear whether the work was ever completed, if it survived the raid, or whether it was rewritten, if it was completely lost, given that Ibn Sīnā died only a few years later.

In the extant text as it appears in the manuscripts and the printed editions [\*167], the author explicitly mentions that it treats of the *ḥaqāʾiq ʿilm al-tawḥīd* (the real meaning of theological truths), which is then taken as its title. There is no reference to a title *al-ʿAršīyya* other than in colophons which would have been added by scribes and do not reflect Ibn Sīnā's own words. As it is not among Ibn Sīnā's extant works, it is not sure whether he ever completed or re-wrote the *ʿAršīyya* or whether a pseudepigraph entitled *Ḥaqāʾiq ʿilm al-tawḥīd* was also given the name *al-ʿAršīyya*.

*Risāla fī Iṭbāt al-nubuwwa* (GM-PS 2)  
*Epistle on the Proof of Prophecy*

A small treatise in two parts, the first establishing the existence of prophecy and explaining its nature, the second showing how the metaphorical language of the revelation is to be interpreted philosophically, with examples from the Quran. Both these aspects are discussed in many of Ibn Sīnā's works, but the details of the exposition in both parts of this treatise, especially the analysis of the rational soul in its relation to the intelligibles as well as the specific interpretation of some Quranic verses, such as the Light Verse, are so clearly different from what Ibn Sīnā wrote throughout his career, and expressed in terms so muddled as to at times verge on the

nonsensical, that it could not possibly have been written by Ibn Sīnā (see the detailed discussion in Gutas 2014a [\*70: 485–489]). Its authenticity has also been questioned by a number of scholars. Davidson (1992 [\*246: 87 n. 56]) was 'not convinced of its authenticity'; al-Akiti (2004 [\*217: 201 n. 36]) and Treiger (2012 [\*581: 133 n. 18]) agree. Eichner 2008 ([\*162: 173 n. 8]) also emphasised its unusual character, although she considered it an early work by Ibn Sīnā, while Marmura, who edited the text, defended its authenticity on the basis of its ideas 'being Avicennian through and through' [\*168: viii], which is an unfounded claim. In a recent French translation and study, Lizzini presents the case for its spuriousness, while Brenet seems prepared to entertain its authenticity in his translation (Lizzini and Brenet 2018 [\*183: 79–82]). Sebtī (2020 [\*187]) proves that the text is spurious.

As a pseudepigraph, and given its confused account of the faculties of the soul as well as the absence of any mention of Ibn Sīnā's signature theory of *ḥads* (correctly guessing the middle term in syllogisms), the work exudes the same atmosphere as the writings of al-Ġazālī and his followers (Gutas 2014a [\*70: 485–489]). See, for example, the interpretation of the Light Verse by al-Ġazālī, and the changes he made to Ibn Sīnā's doctrine, as presented by Treiger (2012 [\*581: 74–78]). Pseudepigraphy under the names of Ibn Sīnā and al-Ġazālī was well underway after the latter's death in 505/1111, which would suggest the end of the 6th/12th or the beginning of the 7th/13th century as the time of composition of the *Risāla fī Iṭbāt al-nubuwwa*. This date is supported by the fact that it is first mentioned in the Extended Bibliography of Ibn Sīnā's works, the earliest manuscript instance of which (Istanbul Murad Molla 1408) was copied in 639/1242.

*Risāla fī I-Ṣalāt* (GM-PS 3)  
*Epistle on Prayer*

The first part of this brief treatise introduces humans as the noblest of all created beings, the function of whose rational soul is to be directed toward the supernal beings and become like the celestial bodies through

prayer, eternally worshipping and thus coming to know the necessary existent. The second part draws a distinction between outward prayer, which is discipline of the body consisting of the physical devotions like prostration, genuflection, etc., and inward or spiritual prayer, the real prayer which consists of contemplating the divine with a pure heart and a clean spirit. The former is incumbent upon those humans in whom the physical and animal faculties prevail, the latter on those in whom the spiritual faculties prevail.

The title of this treatise does not appear in any of the early bibliographies, which means that the treatise itself came into circulation under the name of Ibn Sīnā well after the middle of the 7th/13th century. All known manuscripts which attribute it to Ibn Sīnā are late, and it appears in none of the known early manuscripts. Its authenticity is thus suspect, as already suggested by Mahdawī 1954 [\*7: 175]. The contents of the treatise are problematic, too, as they exhibit discrepancies with the mainstream theories of Ibn Sīnā. Eichner 2008 [\*162] ascribes these discrepancies in the treatise to its allegedly early date; but some of them are also found in the *Risāla fī Itbāt al-nubuwwa* (Eichner [\*162: 173 n. 8]), which is almost certainly not by Ibn Sīnā, as discussed in the preceding entry.

*Risāla fī Sīr al-qadar* (GM-PS 4)  
*Epistle on the Secret of Predestination*

A very brief essay on predestination and the problem of evil. It is presented as an unnamed narrator's report on what Ibn Sīnā replied when another unnamed person asked him the meaning of the Sufi saying, 'He who knows the secret of predestination (*qadar*) is an apostate.' After declaring this matter to be very obscure, Ibn Sīnā reportedly says that the secret of *qadar* is based on three premises: the world order, the report (*ḥadīth*) about reward and punishment, and the affirmation that the souls live on after death. This is followed by five statements: according to Aristotle, apparent evil is not intended for the world, only good is, while evil is privation, but according to Plato

they both are intended and willed; (divine) commands and prohibitions to humans act as stimulants for the performance or avoidance of actions of which it is known beforehand that humans would perform or avoid them; similarly (divine) praise and criticism act as stimulants; divine reward and punishment are not the physical tortures that theologians claim, as cruelty is not an attribute of God; similarly earthly punishments (*ḥudūd*) are intended to prevent transgressions (Hourani 1966 [\*204]).

The whole is rather incoherent or 'illogical' in its argumentation and written in a way 'which needs so much unravelling' (Hourani 1966 [\*1966: 33. 41]). Hourani goes through Straussian interpretive acrobatics, psychologising Ibn Sīnā's intentions and motivations in order to make sense of the text. In support, he quotes passages from Ibn Sīnā's authentic works; however, these are not confirmed by the essay itself.

Apart from the fact that the essay is not by Ibn Sīnā himself but is presented as somebody's report on what he said, it is not mentioned in any of the bibliographies of his works. It was, however, incorporated into the pseudepigraphic Ibn Sīnā – Ibn Abī l-Ḥayr correspondence, which would explain the opening lines introducing it as Ibn Sīnā's elucidation of a Sufi saying. Sufi circles would appear to be the original context of this forgery. If not deliberate, the misattribution to Ibn Sīnā may be due to confusion with the authentic treatise *al-Qadā' wa-l-qadar* (GM 4); cf. Reisman 2002 [\*150: 141 n. 79] and § 3.6 above).

*Fī Sabab iḡābat al-du'ā' wa-kayfiyyat al-ziyāra*  
 (GM-PS 5)

*On the Cause of the Efficacy of Prayer and Visitation [of Tombs]*

A brief treatise presented as Ibn Sīnā's answer to a question on the subject. It begins by stating several premises which posit the familiar emanation of being from the necessary existent through the supernal intellects, souls, and spheres to the material elements

on earth, and then to minerals, plants, and finally to humans. They are the noblest of the earthly beings because of their rational soul which can at times reach such perfection as to become similar to the eternal celestial substances. Such souls, when they separate from their bodies interred after death, join the celestial substances and intellects and may then exert influence similar to that of the celestial intellects on souls still within their bodies on earth. When their help is solicited through prayer and visitation of tombs by the earthly souls, it is provided depending on the physical and spiritual preparedness of those souls. Physical preparedness is achieved by acquiring a balanced temperament and pure thoughts through the visitation of holy places, and spiritual preparedness by divesting one's spirit of all earthly cares and concerns and concentrating on the divine.

This work is listed in none of the oldest bibliographies and appears to be preserved only in late manuscripts. In parts it seems to be a second-hand elaboration (by someone with a Sufi background) of some of Ibn Sīnā's theories on the subject, but there are also elements foreign to Ibn Sīnā, such as the statement that the brain is the instrument (*āla*) of the rational soul. In some manuscripts the person who asks Ibn Sīnā the question of the title is given as the mystic Ibn Abī l-Ḥayr, making the treatise part of the pseudepigraphic Ibn Sīnā – Ibn Abī l-Ḥayr correspondence. Some of the text itself may be related to the *Ta'liqāt* (Reisman 2002 [\*150: 140 n. 83]).

*al-Mu'awada fi amr al-nafs [wa-l-fayḍ]*

(GM-Ps 6)

*On the Return of the Soul [and the (Divine) Effluence]*

The issue addressed in this brief text, which begins with a definition of 'possible existence', actually concerns the return, or resurrection, of past existents within the context of a resurrection of the soul (Reisman 2002 [\*150: 146]). It is transmitted as a letter by Ibn Sīnā addressed in some manuscripts to al-Ġūzġānī, but it appears to have been

addressed to Bahmanyār originally. Later it was incorporated into the pseudepigraphic Ibn Sīnā – Ibn Abī l-Ḥayr correspondence, as was *al-Fayḍ al-ilāhī* (= *al-Af'āl wa-l-infi'ālāt*, GPP 1e). Because of this, the word *al-fayḍ* was added to the title. See the discussion in Reisman (2002 [\*150: 144–147]).

*Ḥuṣūl 'ilm wa-ḥikma* (GM-Ps 7)

*Acquiring Knowledge and Philosophy*

A spiritual recommendation (Michot 2000 [\*144: 120\*]) in flowery language to devote oneself wholly to God, addressed to Ibn Zayla in response to the letter in which he expressed his decision to go into seclusion (*'uzla*). A slightly abridged version was later incorporated into the pseudepigraphic Ibn Sīnā – Ibn Abī l-Ḥayr correspondence. See Reisman (2002 [\*150: 141 n. 83 and 198]).

*Salāmān wa-Absāl* (GM-Ps 8)

*Salāmān and Absāl*

Presumably a phantom work by Ibn Sīnā that never existed, although substantial claims have been made concerning it (Corbin 1960 [\*33: 204–241 Engl.]). In all his works, Ibn Sīnā mentions Salāmān and Absāl together only once, and Absāl by himself only once. The former is in the *Išārāt* [\*58: 11.9.1, 198–199 Forget /355 Zārī'i], where he says: 'If among the things that reach your ear and the tales you hear there is the story of Salāmān and Absāl, know that Salāmān is an image referring to yourself and that Absāl is an image referring to the stage you [have reached] in knowledge, if you are worthy of it. Now analyse the allegory, if you can.' The second reference is in the first part of *al-Qaḍā' wa-l-qadar* (GM 4), where Ibn Sīnā says: 'Not everyone is endowed ... with the chastity of Absāl when a big thick cloud loomed over him that lit up with a long streak and revealed to him her face' [\*124: IV, 5–6 Mehren]. The reference here is to the story, as reported by al-Ṭūsī, in which the wife of Salāmān, who was secretly in love with his half-brother, Absāl, stole into his bed at night but 'the sky became overcast with dark clouds in which there flashed a lightning,

and Absāl recognised her face in its light and pushed her away' (al-Ṭūsī [\*209: 1v 54 *Dunyā*]).

In neither of these passages does Ibn Sīnā imply that the story of Salāmān and Absāl is something he himself had written, which is borne out by the complete absence of the title from the oldest bibliographies. The mention of a detail of the story in the second passage, namely Absāl's recognition of the adulterous wife in the flash of lightning, at most indicates that this was a story with which Ibn Sīnā's circle would have been presumed to be familiar. But the problem of the absence of the story – if it was a story – from any record until al-Ṭūsī, more than two centuries after Ibn Sīnā's death, raises serious doubts about its existence altogether. Nobody in the circles of Ibn Sīnā's disciples and propagators and students of his works had heard of a such a story, let alone a work by Ibn Sīnā with that title. And the two earliest commentators on the *Iṣārāt*, al-Āmidī and Faḥr al-Dīn al-Rāzī, say nothing on the subject in the relevant passage at the beginning of the ninth *namaṭ*.

The first who claims to have seen such a story and ascribe it to Ibn Sīnā is al-Ṭūsī, who claims to have come across the story twenty years after completing his commentary on the *Iṣārāt*, and refers to the old bibliographies as evidence for the text. But his reference is inaccurate, and the sources from which he would have received such a text are unclear. All these uncertainties leave little doubt about the spuriousness of the work, if indeed a 'work' it was.

#### *Risālat al-Nīranġāt* (GM-Ps 10)

##### *Epistle on Magical Practices*

The *nīranġ* 'is a magical practice which includes the mixing and processing of ingredients, the recitation of magic words, the burning of incense, and the making of figurines, in order to manipulate spiritual forces.' This treatise, attributed to Ibn Sīnā, 'is a non-theoretical work that simply lists the days, nights and hours of the planets, their suitability for the work of friendship (*'amal al-ṣadāqa*) and enmity (*'adāwa*), the races

and kinds of people attributed to them, their incenses, their letters, the letters of the four elements, and the prayers and fumigations accompanying the combinations of these letters (the charm: *ruqya*)' (Burnett 2008 [\*669: 42 and 44 n. 20]). The treatise, which appears in none of the early bibliographies, is known so far to exist in the two late manuscripts in Istanbul. The attribution to Ibn Sīnā can hardly be entertained.

#### *Risāla fī l-Sīyāsa* (GPP-Ps 1)

##### *Epistle on Governance*

A treatise on household management (economics). The introduction discusses God's management (*tadbīr*) of the world and the special place of humans in it. Apart from kings, people need to gather and store their food, which makes them unlike the other animals. Servants are needed to help, wives are needed to protect the house, and children to perpetuate the man's name and assist him in his old age. After this introduction the first section concerns ethical matters, especially humans governing their souls and achieving self-control. The second section is on earning one's livelihood by means of a profession and the income and outlays involved; the argument is mostly in moral terms with few economic references. The third section is on the wife, the fourth on the child, and the fifth on servants (Swain 2013 [\*225: 406–407], McGinnis and Reisman 2007 [\*56: 224–237]). The treatise follows the well-established Greek tradition of economics, and Swain's analysis (2013 [\*225]) presents the many ways in which this treatise adopts elements from Bryson's *Oikonomikos*, occasionally in an innovative fashion.

The title *Risāla fī l-Sīyāsa* appears in none of the early bibliographies but only in the late Extended Bibliography which dates from the first quarter of the 7th/13th century. This would indicate that the treatise first came into circulation around this time, which agrees with the fact that al-Ṭūsī knows and uses it in his *Aḥlāq-i Nāṣiri* (Wickens 1964 [\*203: 155]), composed in 633/1235 AD. The Extended

Bibliography also lists another economical title by Ibn Sīnā, *Tadbīr al-manzil* (*Management of the Household*), which clearly refers to the same treatise. Given that the treatise is actually on economics rather than on political governance (*siyāsa*), this may have been

an alternative (and original?) title that eventually fell into disuse. The authenticity of the treatise thus remains to be established (cf. the comments by T. Hoff who finds in it 'elements which sound rather un-Avicennian,' quoted by Janssens 1999 [\*10: 36, *Suppl. 1*]).

## 4 Doctrine

4.1 Ibn Sīnā's Philosophical Project and the Integration of the Sciences – 4.2 The Rational Soul, in Physics and in Metaphysics – 4.3 Theory of the Soul and Epistemology – 4.4 Logic – 4.5 Metaphysics – 4.6 Physics – 4.7 Mathematical and Biological Sciences

### 4.1 *Ibn Sīnā's Philosophical Project and the Integration of the Sciences*

*Dimitri Gutas*

4.1.1 The Sources – 4.1.2 The Classification of the Sciences and the Structure of Philosophy – 4.1.3 Ibn Sīnā's Understanding of the History of Philosophy and of his Own Place within it – 4.1.4 The Development of the 'Metaphysics of the Rational Soul' – 4.1.5 The Primacy of Logic – 4.1.6 Ibn Sīnā's Styles of Writing and Target Readership

#### 4.1.1 The Sources

When Ibn Sīnā came of age in the last quarter of the 4th/10th century, the philosophical and scientific activities in the Islamic world, and the Graeco-Arabic translation movement which they fostered and sustained, had been in progress for over two hundred years. The vast majority of Greek philosophical and scientific texts had already been translated into Arabic upon demand by those who engaged in these activities as both practitioners and sponsors, and in all intellectual fields works originally composed in Arabic developed research beyond the level of the translated texts (cf. PIW 1 § 3).

Ibn Sīnā's studies in Bukhara, as recounted in his biography above, were crowned by advanced research in the royal library of the Samanids, which he describes as follows in the Autobiography: 'I was admitted to a building with many rooms; in each room there were chests of books piled one on top of the other. In one of the rooms were books on the Arabic language and poetry, in another on jurisprudence, and so on in each room on a separate science. I looked through the catalogue of books by the ancients and requested those that I needed. I saw books whose very names are unknown to many and which

I had never seen before nor have I seen since. I read those books, mastered their teachings, and realised how far each man had advanced in his science. So by the time I reached my eighteenth year I had completed my study in all these philosophical sciences. At that time my retention of knowledge was better, but today my grasp of it is more mature; otherwise the knowledge is the same, nothing new having come to me since' (Gutas 2014 [\*70: 18]).

Ibn Sīnā's description of the Samanid library and its contents, apart from its invaluable testimony about library science in central Asia in the 10th century, is a significant witness to the spread and dominance of the philosophical and scientific culture that was created in Baghdad in the first two centuries after its foundation in 762. It was this culture that provided Ibn Sīnā both with an intellectual orientation of rationalism within which to work, and the resources – the philosophical material – with which to carry it out. It is important to realise this intellectual and social context in order to appreciate the direction of his work.

On his testimony, therefore, there is little doubt that during his education (but also later in his career) Ibn Sīnā had access to everything that we know was translated from Greek (for a list see PIW 1 § 3), and certainly to the entire intellectual production in Arabic since the beginning of Islam on all fields, especially on philosophy and theology (*kalām*). Specifically, on the Greek side, Ibn Sīnā mastered essentially the Aristotelian tradition. Of the extant authentic works of Aristotle, Ibn Sīnā knew all except the following which are not known to have been translated into Arabic (and hence were unavailable to him): *De motu animalium*, *De incessu animalium* (*Movement and Progression of Animals*), *Eudemian Ethics*, most of *Magna moralia*, most of *Politics*, and from the collection later known as *Parva naturalia*, the brief essay (or three essays) *De iuventute et senectute, de vita et morte, de respiratione* (*On Youth and Old Age, Life and Death, and Respiration*). The *Constitution of Athens*, which has survived accidentally in a papyrus roll discovered at the end of the 19th century, was not available in medieval manuscripts even in Greek. In addition, Ibn Sīnā had access to the whole range of commentators – even to some whose works have not survived in Greek – from Nicolaus of Damascus, Alexander of Aphrodisias, and Themistius to the late antique Alexandrian philosophers, notably Philoponus.

On Plato, on the other hand, Ibn Sīnā had partly peripheral information about his life and works, their order, and the subjects they treated, and partly access to paraphrases and summaries of some dialogues, and the synopses of some others by Galen. Of the authentic dialogues he had read none, for none had been translated in its entirety in Arabic (Gutas 2012 [\*168], Moseley 2017 [\*181]). Accordingly, he had a low opinion of Plato's philosophical worth

(Gutas 2014 [\*70: 323–324], Moseley 2017 [\*161: Chapter VII, 4a]). Of the later (Neo-)Platonic works, some pseudepigraphs apart, he knew essentially some Plotinus and Proclus, though in their case their works that were known circulated under the name of Aristotle, the *Theology of Aristotle* and *Liber de Causis* (*On Pure Good*), respectively (cf. PIW 1 § 1.4).

Of the other ancient schools of philosophy, finally, none had survived in any significant form until late antiquity, and neither did any of their works that would be available to the Arabic translators in the ninth century. Stoics, Epicureans, Sceptics, and Pythagoreans were known primarily through collections of the lives and sayings of the philosophers and, in the case of the Neopythagoreans, through the translation of a few works, some mathematical, some hortatory, and some spurious (Gutas 1994 [\*137]).

As for the Islamic tradition, and not only the philosophical and theological but also religious, literary, lexicographical, etc., Ibn Sīnā clearly had access to all the major texts, already while in Bukhara, if his report on the Samanid library is to be taken literally, and certainly in Iran after his move there.

4.1.2      The Classification of the Sciences and the Structure of Philosophy  
Equally important as the availability of the Graeco-Arabic and Arabic philosophical literature to Ibn Sīnā was the structure of this philosophical knowledge which he studied and internalised. The course of studies, or philosophical curriculum which he followed, as he reports in the Autobiography, is patterned according to the classification of the philosophical sciences in the Aristotelian tradition of Alexandria in late antiquity: logic comes first as the instrument, the *organon*, for the study of philosophy, followed by theoretical philosophy, which consists of physics (Aristotle's physical and zoological treatises), mathematics (the *quadrivium*: arithmetic, geometry, astronomy, music), and metaphysics. This is followed by practical philosophy: ethics, household management (i.e., economics) politics. This classification of the sciences, with much additional detail, Ibn Sīnā presented in his *Maqāla fī aqsām al-ḥikma* (*The Parts of Philosophy*; GS 1 [\*50]) and followed fully in *al-Šifā'* (*The Cure*).

The systematic presentation of the actual course of his studies in the Autobiography – regardless of its historicity, as noted above – and the same classificatory scheme of all philosophy presented in the *Maqāla fī aqsām al-ḥikma* are important for what they indicate about Ibn Sīnā's understanding and approach to knowledge. For it is significant to realise that he did not study these sciences as discrete entities, but as a structured whole. The philosophy of education exhibited in this curriculum was very influential in late antique times and throughout the Middle Ages in many languages. It largely set the framework both for the kind of knowledge in high learning that was to be



translated and transmitted and for the way in which it was to be studied. The ultimate origin of this classification and theoretical structure of the sciences was the edition of Aristotle's works in the 1st century BC, which were adopted in the following centuries not only for pedagogical purposes in instruction, but also as reflecting actual reality: the sciences are so classified because the order of the universe is so arranged (Gutas 1983 [\*125]). These aspects of the classificatory scheme were taken over into Arabic, where they were developed in particular by al-Fārābī (cf. PIW 1 § 8.4.1), just as they were later taken over and developed by Dominicus Gundisalvi in Latin. Ibn Sīnā was schooled – or schooled himself – in this curriculum with this understanding of the structure of knowledge and its correspondence to, or explication of, reality. Implicit in this, and at the same time explaining it, is that in this tradition doing philosophy meant being what we today call a scientist: the rational and logically verifiable understanding of the universe and its operation.

This traditional classification of the Aristotelian corpus and, by extension, of all philosophy, presented a blueprint for an all-encompassing book of knowledge, or 'an encyclopaedia of unified science' that was already hinted at in some later statements by Aristotle himself. 'In a perfect Aristotelian world, the material gathered in the corpus [of his writings] will be systematically presented; and the logical structure of the system will follow the pattern of the *Posterior Analytics*' (Barnes 1994 [\*300: xii]). Throughout the long history of Aristotelianism until Ibn Sīnā, followers and adherents never actualised this implicit comprehensive and systematic work of unified science; they wrote commentaries instead, or monographs, clarifying or treating various points which better expressed what this implicit 'encyclopaedia' in their minds contained. Ibn Sīnā broke the mould. He was the first philosopher ever to write about *all philosophical knowledge* (what he called simply *al-ʿilm*, knowledge) within a single composition as a unified whole. He developed – drawing on the preliminary works of al-Fārābī (cf. PIW 1 § 8.3.9) – the *summa philosophiae*. The first goal of his philosophical project was thus clear. Philosophy, he felt, needed to be presented as a whole, to reflect both the interrelatedness and interdependence of all knowledge, and its correspondence with reality.

#### 4.1.3 Ibn Sīnā's Understanding of the History of Philosophy and of his Own Place within it

The philosophical knowledge Ibn Sīnā received in this fashion, though structurally presented as a unified whole, was neither internally self-consistent nor complete. Diverging directions had been taken by mainstream philosophy, i.e. the Aristotelian and Platonic traditions, while not only are there discrepancies already within the surviving work of Aristotle but also the developments after

him brought about shifts and changes on the original teachings in the hands of the followers and commentators. Philosophers in the late antique Platonic tradition (the Neoplatonists), in addition to effecting substantive elaborations of Platonic philosophy, also developed the idea of Aristotelianism being completed by Platonism, thus introducing upon the trunk of the Aristotelian system an incongruous emanationist head, among other changes. This development is not unrelated to the power of the afore-mentioned Aristotelian curriculum to rationalise and integrate discrepant elements. At the same time, the view of the history of philosophy through an Aristotelian prism that it presents (what Moseley 2017 [\*161] called 'Aristotle-centric progressivism') must be a significant factor in the reception of Aristotelianism as the main philosophical tradition in Arabic, as described above, and the favouring of the translation of some books over others. In addition, the philosophers preceding Ibn Sīnā in Islam, faced with the same problems as he, had effected their own partial adaptations and accommodations.

While Ibn Sīnā had no way of knowing the particulars of this history of philosophy for the pre-Islamic period, he was fully aware of Aristotle's philosophical project and could tell where he thought it fell short, just as he could distinguish between it and what he would characterise as the subsequent developments and accretions, erroneous or not, in the hands of the commentators, among whom he would count the Neoplatonists (*al-Mašriqiyyūn*, *The Easterners* [\*24: 2–4]; Gutas 2014 [\*70: 35–41]). As Ibn Sīnā came to realise and acknowledge, Aristotle, the architect of the system, was correct in most things but not in all. Moreover, Aristotle had lived one thousand three hundred and thirty years before him (correctly calculated by Ibn Sīnā in the epilogue of the Sophistics part of *al-Šifā'*, Gutas 2014 [\*70: 28]), and knowledge, being cumulative over time, had advanced since then. More significantly, in Ibn Sīnā's opinion, successive generations of philosophers had followed customary practice in defending and trying to explicate what Aristotle said, instead of discovering the truth through critical thinking and philosophical analysis, and had added to and compounded the errors. The second task of his philosophical project, then, Ibn Sīnā concluded, was to bring philosophy up to date.

It is this understanding that enabled Ibn Sīnā to have a progressive view of the history of philosophy and set the framework for his philosophical project. For although the knowledge to be acquired, in itself and as represented by the totality of intelligibles thought by the eternal intellects of the celestial spheres, is a closed system and hence static, on a human level and in history it is evolutionary. Each philosopher, through his own syllogistic reasoning and ability to hit correctly upon the middle terms of syllogisms, modifies and completes the work of his predecessors, and reaches a level of knowledge that is an ever

closer approximation of the intelligible world and hence of truth itself. Ibn Sīnā was conscious of having attained a new level in the pursuit of philosophical truth and its verification, but he never claimed to have exhausted it all. In his later works he bemoaned the limitations of human knowledge and urged his readers to continue with the task of improving philosophy and adding to the store of knowledge.

#### 4.1.4 The Development of the 'Metaphysics of the Rational Soul'

Just as much as Ibn Sīnā was aware of the history of philosophy, he was equally conscious of his own historical moment and social context, which was yet a third factor motivating his holistic efforts. He was convinced that if philosophy is what we would call today a scientific system explaining all reality, it must certainly also explain religion and other manifestations of the contact between humans and the transcendent (i.e. the supernal world in his emanationist cosmology), all parts of reality in his time. Starting from an empirical stand (cf. § 1.4.3 below), Ibn Sīnā acknowledged that religious phenomena such as prophecy, miracles, eschatological beliefs, the efficacy of religious practices like prayer and fasting, and the insights of some mystics, were all real, just as he readily accepted the existence of other phenomena that we would call 'paranormal', such as veridical dreams, prognostication of the future by soothsayers, the ability by some to effect telekinesis, the evil eye, etc. At the same time, however, he set out to demystify these phenomena and understand their causes, explain how they happen in accordance with natural science, and describe the mechanisms of the human rational soul, the sole agent responsible for these phenomena, which bring them all about. Previous philosophers writing in both Greek and Arabic had touched upon some of these subjects but none had done this effectively. Ibn Sīnā dealt with these phenomena comprehensively within the parameters of the Aristotelian theory of the soul, which he greatly developed to accommodate the demands of this new subject, creating a veritable metaphysics of the rational soul, as it can in effect be called (Gutas 2014 [\*70: 288–296]; Gutas 2012 [\*222]). Thus if philosophy needed to be treated not piecemeal but comprehensively as an integral whole, and if it needed to be brought up-to-date through the elimination of its internal inconsistencies and anachronisms, it also needed to include within its compass the experience of social and religious reality of his time and place. This was the third task of his philosophical project.

#### 4.1.5 The Primacy of Logic

In the realisation of his project, Ibn Sīnā from the very beginning concentrated above all else on the verifiability of the knowledge he set out to acquire.

Verifiability depends on two interdependent factors for the person doing the verification: following a productive method and having the mental apparatus to employ that method and understand its results. The method Ibn Sīnā adopted already at the start of his career was logic, and the mental apparatus wherewith we know involves an understanding and study of the human soul. Thus logic and the theory of the rational soul as the basis for epistemology are the two motors driving Ibn Sīnā's philosophy. He wrote more, and more frequently, on these two subjects than on anything else.

Ibn Sīnā discovered logic early and, more importantly, realised that he was good at it. In the Autobiography he recounts how, when he must have been barely twelve years old, he stupefied his teacher by analysing the definition of genus better than anything the teacher had heard, and that he was better at forming concepts (*taṣawwartuhā*) than his teacher (Gohlman 1974 [\*117: 20–23]). There is no reason not to take this report at its face value, but that is unimportant. The reference here is clearly to one of the most basic logical theories of Ibn Sīnā, namely, that all knowledge is either forming concepts (*taṣawwur*) by means of definitions – i.e. in good Aristotelian fashion, realising the genus and specific difference of something – or acknowledging the truth (*taṣdīq*) of a categorical statement by means of syllogisms (see Lameer 2006 [\*569] on *taṣawwur* and *taṣdīq* in the history of logic in Islam). The inspiration here is clearly the beginning of the *Posterior Analytics*; Ibn Sīnā took this book seriously, following both the curriculum, in which this book was made the centre of logical practice, and especially his two Peripatetic predecessors in Baghdad, Abū Biṣr Mattā and al-Fārābī, who made it the cornerstone of their philosophy and advertised its virtues (cf. Gutas 1983 [\*125], Marmura 1990 [\*296], and PtW 1 § 7.1 and 8.4.2).

#### 4.1.6 Ibn Sīnā's Styles of Writing and Target Readership

If Ibn Sīnā's philosophical project involved putting together a unified theory of everything in which he would integrate in a self-consistent whole, based on Aristotelian logic, all parts of philosophy as traditionally transmitted, and which would represent all knowledge and account for all reality, including religious reality, then the ways which he devised and employed to communicate this knowledge were no less global in their aspirations. To a large extent this is to be expected from a thinker who dwelt long and hard on the modalities of the transmission and reception of knowledge from all directions, transcendent and mundane, and was alive as much to the mechanics of every nuance of this process as to the range and subtleties of literary style. But it is still amazing to witness the numerous compositional styles with which he experimented and the different registers of language that he used for each. This is not accidental

or routine, but bespeaks the fact that communicating intelligibly this knowledge, both to his contemporaries at their various levels of preparation and background *and* to posterity, was part of his philosophical project itself. More than most other indicators, this fact alone shows that Ibn Sīnā was the second philosopher after Aristotle to have as pronounced a sense of advancing philosophy to a qualitatively higher level and the corresponding need to communicate it broadly and systematically (cf. Gutas 2014 [\*70: xx – xxi]; for bibliographic information about his works cf. § 1.3 above and Gutas 2014 [\*70] Appendix).

At a very basic level, Ibn Sīnā brought to fruition a development that had been in progress for centuries, first in Greek and then in Arabic, by putting between the covers of a single book the entire philosophical curriculum: he developed the *summa philosophiae*. None had done this before him. In Roman imperial and late antique times, philosophy was done primarily in the form of commentaries on Aristotle and Plato, with the occasional essay or book on a single subject. Ibn Sīnā's closest predecessor in this form of writing was al-Fārābī, whose two major works, significantly both entitled *Principles – Mabādī' āra' ahl al-madīna al-fāḍila* (*The Principles of the Opinions of the Inhabitants of an Excellent City*) and *Mabādī' al-mawǧūdāt* (*The Principles of Existing Things*; cf. PIW 1 § 8.3.9) – present a synoptic and interconnected account of the universe, descending from the One through the celestial spheres to terrestrial phenomena and then all the way down to social formations among humans. Yet al-Fārābī's purpose in this is not to cover all the sciences but to trace the devolution of being from the first principle downwards in order to account for and explain the principles of existing things. In the case of Ibn Sīnā, however, his philosophical summae either actually do present all the sciences, as in the *Šifā'*, or intend to cover them but leave them out for reasons of expediency. Ibn Sīnā wrote eight such summae, ranging in length from a booklet he called *Uyūn al-ḥikma* (*The Elements of Philosophy* [\*52]) to the monumental *al-Šifā'* [\*54].

*Al-Šifā'*, which in the Cairo edition (1952–83) runs to twenty-two large size volumes, contains the most extensive coverage of philosophy he ever wrote. In it he treated all subjects in the curriculum. The work is methodical and argumentative in its approach, discussing all aspects of each issue that had been raised since Aristotle, and is written in a fine expository prose that subsequently became the standard in philosophy. Its contents are listed in detail in the description of his works at § 1.3.2 above.

Ibn Sīnā rewrote the summa, on what he considered the controversial subjects in philosophy – logic, physics, and metaphysics, thus bypassing the mathematical sciences and most of practical philosophy – in *al-Mašriqiyyūn* (*The*

*Easterners*) or *al-Ḥikma al-mašriqiyya* (*Eastern Philosophy*), which he explicitly declared to be a doctrinal work intended to present the truth. The language is the same as in *al-Šifā'* – indeed much of it is taken verbatim from that work – but the historical discussions are eliminated and many arguments are recast to follow the doctrinal rather than historical presentation. The different audiences – or the different interests of the same audience – to which these two works are addressed can be seen in their varied approaches to the subject, even as the doctrine presented in both is the same.

For a somewhat less philosophically adept, but equally serious, audience he wrote, upon their request, the short *al-Nağāt* (*The Salvation*), a one-volume pastiche of previous expository writings of his that aimed to present, according to those who commissioned it, the indispensable minimum on logic, physics, mathematics, and metaphysics. Though strictly speaking not a summary of *al-Šifā'*, given its components it has often been treated as such.

Similar to *al-Nağāt* in its purpose and scope, and roughly contemporaneous, was *Dānišnāma-yi 'Alā'* (*Philosophy for 'Alā' al-Dawla*), covering logic, metaphysics, and physics (in that order), while al-Ġūzġānī added the parts on mathematics. What is astonishing about this work though, is that, following the request of his final patron and protector, the Kākūyid prince 'Alā' al-Dawla, it is in Persian, the first philosophical work to be composed in neo-Persian. In a single stroke, Ibn Sīnā fashioned modern Persian philosophical prose.

The earliest summa he wrote was the one commissioned by 'Arūḍī in his home town. We may be thankful to this gentleman insofar as he gave Ibn Sīnā an occasion to put together in a unified whole all the notes on the entire philosophical curriculum he had taken during his studies and alerted him to the fact that it can be meaningfully done. Only part of this summa survives, but there is enough of it to show that although it was a youthful work it was not amateurish, for Ibn Sīnā himself copied passages from it in later compositions. This supports Ibn Sīnā's claim in the Autobiography to have mastered the whole structure of philosophy by his eighteenth birthday.

With the one-volume summa entitled *al-Hidāya* (*The Guidance*), written in his mid-career for his brother while in political prison, according to al-Ġūzġānī's biography, there is perceptible change in the expository prose toward a more literary style. This tendency will find its full expression in his last summa, *al-Išārāt wa-l-tanbihāt* (*Pointers and Reminders*).

In compendious fashion he also wrote *Uyūn al-ḥikma* (*The Elements of Philosophy*), a succinct work on logic, physics, and metaphysics – sixty pages in Badawī's edition [\*52] – which lives up to its title and which Badawī likened to Lombard's *Sententiae*. It is not known for whom or on what occasion he wrote it, but it is almost like an aide-mémoire, which may give a clue to its purpose.

It was subjected to a massive commentary of seven hundred and thirty pages by the influential Ash‘arī theologian Faḥr al-Dīn al-Rāzī (d. 606/1210) – a purposeless undertaking, one would have thought, insofar as anyone who had difficulty with the tersely expressed statements in *‘Uyūn al-ḥikma* could have found them all expounded at great length by Ibn Sīnā himself in *al-Šifā’*. But laconism, and the inevitable attendant obscurity, invite comment and preoccupation with an author’s work, keeping it alive for generations. It is an effective technique to communicate one’s thought to posterity.

That such a consideration may have actually been part of Ibn Sīnā’s strategy of communication is shown by his very last partial summa, *al-Išārāt wa-l-tanbīhāt* (*Pointers and Reminders*). The work covers syllogistic logic, metaphysics, and physics, but in two parts this time, with metaphysics and physics treated together in the second part whose subjects are selected for their relevance to the main theme of the work, essentially religious, the generation of the universe and man’s place in it. It is written entirely in the allusive, suggestive, and compact style indicated by its title, a style expressly developed by Ibn Sīnā for this purpose. It consists of presentation by means of discrete brief paragraphs, labelled either ‘pointers’ (*išārāt*) or ‘alerts’ and ‘reminders’ (*tanbīhāt*), and occasionally alternating with other labels such as ‘censure’ (*taḍnīb*) or ‘completion’ (*takmila*). The pointers present philosophical theory briefly, pointing to its various aspects, and in the reminders again briefly alert the reader about a doctrinal point that would help him round out the argument for himself and come to an understanding of the philosophical issue at hand. The language is ornate, with frequent use of rare words culled from literature, while the syntax at times is complex to the point of obscurity, pushing the regular paratactic structure of Arabic to its limits. Later commentators, of whom there were many – as Ibn Sīnā evidently intended – regularly include in their comments lexicographic explanations and on occasion feel the need, like professors in an Arabic language seminar, to spend time parsing a particularly abstruse sentence. The whole is breathtaking and quite a tour de force; there is nothing else like it in Arabic philosophical literature.

A topos in the Greek introductions to the study of Aristotle in late antiquity, taken over also in Arabic, and intended to explain why Aristotle was allegedly difficult to understand, was that the philosopher had cultivated obscurity deliberately in order both to discourage the unworthy from taking up philosophy and to train students. Ibn Sīnā taps into this tradition to justify and explain his procedure by pointers and reminders both in this work and in other contexts. This topos, whose background and development are well known (Gutas 2014 [\*70: 256–266]), was part of the philosophical culture inherited into Arabic from late antique Alexandria, and had to be acknowledged. However, a misunderstanding of the history and function of this topos in Arabic philosophical

literature gave rise, in the second half of the twentieth century, to the notion, first proposed by Leo Strauss, that these philosophers expressed themselves cryptically out of fear of persecution by the religious authorities (cf. PIW 1, Introduction, Section 1). But this interpretive approach is baseless (Leaman 1980 [\*119], Tamer 2001 [\*148], Gutas 2002 [\*149: 19–25]). Historically there was never any question, in the more than two centuries of the Graeco-Arabic translation movement, of hiding philosophy from anybody; to the contrary, the efforts of philosophical authors were directed at popularising philosophy in the intellectual arena. With the style of pointers and reminders, Ibn Sīnā hit upon the perfect formula to wed his philosophical system as exposed in detail in *al-Šifāʾ* to a means of communicating it to the widest possible sophisticated audience in the Islamic societies of his time. The *Išārāt* were wildly popular and the subject of numerous commentaries through the centuries, while *al-Šifāʾ*, by contrast, though dutifully copied in many surviving manuscripts and diligently studied by all serious students of philosophy, had almost no commentaries for all parts but the metaphysics. A (possibly) unintended consequence of this popularity of *al-Išārāt wa-l-tanbīhāt* was that it restricted philosophical discourse, logic apart, to the subjects treated in the Physics and Metaphysics section, essential to theology. In the centuries following Ibn Sīnā and with the Seljuq take-over of political authority in the eastern Islamic world during the so-called Sunni restoration, the intellectual climate changed from toleration and even promotion of open-ended research to literalist adherence to the doctrines of revelation. This conservative attitude was best expressed and aided by al-Ġazālī who, in addition to excommunicating (*taḳfīr*) the philosophical positions as apostasy, argued for the imposition of legal sanctions – the death penalty – to those guilty of adherence to them. Philosophically minded theologians took over the subjects in *al-Išārāt*, and, with various modifications to Ibn Sīnā's Peripatetic positions in order to render them consonant with Islamic tenets, fashioned a new genre of simulated philosophical writing – paraphilosophy – what was eventually called by the practitioners 'Islamic philosophy' (*ḥikma islāmīyya*; Gutas 2018 [\*596]). To a large extent, this effectively put a stop to open-ended philosophical discourse as it was practiced until Ibn Sīnā – although the details of the later development are awaiting investigation (cf. PIW 3 [in preparation]).

Ibn Sīnā was not content merely to engage the attention of this wider public by means of his allusive 'pointers and reminders' style. He wanted everybody to be exposed to his philosophy, so he also wrote allegories, consonant with his belief, otherwise widely shared by philosophers both in his time and before, that people vary in mental acuity and that those on the lower end of the scale who cannot understand the expository language of philosophy respond to information transmitted symbolically – which is, in essence, the reason why a



prophet's developed internal sense of imagination translates into symbols the intelligibles it receives from the supernal world in syllogistic order, containing the middle terms, and generates the holy texts of revelation. He wrote two such allegories, *Ḥayy b. Yaqzān* (*Alive, Son of Awake*), and *al-Ṭayr* (*The Bird*). Meticulous in their construction, he was careful to have every element in his allegory correspond precisely with a philosophical concept (Goichon 1959 [\*108]). In the same vein he wrote some smaller treatises in which he explained certain theological concepts like destiny (*qadar*), and interpreted a number of verses from the Qur'ān. Philosophical interpretation of the Qur'ān had already started with the first philosopher, al-Kindī (Janssens 2004 [\*155]; cf. PIW 1 § 4.4.3), but Ibn Sīnā elevated it to new levels and effectively ensured its incorporation into mainstream Quran interpretation (*tafsīr*), as the philosophical content of the huge commentary by the same Faḥr al-Dīn al-Rāzī shows. In this fashion, Ibn Sīnā brought philosophical ideas closer to the masses.

Equal in extent to the philosophical summae were two massive works, each in about twenty volumes, written in the age-old traditional style: the text of Aristotle followed by comments. The first, *al-Ḥāṣil wa-l-maḥṣūl* (*The Available and the Valid [of Philosophy]*), was an early work commissioned by a neighbour in Bukhara, that has completely disappeared; Ibn Sīnā says in the Autobiography that the neighbour never lent it to anyone for copying. The second, *al-Inṣāf* (*Fair Judgment* [on the various philosophical doctrines]), fared only slightly better; the first draft was lost in some military upheaval, and the few surviving sections would seem to come from disciples' notes.

Despite the huge size of these works, though, commentary writing is not what Ibn Sīnā readily did. Commentaries were the genre par excellence of philosophical writing in late antiquity, and this practice was continued in Syriac and then in Arabic with the Baghdad Aristotelians. Ibn Sīnā consciously departed from this practice. When he was asked by al-Ġūzġānī to write commentaries on Aristotle, he said that he would write about what he thought was sound, composing *al-Šifā'* – and experimented with the different genres enumerated above. For the first of his commentaries, *al-Ḥāṣil wa-l-maḥṣūl*, we have absolutely no information other than its title, which itself may imply a critical attitude on Ibn Sīnā's part. But in the case of the second, *al-Inṣāf*, it is clear that Ibn Sīnā engaged in it for a purpose other than the traditional, so that it was more of an adjudication than commentary. In this way, again, it set the stage for a new philosophical genre in Arabic that was to gain some traction in subsequent centuries, the *muḥākama* (adjudication or arbitration). In *al-Inṣāf*, Ibn Sīnā divided philosophers into two camps, the Westerners (the traditional Aristotelians of late antiquity and Baghdad) and the Easterners (himself, working in Ḥurāsān in the East), and went along commenting on the Aristotelian text by 'judging fairly', he claimed, between the views of the two

camps, but actually presenting his own system (that of 'the Easterners') in the most traditional of ways, for those who preferred commentaries. It was in this vein that he also wrote *al-Mašriqiyyūn* (or *al-Ḥikma al-mašriqiyya*), indicating that this was the new appellation he wanted to give to philosophy. However, in this final regard, it appears that Ibn Sīnā met his contextual limits. This was too much neoterising for his milieu to take; the complete break with tradition that this step entailed was not tolerated, and Ibn Sīnā in his final years tacitly disowned the idea of the 'Easterners', and wrote *al-Išārāt wa-l-tanbihāt* instead.

In expository prose and in a more conventional style, Ibn Sīnā of course composed monographs and essays on specific subjects, notably on the soul and its faculties and especially on the metaphysics of the rational soul, in which he dealt with traditionally religious phenomena within the context of Aristotelian psychology, as mentioned above. But he also dealt with whatever other subjects came up or were requested of him, including an essay on phonetics, *Asbāb ḥudūt al-ḥurūf* (*The Causes of the Articulation of the Letters of the Alphabet*).

Traditional educational practice in the Islamic world, from elementary school onward, heavily involved memorization of the texts to be learned, with the Quran and the prophetic traditions (*ḥadīth*) taking pride of place. The practice extended to all textbooks in school, including, for example, grammar books. Poetry, with meter and rhyme, is quintessentially memorisable, and accordingly it was not long before didactic poems – poems setting in rhyming verse the entire subject to be learned – became common in educational technique. The metre used in Arabic was the one called *rağaz*, which was not considered proper poetry by the specialists precisely because of its broad flexibility. In its most common form it consisted of six di-iambic feet in a line of two rhyming hemistichs. Ibn Sīnā, wishing to reach students of all ages and levels, composed a number of poems in this meter, most famously one on logic (the entire *Organon*) in 290 verses, and another on medicine in 1,326 verses, which was commented upon by a number of scholars, notably Ibn Rušd. A brief poem in 20 verses, known as *al-'Ayniyya* (*Poem rhyming in 'ayn*), on the descent of the soul into the body and its ascent out of it, composed in Ismā'īlī circles soon after his death and attributed to him, became quite popular in subsequent tradition and was frequently commented upon. The bibliographies list some other such poems by Ibn Sīnā on medicine and one called *al-Ġumāna al-ilāhiyya fī l-tawḥīd* (*The Divine Pearl on the Oneness [of God]*; GM 9) in 334 verses, but their authenticity has yet to be established.

Indicative of the vast capacity of Ibn Sīnā's intellect and uncanny ability to mind every detail is his project, after the compilation of *al-Šifā'*, to update it yearly with new discoveries, resulting in a work which he meant to call *al-Lawāḥiq* (*Appendices*). This was apparently never written as such, though

there are two collections of precisely such notes, comments, and responses to questions by students put together by disciples, circulating in the manuscript tradition under the titles of *al-Mubāḥaṭāt* (*The Discussions*) and *al-Ta'liqāt* (*Notes*). No less important than *al-Šifā'*, they provide significant information about the development of Ibn Sīnā's ideas on a number of problems during his final years.

Finally, and related to the preceding, is the considerable correspondence that has come down to us. These were occasional pieces, written usually in response to some crisis in his personal and professional relations. Reisman 2013 [\*175] has presented sufficiently the social and historical contexts in which they were written. They can be called personal and controversial writings, but they frequently deal with real philosophical issues. More than anything else they provide a comprehensive view of the integral position that doing philosophy occupied among the intellectual and political elites in Ibn Sīnā's lifetime.

Ibn Sīnā sought to express his new synthesis of philosophy in a way that would also respond to philosophical concerns of his age and society, and this explains his experimentation with the wide variety of compositional styles listed above. He communicated with everybody, not only among his contemporaries but also with an eye to posterity. Perhaps the most telling indication of his success is that after him philosophers no longer read Aristotle and Galen, but Ibn Sīnā. By the same token, however, he was responsible for the final integration and naturalisation of Greek philosophical thought in Islamic intellectual life. His influence was colossal and it determined high intellectual culture for centuries to come, as we shall see below in the chapter focussing on his influence (§ 1.5) (cf. also Gutas 2002 [\*563] and Langermann 2009 [\*59]).

## 4.2 *The Rational Soul, in Physics and in Metaphysics*

*Dimitri Gutas*

4.2.1 The Substance and Function of the Rational Soul and its Relation to the Intelligibles – 4.2.2 Intellection – 4.2.3 The Levels of Intellection; the Absence of Mysticism – 4.2.4 Prophecy and 'Paranormal' Phenomena – 4.2.5 Practical Philosophy: Ethics and the Religious Law, the Role of Medicine, Eschatology – 4.2.6 Practical Philosophy: Politics

### 4.2.1 The Substance and Function of the Rational Soul and its Relation to the Intelligibles

The subject that literally 'animates' Ibn Sīnā's philosophical system and lends to it unity and coherence is his theory of the rational soul, i.e. the part, or

rather, aspect of the soul (since the soul is an immaterial and indivisible substance) which is distinctively human. The background of this development lies in Aristotle's *De anima* (*On the Soul*, III 4–5 and following chapters), and the long tradition of commentaries and elaborations in the Greek tradition, Aristotelian and (Neo-)Platonic, which it generated. This tradition was continued, in Arabic this time, in the work of al-Fārābī (d. 339/950), in whom noetics plays also an integrating role, and it was perfected in Ibn Sīnā, who considered himself a successor to al-Fārābī, at least certainly in this respect. The study of the different functions of the rational soul in Ibn Sīnā unites most branches of his philosophy and in addition incorporates into the same rational whole such traditionally religious subjects as prophecy, revelation, miracles, theurgy, etc. It therefore constitutes more than a mere theory of the soul as discussed in physics (natural science) but is a veritable metaphysics of the rational soul, and it clearly appears as the primary purpose and goal of all philosophical praxis.

The rational soul, according to Ibn Sīnā, is an immaterial substance subsisting by itself, and it is neither imprinted in the human body nor in anything else corporeal; it is completely separable and abstracted from matter. This he establishes empirically by the self-awareness that the rational soul has of its existence, together with its independence and substantiality in the famous 'flying man' argument. Ibn Sīnā calls it an 'argument' (*huġġa*) or 'reminder/alert' (*tanbīh*) since, based as it is on empirically prior knowledge, it cannot be a 'proof' (*burhān*). According to this argument, a man is assumed to have been created perfect and all at once, and he falls or is suspended in the air spread-eagled, without his limbs touching each other and without feeling the resistance of the air. He has thus no sensual perception of any kind, and is aware only of the existence of his self, or necessarily affirms the existence of his self (*yutbitu wuġūda dātihi, thubūt al-annīyya*) (for references to the texts and the considerable scholarly discussion of this argument, see Mühlethaler 2009 [\*262]; cf. also Michot 1997 [\*142]).

The rational soul comes into existence together with the human body, not before, and it maintains a certain association with it as long as a person is alive. This association Ibn Sīnā defines in strictly Aristotelian terms by calling the rational soul 'the first entelechy of a natural body possessing organs', and explains the 'rational' aspect of the soul by adding, 'insofar as it is up to it to perform acts by rational choice and deliberative discovery, and insofar as it perceives universals' (*Šifā', al-Nafs* [\*54.2.6: 40 Rahman], corresponding to Aristotle, *On the Soul* II 1 412b5–6). The rational soul thus has two functions, one theoretical, perceiving the universals, and another practical, making rational choices and deliberations that lead to actions. The theoretical part perceives the supralunar world of metaphysical reality – the intelligibles, as

will be stated below – and the practical part manages the individual's relationship with the sublunar world of natural coming to be and passing away. Elsewhere Ibn Sīnā elaborates on the function of the rational soul by saying that its association with the body is to be understood as the relation of the wielder of an instrument to the instrument, not as that of a thing to its receptacle; the rational soul, in other words, is not *in* the body but is in a position such that, through its perception of the universals and the rational choices that flow therefrom, it manages and coordinates the body (*Risāla fī l-Kalām 'alā l-naḥs al-nāṭiqā*, in Gutas 2014 [69: 70]).

The substance which is the rational soul is immortal: when the body with which it was associated dies, the rational soul survives either in happiness or in misery, depending upon whether, while in association with the body, it had actualised, or perfected itself. The actualisation of the rational soul is described, in accordance with its dual function, as having had the correct knowledge and having performed the correct actions. An analysis of what and how the rational soul knows leads to Ibn Sīnā's epistemology as well as to his metaphysics, ontology, and cosmology, while the question of its actions, dependent as they are on the medically determined functions of human biology, leads to his understanding of ethics, of paranormal phenomena, of religious manifestations, and eventually of politics.

Ibn Sīnā understands the concept of correct knowledge along Aristotelian lines, in that he considers happiness, the Aristotelian εὐδαιμονία (*sa'āda*) to consist of the eternal and unobstructed contemplation of the intelligibles, as follows. In the emanationist scheme of Ibn Sīnā's Ptolemaic cosmology, there proceeds from the First, or the necessary being (*wāḡib al-wuḡūd*), one intellect, from which then there proceed in succession the remaining intellects of the celestial spheres with their bodies and souls. The last in this procession is the sphere of the terrestrial realm and its intellect, known as the active intellect (*al-'aql al-fa'āl*), with which the human rational soul can be in contact (*Fī l-Aḡrām al-'ubwīyya* [\*96]). Since all these intellects are immaterial and fully actual without a trace of potentiality in them, their activity can be nothing else but incessant intellection. Their objects of thought are the intelligibles, which are universal concepts and the principles of all particulars, or, as Ibn Sīnā says, 'the forms of things as they are in themselves'. They express the order and contents of the universe, its emanation from the necessary being, the principles of one and the many, necessity and contingency, motion and rest, etc., and the mathematics; in other words, the intelligibles as a whole comprise the contents of the sciences of theoretical philosophy: physics, mathematics, and metaphysics.

It is significant to note that these intelligibles, though thought atemporally and all together by the celestial intellects, nevertheless have an essential order in which they are thought by them. This is the order of the terms of the propositions constituting the conclusions of the syllogisms which express the individual intelligibles (*al-Mubāḥaṭāt* [\*61: §237 Bīdārfar]; transl. in Gutas 2014 [\*70: 188, L12 § 4]). Thus, the essential order of the intelligibles is syllogistic, i.e. according to the consecutive steps of the arguments which, starting from the very first premise, proceed successively to prove the rest of the statements describing reality. And since these intelligibles collectively represent the structure of the universe as discussed in theoretical philosophy, the essential structure of the universe is also syllogistic (Gutas 2014 [\*70: 198]).

Human happiness consists, then, of the rational soul contemplating, i.e. perceiving, these intelligibles, in imitation of the immortal intellects of the celestial spheres. An analysis of the relation which the human intellect bears to these intelligibles and of the ways in which it can acquire them reveals Ibn Sīnā's epistemology.

The human rational soul, as the intellect (*'aql*), has four different relations to the intelligibles. When it is first associated with a human being, as in the case of an infant, its relation to the intelligibles is one of pure potentiality: it has the capacity to acquire them but it has not done so yet. When it has this relation to the intelligibles, it is called 'material intellect' (*'aql hayūlānī*), in the sense that it is potential like pure matter, not because it has any mixture with matter. When the intellect has later acquired the primary intelligibles, which are axiomatic and self-evident universal concepts, its relation to the secondary intelligibles (the intelligibles described above) is one of possible acquisition, one in which it has the disposition to acquire them; it is then called 'dispositional intellect' (*'aql bi-l-malaka*). When the relation of the intellect to the intelligibles is that it has at some point acquired them and is therefore able to call them to presence whenever it wishes but is not at the moment thinking them, it is called 'actual intellect' (*'aql bi-l-fi'l*). And when its relation to them is that it is actually thinking them, it is called 'acquired intellect' (*'aql mustafād*) (*Šifā'*, *al-Nafs* [\*54.2.6: 48–50 Rahman]; cf. Hasse 1999 [\*250]).

#### 4.2.2 Intellection

The central question in the discussion of the relation of the human intellect to the intelligibles is naturally the precise way in which it acquires them, i.e. how the intellect proceeds from being a material and dispositional intellect to an actual or acquired intellect. Ibn Sīnā answered this question by adhering closely to the Aristotelian logical tradition. Conclusions of syllogisms, i.e. the

propositions that express the intelligibles, are explained and understood when the middle term that is common to the two premises of the syllogism is found (i.e. if we seek to verify the proposition, when seen as a conclusion, 'A is C', we must discover or hit upon a suitable B to construct a syllogism of the form, 'A is B, B is C, therefore A is C'). Ibn Sīnā built his epistemological theory of theoretical knowledge on the discovery of the middle term; but since human happiness both here and in the hereafter depends on knowledge of the intelligibles, as already mentioned, he erected his soteriology, or the purpose of the philosophical praxis, also on the same concept.

The modalities of discovering the middle term, or more generally thinking the intelligibles, occupied Ibn Sīnā throughout his career and he constantly refined the concept and elaborated on its implications. In section after section and chapter after chapter in numerous works he analyses not only questions of formal logic but also the very conditions operative in the process of hitting upon the middle term: how one can work for it and where to look for it, and what the apparatus and operations of the soul are that bring it about (see the discussion in Gutas 2001 [\*253]). He charts in great detail the operations of all the senses, and especially the internal senses – common sense, imagination, estimation, etc. (cf. § 1.4.2.1 below) – and how they can help or hinder the intellect in hitting upon the middle term and perceiving intelligibles more generally. In order to enable the internal senses, which, being resident in the brain, are biological operations, to function in ways that support the intellect, Ibn Sīnā discusses both behaviour and pharmacological means that can affect positively the humoral temperament of the body and bring it to a state of equilibrium so that the intellect can function unencumbered by extraneous considerations and preoccupations. His references to prayer and wine drinking in the *Autobiography* are intended to indicate this aspect of intellection.

To begin with, the intelligibles exist actually, i.e. are the objects of actual and continuous intellection, only in the celestial intellects, as already mentioned, insofar as their intellection constitutes the eternal activity of these intellects. This means that all the intelligibles which may serve as middle terms, depending on the syllogism to be constructed, also exist in the celestial intellects and, more specifically for the purposes of human knowledge, in the intellect of the sphere of the terrestrial realm known as the active intellect. These 'middle term intelligibles' cannot uninterruptedly exist anywhere else: Ibn Sīnā will not accept Platonic ideas with which to identify them, and they obviously cannot exist in the human intellect *while it is not thinking them*. In other words, once acquired, they cannot be stored in the intellect because being stored in the intellect, which is an immaterial and hence indivisible substance, is in their case identical with their being thought by the intellect. But since we obviously

do not think them all the time, they must exist somewhere else, and the only place is in the active intellect. Consequently, discovering the middle term for the human intellect means acquiring it from the active intellect (hence the appellation of this stage of intellection, ‘acquired intellect’, *al-‘aql al-mustafād*).

Ibn Sīnā calls this process of acquisition or reception a ‘contact’ (*ittiṣāl*) between the human and active intellects (Gutas 2022 [\*277]). This process of contact Ibn Sīnā described in two ways, depending on whether he was talking from the point of view of the active intellect or the human intellect. In the former case, the process is what he called the ‘divine effluence’ (*al-fayḍ al-ilāhī*), or flowing of the intelligibles upon the human intellect (Lizzini 2011 [\*450]). From the point of view of the human intellect, however, Ibn Sīnā described the process of discovering the middle term as guessing it correctly (*ḥads*). Inspired by Aristotle’s discussion in the *Posterior Analytics* (I,34 89b10–11) about acumen as being the ability spontaneously ‘to hit correctly upon (*eustochia* in Aristotle’s Greek, *ḥusn<sup>u</sup> ḥads<sup>in</sup>* in the Arabic translation) the middle term in an imperceptible time’, Ibn Sīnā made it the cornerstone of his epistemology. This he did for three reasons. First, it made the core of syllogistic verification by means of hitting upon the middle term the one indispensable element of all certain intellectual knowledge; second, it explained why people differ in their ability to apply this syllogistic method by stating that they possess varying talent for it, as with all human faculties, which enabled Ibn Sīnā to explain in a naturalistic manner prophecy and similar phenomena; and third, it was consistent with and mirrored, as it had to, the syllogistic structure of knowledge possessed by the celestial spheres, complete with middle terms, as mentioned above.

Since then all the middle terms are thought by or exist in the active intellect, the question is how humans can gain access to them, or how exactly guessing them correctly works. Ibn Sīnā initially maintained that all learning, i.e. all acquisition of the middle terms, is accomplished either through instruction by a teacher or by oneself by guessing them correctly; but since he realised that instruction ultimately was also dependent on the theoretical very first teacher who had necessarily to guess them by himself, he later dropped mentioning instruction and introduced instead ‘thinking’ (Gutas 2001 [\*253]). Thinking, based on abstraction and logical analysis, prepares the intellect to hit upon the middle term or make ‘contact’ (*ittiṣāl*) with the active intellect. As he describes the process in a hunting metaphor in *al-Mubāḥaṭāt*, thinking casts a net, in the probable area where the middle term might be, in order to snare it (*al-Mubāḥaṭāt* [\*6r: §600 Bīdārfar, transl. in Gutas 2001 [\*253: 27]). The wording itself of this acquisition of knowledge by the human intellect – ‘contact with the active intellect’, or receiving the ‘divine effluence’ – has misled interpreters



of Ibn Sīnā into thinking that this ‘flow’ of knowledge from the divine to the human intellect is automatic and initiated by the active intellect – i.e. is due to God’s grace – or it is ineffable and mystical. But this is groundless; the ‘flow’ has nothing mystical about it since it just means that the intelligibles are permanently available to human intellects who seek a middle term or other intelligibles at the end of a thinking process during which they touch, or come into contact, with the depository of the intelligibles, the active intellect.

The main source of the misunderstanding was the mistranslation of the word *ittiṣāl* as ‘connection’, ‘conjunction’, or even ‘union’ (cf. Davidson 1992 [\*246: 89; 103–105], Geoffroy, Janssens, Sebtī 2014 [\*176: 96], and many others); an impossible notion for Ibn Sīnā, since the rational soul, which alone survives the death of the body, is the carrier of individuality which justifies the concept of posthumous bliss or misery and cannot be dissolved in a conjunction or union with the active or any other celestial intellects. In actual fact, the use of the ‘touching’ metaphor by Ibn Sīnā to describe the relation between thinker and thought at the moment of intellection was manifestly suggested to him by Aristotle, who states in *Metaphysics* (Book Λ, 1072b21) that the intellection of the intelligible by the intellect happens by the one ‘touching’ the other (θίγγανων). This Greek word was translated, accurately in the Arabic translation available to Ibn Sīnā, as *yulāmisuhu*, and Ibn Sīnā uses the same word in his commentary in the *Inṣāf* on that Aristotelian passage to explain the word *ittiṣāl* (Geoffroy, Janssens, Sebtī 2014 [\*176: 59, 152 and 59, 162]). The metaphor thus means in Ibn Sīnā what it meant in Aristotle, that the apprehension of the intelligible by the intellect is infallible and direct (Gutas 2016 [\*73: n.7, after W. D. Ross], and, more fully, Gutas 2022 [\*277]).

Furthermore, Ibn Sīnā is quite explicit about the need for the human intellect to be prepared and *demand* to hit upon a middle term or actively *seek* an intelligible in order to receive it: ‘The active principle [i.e. the active intellect] lets flow upon the [human rational] soul form after form *in accordance with the demand by the soul*; and when the soul turns away from it [i.e. the active intellect], then the effluence is broken off’ (*Ṣifāʾ, al-Nafs* [\*54.2.6: 245–246 Rahman]; cf. Hasse 2013 [\*265: 116–117]). As a matter of fact, the whole concept of the emanation of the intelligibles for the purpose of intellection is never developed in Ibn Sīnā beyond this mere description of the flow, while the reasoning process, including abstraction, culminating in the discovery of the middle term is analysed thoroughly and in depth in a number of works (he describes the process in his Autobiography, Gutas 2014 [\*70: 16–17]; examples of his procedure *ibid.* [\*70: 351–358], and Gutas 2012 [\*263: 425–431, Appendix]). From this point of view, the active intellect appears to serve no other purpose in the process of human intellection than to be the depository of the intelligibles,

making them available to the inquiring human intellect; otherwise it is completely inert.

#### 4.2.3 The Levels of Intellection; the Absence of Mysticism

The establishment of the syllogistic structure of all theoretical knowledge as thought by the celestial intellects enabled Ibn Sīnā to unify and integrate the different levels of its acquisition by the human intellect within a single explanatory model and accordingly de-mystify religious and paranormal concepts like revelation, inspiration, enthusiasm, mystical vision, soothsaying, etc. At the basic level beyond the empirical perception of reality, the intellect grasps universal forms or intelligibles directly if they are abstract in themselves (like God and the supralunar intellects), or by abstracting them from matter if they are forms of material objects (Hasse 2013 [\*265: 114–115]). On the basis of these intelligibles there is then, first, discursive thinking, in which the intellect proceeds to construct syllogisms step by step with the aid of the internal and external senses, and acquires further intelligibles by hitting upon the middle terms (Gutas 2001 [\*253] on intuition and thinking). Second, at a higher level, Ibn Sīnā analysed non-discursive thinking, which takes no time and grasps its object in a single act of intellection, though the knowledge acquired is still structured syllogistically, complete with middle terms (again, because in its locus, the active intellect, it is so structured) (Adamson 2004 [\*255]). Ibn Sīnā also affirmed, third, a facility for or habituation with intellection, which he called direct vision or experience (*mušāhada*) of the intelligibles. It comes about after prolonged engagement with intellectual techniques through syllogistic means until the human intellect is not obstructed by the internal or external senses and has acquired a certain familiarity or ‘intimacy’ with its object, ‘without, however, the middle term ceasing to be present’. This kind of intellection is accompanied by an emotive state of joy and pleasure (Gutas 2006 [\*257: 365–369]). And fourth, the highest level of intellection is that of the prophet, for which Ibn Sīnā accounts as follows.

#### 4.2.4 Prophecy and ‘Paranormal’ Phenomena

Building upon the Galenic tradition in medicine and his own further elaborations, Ibn Sīnā maintained that in intellection, the ability of people to hit upon and guess correctly the middle term varies, depending on how fast and how frequently they can do it (Gutas 2014 [\*70: 192, 196–197]). Some people are completely helpless, others need a lot of instruction, or preparatory logical analyses before they are successful, while still others need but little reflection, being able to hit upon the middle terms in a short time. At the other extreme there is the rare and unique individual with a ‘powerful soul’, as Ibn Sīnā says, who

can hit upon all the middle terms in record time without any need for thinking at all. This person is the Prophet. In his case, the intelligibles contained in the active intellect are imprinted in his intellect almost at once; Ibn Sīnā is careful to point out, however, that this process also is not an 'uncritical reception of the intelligibles merely on authority [divine authority, that is]', but follows the strict syllogistic order of the intelligibles as they exist in the active intellect, 'an order which includes the middle terms' (*Šifā'*, *al-Nafs* [\*54.2.6: 249–250 Rahman]; transl. in Gutas 2014 [\*70: 184]; discussion in Gutas 1998 [\*249]). In this fashion, the procedure whereby the prophet gains his knowledge is shown to be no different from that in other humans except that the prophet has a fully developed power of hitting upon the middle terms; because of that, his 'dispositional intellect' (*'aql bi-l-malaka*), at which level this power operates, is most effective, and is called by Ibn Sīnā the 'sacred intellect' (*'aql qudsī*). The Prophet's intellection of the intelligibles as thought by the active intellect thus vouchsafes him the contents of revelation, which turn out to be identical with the contents of philosophy. It is therefore to be noted that Ibn Sīnā's use of the term 'sacred' (*qudsī*) for the intellect at this level does not imply an otherwise unaccounted-for divine intervention, or a divine nature or otherworldly provenance for the intellect, but merely points to the fact that its contents describe the sacred which, presented by the Prophet as revelation, constitute religion.

This is the intellectual aspect of prophecy. Ibn Sīnā, however, recognises two more aspects of prophecy, one relating to the imaginative and the other to the motive faculty of the Prophet, both of which are also developed in him beyond the average level of common man. The intelligibles relating to revelation that are acquired by the Prophet's intellect syllogistically, and in an order which includes the middle terms, as they are found in the celestial spheres and the active intellect, are then transmitted to his imaginative faculty; this latter in turn reproduces or 'translates' them in terms of perceptible and audible messages which are recited to the people and constitute the text of the revelation (discussion in *al-Šifā'*, *al-Nafs* [\*54.2.6: 169–182 Rahman]). The metaphorical and allusive language of the revealed text as finally presented and recorded is necessary because syllogistic discourse, the form in which the Prophet's theoretical intellect thought or received the intelligibles, is unintelligible to the masses.

This mechanism whereby the imaginative faculty, through the intellect, is ultimately receptive to influences from the supernal world of the celestial spheres, is also the one through which veridical dreams and other 'paranormal' experiences, such as prognostication of the future, are had by individuals. For in addition to intelligible knowledge, the divine effluence from the intellects and the souls of the celestial spheres includes also information about

events on earth, for all of which the celestial spheres are responsible: past, present, and future events, what Ibn Sīnā calls ‘the unseen’ (*al-ḡayb*) (Gutas 2006 [\*257: section III]). This information also can be received by humans in various forms – as waking or sleeping dreams, as visions, as messages to soothsayers – depending on the readiness (*isti’dād*) of their intellects, which in turn depends on the non-obstructive and non-distracting functioning of their internal and external senses, and the level of their humoral equilibrium. Somebody whose internal sense of imagination or estimation is overactive, for example, may hinder the clear reception of dream images so that his dreams would be garbled or require interpretation, while someone else not so afflicted may get clearer messages; or the ‘Turkish soothsayer’ who wishes to receive information about the future has to run long and hard in order to bring about, through the extreme exertion, such a humoral equilibrium in his constitution (a case actually mentioned by Ibn Sīnā in *al-Iṣārāt* (*Namaʿ* 10,23 [\*58: 217 Forget, 384 Zārī]).

The logistics of the reception of information from the supernal world thus varies in accordance with what is being communicated and who is receiving it, but in all cases the recipient has to be ready and predisposed to receive it. All humans have both the physical and mental apparatus to acquire intelligible knowledge as thought in the supernal world, and the means to do so, but they have to work for it, just as they have to prepare for their bliss in afterlife while their immortal rational souls are still in the body. There is no free emanation of the intelligibles on slothful and indolent humans, or after-life contemplation for them of eternal realities in the company of the celestial intellects (Ibn Sīnā’s paradise). To have thought so – i.e. the idea that God’s grace might be emanated over all individuals ‘gratis’ and indiscriminately – would have negated the entire philosophical system Ibn Sīnā so painstakingly constructed.

The Prophet, finally, has also fully developed motive powers, and his soul can accordingly set into motion and influence not only parts of his own body – this is something that all souls do – but also other bodies outside the person whose soul it is (discussion in *al-Šifāʾ*, *al-Nafs* [\*54.2.6: 194–201 Rahman]). This is a kind of telekinesis (influence without physical contact) which can be observed in other areas as well, like the influence of the sphere of the moon upon the ebb and flow of the tides on earth, the effects of the evil eye, and, in the case of evil men, magic. In the Prophet, this ability is used for salutary purposes, namely, to produce miracles which prove the Prophet’s veracity. It is thus clear that Ibn Sīnā’s concern in all this is not to point to the uniqueness of the Prophet, which would make him philosophically and scientifically inexplicable, but to discover and elaborate, within the context of the scientific theories of the soul in the Aristotelian tradition, the basic operations of the human

soul which account for and give a naturalistic explanation of all observable psychic phenomena – like veridical dreams, the evil eye, extreme fasting without bodily debilitation, extraordinary physical strength, etc. – and which can also accommodate, in extreme cases, prophecy as well. In the tenth *namaʿ* (book) of *al-Iṣārāt*, where Ibn Sīnā analyses and explains these phenomena, he repeatedly insists that they are in accordance with the ‘well-known laws of natural science’ (*maḍāhib al-ṭabīʿa al-mašhūra* [\*58: 207 Forget, 371 Zāriʿī, and later]; cf. Rapoport 2018 [\*231: chap. 4]) to which he refers.

To sum up the intellective process, then, the dispositional intellect, armed with the primary intelligibles and after reasoning processes involving abstraction and thinking, is able to hit upon the middle term in any given syllogism, find the cause for the conclusion which represents an intelligible concept, and as a result attain the state of actual or acquired intellect. In this way, by means of logic, the human intellect is able to think the intelligibles also thought by the celestial spheres and thus reproduce in itself the structure of reality reflected in them.

However, this reproduction of the intelligibles in the human intellect is not perfect. There are many reasons for this. In the first instance, as humans are bound by temporality, so also is the sequence of their discovery and perception of the intelligibles, as opposed to the atemporal intellection of the intelligibles enjoyed by the celestial spheres. More important than this, though, is the fact that the human intellect is affiliated with the body and its powers and senses, both external and internal, which prove to be a hindrance to the intellect’s thinking of the intelligibles and distract it in numerous ways from it. At this point Ibn Sīnā introduces medical, ethical, and political considerations in his further analysis of the functions of the rational soul.

#### 4.2.5 Practical Philosophy: Ethics and the Religious Law, the Role of Medicine, Eschatology

It was mentioned above that one of the two functions of the rational soul was to make rational choices that lead to correct actions which, as a consequence, help bring about its actualisation or perfection. These rational choices, however, have to be acceptable, so to speak, to the other powers governing the body, the appetitive and the irascible, in order for the correct action to be performed by the person. In other words, the rational soul has to subjugate the appetitive (ἐπιθυμητική [*epithymētikē*], *ṣahwānī*) and irascible (θυμοειδής [*thymoeidēs*], *ḡaḍabī*) powers or faculties of souls. This can happen when a person has what is described in popular terms as good habits and excellent qualities of character. But in scientific, or medical terms, habits and qualities of character are a function of the physical constitution of the body; that is,

in the Galenic humoral medicine practised by Ibn Sīnā, they depend upon and follow the temperament of the body (as Galen's treatise by that name has it, widely studied in Arabic translation), or its particular mixture of the four humours, blood, phlegm, black bile, and yellow bile. The preponderance of one humour over the others causes the particular dominant characteristics of individuals, such that the phlegmatic is he whose temperament is dominated by phlegm (φλέγμα), the melancholic he whose temperament is dominated by black bile (μέλαινα χολή), etc. This imbalance in the humoral constitution of individuals is what causes imbalance in character, i.e. bad character, while the excellent character is the result of a balanced temperament or equanimity (in its etymological sense).

Now it is a known fact that temperaments are subject to change, in which case it follows that qualities of character also are subject to change thereby. The key to changing the bad character of a person for the better, therefore, is to change his temperament. This is accomplished in a number of ways, both 'chemically' and behaviourally, as we would say today. Medication and diet are the obvious means to effect a change in somebody's physical constitution; thus a melancholic person, for example, would consume warm liquids to counter-balance the prevailing characteristics of his predominant humour, black bile, which is cold and dry. Change of behaviour, on the other hand, can be regulated by following the strictures enjoined in books on ethics and by performing the duties and exercises specified in the religious law laid down by the prophet. Virtuous conduct, prayer, fasting, pilgrimages, and similar religious practices are all intended to balance the temperament and give a person an excellent character and thereby make the bodily faculties of the soul, the appetitive and the irascible, subservient to the rational soul. With the bodily faculties thus subjugated, the rational soul can then concentrate on its main task on its way to happiness, that is, intellection of the intelligibles and the discovery of the middle terms. This, incidentally, explains why Ibn Sīnā says in his autobiography that when he had difficulties finding the middle term in a syllogism he would go to the mosque and pray and then go home and study with the help of a little wine. In ancient and medieval pharmacology, in which Ibn Sīnā was trained and which he practised, wine was used as medication in order to equalise and moderate the various humours of the body (Gutas 2014 [\*70: 206–213]). The closer a temperament is to a balanced state, therefore, the more is a person predisposed to develop excellent traits both in his conduct and his knowledge.

Ibn Sīnā argues in favour of this position by considering the specific difference between the rational soul and the souls of the celestial spheres. They are both congeneric (*muḡānis*) substances whose essence is to think the intelligibles; where they differ is in the nature of the bodies with which they are

affiliated. The human rational soul is associated with a body which is constituted from a mixture of the four sublunar elements which, in combination, produce the four humours and their opposite qualities (hot, cold, moist, and dry). The celestial spheres, on the other hand, whose intellection of the intelligibles is continuous and perfect, are not so constituted, and they are accordingly completely lacking in these opposites. It is thus clear that it is the involvement with these opposites, and the resulting imbalance in the constitution of human bodies, that hinders the rational soul from the discovery of middle terms or, stated differently, from receiving the 'divine effluence' from the active intellect. It is for this reason that the closer a temperament is to a balanced state the more predisposed is a person to perfect his intellect and think the intelligibles, or receive this 'divine effluence'.

And yet, human beings, no matter how balanced their temperaments may be, are not completely free from flaws that arise because of their involvement with the opposites. As long as the rational soul is associated with the human body, no human can be completely ready to intellect perfectly all the intelligibles (or to receive the 'divine effluence'). Humans can, however, come asymptotically close to it by expending all their efforts, through study and virtuous ethical and religious behaviour, to acquire a balanced temperament that lacks these opposites which hinder its reception. When this happens, there comes about in the human a certain similarity to the celestial spheres. At this stage, if they are not actually thinking the intelligibles (acquired intellect), they are ready to call them to presence whenever they wish, the relation of their intellect to them being that of the actual intellect. The rational soul becomes, as Ibn Sīnā mentions a number of times, 'like a polished mirror upon which are reflected the forms of things as they are in themselves [i.e. the intelligibles] without any distortion' (*Risāla fī l-Kalām 'alā l-naḥs al-nāṭiqā* [*On the Rational Soul*] [\*10r: 196 Ahwānī, 426 Šamsaddīn, transl. in Gutas 2014 [\*70: 71]). This constitutes practicing, through the practical sciences, the theoretical philosophical sciences.

Perfect and continuous intellection of the intelligibles is accomplished by the rational soul only when its association with the body is severed through death and only if it acquired the correct knowledge and performed the correct actions while alive. In this posthumous state, the rational soul will intellect the intelligibles precisely like the intellects of the celestial spheres and will become similar to them. This is its final state of bliss in Ibn Sīnā's eschatology. As for the afterlife of the rational souls of those individuals who neither acquired the correct knowledge nor performed the correct actions – that is, the unphilosophical dolts (*al-nuḥs al-bulh*), both the virtuous and the vicious – it is presented by Ibn Sīnā in an account which he describes as a (Platonic) likely

story (*qawl mumkin*) and attributes to ‘some or one of the learned men’ (*baʿḍ ahl al-ʿilm, baʿḍ al-ʿulamāʾ*). After death, these souls become associated with some sort of matter – described variously as ‘generated from air, fumes, and vapours’ (*al-Mabdaʾ wa-l-maʿād*) or as ‘something that belongs to the celestial bodies’ (*al-Šifāʾ*) – which enables them to exercise their imagination (since the internal sense of the imagination needs a material substrate in order to function). They thus experience in imagination all that they had believed in in life regarding the pleasures of paradise and torments of hell as described in revelation (*al-Mabdaʾ wa-l-maʿād* [\*121: 111 15]; *al-Adḥawiyya* [\*122: last chapter]; *Šifāʾ, al-Ilāhiyyāt* [\*54.4: 1X 7, end]; detailed analysis of the imagined otherworld in Michot 1986 [\*209]).

In this system, the agent of intellection (the rational soul), the process of intellection (thinking the intelligibles and discovery of the middle terms), the method of intellection (logic), and the objects of intellection (the intelligibles) are brought together in an interdependent and mutually explanatory relationship, and various branches of the Aristotelian philosophical tradition are harmonised and interrelated: the theory of the soul provides the framework within which epistemology, through logic, reproduces cosmology (or ontology), which in turn posits the theory of the soul. Practical philosophy in the form of ethics and religious law is also incorporated into the system, as is medicine, which lends a biological basis to the whole analysis of the rational soul.

There is thus a deeply ethical aspect to Ibn Sīnā’s philosophical system, much as he may not have dwelt a lot upon practical philosophy as such. Because our rational souls – our selves – are consubstantial with the celestial intellects, it is our cosmic duty to enable them to reach their full potential and behave like them, i.e. think the intelligibles (see the discussion of the ‘contemplative life’ in Ibn Sīnā’s philosophy in Lizzini 2009 [\*221]). And because we (i.e. our essential core which identifies us and survives, our rational souls) are given a body and our materiality hampers our unencumbered intellection like that of the celestial beings, we have to tend to the body by all means, behavioural (religious practices, ethical conduct) and pharmacological, to bring its humoral temperament to a level of equilibrium that will help the function of the intellect. This is humanist ethics dictated by a scientific view of the world.

#### 4.2.6 Practical Philosophy: Politics

Ibn Sīnā’s major contribution to the analysis of the political aspect of practical philosophy consists in his extending to this area both the function of the rational soul as the major agent in prophecy, and the significance of ethics and religious law in bringing about, in medical terms, a humoral equilibrium that would enhance this function. Otherwise he was as a whole reticent about



the details of practical philosophy, and he seldom discussed at any length its traditional three parts (ethics, economics, and politics), ostensibly because he considered it too self-evident and philosophically unchallenging. In the introduction to *al-Mašriqiyyūn* (*The Easterners*), he says that he will treat ‘only as much of the practical science [i.e. ethics, household management, and politics] as is needed by the seeker of salvation’ i.e. the subjects discussed in the metaphysics of the rational soul, while the rest of it will not be dealt with, presumably because, just like mathematics, it is scarcely controversial and ‘there is no disagreement about it’ among philosophers (*al-Mašriqiyyūn* [*The Easterners*] [\*24: 8], quoted in Gutas 2014 [\*70: 316]). This reason for not writing on practical philosophy given by Ibn Sīnā would seem to be only partially valid; there is also the fact that Greek works on economics and especially politics were little translated and treated in Arabic because they dealt with Greek community affairs, the Greek family and city, which were too culturally specific for philosophers in the Muslim commonwealth to appropriate and apply. More generally, they were not easily assimilable in a Muslim context to be even of any theoretical relevance.

Ibn Sīnā was interested in universal theories and principles, which he would not find in the details of Greek economics and politics. Thus, apart from a couple of short essays on ethics and one on politics of dubious authenticity which are extant, he wrote only one major work on practical philosophy in his youth, *al-Birr wa-l-iṭm* (*Piety and Sin*), which is now mostly lost. But Ibn Sīnā gives a brief description of its gist at the end of the *Ilāhiyyāt* of *al-Šifāʾ*, where, after discussing the celestial influences on the world and the meaning of divine providence, he goes on to suggest consulting the book *Piety and Sin* in this context: ‘You should study the presentation of these topics in it with care, regard as true the tales of divine punishment descending on corrupt cities or unjust tyrants, and observe how truth remains victorious. You should also know that the reason for [the effectiveness of] our prayers, alms etc. as well as the existence of evil-doing and sin originates “There”, for the principles of all these things ultimately go back to nature, will, and coincidence. ... If things are dissolved [onto their constituent components], they are recognised to be dependent on the first principles that necessitate them, and that are descended from God (*Šifāʾ*, *al-Ilāhiyyāt* [\*54.4(a): 439, 6–17 Mūsā et al.]; transl. Gutas 2014 [\*70: 95]).

Thus it is clear that from the very beginning Ibn Sīnā’s interest in practical philosophy expressed itself through his understanding of the emanation of being, order, and knowledge from the One through the universe and the world. This explains divine providence, theodicy, and evil, as the knowledge by the One devolves through the celestial intellects and eventually onto the sublunar world of generation and corruption and its opposites. The Prophet, who taps

into this emanated knowledge with its syllogistic order, through his superior ability to guess correctly the middle terms, as well as his extremely developed internal sense of imagination that translates this syllogistic knowledge into the metaphoric and allusive language of the revealed text that is intelligible to the masses, is the natural vehicle for the establishment of guidelines for conduct, or laws, which human communities need to survive and prosper. Thus the political part of practical philosophy cannot discuss kingship as such without first discussing the principles on the basis of which a king will rule his community, and those are derived from prophetic legislation (*šarī'a*). This is why already in his early classification of the sciences in the *Aqsām al-ḥikma*, Ibn Sīnā split the third part of practical philosophy into two, kingship (*mulk*) and prophecy (*nubuwwa wa-šarī'a*), and explained as follows the subjects dealt by the latter: 'This part of practical philosophy [i.e. prophecy and prophetic legislation] allows us to recognise the following: [a] the existence of prophecy and the need humans have of prophetic legislation (*šarī'a*) for their existence, their survival, and their afterlife. Through it [reading *bihi* for *ba'd* in the editions] we furthermore recognise: [b] the philosophical foundations (*al-ḥikma*) of those divine commandments (*ḥudūd*) that are universal and shared by all prophetic legislations (*šarī'a*) as well as those that are peculiar to individual prophetic legislations and differ between peoples and eras, and finally we recognise through it: [c] the difference between divine prophecy and the false claims made about it [read *fihā* for *kullihā* in the editions]' (*Maqāla fī Aqsām al-ḥikma* [\*27: 108 Mišr 1326/1908]; corrected readings after MS Istanbul, Üniversite 4755, fol. 85v: cf. the translations by Mimouné 1984 [\*50: 145] and Kaya 2014 [\*226: 274], 2020 [\*184]).

Ibn Sīnā thus understood, or rather, proposed (since he was the first to have this understanding) that the subject matter proper of practical philosophy is the philosophical explanation, and hence defence, of the social and legal aspect of prophecy, just as the part of physics dealing with the theory of the soul and intellect, as we saw above, explained and hence defended the epistemological aspect of prophecy, how a prophet knows. The details of politics, the third part of practical philosophy, as transmitted in the Aristotelian (and Platonic) tradition – the different kinds of kingship, state and city formations, etc. – could not be discussed without an understanding of the principles upon which they were based, and these Ibn Sīnā saw in the legislative function of the Prophet. He states this explicitly in his equally early work, *Uyūn al-ḥikma: (The Elements of Philosophy)*: 'The principle of these three [parts of practical philosophy] goes back to the divine prophetic legislation (*al-šarī'a al-ilāhiyya*), which also provides the ideal form of the divine commandments (*kamālāt ḥudūdihā*) that applies to these [three]. The human theoretical faculty [the

rational soul] elaborates them further, determining practical norms to apply to them [the people] (*tataṣarrāfu fihā bi-maʿrifat al-qawānīn al-ʿamaliyya minhum*), and applying these norms with reference to particular circumstances' (*ʿUyūn al-ḥikma* [\*52: 16]).

The divine ordinances included in the revelation brought down by the Prophet thus constitute the axiomatic starting points, and hence the principles, of practical philosophy. According to Ibn Sīnā's epistemology, they are among the propositions whose truth is acknowledged without any intermediary, those data which are approved on authority, the *maqbulāt* (cf. § 1.4.3.2 below). They are principles of syllogisms in these fields, and once accepted they constitute the basis for further elaboration and working out by the intellect. In the case of politics, they lead to the enactment and application of secular laws. It is only at this point, Ibn Sīnā implies, that the traditional discussion of politics, in terms of kingship and the different kinds of state and city formations, becomes operative. This part of practical philosophy, to which Ibn Sīnā refers in the early *Aqsām al-ḥikma* as 'prophecy and prophetic legislation' (*nubuwwa wa-ṣarīʿa*) and sees as one half of politics, he later promotes to an independent status, now called 'the discipline of prophetic legislation' (*al-ṣināʿa al-ṣarīʿa*), as the fourth part of practical philosophy (*al-Maṣriqīyyūn* [\*24: 8.1]). The position of the discipline of prophetic legislation in the classification of the sciences, though, even if technically situated within the practical sciences, is redeployed to the end, or as the continuation, of metaphysics. Because of its connection with, indeed the culmination of, the sciences that deal with the subjects discussed in this section as the metaphysics of the rational soul, and because it provides the principles of the practical sciences, it acts as the mediator between them and Ibn Sīnā's metaphysics (Kaya 2013 [\*224: 216]; cf. also Kaya 2014 [\*226] for a discussion of political thought and the development of 'prophetic legislation' in Ibn Sīnā's works and its aftermath, with references to earlier studies). We thus see these subjects discussed at the end of the metaphysics sections in a number of his works.

The most extensive extant treatment of practical philosophy comes at the end of the metaphysics (*Ilāhiyyāt*) of *al-Šifāʾ* as what appears to us an appendix, though doubtless it was intended by Ibn Sīnā as the crowning crescendo of this work, given the subject of the final section on politics proper, the caliphate. In the last, tenth, book of the *Ilāhiyyāt*, Ibn Sīnā first discusses what he had established as the principle of practical philosophy: prophetic legislation, the need for it, and laws relating to acts of worship enacted by the prophet (x 2 and 3). Then, in brief declaratory terms expressing Islamic practice, Ibn Sīnā presents in two short sections (x 4 and 5) the social organization of the city; marriage, children and the family; and the caliphate: the need for the caliph

to be obeyed and his duties to maintain social order by enacting statutes that ensure justice in criminal and civil law, and to proclaim ethical standards. It is a rather perfunctory treatment, which in the introduction to the entire *al-Šifā'* Ibn Sīnā describes as a presentation of 'the essential elements of ethics and politics, in anticipation of a comprehensive and separate book which I will write on these subjects' (Gutas 2014 [\*70: 46]). He never wrote that book. In the *Maqāla fī Aqsām al-hikma* (quoted above), Ibn Sīnā described the task of practical philosophy, and especially of its principle, prophetic legislation, as being to provide the philosophical basis and arguments for the divine ordinances, both those that are universal and common to all religions and those that are particular to each religion. This was something which he never accomplished.

### 4.3 *Theory of the Soul and Epistemology*

*Dimitri Gutas*

4.3.1 Theory of the Soul and its Faculties. External and Internal Senses. Theoretical and Practical Intellect – 4.3.2 Epistemology and Empiricism

#### 4.3.1 Theory of the Soul and its Faculties. External and Internal Senses. Theoretical and Practical Intellect

The study of the soul occupied Ibn Sīnā throughout his career. He evolved a highly complex and dynamic theory that was based on Aristotle's *On the Soul* (*De anima*), but went beyond it in its detailed and precise articulation and internal consistency of structure. It is comprehensive, and it accounts for all conceivable phenomena of the soul, in particular those related to the external and internal senses and the practical and theoretical intellect. In reviewing its most important points, the presentation below follows closely Ibn Sīnā's own deliberations in the first chapter of *Kitāb al-Nafs* (*The Book of the Soul*) in the *Šifā'*. According to this, the faculties of the soul can be classified in three groups, which constitute (A) the vegetative, (B) the animal, and (C) the human soul of human beings.

(A) The vegetative soul possesses three faculties: the nutritive faculty, the faculty of growth, and the faculty of reproduction.

(B) The animal soul possesses two faculties, namely (1) the motive faculty and (2) the perceptive faculty. (1) The former consists of (a) the capacity to cause movement by stimulating [other faculties] and (b) the capacity to generate movement. (a) Once the form of something sought or to be avoided has been imprinted onto the imagination, the capacity to cause movement by stimulation is the desire that causes other faculties to generate movement. It

has two branches, appetitive and irascible. (b) The capacity to generate movement is distributed via the nerves and the muscles, and its task is to contract or relax muscles and to move the tendons and ligaments to their starting point or its opposite. (2) The perceptive faculty has two parts which concern (a) external and (b) internal perception. In the common understanding, the faculty of external perception comprises five senses, namely sight, hearing, smell, taste, and touch. Some, however, are of the opinion that there are eight senses. In their view, touch is not a last species but a genus of four or more faculties distributed all over the skin, discerning the opposites of hot and cold, wet and dry, hard and soft, as well as rough and smooth, and at the same time give the impression that they are essentially one. (b) The capacity of internal perception is divided into forces that perceive the form, and forces that perceive the attributes of the sensibles. The form is perceived by the external senses and sent to the internal senses. Thus a sheep will perceive the form of a wolf – i.e. its shape and colour – first with its external and then with its internal senses. The concomitant attributes, however, are perceived by the internal senses only; e.g. in the case of the wolf the attribute ‘hostile’ and the attribute that it must be feared and fled from. Part of the faculty of internal perception in animals is (i) ‘phantasia’, i.e. the ‘common sense’ located in the anterior ventricle of the brain; it receives all the forms imprinted on the five external senses or conveyed to them; (ii) the ‘imagery’ (*ḥayāl*) or the ‘form-bearing’ (*muṣawwira*) faculty’ in the rear part of the anterior ventricle; immediately after the disappearance of the perceivable entities, it retains the forms the common sense has conveyed to it, thus acting as a kind of short term memory; (iii) the faculty which in animals is called ‘imagination’ and in humans ‘cogitation’, located in the medial ventricle of the brain at the cerebellar vermis; its function is to actively combine or separate the contents of the form-bearing faculty; (iv) the ‘faculty of estimating or assessing’ (*al-wahmīyya*) located in the rear part of the medial ventricle of the brain; it comprehends attributes that the external senses do not perceive, as for instance a sheep estimates a wolf as something to be fled from and a lamb as something to be loved; besides, it appears to influence objects of the imagination by combining or separating them; (v) the faculty of recollection in the posterior ventricle of the brain; it retains attributes that are not comprehended by the external senses but by the faculty of estimation.

The faculty of recollection is to the faculty of estimation what the form-bearing faculty is to sensory perception, and the relation of recollection to the attributes corresponds to the relation of the form-bearing faculty to the forms of the perceivable entities.

(C) The human soul comprises (1) the practical and (2) the theoretical faculty. They are both called ‘intellect’ by homonymy or equivocation.

(1) The practical faculty is a principle that moves the human body to execute certain actions; its characteristic is the consideration of that which is universally considered to be part of these actions. The practical faculty may be regarded (a) with respect to the appetitive faculty, (b) with respect to the imaginative and estimating faculties, and (c) with respect to itself. (a) With respect to the appetitive faculty, it is the aspect from which specifically human conditions result that immediately move us to actions or emotions, such as feeling ashamed or shy, or laughing, crying, etc. (b) With respect to the imagination and the faculty of estimation, it is the aspect the practical faculty assumes when it wishes to dominate the natural world (of becoming and passing away) and to develop the arts. (c) With regard to itself it is the aspect under which the practical and the theoretical intellects together generate opinions concerning human actions that are widely recognised and do not rest on the demonstrative method. For example, that lies are bad and oppression evil, and other propositions or premises that barely differ at all from the primary judgments (*awwaliyāt*; cf. § 1.4.3.2 concerning epistemology) that are provided by the intellect and are listed in books on logic. The practical faculty should govern the other faculties of the body in concord with the theoretical faculty, exerting influence on rather than being influenced by them. The former will lead to positive character traits, the latter to certain inclinations influenced by the body, which are called negative character traits. Our character traits (*aḥlāq*) are based exclusively on the practical faculty as the human soul, despite being *one* substance, has connections in two directions, one upwards and one downwards. The practical faculty is responsible for the downward connection with the body, while the theoretical faculty is responsible for the upward connection with the higher principles, that is, the intellects of the celestial spheres. Consequently the practical faculty must not be susceptible to influences exerted by the body, while the theoretical faculty must be susceptible to influence from the intellects. The lower faculty forms character traits, the higher knowledge.

(2) The theoretical faculty's characteristic is to be imprinted with the universal forms abstracted from matter. If these are abstract in essence, the imprinting is easier. If not, the theoretical faculty abstracts them from their material connections. It is possible that different connections with forms exist, as the receiving faculty is sometimes potentially and sometimes actually receiving. 'Potentiality' can mean three things: (a) It may be said of the absolute disposition that has neither actualised nor generated anything that will lead to actualisation, such as an infant's potential ability to write. (b) It may be said of a disposition within which something was generated that will permit actualisation without further mediation, such as a youth's ability to write

once he has reached puberty and is familiar with pen, ink, and the alphabet. (c) It may be said of a disposition that is complete and possesses the means of actualisation – whenever it wishes – such as a trained scribe's ability to write while he is not writing. The first one (a) is called 'absolute' or 'material', the second (b) 'possible', and the third (c) 'perfect potentiality'. The theoretical faculty's relation to the abstracted forms is either (a) one of absolute potentiality, i.e. without any actualisation or perfection; in this case it is called 'material intellect' in analogy with prime matter; this is possessed by every individual. Or it is (b) one of possible potentiality, which is the case when it possesses the primary intelligibles, i.e. self-evident truths such as the axioms (e.g. 'the whole is greater than the part'), and is called 'dispositional intellect' but may also be called 'real intellect' in comparison with the material intellect. Or it is a relation of (c) perfect potentiality, which is the case when it has acquired and stored further intelligibles in addition to the primary ones without actually intellecting them, and is called 'actual intellect', although it may also be called 'potential intellect' in comparison with the following, higher level. Finally the relation between the theoretical faculty and the abstracted forms may be one of (d) absolute reality. In this case the intelligible forms are present within it, it intellects them knowing at the same time that it does so. This level is called 'acquired intellect', as forms acquired from outside have been imprinted into the potential intellect as a result of the contact with the always actual active intellect. With the acquired intellect, the 'living being' or the human species has been completed, and on this level, the human theoretical faculty resembles the first principles of existence, i.e. the celestial intellects.

The different faculties are in a relation of ruling and serving. The acquired intellect rules exclusively, while all others serve it. The dispositional and the material intellect serve the actual intellect. The practical intellect serves all faculties of the theoretical intellect, as the former establishes a connection with the body, the purpose of which is the perfecting, cleansing, and purification of the theoretical intellect. The estimative faculty serves the practical intellect, being served in turn by the faculty of memory and all those faculties located at the front of the brain. The imaginative faculty is served by the faculty of desire (through advice and encouragement to movement) and the form-bearing faculty (through storing and displaying forms). The form-bearing faculty is served by the common sense, which in turn is served by the five external senses. The faculty of desire is served by the appetitive and the irascible faculties, which are served by the muscles' faculty of movement. The faculties of the animal soul are served by the faculties of the vegetative soul, first and foremost the reproductive faculty. The latter is served by the faculty of growth, and both of these by the nutritive faculty. They are all served by the four natural faculties,

i.e. digestion, preservation, attraction, and expulsion. All of them, finally, are served by the four elementary qualities among which heat is served by cold, and both by dryness and moistness (regarding all this see *Šifāʾ*, *al-Nafs* [\*54.2.6: 39–51 Rahman]; transl. by McGinnis and Reisman 2007 [\*43: 179–186], Alpina 2021 [\*275: 210–223]; cf. *al-Nağāt* [\*55: 258–261, 264–272, 274–275 al-Kurḏī]).

So much for the synopsis of the doctrine of the soul taught by Ibn Sīnā. Noteworthy in Ibn Sīnā's understanding of the soul is that while he accepts from Aristotle its functionalist definition as the 'first entelechy/perfection of a body possessed of organs', he also resolves the implicit contradiction in Aristotle between the functionalist, and hence conceptually immanent soul, and the immortal and separable rational soul of *On the Soul* (*De anima*) III.5, by also defining soul by its essence and not by its function, as an immaterial, self-aware substance, as in the 'flying human' argument he presents at the end of the opening chapter (*al-Nafs* I 1 [\*54.2.6: 4–16 Rahman]). Thereby he provides a theoretical grounding and philosophical justification for the study of the rational soul in its metaphysical dimensions (cf. § 1.4.2 above) within the parameters of the traditional Aristotelian theory of the soul.

Ibn Sīnā's theory of the soul is characterised by precise differentiation among the various faculties and their functions, and an analysis of their dynamic interactions which eventually determine the particular behaviour and thinking of a person. It is grounded on scientific knowledge from medicine, anatomy, and natural science, and on minute psychological observation, going far beyond the Aristotelian basis. Of particular significance is his development of the internal senses, which he situates in the brain, following Galen and subsequent physicians (Strohmaier 1988 [\*245], Pormann 2013 [\*543: 102–103]), and expands, as he says (*al-Taʿlīqāt ʿalā ḥawāšī Kitāb al-Nafs* [\*28: 98,5–6]), upon Aristotle's discussion of imagination (φαντασία) in *De anima* 428b10–17, especially through his ground-breaking introduction of the internal sense of estimation (*wahm*). In essence, estimation is the judgment one makes about what the objects of sense perception – the entire sensible environment – signify (*maʿnā*), connote, or imply for the observer and accordingly indicate the course of action to be taken (as we have seen above, estimation perceives the 'connotational attributes' of sensibles). The term Ibn Sīnā uses to describe what a sensible means or implies for the observer is properly and literally, *maʿnā*, 'that which is meant or 'import' (an infinitive formation understood as the passive participle of the verb). It was translated as *intentio* in medieval Latin (Hasse 2000 [\*251: 127–141]), which, along with some mistranslations by medieval and modern scholars of Ibn Sīnā's Arabic, has given rise to frequent misunderstanding of the term in modern times as implying Brentano's 'intentionality', which is in fact unrelated (Gutas 2012 [\*263: 430–431]). In actuality, estimation



constitutes the highest discriminatory faculty after the intellect for humans, and the highest absolutely for animals, that governs behaviour and how the individual interacts with the sensible environment. It is thus responsible for affective reactions (fear at the sight of real danger and consequent fleeing, love at the sight of the beloved and consequent approach); for what humans call instinct (a baby turning to the mother's breast after birth; birds being on their guard against predatory birds without having had any experience of them); for conditioned behaviour due to experience (dogs being afraid of stones and pieces of wood – with which they had been beaten before (*al-Nafs* [\*54.2.6: 183–185 Rahman])); and for emotions, either resurging upon the recollection of a real past event as stored in memory, or arising out of concocted images generated by the imagination and stored in the imagery, causing fright, alarm, etc. Additionally, and most importantly, it aids the practical intellect as the latter becomes 'involved in discovering ways to manage the [natural] world of generation and corruption and in devising the crafts of human society' (*al-Nafs* [\*54.2.6: 46 Rahman]), because estimation can judge what the ways of this management and the crafts mean or imply for the welfare of humans, and it can thus shape them accordingly. It also aids the theoretical intellect, as the latter abstracts universals out of particulars, with the building blocks of initial concept formation (*mabādi' al-taṣawwur*; *Ṣifā'*, *al-Nafs* [\*54.2.6: 221–222 Rahman]; transl. in McGinnis and Reisman 2007 [\*43: 192]) because estimation is the faculty that judges what the sensible particulars signify for humans and what are the corresponding concepts of these significations. Estimation functions best when it works together with the intellect, for it can then avoid mistaken judgments. Since estimation functions only on the basis of sense perception, it may mistake the implication of a particular sensible – the example Ibn Sīnā frequently gives is mistaking a yellow viscous substance for honey when it is actually yellow bile, or vice versa. It is only the intellect, which can evaluate circumstances, causes, etc., that can assist estimation in making the correct judgment.

This latter aspect of the simultaneous working of the faculties of the soul is a second major characteristic of Ibn Sīnā's theory, its dynamic character. Each faculty has its own particular function, which it should exercise in accordance with the hierarchical structure of dominance and subservience registered in the classification of the faculties given above; the function of a faculty should not be interfered with by the function of any lower faculty on that scale. Thus the function of the intellect is paramount, followed by that of the estimation, then the imagination, etc. But when one function (or more) operates intensively and with dedication, it absorbs most of the energy of the soul and distracts the other functions, above or below, causing them to underperform or

cease functioning altogether, bringing about what we would call behavioural malfunctions. The intellect suffers most from this situation, naturally, being constantly distracted by the functioning of this or that faculty – the sight, sound, or smell of something extraordinary, hunger, desire, imagination, estimation producing disturbing emotions through the memory of a past event, etc. This is the main reason why humans cannot exercise incessant intellection of the intelligible world while in the body and cannot enjoy the same bliss as the intellects of the heavenly spheres. However, the other faculties also interfere with each other's function, as experienced by all. A student who is day-dreaming during class does not hear the teacher calling him, which means, in Ibn Sīnā's analysis, that the internal sense of imagination is working overtime, thus inhibiting the function of his external senses, notably his hearing; his ear does register the sound of the teacher, but the sound does not get transmitted to the common sense where it would be actually perceived, and thus he does not hear. The study of the soul for Ibn Sīnā entails such detailed analysis of all the faculties of the soul involved in producing behaviour. To appreciate the full breadth and depth of Ibn Sīnā's study of the soul and its faculties, one needs to add to these psychological factors also the physiological factors that determine behaviour: the humours of the body in their particular mix (idiosyncrasy), which constitutes the temperament of a person and conditions the faculties of the soul, as Galen's famous work has it (*That the Faculties of the Soul Are Consequent upon the Temperament of the Body*).

#### 4.3.2 Epistemology and Empiricism

The human intellect can function in syllogistic processes in an order which includes the middle terms and which are identical with those of the celestial intellects for the simple reason, as Ibn Sīnā repeatedly insists, that both human and celestial intellects are congeneric (*muḡānis*) immaterial substances. However, their acquisition of knowledge is different because of their different circumstances: the human intellect comes into being in a potential state and needs its association with the perishable body in order to actualise itself, whereas the celestial intellects are related to eternal bodies and are permanently actual. Thus unfettered, the knowledge of the celestial intellects is completely intellective (i.e., a priori) because they perceive and know the intelligibles and their devolution in the sublunar world from what causes them – namely, themselves – while the human intellect is in need of the corporeal senses, both external and internal, in order to perceive the effect of the intelligibles and their devolution into particulars from which it can reason through abstraction and syllogistically back to their cause (*Šifā', al-Ilāhiyyāt* 1.3 [\*54.4(a): 21 Anawati, Zāyid]; transl. in Gutas 2012 [\*263: 414]).

And this makes it necessary for Ibn Sīnā to have an empirical theory of knowledge (for a fundamental overview see Gutas 2012 [\*263]; cf. Black 2013 [\*264], McGinnis 2008 [\*261]). We learn more about this in an informative passage in the *Ta'liqāt* (*Notes*), which may be summarised as follows. Perception is part of the soul; it occurs when something sensible is perceived and the soul (i.e. not the sensory organ alone) is affected by it. The soul grasps the sensible forms via the senses, and the attendant intelligible forms through the mediation of the sensible forms, as the intelligibility (*ma'qūliyya*) of these forms is made accessible to it by their sensibility (*maḥsūsiyya*). That which is grasped intellectually of the forms corresponds to that which is perceived by the senses. The First Principle and the celestial intellects, whose essences are purely spiritual, do not require sensible forms as mediators in the process of intellection; they do not grasp the intelligible forms via perception but rather through their immutable cause, and consequently that which they intellect is not subject to change. Humans, however, require the mediation of (perishable) sensible forms when comprehending intelligible forms, because their rational souls are imperfect. They receive different kinds of knowledge (*ma'ārif*) through their senses, and their grasp of the universals derives from the sensory perception of the particulars. The soul of a human is also capable of knowing potentially: The soul of an infant, for instance, is disposed to receive primary knowledge without having recourse to the senses. And it may also be that after death the soul is disposed to grasp the intelligibles without mediation by the internal and external senses – thanks to its lifelong intellectual striving in preparation for eschatological bliss. Aside from this, the senses are the means by which the human soul acquires different kinds of knowledge (*ma'ārif*) (*al-Ta'liqāt* [\*60.1: 23 Badawī; \*60.3: 97–98 al-'Ubaydī]; cf. the transl. of the passage in Gutas 2014 [\*70: 374–375]).

How these different kinds of knowledge are acquired by the human soul through the senses is set forth by Ibn Sīnā in his analysis of his core concept that all knowledge is either forming concepts (*taṣawwūr*), which is acquired by means of definitions, or acknowledging the truth of a proposition (*taṣdīq*), which is achieved by means of syllogisms (*al-Nağāt* [\*55: 3–4 al-Kurdī]; cf. Ahmed 2011 [\*166: 3]). If this is so, then the question is clearly to identify the different types of propositions which form the irreducible and axiomatic starting points of syllogisms and definitions. By looking at these propositions and inquiring about their ultimate source one can gain an understanding of his principles of knowledge.

Ibn Sīnā called these propositions which form 'parts of syllogisms and definitions whose truth is acknowledged without mediation' (*bi-lā wāsiṭa*; *al-Nağāt* [\*55: 94 al-Kurdī; cf. Ahmed 2011 [\*166: 87–88]]) mainly 'principles of syllogisms'

(*mabādī' al-qiyāsāt*). Their number and categorisation, and their order of presentation, vary from work to work, the tendency being toward an increasingly greater differentiation among them and fuller analysis in their description; the overall basic orientation and approach to the subject, however, remain amazingly consistent throughout his career.

The *Šifā'* lists fourteen types of propositions, the *Išārāt* sixteen (this being the greatest number ever stated by Ibn Sīnā), which will be presented in what follows (in accordance with the structure of the *Šifā'*). We learn that propositions may be based on (1) data of the imagination, i.e. images evoked (*muḥayyalāt*) within the internal sense of imagination (*al-mutaḥayyila*), and the truth value of which is not questioned (example: honey is like [yellow] bile). Or they may be based on data of experience (*mušāhadāt*), which may appear in two ways: as (2) sensory data (*maḥsūsāt*), i.e. as things whose truth is recognised by the external senses, and as (3) data of reflection (*i'tibārīyya*), i.e. as things whose truth is recognised by our self-awareness (example: we realise that we were cogitating). Or on (4) tried and proven data (*muğarrabāt*), i.e. on things whose truth is recognised via the formation of a syllogism on the basis of repeated repetition, in which way the proposition is proved (example: scammony purges). Or on (5) data gained by finding the middle term of a syllogism (*ḥadsīyyāt*) on the basis of experience (example: the moon receives its light from the sun; cf. Aristotle, *Anal. Post.* I 34, 89b11–13). Or on (6) data that is provided by several accounts confirmed by uninterrupted chains of transmission (*mutawātīrāt*) and consequently true (example: persons from the past, and cities we have never seen, do exist). Or on (7) data provided by the faculty of estimation (*wahmīyyāt*); they may be true but are not necessarily so (example of a true proposition of this kind: two bodies cannot simultaneously occupy the same space; example of a false proposition: everything that exists [*mawğūd*] must be in a location). Or on (8) primary data (*awwalīyyāt*) which to Ibn Sīnā means propositions 'the truth of which is recognised without acquisition [via a syllogistic thought process], and without the person recognising the truth being aware that it could ever have been an option not to recognise the truth' (*al-Nafs* [\*54.2.6: 49 Rahman]; example: the whole is greater than the part). Or on (9) data with an 'inbuilt' syllogism, as it were, which is contained within the proposition itself (*qaḍāyā qiyāsātuhā ma'ahā, muqaddamāt fiṭriyyat al-qiyās*; example: four is an even number).

Another group of irreducible propositions consists of those whose truth is recognised by concession (*taslīm*). The concession (not that which is conceded) may in turn be false (*ğalat*); in that case, the proposition (10) expresses equivocal data (*mušabbahāt*) (example: every eye can see – since the word 'eye' [*ayn*] can also mean 'coin' [*dīnār*]). Alternatively the concession may be

correct (*ṣawāb*); in that case it is granted to a single person, or to all people, or to a group of people. If it is granted to one person who does not hold a particular authority, the propositions (11) include conceded or admitted data (*musallamāt, taqrīriyyāt*) granted to the opponent in a debate or to the teacher introducing a new field of study. If it is granted to all people, the propositions (12) express absolutely (= universally) recognised data (*mašhūrāt muṭlaqa*) (example: justice is good). If it is granted to a group of people, the propositions may (13) express partly recognised data (*mašhūrāt maḥdūda*) such as those that apply to one people or to the experts of one discipline, or they may be propositions that (14) express data accepted by an authority (*maqbulāt*) like those recognised by the experts on religious law.

Finally there are propositions whose truth is recognised in accordance with the prevailing opinion (*‘alā wağhi ḡann<sup>in</sup> ḡālib<sup>in</sup>*). Some of these rest on (15) immediately recognised but untested data (*mašhūrāt fī bādī’ al-ra’y al-ğayr al-muta’aqqaḡ*) such as the assumption that one must support one’s brother through right and wrong, which is found to be false on closer investigation. Others rest on (16) merely assumed data (*maẓnūnāt*) one has adopted from a person one considers reliable, or in another way not recognised by everyone, and which one is inclined to accept rather than reject (concerning numbers 10–16 cf. also Aouad 1999 [\*391]).

This list makes clear that that the propositions whose truth is acknowledged without mediation (*bi-la wāsiṭa*) in all manners, and hence without the possibility to go beyond them to a previous justifying or explicating statement, are all based on sense-perception either directly or ultimately, and on experience both personal and social, except for numbers 8 and 9 (primary and data with ‘built-in’ syllogisms) which somehow involve a function of the intellect. The non-intellective source of these propositions is also valid for religious propositions, which Ibn Sīnā characterises as data approved on the authority of other humans (no. 14). Ibn Sīnā categorises this kind of knowledge as depending ultimately on the statements of prophets and subsequently on religious leaders whose truth is acknowledged without mediation because, the implication is, a particular society that adheres to that religion so accepts them and people acknowledge the truth of their statements upon hearing them. Elsewhere in his works, Ibn Sīnā explains what the faculties of the soul are which enable the prophet to develop this information and why it is to be acknowledged as true. Thus, although the justification of the source of prophetic knowledge which he gives elsewhere depends on the faculties of the soul of the Prophet, what constitutes this knowledge for the rest of humanity is the reports they hear from prophets in their societies, and thus it depends on sense-perception.

The two types of propositions the acknowledgment of whose truth is imposed by the intellect are the primary data (*awwaliyyāt*) and data 'with built-in syllogisms' (nos. 8 and 9 above). The question is then from where the intellect gets them. It is clear that they are not intrinsic to the intellect, or innate, because the intellect, upon its first creation and association with the human body of an infant, is purely potential, a *tabula rasa*, as Ibn Sīnā insists frequently, and arrives at these primary intelligibles during the stage of its relation to the intelligibles which he calls 'dispositional intellect'. These primary intelligibles are the axiomatic principles of thinking, for which Ibn Sīnā always gives as examples logical and mathematical propositions like 'the whole is greater than the part' and 'four is an even number'; and for these, it is sense perception that provides the initial concepts of 'the whole', 'greater', and 'the part'. It is only *after* one has experienced such objects of sense and the intellect has understood these concepts and other numerical concepts, like 'four' and 'even number' as the child grows up, that the intellect operates on them by what Ibn Sīnā calls its very nature (*fiṭra*, *ḡibilla*, *ḡarīza*), acknowledging their truth and structuring the 'built-in syllogism' which demonstrates their truth. Through this same nature the intellect also 'discriminates among concepts, breaks them down into categories, takes up each one of the concepts individually, and arranges in order the most particular and the most general, and the essential and the accidental. Thereupon there are impressed on the intellect, in [a process of] concept formation, the primary notions (*al-ma'ānī al-ūlā*), and then definitions are composed out of them' (*al-Nağāt* [\*55: 102 al-Kurdī, 170 Dānišpažūh]; cf. Ahmed 2011 [\*166: 135] and the detailed discussion in Gutas 2012 [\*263: 404–410]).

For human intellective knowledge, therefore, the intellect functions as a 'processor' of the information provided by the external and internal senses. By its very 'nature', its *fiṭra*, it sifts, sorts, categorises, files, and orders the primary notions received from the senses. These in turn constitute the basic concepts that are then used in definitions and syllogisms – the *fiṭra* is the natural mode of operation of the intellect and does not bring along or contain any concepts. It is important to realise that this is not because the intellect does not have the constitution to have purely intellective knowledge, like the celestial spheres, but because its existence in the sublunar world of time and perishable matter precludes its understanding the intelligibles through their causes. Instead, it must proceed to them from their perceived effects. Once however, the soul has been freed of the body after death, and if it has acquired, while still with the body, the predisposition to perceive the intelligibles through philosophical training, then it can behold the intelligibles through their causes and

become just like the celestial spheres, a state which Ibn Sīnā describes as happiness in philosophical terms and paradise in religious terms (cf. Gutas 2001 [\*253: 29–31]).

Empiricism is thus essential to Ibn Sīnā's theory of knowledge, but his is not an agnostic or sceptical empiricism but a rationalist one which is processed by syllogistic reasoning through the discovery of the middle terms and in accordance with principles and axiomatic truths self-evident to reason. It is also empiricism in the true sense of the term, based on our total experience of reality, and not just on sense perception through the external and internal senses. In the later stages of his career, Ibn Sīnā arrived at a nuanced understanding of empiricism to include our immediate experience of ourselves, an empiricism, so to speak, of the self. Propositions based on direct experience, or direct observation (*mušāhādāt*), as he says, are of two kinds, one based on sense perception and another on self-reflection (*qaḍāyā i'tibārīyya*). These latter 'are due to the observation of faculties other than sense perception, like our realisation that we have thought, that we are afraid and angry, and that we are aware of our selves and of the acts of our selves' (*Iṣārāt*, *Nahj* 6 [\*58: 56 Forget, 124 Zārī]). 'Self-awareness', he further specifies, 'is innate to the self, being its very existence, and thus we do not need anything external with which to perceive the self, but the self is that with which we perceive its self' (*Ta'liqāt* [\*60.1: 161 Badawī]; cf. Gutas 2012 [\*263: 402–404] as well as Black 2008 [\*259] and Kaukua 2015 [\*268]).

That empiricism, and in particular empiricism of self, was essential to Ibn Sīnā's philosophical edifice can be gauged from the fact that he based it on the absolutely primary and irreducible empirical fact of existence (cf. Davidson 1987 [\*423: 303], Gutas 2012 [\*263: 415–417]). We simply know that there is existence and that we exist, absolutely: not by acknowledging the fact at the end of a syllogism, not by forming a concept by identifying species and specific differences, and not by any sense, either external or internal; we simply know that there is existence. As stated in five simple words by Ibn Sīnā, *lā šakka anna hunā wuğūd<sup>an</sup>* ('there is no doubt that there is existence'; *al-Nağāt* [\*55: 383 al-Kurdi]; cf. Marmura 1986/2005 [\*421: 350/145]). This irreducible empirical fact is the basis for his argument for the existence of God, as follows: 'We exist, but contingently, therefore we may not have existed; but we do exist; therefore there must be a necessary existent that causes existence to exist'. This empirical fact is also the basis for his argument proving the existence of our immaterial and substantial rational souls: the 'flying man' argument whereby we simply know that we exist apart from our body or any other external element. And from these two positions flows everything else.

Ibn Sīnā's rationalist empiricism is the main reason why he strove in his philosophy on the one hand to perfect and fine-tune the logical method and

on the other to study the human soul and cognitive processes at an almost unprecedented level of sophistication and precision.

#### 4.4 *Logic*

##### *Tony Street and Renate Würsch (Subchapter 4.4.9)*

4.4.1 Logic in the Formation and Practice of a Philosopher – 4.4.2 Contents and Structure of Ibn Sīnā's Logical Treatises – 4.4.3 al-Madḥal ('Isagoge') – 4.4.4 Kitāb al-Maḳūlāt ('Categories') – 4.4.5 Kitāb al-'Ibāra ('On Interpretation') – 4.4.6 Kitāb al-Qiyās ('Prior Analytics') – 4.4.7 Demonstration and Syllogistic Matter – 4.4.8 al-Safsāṭa ('Sophistici Elenchi') – 4.4.9 Rhetoric and Poetics

Ibn Sīnā is the most important logician who wrote in Arabic. His logical works supplanted the *Organon* of Aristotle in the realms of Islam, and Ibn Sīnā's formulations became the point of reference and dispute for the logicians writing in Arabic who came after him, who can in consequence truly be referred to as post-Avicennan logicians (Rescher 1964 [\*283: 50], Street 2004 [\*308: 552], El-Rouayheb 2010 [\*323: 11]). Even anti-Avicennan logicians such as Ibn Rušd are forced to devote much of their logical work to dealing with Ibn Sīnā's formulations; Ibn Rušd became in spite of himself yet another recipient of the influence Ibn Sīnā exercised on later Arabic logic (cf. e.g. Rescher 1963 [\*282]).

Ibn Sīnā's importance relative to Aristotle is disorienting for those used to working on medieval Latin logic. Although Ibn Sīnā himself made numerous references to Greek logicians, especially in his early- and middle-period works, he naturalised the discipline of logic to the extent that logicians who came after him could work entirely within a canon of original Arabic texts on logic, rather than with texts translated from the Greek. Moreover, his last work, *al-Išārāt wa-l-tanbihāt* (*Pointers and Reminders*) [\*58], which devotes about a third of its coverage to logic, directly inspired a tradition of logical writing which came to be taught in the madrasas (Street 2004 [\*308: 580]). Madrasa logic is in important respects a simplified version of Ibn Sīnā's logic, concentrating on a few major themes he had developed, as in such as e.g. Naḡm al-Dīn al-Kātibī's *Logic for Šams al-Dīn* (*al-Risāla al-Šamsiyya*, in Sprenger 1862 [\*280]; cf. the assessment by Madkour 1969 [\*286: 9–10], on this work being equated with Ibn Sīnā's *Logic* in the 18th century cf. Ahmed 2011 [\*326]). It is a characteristically Avicennan tradition because of the nature of its treatment of those themes, and the order in which they are treated.

At the same time logicians were arriving at what came to be madrasa logic, they were also working on advanced topics in logic, nearly all of which were determined in their formulation by Ibn Sīnā's writings. The advanced



treatments in later logic, particularly in the 12th and 13th centuries, are written either explicitly or implicitly in commentary on Ibn Sīnā's works. In the same way that the commentaries of late antiquity throw light on how to interpret Aristotle, so too post-Avicennan logicians present and evaluate different ways to read various difficult passages found in the Avicennan corpus. It may well be that they do not convey genuinely Avicennan teaching, but they certainly represent views hammered out through years of thought and argument. A number of their views are adopted below, as provisional interpretations of controversial points in Ibn Sīnā's logic.

#### 4.4.1 Logic in the Formation and Practice of a Philosopher

It is difficult to say precisely how much of Ibn Sīnā's work is devoted to logic; perhaps a quarter of his works are exclusively or substantially given over to logic or a closely related topic. We can say, however, that nearly half of what he wrote in *al-Šifā'* is on logic, and roughly a third of *al-Išārāt*. Those two works might give the truest reflection of how much of his philosophical activity was given to the subject throughout his career. The high proportion of Ibn Sīnā's oeuvre devoted to logic is indicative of the stress he laid on it. He regarded logic as indispensable in the formation of a philosopher, and in proper philosophical practice. Ibn Sīnā's autobiography presents an idealised model of a philosophical education, and logic features prominently. Famously, after his first studies in philosophy, Ibn Sīnā went back over all the parts of the discipline again, compiling a set of files, and 'for each argument that I examined, I recorded the syllogistic premisses it contained, the way in which they were composed, and the conclusions which they might yield, and I would also take into account the conditions of its premisses [i.e. their modalities] until I had ascertained that particular problem. Every time I was at a loss about a problem, concerning which I was unable to find a middle term in a syllogism, I would repair on its account to the mosque and worship, praying humbly to the All-Creator to disclose to me its obscurity and make its difficulty easy' (after Gohlman 1974 [\*117: 26–28]; transl. by Gutas 2014 [\*70: 16–17]).

By the same token, Ibn Sīnā regarded the absence of a syllogistic habit in scholars to render them incapable of practising philosophy. In conversation with one of his students, he noted this as a problem common among his Christian contemporaries (who reappear as 'the literalists' [*al-ṣāhiriyyūn*] in *al-Nağāt*, and 'the Westerners' [*al-mağribiyyūn*] in *al-Mašriqiyyūn*); they have dismissed logic completely: 'With regard to the matters of syllogisms, their dismissal is complete ... As for the forms of syllogisms, specifically these people have disregarded them. Whenever they treated them, they strayed from the right path because they never acquired the habit of dealing with them and they

never suffered the pains of analysing the details of problems so that they may gain a syllogistic habit; their sole reliance, instead, is upon ideas not subject to rules' (cf. Gutas 2014 [\*70: 63–64], translated from *Kitāb al-Mubāḥaṭāt* after the text in MS Oxford, Hunt. 534 fol. 64<sup>r</sup>–66<sup>r</sup> [\*6r: § 134 Bīdārfar]). We find Ibn Sīnā condemning an alumnus of the Baghdad school, Abū l-Qāsim al-Kirmānī, for his inattention to logic: 'When he spoke, he spoke with another species of syllogism; he thought they produced what he sought, but they didn't, neither actually nor in potentiality close to actuality. When I analysed his syllogisms and established their sterility and the fact that they produced something other than what he sought, it had no effect on him; rather he would aim to correct them with something even more remote than the first attempt' (*Risāla* [\*14r: 75,3–6; transl. in Michot 2000 [\*144: 12\*–13\*]). More generally, Ibn Sīnā viewed those without proper training in logic as unable to argue in an articulated manner, like musicians improperly trained in playing their instruments (*Šifā'*, *Manṭiq*, *Ġadal* [\*54.1.6: 26–29]; Fr. transl. by Michot 2000 [\*144: 45\*]; cf. also Michot 2000 [\*144: 68\*–72\*]; cf. also *Šifā'*, *Manṭiq*, *Madḥal* [\*54.1.1: 19–20]). Ibn Sīnā warned that someone who had practised what was covered in the logic section of *al-Iṣārāt* yet still fell into error with respect to it should be restrained from philosophy (*al-Iṣārāt* [\*58: 506]); logic constituted, therefore, an entrance exam to qualify for further philosophical study.

Ibn Sīnā attributed the invention of logic to Aristotle (though he claimed access to further insights into the philosophical sciences generally by way of intuition, (cf. Gutas 2014 [\*70: 37] with a reference to *al-Mašriqīyyūn*), and saw himself as working to augment the achievements of Peripatetic logic. It has already been mentioned that his attitude to Aristotle changed over the course of his works, and how it is reflected in the structure and contents of his treatises. The other forebears whose logical work he admired, and whose paradigms he aspired to continue, are typical of those he admired in the other areas of his philosophy. So Themistius, Alexander, Philoponus, and above all al-Fārābī are the philosophers whose work Ibn Sīnā strove to emulate (Gutas 2014 [\*70: 58]). Of these, al-Fārābī is the scholar most quoted throughout *Treatise on the Syllogism* (*Šifā'*, *Manṭiq*, *Qiyās* [\*54.1.4]); he is 'the eminent later scholar', the man 'to whom I am most concerned to direct my remarks' (cf. Street 2001 [\*304]). Still, although Ibn Sīnā refers to al-Fārābī, he does so above all in order to present his differing opinion and strike a new path. Even so, his respect for al-Fārābī is usually deep, and the latter's influence on him is evident (Zimmermann 1981 [\*292: lxxiv n.2], Strobino 2018 [\*351]).

An essential document for our understanding of Ibn Sīnā's logic and its relation to his philosophical practice was translated by Gutas 2014 [\*70: 65–66] following the text of MS Oxford, Hunt. 534 fol. 64<sup>r</sup>–66<sup>r</sup> (*al-Mubāḥaṭāt* [\*61: § 137

Bidārfar]). Written by one of Ibn Sīnā's disciples from Rayy, it records how Ibn Sīnā would teach his students to use the logic they had studied. It is notable that Ibn Sīnā taught his students to analyse the philosophical sciences, their corollary principles and whatever is further derived from them 'not according to the forms of the [syllogistic] figures but according to their matters' (Gutas 2014 [\*70: 65]). Ibn Sīnā would teach his students how to find middle terms, because 'Ibn Sīnā has a superbly detailed knowledge, unparalleled in others, of what does not constitute terms of premisses in demonstrative, dialectical, and sophistical syllogisms' (Gutas 2014 [\*70: 65]). Finally, in the same account it is related that Ibn Sīnā would counsel his students against spending too long when analysing an argument on the form of the syllogism, 'for that is one of the easy parts and a sound instinct rarely makes a mistake about it; you should rather practice examining in detail the matters [of syllogisms]' (Gutas 2014 [\*70: 65–66]).

In short, Ibn Sīnā specifically advised his students that the difficult part in analysing philosophical arguments is in the analysis of their matter, that is, their concrete terms and the determinacy of the relation – be it epistemic or semantic – those concrete terms have to each other. It is ironic that the insights in treating syllogistic form worked out in minute detail in *al-Tbāra* (*On Interpretation*) and *al-Qiyās* (*Prior Analytics*) – in all probability Ibn Sīnā's most innovative contribution to logic – are said to be of little value in appraising an argument actually used in the philosophical sciences relative to considerations of syllogistic matter. In light of the disciple's memoirs, there is little reason to think that arguments actually used in Ibn Sīnā's works on geometry, say, or physics, will serve the methodological goal of helping us check the accuracy of our analyses of Ibn Sīnā's intricate accounts of argument forms.

This is not to say that Ibn Sīnā produced highly technical machinery in his logic for no purpose; but rather that the ultimate use of the technical machinery he produced was not the primary consideration in his mind as he worked. Drawn into a complicated and challenging debate about questions to do with propositional forms, modality, and logical consequence (among other issues), he tried to resolve these questions in the terms they had been posed in the philosophical works to which he had access. Factors internal to the received debates mattered more in developing the technical stretches of his formal logic than pressures arising from the use of that formal logic in debates outside the discipline. By contrast, there is every reason to think that the use to be made of his theories determined in large part the course of his reflections in his work on the material aspects of logic.

#### 4.4.2 Contents and Structure of Ibn Sīnā's Logical Treatises

What is most salient about Ibn Sīnā's approach to logic is that – as in his other philosophical work (cf. esp. Gutas 2014 [\*70: chap. 6]) – he was committed to writing a systematic and coherent treatment of the various problems he dealt with. In contrast to al-Fārābī, who devoted much of his long commentaries on the books of the *Organon* to the classical project of disinterring what Aristotle meant, Ibn Sīnā first and foremost enlarged on his own logical concerns (Street 2004 [\*308: 583]). When he faced a crux in a relevant Aristotelian text, or a passage which undercut the project he had in hand, Ibn Sīnā used ways of effectively neutralising the need to deal with it, either by treating what Aristotle had to say as merely a test (as he did in respect of the modal syllogistic in *al-Qiyās* [\*54.1.4: 204.10–12]), or as inconsistent with other more important principles, and therefore to be rejected (as he did in respect of certain Aristotelian claims concerning syllogisms with mixes (*muḥtaliṭāt*) of differently modalised premises in *al-Aḡwiba* [\*77: 85 and passim]). Ibn Sīnā's attitude towards Aristotle in *al-Šifā'* is on the whole respectful; later Avicennan works on logic like *al-Išārāt* hardly mention Aristotle at all.

Aside from the great summa, *al-Šifā'*, and the late treatise, *al-Išārāt*, Ibn Sīnā's other writings form three broad types. First, Ibn Sīnā wrote general treatises on philosophy shorter than *al-Šifā'*, almost always with wide-ranging treatments of logic; the most important of these are *al-Nağāt* [\*55], *Dānišnāma* [\*56], and the extant sections of *al-Mašriqiyyūn* [\*57]. These treatments are far less ambitious than *al-Šifā'*, and tend to stick to formal logic, its application in demonstrative reasoning, and its pathology in terms of sophistical arguments. Then there are free-standing treatises on logic which cover the whole subject, none of which has been consulted for this entry (though one of them – *The Middle Compendium on Logic* (*al-Muḥtaṣar al-awsaṭ fī l-manṭiq* [\*67]) – reappears in a revised form as the logic of *al-Nağāt*). Finally, Ibn Sīnā also wrote epistles treating matters of a more focused nature. Of these, one in particular, *The Answers* (*al-Aḡwiba* [\*77]), allows us to glimpse how Ibn Sīnā's contemporaries responded to his logic (see Street 2010 [\*324]); another (*al-Risāla* [\*141]), how Ibn Sīnā first reacted to the theory of universals of the Baghdad school.

But the most sustained contribution to logic which Ibn Sīnā wrote is constituted by the nine volumes of *al-Šifā'* which deal with the texts making up the Alexandrian *Organon*, that is to say the *Isagoge*, *Categories*, *On Interpretation*, *Prior Analytics*, *Posterior Analytics*, *Topics*, *Rhetoric*, *Sophistical Refutations*, and *Poetics* (an overview of the Alexandrian *Organon* to which Ibn Sīnā was heir may be found in Black 1990 [\*295: chap. 2]). In the *Šifā'*, Ibn Sīnā responded

to the late antique commentary tradition on the *Organon*, although – as he insisted in response to Ġūzġānī's request for a commentary on Aristotle's corpus in the strict sense of the term (Gohlman 1974 [\*117: 54]) – he deliberately chose not to write his major contribution to the tradition as a commentary. It is true that he strove while writing the logic of *al-Šifā'* 'to have it run parallel to the order of Aristotle's books [on Logic], supplying in addition [discussions on] hidden and subtle issues which are lacking in available books' (*Madḥal* [\*54.1.1: 11,1–3], transl. by Gutas 2014 [\*70: 45]). But to infer from this structural conformity that *al-Šifā'* is essentially a commentary on the *Organon*, an elaboration of a new synthesis encompassing preceding philosophical insights (as Madkour 1969 [\*286: 24] seems to do; though note his later evaluation in Madkour 1970 [\*54.1.3: p. 1]), is to underrate work that can be spectacularly original and a mine of information on the history of logic in respect of – generally unnamed – earlier logicians, on whose conclusions Ibn Sīnā commented.

The *Išārāt* [\*58] is Ibn Sīnā's last work on logic, and only passing reference is made in it to Aristotle. It may be used as a compressed account of important doctrines in Ibn Sīnā's logic; it was certainly taken in the past by Ibn Sīnā's commentators to be his most considered statement of certain central problems (e.g. Tūsī, *Ḥall* [\*214: 391]). Its logic is presented in the first volume in ten 'paths' (Ar. *Nahġ*), or chapters. *Al-Išārāt* exemplifies in varying degrees all five changes in format set down by Ibn Ḥaldūn (*al-Muqaddima* [\*221: 112–113]) as typical of post-Avicennan logical treatises. These include: (1) changing technical terms relative to pre-Avicennan usage (among many innovations, the meanings assigned to *wuġūdiyya*, to *iqtirānī*, and *istiṭnā'ī*, to *mā dāma mawġūd al-dāt*; regarding these as well as other technical terms cf. the glossary in El-Rouayheb 2010 [\*323]); (2) shifting the main treatment of definition from the *Posterior Analytics* to the end of the section dealing with material from the *Isagoge* (in terms of the ordering in *al-Išārāt*, from path nine to path two); (3) omitting treatment of the *Categories*; (4) shifting the treatment of conversion from the section on *Topics* to the sections on propositions (in fact, *Topics* is dropped from *al-Išārāt* altogether, except for some comments on dialectical premises in path six, and conversion is moved to path five); and (5) omitting much of the treatment of syllogistic in terms of its material implementation, which amounts to dropping most of what is dealt with in the last five books of the *Organon* (though paths nine and ten of *al-Išārāt* deal, respectively, with demonstration and sophistical fallacies). Ibn Sīnā not only made global changes to the structure of the logic treatise in *al-Išārāt*, he also made local changes in the way separate topics were presented. So – as will be mentioned below in dealing with *al-Qiyās* – in early and middle-period works, he followed Aristotle's method of exposition of the modal syllogistic in *Prior Analytics*, by

premise pairs; in *al-Iṣārāt* he dealt with it by figure (i.e. all modal mixes in the first figure, then in the second, then the third).

No-one has studied the reasons why Ibn Sīnā restructured the logic of *al-Iṣārāt* as he did, though recent work on the metaphysics (Bertolacci 2006 [\*442]) – following a line of analysis first brought to bear on the Avicennan corpus in Gutas 1988 – is suggestive. Ibn Sīnā reorganised Aristotle's metaphysics by adopting the stipulations of the *Posterior Analytics* for laying out a science, setting out its principles, subject matters and questions, then proving simpler and deductively more powerful conclusions before moving on to more complicated derivative proofs (Bertolacci 2006 [\*442: 194], where he quotes a statement of ideal scientific method from *al-Burhān* [\*54.1.5: 155 'Afīfī]). This is not the place to argue that the stipulations for setting out a science motivate how Ibn Sīnā reorganised logic; the question merits a study in itself. Statements in later logical texts which adopt and develop further the layout of *al-Iṣārāt*, however, lend support for this explanation of the way he restructured the logic treatise (Taḥṭānī, *Taḥrīr* [\*220: 4,4–4,8]).

Whereas the logical sections of *al-Šifā'* were explicitly written to follow the structure of the *Organon*, *al-Iṣārāt* deals with expressions and the meanings they signify (paths 1 and 2), propositions (paths 3–6), and arguments (paths 7–10). This means that paths one and two go to how a conception (*taṣawwur*) is formed, and the rest go to how an assent (*taṣdīq*) is given (see the next section, on *al-Madḥal*, for more detail). This is the broadest structuring division of material in Ibn Sīnā's logic treatise, and structures all post-Avicennan treatises. At a more detailed level, propositions may be treated from a formal perspective (paths 3–5) or from a material perspective (path 6); arguments too may be treated formally (paths 7 and 8), or materially; arguments with appropriate matter may be demonstrations (path 9), though if they suffer certain flaws, they may be sophistical fallacies (path 10). By introducing this new method of exposition, Ibn Sīnā set the trajectory for further changes in the presentation of logic in the later Arabic tradition. Simply by making one further modification (treating formal aspects of logic first, then material aspects), the later textbooks went from the exposition in *al-Iṣārāt* to an exposition which even now remains the default method for setting out logic. The later tradition went further too in modifying Ibn Sīnā's treatment of specific issues; to give one example, they changed his order of treating conversion (though they stuck to his new method of delivering the syllogistic). Overall, the changes in *al-Iṣārāt* mean that one book of the *Organon* (the *Categories*) disappears altogether, two books (*Topics* and *Rhetoric*) survive only in fragments in path 6, and material from two books (*al-Ṭbāra* and *al-Burhān*) are distributed to other parts of the logic.

In the following, the material will be presented in the sequence of the books of the *Šifā'*. For what is discussed with respect to each volume, however, the material is most often selected by virtue of its appearance in *al-Išārāt*, and ordered as it is there. References to *al-Išārāt* are to *nahj* ('path' or chapter) and to *išāra* ('pointer' or subsection), following the transl. by Inati 1984 [\*58] which follows the Dunyā edition, thus for instance 1.1 or 1.2.; if a specific passage is referred to, the path and pointer reference is followed by the page numbers (in the entire chapter on logic, the passages from the *Išārāt* are cited after the second printing of the Dunyā edition [1968–1971]). References to volumes of *al-Šifā'*, such as e.g. *al-Madḥal*, are to treatise (*maqāla*; all volumes covered here comprise more than one treatise) and chapter, (*faṣl*) (e.g. I 1 or I 2), unless a specific passage is referred to, at which point page numbers are given.

#### 4.4.3 al-Madḥal ('Isagoge')

The first volume of the Logic in *al-Šifā'* introduces the whole of logic, rather than simply the *Categories* (as did its distant ancestor, Porphyry's *Isagoge*); to a lesser extent it also introduces the whole of philosophy, though not as comprehensively – nor as superficially – as its contemporary competitor, Ibn al-Ṭayyib's commentary on the *Isagoge* (cf. esp. Di Vincenzo 2018 [\*589] and, for an annotated translation of the whole work, Di Vincenzo 2021 [\*354]). Ibn Sīnā presents logic as one science among many; sciences alongside logic are ideally completed by using logic, the instrumental science (*Išārāt* [\*58: 1.0]; *Madḥal* [\*54.1.1: 1 3]). Each science has a subject matter which it investigates from a given perspective, so logic has a determinate subject matter, secondary intelligibles, which is to say – and more is given on this below – second-order meanings (Ṭūsī, *Hall* [\*214: 118], ad *Išārāt* [\*58: 1.0]; *Madḥal* [\*54.1.1: 1 4]). These meanings must be approached through language, so problems associated with how linguistic expressions signify meanings – especially universal meanings – must be dealt with (*Išārāt* [\*58: 1.5–8]; *Madḥal* [\*54.1.1: 1 5]). Science is concerned with universal expressions; more precisely, Aristotelian sciences define their subjects using certain kinds of universals, and seek to prove properties denoted by other kinds of universals belong to those subjects necessarily. By using the notions of the 'essential' and the 'accidental' (*Išārāt* [\*58: 1.9–14]) along with the fundamental question 'What is it?' (*Išārāt* [\*58: 1.15–16]; *Madḥal* [\*54.1.1: 1 5–7]), Ibn Sīnā was able to divide universal simple expressions into Porphyry's five predicables (genus, species, differentia, proprium, and general accident), the first three of which go to definition, the fourth, to what is proved to belong to a subject (*Išārāt* [\*58: 2.1–6]; *Madḥal* [\*54.1.1: 1 8–11, 13–14, and 11 1–4]), while the fifth has no scientific utility. Questions to do with what is essential – and in what sense they are essential – are revisited in the second

treatise of *al-Burhān* (\*52.1.5; cf. Strobino 2016 [\*344]). *Al-Iṣārāt* proceeds after treatment of the predicables to deal with definition, which – following the grouping of material in al-Šifāʾ – I defer to the section below on *al-Burhān*.

Let us look more closely at three of the preliminaries for a study of logic: (1) the division of the sciences, a division which includes a working definition of logic (*Madḥal* [\*54.1.1: I 2, pp. 12–16]; transl. of the entire chapter by Marmura 1979 [\*289], transl. of the definition by Gutas 2014 [\*70: 317], cf. Sabra 1980 [\*291: 751–752]); (2) a consideration of the benefit of logic, which introduces the notion that all that is knowable is known in one of two cognitive states, conception (*taṣawwur*) or assent (*taṣdīq*) (*Madḥal* [\*54.1.1: I 3, p. 16–20]; discussed in detail in the excellent contribution by Sabra 1980 [\*291: 757–762]); (3) a discussion on what is the subject matter of logic (*Madḥal* [\*54.1.1: I 4, p. 21–24]; cf. Sabra 1980 [\*291: 753–757]). Aside from his lengthy treatment of the predicables, Ibn Sīnā went on in *al-Madḥal* (4) to reflect on the ontological, epistemic and logical status of universals (*Madḥal* [\*54.1.1: I 12, pp. 65–72]; transl. by Marmura 1979 [\*289], discussed anew in Marmura 1992 [\*298]). Remarks on each of these four topics in the following.

(1) Ibn Sīnā defined logic in a number of texts, always emphasising the instrumental nature of the discipline (Gutas 2014 [\*70: 303–322]), while also – against his Peripatetic colleagues (cf. e.g. Ibn al-Ṭayyib, *Taḥṣīl* [\*206: §70, S. 33]) – maintaining that it was a science (Sabra 1980 [\*291: 746]). His last definition of logic is given in the *Iṣārāt*: ‘The purpose of logic is to be for man a normative instrument the use of which will protect him from going astray in his thinking. By “thinking” I mean here what is by consensus taken to be a move from matters present in the mind, whether conceived or assented to [as true] (whether the assent be scientific or suppositional or a posit [for learning a science] and a concession) ... to matters absent in it ... Logic, then, is the science whereby are learned the different kinds of moves from matters actually existing in man’s mind to those whose acquisition is desired ...’ (*Iṣārāt* [\*58: 1.0, pp. 117–124]; transl. with further definitions of logic in Gutas 2014 [\*70: 317–318]). The parenthesis ‘whether the assent be scientific or suppositional or a posit [for learning a science] and a concession’ refers to the material (here: epistemic) status of the assent, to which I return in dealing with demonstration below.

(2) Logic provides rules for moving ‘from matters present in the mind, whether conceived or assented to [as true] (whether the assent be scientific or suppositional or a posit [for learning a science] and a concession)’. Everything in the mind – all knowledge – is either a conception (*taṣawwur*) or an assent (*taṣdīq*; for alternative translations of this second term, see Gutas 2012 [\*263] and Lameer 2006 [\*569: 3–18]). ‘A thing is knowable in two ways: one of them is for the thing to be merely conceived (*yutaṣawwara*) so that when the name



of the thing is uttered, its meaning becomes present in the mind without there being truth or falsity, as when someone says “man” or “do this!” For when you understand the meaning of what has been said to you, you will have conceived it. The second is for the conception to be [accompanied] with assent, so that if someone says to you, for example, “every whiteness is an accident”, you do not only have a conception of the meaning of this statement, but [also] assent to it being so. If, however, you doubt whether it is so or not, then you have conceived what is said, for you cannot doubt what you do not conceive or understand ... but what you have gained through conception in this [latter] case is that the form of this composition and what it is composed of, such as “whiteness” and “accident”, have been produced in the mind. Assent, however, occurs when there takes place in the mind a relating of this form to the things themselves as being in accordance with them; denial is the opposite of that’ (*Madḥal* [\*54.1.1: 13, p. 17,7–17], transl. by Sabra 1980 [\*291: 760], with slight alterations). As has been mentioned, Avicennan treatises on logic written after the *Šifā* – such as the *Iṣārāt* – are structured in accordance with this doctrine: a first section deals with matters to do with definition, which conduces to conception, a second with proof (especially by syllogism), which conduces to assent.

(3) In claiming that logic is a science, Ibn Sīnā had to be able to assign to it principles (*mabādī*), subject matters (*mawḍū‘āt*), and questions (*masā’il*). In practice, assigning it a subject matter was his most obvious move in making this claim. It is identified in *al-Ilāhiyyāt*: ‘The subject matter of logic, as you have known, are the secondary intelligible ideas that depend on the primary intelligible ideas with respect to the manner by which one arrives through them from what is known to what is unknown – not [however] with respect to their being intelligible[s], having [that] intellectual existence that either is not at all attached to matter or attached to non-corporeal matter’ (*Ilāhiyyāt* [\*54.4: I 2, p. 10–11]; Engl. transl. by Marmura 2005 [\*54.4 (b): 7]). A later commentator explained: ‘The explanation of “secondary intelligibles” is that man conceives the realities of things (*ḥaqā’iq al-ašyā*) in the first place, then qualifies some with others either restrictively or predicatively. The quiddity’s being qualified in this way is something that only attaches to the quiddity after it has become known in the first place, so it is a second-order [consideration]. If these considerations are investigated, not absolutely, but rather with respect to how it is possible to pass correctly by means of them from the known to the unknown, that is logic’ (Rāzī, *Mulāḥḥaṣ* [\*212: 10,1–8; El-Rouayheb 2012 [\*329: 72–77] shows that Rāzī’s clarification is compatible with Ibn Sīnā’s doctrine). In arguing for this view, Ibn Sīnā was departing from an account of the subject matter of logic congenial with al-Fārābī’s views, which takes the subject matter of logic to be expressions as they relate to intelligibles (PTW 1 § 8.4.1; cf. Menn

2012 [\*330: 68], who argues that al-Fārābī also took secondary intelligibles to be the subject matter of logic).

(4) Ibn Sīnā's analysis of how a general term can refer to many things makes up part of what is called the common nature doctrine of universals, a doctrine strongly associated with Ibn Sīnā in the West (Klima 2013 [\*335: section 7]). The doctrine treats the universal under a number of distinctions, three of which are important in understanding the logical significance of the doctrine, distinctions which deliver the natural, the logical and the mental universal. The same nature, or meaning, informs a conception in the mind and its instantiations in reality. The meaning, considered apart from its conception and its instantiations, does not exist as a universal or an individual, because the common meaning does not in itself involve generality or particularity. Take the genus 'animal' as an example. 'Animal in itself is a meaning, regardless of whether it exists in external reality (*fī al-a'yān*) or is conceived in the soul (*mutaṣawwar<sup>an</sup> fī l-naḡs*). In itself it is neither general nor particular. If it were in itself general, so that animality by reason of being animality is general, it would follow necessarily that there would be no individual animal; rather, every animal would be general. If, moreover, animal by virtue of being animal were individual, it would then be impossible for it to be anything but one individual, that individual required by animality, and it would be impossible for any other individual to be an animal ... If with this it is [also] conceived as general, particular and the like, then an idea additional to its being animal, occurring accidentally to animality, is conceived with it' (*Madḡal* [\*54.1.1: I 12, p. 65, 11–19]; Engl. transl. in Marmura 1979 [\*289: 47]).

So this meaning, the natural universal, does not entail universality, but it is apt to be universal if it is predicable of more than one instance (and considering whether it is or not constitutes what Marmura [\*289: 34] calls 'the predication test'). An idea 'additional to its being animal' is thereupon added to the meaning conceived in the mind: 'Animal in the mind is one meaning, its being general or a genus is [another] meaning, and its being a generic animal [yet another] meaning. They thus call the meaning (*ma'nā*) of [the] genus [considered simply as genus] "logical genus"' (*Madḡal* [\*54.1.1: I 12, p. 66, 10–12]; transl. in Marmura 1979 [\*289: 48]). It is only a nature, conceived in the soul and joined to logical genus (e.g. 'a generic animal', what Ibn Sīnā called the mental genus), that can be a genus or a species strictly so-called. Species and genera are, in short, mind-dependent relations between natures.

#### 4.4.4 Kitāb al-Maqūlāt ('Categories')

Logicians of late antiquity had debated whether or not the *Categories* was a logical or a metaphysical work. Ibn Sīnā ruled that it was metaphysical, listing

as it does what higher kinds may be said in answer to the question, ‘what exists’? Nonetheless, to observe long-standing Peripatetic tradition, Ibn Sīnā dedicated the second volume of *al-Šifāʾ* to treating the categories (see now especially Kalbarczyk 2018 [\*349]). He stressed at the outset that it is irrelevant to the larger task of learning logic; the student ‘after becoming acquainted with such matters as we described relating to simple terms [*Isagoge*], and after becoming acquainted with names and verbs [*On Interpretation*], the student of logic can move on to study propositions and their parts, syllogisms, definitions and their kinds [*Prior Analytics*], the matters of syllogisms, demonstrative and non-demonstrative terms along with their genera and species [*Posterior Analytics*], without having any idea that there are ten categories’ (*Maqūlāt* [\*54.1.2: 5,1–4]; transl. by Gutas 2014 [\*70: 301]; cf. Sabra 1980 [\*291: 764]). In saying this, Ibn Sīnā was counselling students to begin with the first four chapters of the first treatise in *al-ʿIbāra* (*On Interpretation*). Later logicians connected the decision to exclude the categories from logic with Ibn Sīnā’s doctrine on the subject matter of logic. The categories are concerned with primary intelligibles and – since (1) the subject matter of logic is secondary intelligibles, (2) secondary intelligibles depend for their existence on primary intelligibles, and (3) a science cannot investigate what underpins the existence of its subject matter – therefore logic cannot properly include an investigation of them in its purview (Ḥillī, *Ġawhar* [\*219: 23]). In his last books on logic, *al-Mašriqiyyūn* and *al-Išārāt*, Ibn Sīnā excluded mention of the categories altogether, a significant development in his attitude to the Peripatetic tradition and the influence he allowed it to have over his exposition of logic (Eichner 2013 [\*334], Kalbarczyk 2012 [\*330]). None of these considerations prevented Ibn Sīnā from offering original contributions to debates about the categories. For example, his treatment of the project of constructing a division to deduce the ten categories exemplifies luminously both the way Ibn Sīnā responded to long-standing debates in the Peripatetic tradition, and the considerations he claimed had to be borne in mind in the process of division (Thom 2015 [\*341]). These matters go, however, to categorial metaphysics.

#### 4.4.5 Kitāb al-ʿIbāra (‘On Interpretation’)

*Al-ʿIbāra* offers a treatment, in two treatises, of material that corresponds fairly closely to what is covered in Aristotle’s *On Interpretation*. The first four sections of the first treatise deal with parts of speech, and – following the advice noted above from *al-Maqūlāt* – came to be integrated into later logical treatises before material from *al-Madḥal* (a rearrangement presaged by a shift in some material in *al-Išārāt*). Ibn Sīnā devoted attention to all parts of speech, including the particle (or perhaps more accurately, the syncategorematic term;

see Chatti 2014 [\*336]); he deplored the fact that Aristotle had omitted the particle in his treatment (*Ibāra* [\*54.1.3: 29]). The subsequent sections of the first treatise and all of the second treatise deal with the construction of propositions. ‘What is beneficial in the sciences is either composition by way of delimitation (*taqyīd*), for acquiring conceptions by definition and description, or composition by way of information (*ḥabar*), for acquiring assents by syllogistic arguments and the like, and from this [second] kind of composition comes about a genus of speech called statement-making (*ǧāzīm*)’ (*Ibāra* [\*54.1.3: 31,16–32,2]). *Al-Ibāra* goes on to consider in general terms the conditions which occur to statement-making propositions, among others, affirmation, negation and opposition (*Ibāra* [\*54.1.3: 1 6]; *Iṣārāt* [\*85: 3.2; 5.1]), and quantification and modalisation (*Ibāra* [\*54.1.3: 1 7]; *Iṣārāt* [\*58: 3.3–4]); it also offers some insights into conditionals and disjunctives (or, more accurately, conjunctive and disjunctive hypothetical propositions; *Ibāra* [\*54.1.3: 33,16–17. 40,14–15]; *Iṣārāt* [\*58: 3.5–6; 3.8]). Other matters which affect the truth-conditions of propositions also include stipulations as to how the subject term is taken, metathesis, and modal subalternation (respectively, *Ibāra* [\*54.1.3: 11 1–2]; *Iṣārāt* [\*58: 3.1; 4.5; cf. 3.7–8]). *Al-Qiyās* returns to treat a number of these conditions in more detail as they relate to the propositions analysed through the syllogistic; it treats in great depth especially issues to do with the subject term, contradiction and modalisation. Due to the restricted nature of this overview, let us defer mention of the conditions treated in both *al-Ibāra* and *al-Qiyās* to their treatment in *al-Qiyās*. It is noteworthy that the material in path five of *al-Iṣārāt* resembles the treatment in *al-Qiyās* more than it does that in *al-Ibāra*.

Three points first raised by Ibn Sīnā in *al-Ibāra* are worth considering more closely, two because they crop up again and again through the later parts of his logic, the third, because it illustrates his claim about the logic books of *al-Šifāʾ* (*Madḥal* [\*54.1.1: 11,1–3]) that it deals with ‘hidden and subtle issues which are lacking in available books’.

(1) Ibn Sīnā first dealt with the matter of a proposition (*māddat al-qāḍiyya*) in *al-Šifāʾ* in *al-Ibāra*; it is an important notion throughout his logic (though not original to him). Propositional matter in this context is determined by the semantic relation of the terms, and not the epistemic immediacy of the nature of the relationship between the terms (the second concern came to be called by later logicians ‘syllogistic matter’ [*māddat al-aqyisa*]). It is the matter of a proposition which underwrites the modality (*ǧiḥa*) the proposition truly has. Once the signification of a proposition’s terms are fixed, its implicit modal status can be established: if the predicate is a genus or a difference or expresses the natural capacity from a proprium of the subject (that is, it is inseparable

from the subject), the affirmative of the proposition is true as a necessity proposition; if the predicate is a merely contingent accident of the subject, the affirmative is true as a possibility proposition; if the predicate is incompatible with the subject, the affirmative is true as an impossibility proposition. The relations these concrete terms have to each other is expressed as, respectively, the necessary, contingent and impossible matter of the proposition; propositions with terms involving such relations are dealt with under this higher level of abstraction from the concrete terms (Hasnawi 2008 [\*316: 297–298, expanding on the translation of *al-ʿIbāra* [\*54.1.3: 47,3–11]).

(2) It is in *al-ʿIbāra* that Ibn Sīnā first introduced a distinction between the mode of the predicate (*ḡihat al-rabṭ*) and the mode of the quantifier (*ḡihat al-sūr*; reprised, with slightly different terms, elsewhere in his writings; cf. *al-Iṣārāt* [\*58: 4.7]). It has been compared to the distinction between *de re* and *de dicto* modality made in western logic (Movahed 2006 [\*311]). The various syncategoremata are assigned natural places in the propositions regimented for logical analysis; the natural place for the quantifier is next to the subject, for the copula, next to the predicate. ‘The modal operator should be next to the copula, because it signifies the modality of how the predicate links with the thing ... So if we say, “every human is possibly a writer” (*kullu insān<sup>in</sup> yumkinu an yakūna kātib<sup>an</sup>*), this is the natural form, and it means that each and every human being [taken one by one] is possibly a writer. If the mode is attached to the quantifier ... its meaning would change. What is possible would come to be this: that all humans, each and every one, being writers all together is possible. The proof that the meaning has changed is that there is no doubt in the minds of people generally about the first statement (for it is known that it is not necessary for each single human – with respect to their nature – always to write or always not to write). But there may be doubt regarding “possibly, every human is a writer” (*yumkinu an yakūna kullu insān<sup>in</sup> kātib<sup>an</sup>*), taking the “possibility” to be a mode of universality and the quantifier. For there are those who say, “It is absurd that all humans should be writers” ...’ (*ʿIbāra* [\*54.1.3: 114,18–115,10]; cf. also the transl. by Ahmed 2008 [\*314] [transl. modified]). Later logicians were to make frequent use of the distinction. They took Ibn Sīnā to be interested almost exclusively in the *ḡihat al-rabṭ*, but they called on the distinction to help clarify some of Ibn Sīnā’s more obscure decisions (e.g. Ḥūnaḡī, *Kaṣf* [\*213: 134], to clarify a conversion-claim; Ṭūsī, *Ḥall* [\*214: 470], to clarify how non-necessity propositions can serve as premises in a demonstration).

(3) We may note that in *al-ʿIbāra* [\*54.1.3: 18–9], Ibn Sīnā offered a treatment of the quantification of the predicate (a topic insufficiently important to be set out in *al-Iṣārāt*). The treatment is occasioned by *On Interpretation* 17b12–16: ‘It is not true to predicate a universal universally of a subject, for there cannot be

an affirmation in which a universal is predicated universally of a subject, for instance: every human is every animal.' Above all, the two chapters which Ibn Sīnā devoted to this lemma illustrate the way in which *al-Šifā'*, while following the *Organon*, can include material some distance from Aristotle's original text (the 'hidden and subtle issues' of which he spoke). Further, it provides an opportunity to watch Ibn Sīnā tackling a logical problem with considerations of propositional matter to the fore. Drawing on the tradition of commentary on Aristotle, Ibn Sīnā devoted twelve pages to working through the combinations of subjects and predicates under universal or particular quantification, differentiated according to necessary, contingent, and impossible matter (Hasnawi 2008 [\*316: 303], summary of conclusions). Two points are worth reflecting on. First, by dealing with the logic of doubly quantified propositions on the model of metathetic propositions (that is, affirmative propositions of the form, 'S is not-P', as opposed to negative propositions, which have the form 'not: S is P'), Ibn Sīnā was able to negate these propositions correctly (Hasnawi 2008 [\*316: 306]), a considerable achievement. Secondly, although Ibn Sīnā protested against those who make the subject of quantifying the predicate a topic for study in logic, he was not content simply to exclude it from any putative final version of logic. Against those who argue that the propositions are to be rejected because some are true in more than one matter (as 'no C is every B' is true in necessary, contingent and impossible matter) and therefore are not a function of real states of affairs, Ibn Sīnā argued, 'Regarding propositions and their use, attention should be paid to nothing but the truth. If they are true, use them inasmuch as truth enters in them ...' (Hasnawi 2008 [\*316: 305, 314], after *Ibāra* [\*54.1.3: 62,17–63,1]).

#### 4.4.6 Kitāb al-Qiyās ('Prior Analytics')

The fourth book of the *Šifā'*, *al-Qiyās*, is – by a considerable margin – the longest of the logical volumes which make up such a major part of Ibn Sīnā's magnum opus. It would seem also to contain his most innovative contributions to logic; it certainly contains his most influential material in terms of impact on the later tradition of Arabic logic. Roughly following the order of the *Prior Analytics*, *al-Qiyās* nonetheless goes beyond its ultimate inspiration to deal with a number of topics merely touched on, or entirely omitted, by Aristotle. The most noteworthy of these extensions to the *Prior Analytics* is in Ibn Sīnā's lengthy consideration of certain kinds of inferences from hypothetical propositions (*al-šartīyyāt*). Ibn Sīnā believed (against al-Fārābī, see Zimmermann 1981 [\*292: 239]) that a treatise Aristotle had written on the subject had been lost (*Qiyās* [\*54.1.4: 397,4–5]), and that logic was the poorer for its loss. Ibn Sīnā's treatment of the hypothetical propositions and their contribution to

inferences provoked extensive responses from Ibn Sīnā's successors, both negative (Bağdādī, *Mu'tabar* [\*207: 155,11–18]) and positive (at least, towards the project; Hūnağī, *Kaṣf* [\*213: 317–423]). This section of *al-Qiyās* has been translated into English (Shehaby 1973 [\*54.1.4]; cf. the studies by Rescher 1963 [\*281], Gätje 1985 [\*293], Movahed 2009 [\*320], Karimullah 2014 [\*337]; see now especially Chatti 2019 [\*353]).

Once again, *al-Iṣārāt* bears witness to the development in Ibn Sīnā's exposition, most evident here in his revised ordering of the treatment of syllogisms. Earlier works (*al-Qiyās* and *al-Nağāt*) display a *Prior-Analytically*-inspired ordering which takes a given premise-pair (two necessity premises, a necessity premise and an assertoric premise, two possibility premises, and so forth) through all three figures before moving on to the next premise-pair. In *al-Iṣārāt*, Ibn Sīnā departed from this procedure, and set out all first-figure mixes of variously modalised premises before moving on to all second-figure mixes, and then to all third-figure mixes. This allowed him to state more neatly than in earlier works his revised account of the 'Rule of the Major' (that is, that the modality of the conclusion follows the modality of the major premise), with all exceptions exemplified next to the Rule's first statement. This was the layout adopted by subsequent Arabic logicians.

*Al-Ibāra* and *al-Qiyās* overlap, as Ibn Sīnā noted in *al-Qiyās*: 'If the thing which was called in *On Interpretation* "apophantic discourse" and "proposition", is made part of a syllogism, it becomes a premise' (*Qiyās* [\*54.1.4: 19,8]). There is no essential difference between the proposition and the premise, but different aspects need to be considered as a function of the different perspectives each approach takes. The investigation into modalised propositions in *al-Ibāra* is not deep enough for the subsequent investigation in *al-Qiyās* (*Qiyās* [\*54.1.4: 38,5]). In consequence, Ibn Sīnā recurred to a number of points first raised in *al-Ibāra* in *al-Qiyās*. It would seem – and there is need for a study on this point – that *al-Iṣārāt* tends to follow the exposition in *al-Qiyās* of this overlapping material more than it does the exposition in *al-Ibāra*; this is especially true of path five. The system touched on here through to 4.4.7 is vast (for a much more profound encounter, see Chatti 2019 [\*353]).

(1) Ibn Sīnā's treatment of the categorical syllogisms, whether with absolute (*muṭlaqāt*) or modal (*muwağğahāt*) premises, depends on the truth-conditions of the propositions, aspects of which are reviewed here. The first is that the subject term of 'every C is B' is taken such that 'we mean that every single thing described as C, be it in mental supposition or extramental existence, be it described as C always, or sometimes, or whatever ...' (*Iṣārāt* [\*58: 280]). It is unclear whether the phrase 'in mental supposition' means that the subject term is taken to amplify to the possible (so that 'every C is B' would be

understood as ‘every possible C is B’; if it does not amplify to the possible, it still includes things that are only at least once C – ‘every one-time C is B’). The way the absolute proposition contributes to inferences on Ibn Sīnā’s account fails to settle the matter, and later Arabic logicians were also uncertain as to whether Ibn Sīnā’s subject terms were amplified: ‘Perhaps Ibn Sīnā hesitated over the conversion of actuality propositions as either possibility or absolute propositions just because of his hesitation over technical usage [concerning the subject term]. When he says that they convert as possibility propositions he doesn’t consider affirmation in actuality with respect to the subject [which is to say, he takes the subject term to amplify]; when he says that they convert as absolute propositions, he does so because the fact the absolute follows on this technical usage is just about patently evident, such that it wouldn’t be appropriate for Ibn Sīnā to deny it’ (Ḥūnāḡī, *Kašf* [\*213: 145,11–15]). How to take the subject term becomes a major focus for later logical discussion; the discussion coordinated material from *al-Ṭbāra* [\*54.1.3: 80,13–81,1], from *al-Qiyās* [\*54.1.4: 1/3–4], and from *naḥğ* 3 and 4 of the *Išārāt* [\*58: 3,2; 4,5] provides the textual basis for further discussion.

(2) It is worth mentioning one possible solution to the problem of how to take the subject term because it has to do with the modal notions that Ibn Sīnā had in play. This solution takes Ibn Sīnā to have collapsed the distinction between alethic and temporal modalities. The solution has been adopted by a number of scholars currently working on Ibn Sīnā, and was explored in Thom’s first model for Ibn Sīnā’s modal system (Thom 2003 [\*306]). It is an old solution, and its rejection as a way to read Ibn Sīnā’s logic is nearly as old: Ḥūnāḡī (d. 646/1248) notes that there may well be many places in Ibn Sīnā’s logic where he equated necessity with perpetuity (and therefore also their respective duals, possibility and actuality; this amounts to committing Ibn Sīnā to a strong principle of plenitude), but that his official position in both *al-Ṭbāra* and *al-Išārāt* is to make necessity stronger than perpetuity (Ḥūnāḡī, *Kašf* [\*213: 93]). In short, it is a solution which raises interpretive problems to do with claims Ibn Sīnā made elsewhere in his logic.

(3) Ibn Sīnā investigated a number of propositions in his syllogistic. He took a proposition without expressed modal operator, the ‘absolute’ (*al-muṭlaqa*), to have an elided temporal modality, ‘at least once’. ‘The contradictory of “All Cs are Bs” taken as the most general absolute [proposition] is “Some Cs are always not Bs”. The contradictory of “No Cs are Bs” ... is “Some Cs are always Bs”’ (*Išārāt* [\*58: 307–308]). These ‘one-sided’ propositions (*muṭlaqāt ‘amma*) he combined to make a ‘two-sided’ proposition, the special absolute (*muṭlaqa ḥāṣṣa*, or *wuğūdiyya*): ‘Every C is at least once B and at least once not B’. Whatever the merits of this account of the absolute, it allowed him to find a



place for the two views in an ancient debate about how to interpret the proposition without an explicit modal operator. 'There are two views concerning the absolute proposition, one belonging to Theophrastus and subsequently Themistius and others. [This view holds] that the absolute is that in which the modality of necessity or possibility of the judgment is not mentioned; rather [the judgment] is given absolutely. So the judgment may belong necessarily, and it may belong non-necessarily (that is, non-perpetually). It is not unlikely that this is the Philosopher's view of the absolute ... The proponents of the second view, among whom is Alexander ... think that ... the absolute is that in whose judgment there is no necessity ... (*Nağāt* [\*55: 34–35]). So Theophrastus' view is compatible with the general absolute, Alexander's, with the special. Ibn Sīnā's absolute propositions do not contribute to inferences in the way that unmodalised propositions in Aristotle's *Prior Analytics* do, yet he tried – and we will return to this below – to find a way to accommodate Aristotle's account. It should be mentioned that the e-proposition ('no C is B') also has this elided temporality, so – assuming the subject exists – it is to be understood as 'every at-least-once C is at least once not B'; in a room of wide-awake men who have all slept the night before, it is true on these truth-conditions to say 'no man is awake'. There was surprisingly little objection to these changes, though we find Ibn Rušd in shrill resistance, and so too Abū l-Barakāt al-Bağdādī (*Mu'tabar* [\*207: 120,20–121,8]).

The other categorical propositions used by Ibn Sīnā in his syllogistic are necessity propositions (*darūriyya*: 'every C is necessarily B') and possibility propositions, both one-sided (*mumkina ʿamma*: 'every C is possibly B') and two-sided (*mumkina ḥāṣṣa*: 'every C is possibly B and possibly not B'). Necessity is the dual of possibility, and Ibn Sīnā defined possibility as that from the supposition of which no impossibility follows. This was a pair of definitions that came under fire in the thirteenth century, when at least Ḥūnājī wanted to have a weaker definition of necessity, and a correspondingly stronger definition of possibility (*Kašf* [\*213: 105]). As we have seen, Ḥūnājī at the same time wants to avoid the collapse of alethic modalities into temporal ones.

(4) Ibn Sīnā read his necessity propositions under one of a number of conditions (later logicians, with good reason, interpreted him as extending these conditions to apply to all his propositions). Two are especially important: 'Necessity ... may be connected to a condition. The condition is either [1] perpetual [relative] to the existence of the substance [of the subject] (*dāt*), as in "man is necessarily a rational body"; by which we do not mean to say that man is and always will be a rational body, because this is false taken for each human individual. Rather we mean that while he exists as a substance (*mā dāma mawğūd al-dāt*) as a human, he is a rational body ... Or [the condition

may be] [2] the duration of the subject's being described with what is set down with it, as in "all mobile things are changing"; this is not to be taken to mean [this is so] absolutely, nor while the subject exists as a substance, but rather while the substance of the moving thing is moving. ...' (*Iṣārāt* [\*58: 264–266]; these conditions come up in *al-Qiyās* [\*54.1.4: I 4, p. 32,7–33,10] and *al-Burhān* [\*54.1.5: II 1, p. 120,15–122,1]; see the excellent treatment in Strobino 2015 [\*339]). Ibn Sīnā took propositions taken under the first condition, *mā dāma mawjūd al-dāt* (called in the later tradition the *dātī* reading), to be those in his repertoire of propositions which corresponded most closely with those Aristotle explored in the modal syllogistic of the *Prior Analytics*; he took those under the second condition to be those which were most helpful in developing the proof theory of *al-Burhān*.

(5) Aside from his categorical propositions (*qaḍāyā ḥamlīyya*), Ibn Sīnā stipulated truth conditions for hypothetical propositions (*qaḍāyā šarṭīyya*) (e.g. *Iṣārāt* [\*58: 224–225]; *Ibāra* [\*54.1.3: 33,16–17. 40,14–15]; *Qiyās* [\*54.1.4: 231–252]). These are composed of more than one categorical proposition, each of which is taken apart from its propositional nature (*ḥabariyya*); rather, the two are related to each other in the hypothetical proposition either by way of implication or by way of conflict. 'If a line cuts two parallel lines, then the external angle will be identical to the internal angle on the other line' is a conditional hypothetical proposition (*qaḍīyya šarṭīyya muttašila*). 'This angle is either acute or obtuse or a right angle' is a disjunctive hypothetical proposition (*qaḍīyya šarṭīyya munfašila*). Ibn Sīnā stipulated quantification for his hypothetical propositions such that 'always: whenever the sun is up, then it is day' is an a-proposition, 'never: whenever the sun is up, then it is night' is an e-proposition, and so forth (*Iṣārāt* [\*58: 235–237]; cf. *Qiyās* [\*54.1.4: 231–252]). I pass over Ibn Sīnā's many further refinements to the range of truth conditions for these propositions.

(6) Aspects to do with the squares of opposition are mentioned in *al-Ibāra*, but are much more helpfully investigated along with conversion in *al-Qiyās* [\*54.1.4: I 5] (cf. *naḥḡ* 5 in the *Iṣārāt*; cf. Chatti 2012 [\*328]). The conversion of the absolute e-propositions ('no C is B' to 'no B is C') does not go through, nor do any second-figure syllogisms (which is to confirm what is already obvious: Ibn Sīnā's *muṭlaqa* is not Aristotle's assertoric). Using the second propositional condition above ('the duration of the subject's being described with what is set down with it'), Ibn Sīnā claimed – somewhat precariously – to be able to replicate at least some of the results Aristotle found for his unmodalised propositions. Nāṣir al-Dīn al-Ṭūsī (*Hall* [\*214: 312,5–7]) says, 'What spurred Ibn Sīnā to this [i.e. the formulation of a revised absolute proposition] was that in the assertoric syllogistic Aristotle and others sometimes used contradictions

of absolute propositions assuming them to be absolute ... When Ibn Sīnā had shown this to be wrong, he wanted to give a way of construing those examples from Aristotle'. The only interest later logicians evinced in Aristotle was at exegetical moments like this, when his lacunose text had provided interpretive puzzles for Ibn Sīnā to solve.

(7) With these matters to do with the propositions in hand, I offer a few comments on the syllogistic. Ibn Sīnā divided his syllogistic into *iqtirānī* and *istiṭnāʿī*, roughly, 'connective' (or 'combinational') and 'reiterative' (or 'repetitive') syllogisms (for the meaning of *istiṭnāʿī*, see Gyekye 1972 [\*287]); Ibn Sīnā explicitly claimed this division as his own, 'according to what we ourselves have verified' (*Iṣārāt* [\*58: 374–375]). It does not correspond with the common Western division into categorical and hypothetical syllogisms. The connective syllogism 'is one in which neither the conclusion nor its contradictory is stated explicitly [in the premises]; rather the conclusion is only in the syllogism potentially ...' In the repetitive, by contrast, either the conclusion or its contradictory is given explicitly in the premises: 'If 'Abdallah is rich, he will not be oppressive; but he is rich, therefore he will not be oppressive', or 'if this fever is day fever, it will not affect the pulse strongly; but it does affect the pulse strongly, therefore it is not day fever'. Put briefly, repetitive syllogisms are either *modus ponens* or *modus tollens*.

Connective syllogisms may result from a pair of hypothetical premises (e.g. 'always: when A is B, then C is D', and 'always: when C is D, then H is Z', therefore 'always: when A is B, then H is Z'), from one disjunctive hypothetical and one categorical premise (e.g. 'every A is B', and 'always: every B is either A or C or D', ergo 'always: every B is either C or D'), from one conditional hypothetical and one categorical premise (e.g. 'when A is B, every C is D' and 'every D is H', therefore 'when A is B, every C is H'), and from other combinations (cf. *Iṣārāt* [\*58: 435–443]). Not only did Ibn Sīnā claim the division into connective and repetitive syllogisms to be his own; he claimed that he was alone in extracting the rules for many of the connective syllogisms (*Qiyās* [\*54.1.4: 356]); a claim doubted by Ḥūnaḡī (*Kaṣf* [\*213: 317]). Ibn Sīnā condemned logicians who ignore the connective syllogisms beyond those with two categorical premises. In *al-Iṣārāt*, Ibn Sīnā limited himself to just those connective and repetitive syllogisms needed for an account of how the *reductio* works (*Iṣārāt* [\*58: 376]; cf. however, the later reference to the more detailed presentation in *al-Qiyās: Iṣārāt* [\*58: 432]; see Hodges 2017 [\*346], Karimullah 2014 [\*337]).

(8) For the rest of the section, I turn to consider connective syllogisms with two categorical premises, what we would call categorical syllogisms. Ibn Sīnā's modal syllogistic is an instrument designed to take propositions with a specific metaphysical application and deduce further such propositions from

them. As shown above, he differentiates the way his propositions contribute to inferences from the way they do on the ‘well-known’ (*mašhūr*) account of the Baghdad logicians (also referred to as the account of the ‘literalists’, or of the ‘Westerners’). The account in *al-Qiyās* begins by asserting a licence to ignore those passages in Aristotle’s account which seem impossible to square with other passages: ‘You should realise that most of what Aristotle’s writings have to say about the modal mixes are tests, and are not genuine opinions – this will become clear to you in a number of places’ (*Qiyās* [\*54.1.4: 204,10–12]).

Let us follow here Ibn Sīnā’s presentation of syllogisms in *al-Iṣārāt*, in which all the syllogisms presented have both premises either temporally or alethically modalised. It is an exposition given as a statement of the ‘Rule of the Major’, along with a number of exceptions to the general operation of the rule; except in demonstration theory, Ibn Sīnā always rejected the Theophrastian ‘Rule of the Weaker’ (*al-natīġa tābī’a li-aḥassi l-muqaddamatayn*). The exposition in *al-Iṣārāt* is also unique among Ibn Sīnā’s works in that it does not call on proofs with a move supposing a possible actual (what I have called – perhaps unhappily – upgrading, a term which now seems to have caught on). If I understand Ṭūsī in his commentary on *al-Iṣārāt* correctly, Ibn Sīnā adopted Aristotle’s proof by upgrading (*Prior Analytics* 34a34–b2) which, according to Ṭūsī (*Hall* [\*214: 391]), led Ibn Sīnā and other logicians into a procedure which lacked clarity and imposed a bad order on the material. ‘It was the custom of logicians to prove these [that is, Barbara MMM, XMM and LML] by indirect reduction, and to reduce them to mixes of actual premises in the other two figures. There is not much clarity in [this procedure], along with its involving a lot of nonsense and bad ordering of material. So in this book Ibn Sīnā deserted the method and proved them with three proofs of the reasoned fact (*burhān limmī*)’ (Ṭūsī, *Hall* [\*214: 391]; corrected against MS British Library, Or. 10901 fol. 75<sup>r</sup>,4).

The overview that follows concentrates almost exclusively on propositions in the *dātī* reading (which are, as Ibn Sīnā stressed, the proposition he took to correspond to Aristotle’s propositions in the *Prior Analytics*), and all as having modalities that belong to the predicate (*ġihat al-rabṭ*). We set out first, the syllogisms Ibn Sīnā took to be perfect (*kāmil*), and therefore not requiring proof (and which are to be used in the proof of imperfect syllogisms). Second, the syllogisms which, in *al-Iṣārāt*, Ibn Sīnā took to be nearly perfect; these are syllogisms most later logicians reject. Third, how Ibn Sīnā summarised the Rule of the Major.

(9) In the *Iṣārāt*, Ibn Sīnā presented a large number of perfect syllogisms with modalised premises. Then he reduced a fairly small number of imperfect syllogisms to the perfect syllogisms. (The reductions are fairly easy, which is

why this discussion is limited to the perfect syllogisms, that is, to syllogisms in which the deduction of whatever follows is evident from the premises being posited.) It's worth stressing that if the perfect syllogisms are accepted as perfect, there's no need to analyse any deeper than Ibn Sīnā did in *al-Iṣārāt*. (And remember too that the absolute a- and e-propositions are compatible, so second-figure syllogisms can't be proved by reductio because they won't lead to an impossibility.)

Here are the perfect syllogisms in the first figure (which I give in Barbara, but they are the same for the other first-figure moods). When the minor premise is 'actual' (*fi'līyya*), that is, either an absolute like 'every C is once B' or a necessity proposition like 'every C is necessarily B', it can be combined with a major premise (whether 'every B is once A', or 'every B is necessarily A', or 'every B is possibly A') to produce a conclusion with the modality of the major (respectively, 'every C is once A', or 'every C is necessarily A', or 'every C is possibly A'). Nearly all post-Avicennan logicians agree with Ibn Sīnā to this point.

(10) Having set out the first-figure syllogisms with actual minors (*al-fi'līyyāt*) – whether with absolute, necessity, or possibility majors – Ibn Sīnā went on to those with possibility premises as minors. In *al-Iṣārāt* [\*58: 391], he claimed that a little reflection showed them to be valid arguments; they are, in his words, 'close to nature'. These three mixes are (and I state minor before major): 'every C is possibly B, every B is possibly A, therefore every C is possibly A' (Barbara MMM); 'every C is possibly B, every B is A, therefore every C is possibly A' (Barbara XMM); 'every C is possibly B, every B is necessarily A, therefore every C is necessarily A' (Barbara LML). As with the perfect mixes, once accepted, these mixes ramify through the rest of Ibn Sīnā's syllogistic; to accept Barbara XMM, for example, is to accept Baroco XLL. These mixes are the source of differences between Ibn Sīnā and Aristotle, and compound the differences already noted which result from Ibn Sīnā's stipulation of truth-conditions for the absolute proposition. And although nearly every post-Avicennan logician accepts Ibn Sīnā's account of the absolute, they nearly all reject these three mixes.

Space does not permit laying out the proofs, but they all turn – on al-Ṭūsī's understanding – on a second-figure inference that is 'primary in the mind' or 'natural'; this primary inference can be contraposed to underwrite the first-figure mix. Here is Ibn Sīnā urging the intuition of the primary inference: 'You know that if C is such that B is true of it in its totality affirmatively without necessity (so B is non-necessary for everything which is C, or non-necessary for what is the exposit part of C), while A differs from this (since of everything that is A, B is necessary for it), then the nature of C (*fa-inna ṭabī'at ḡīm*), or the exposit part of it, is disjoined from the nature of A (*mubāyanat<sup>un</sup> li-ṭabī'at*

*alif*), neither of them entering under the other, not even possibly ... You likewise know that the conclusion is always necessary negative ...' (*Iṣārāt* [\*58: 421–422]; cf. MS British Library, Or. 10901 fol. 82<sup>v</sup>, 13). Since the conclusion is a necessary negative, it converts; in short, there are even more inferences derived from this insight than directly indicated in the text. Here is one, Camestres MLL (Aristotle accepts the mix with a weaker conclusion, Camestres MLM: 38a25–26): no C is possibly B, and every A is possibly B, therefore no C is possibly A. And with the concrete terms used in al-Ṭūsī's commentary: no celestial body is possibly still, every animal is possibly still, therefore no celestial body is possibly an animal. C is said of things which are such that their natures essentially exclude B, while A is said of things which may be B; so necessarily the Cs and the As are essentially different. Put another way, whatever is not possibly B (i.e. C) is not possibly what is possibly B (i.e. A). By contraposition, whatever is possibly what is possibly B is possibly B, which underwrites Barbara MMM (every C is possibly B, every B is possibly A, therefore every C is possibly A). (Strictly, Barbara MMM is underwritten by Baroco MLL.) Ṭūsī's understanding of Ibn Sīnā's syllogistic has inspired a preliminary model of Ibn Sīnā's modal syllogistic which seems the best to date (Thom 2013; for an alternative model, see Hodges, Johnston 2017 [\*347]).

(11) Ibn Sīnā summarised his work on the modals in the *Iṣārāt* by stating the 'Rule of the Major' (the conclusion's modality follows that in the major premise), with two exceptions. The first is Barbara XMM: every C is possibly B, every B is once A, therefore every C is possibly A. The second exception comes about by using a necessity major in the descriptive (*waṣfī*) reading (mentioned above; such a proposition is considered to be weaker than a *dātī* necessity proposition, because the strongest *dātī* proposition which may be inferred from it is an absolute). I use a text from *al-Najāt* to avoid the distracting detail in the treatment of this mix in the *Iṣārāt*. 'Here there is something which should be known, which is that, if the major is absolute, and the time of its assertion is as long as the subject remains described by whatever it is described by, then the conclusion will be necessary, because C is B always, and it has been posited that B, as long as it is B, is A; so C is always A – so here the conclusion is necessary and the major absolute' (*Naḡāt* [\*55: 57, penult.–58]). Which is to say: the premise pair 'every C is necessarily B and every B is necessarily A while B' concludes in 'every C is necessarily A'; the *dātī* conclusion is stronger than the *waṣfī* major. The exceptions to the 'Rule of the Major' become increasingly complicated in later logic (Rescher [\*285: 44]; even Ṭūsī, *Hall* [\*214: 401] adds two more in commentary on Ibn Sīnā's exceptions).

(12) How did Ibn Sīnā's contemporaries respond to his logic? What worried them about it most? We can offer some kind of answer to this question thanks

to Ibn Sīnā's short work *al-Ağwiba* (*Twenty Answers [on Logic]* – although there are only nineteen in the extant text). Responding to a logic text like the one included in *al-Nağāt* (they may even be the scholars of Shiraz mentioned by Ġūzġānī; cf. Gohlman 1974 [\*117: 75–81], Street 2010 [\*324]), scholars wrote questions for Ibn Sīnā (now lost, but reconstructable), and *al-Ağwiba* contains Ibn Sīnā's answers. Of the seventeen questions dealt with in this text that deal with the categorical syllogistic, four relate directly to problems arising from Ibn Sīnā's idiosyncratic stipulation of truth conditions for the absolute (*al-qadīyya al-muṭlaqa*: questions 2, 3, 4 and 9), and six (questions 12–17) dwell at length on why Ibn Sīnā's treatment of syllogisms with at least one modal premise differs so much from Aristotle's. The last question (question 19) seeks to discover a philosophical utility for the syllogistic with hypothetical premises (cf. Street 2010 [\*324], appendix). In short, Ibn Sīnā was seen to be coming to results worryingly different from those Aristotle had reached; of special concern was what Ibn Sīnā had done in the syllogistic.

#### 4.4.7 Demonstration and Syllogistic Matter

Research into Ibn Sīnā's theory of demonstration has increased recently (cf. Benevich 2018 [\*348], Strobino 2021 [\*355]). Essentially his work *al-Burhān* (*Demonstration*) follows the broad outline of the *Posterior Analytics* (cf. Strobino 2010 [\*325], who lists the contents of *al-Burhān* in an appendix). Demonstration theory is at the core of Ibn Sīnā's conception and implementation of his philosophical project (Gutas 2014 [\*70: 227–228], Bertolacci 2006 [\*442: esp. chap. 6]). His use of the theory is more intensive and thoroughgoing than preceding philosophers, and recent research has shown that he intervened to modify the theory in significant ways. Comparing *al-Burhān* and *al-Iṣārāt* is particularly instructive because demonstration-theory suffuses *al-Iṣārāt*; that it does so underlines more than anything else the centrality of demonstration in all of Ibn Sīnā's thinking about logic. Although only path nine is devoted explicitly to demonstration, passages throughout *al-Iṣārāt* recall specific chapters of *al-Burhān*. Path one presents aspects of predication which derive from the *Posterior Analytics*, and takes up preliminary considerations to do with demonstrative questions (cf. *Burhān* II 2–3). Path two establishes the criteria for definitions and descriptions (cf. *Burhān* I 1; I 4). Path six sets out material for demonstrative premises (cf. *Burhān* I 4; this path has all that survives in *al-Iṣārāt* of *al-Ġadal*, *al-Ḥiṭāba*, and *al-Ši'r*, and much that derives from *al-Safsāṭa*). The descriptive (*waṣfī*) readings developed in paths four and five, and explored slightly in path seven, are marked out to serve as premises in demonstrations (cf. *Burhān* II 1 [\*54.1.5: 122–123]).

Ibn Sīnā's demonstration theory is deeply Aristotelian in outline. Demonstration is one kind of discourse, using premises which meet certain epistemic conditions, put together in forms of argument which meet conditions over and above being merely valid. Discourse to be used in a demonstrative context can be distinguished from discourse used in sub-demonstrative contexts on the basis of the epistemic conditions its premises meet; Ibn Sīnā provided criteria for judging whether premises meet those epistemic conditions in what we now call the 'context theory' (Gutas 2012 [\*263], Black 1990 [\*295]; cf. *Iṣārāt* [\*58: 6; 9.1], *Burhān* [\*54.1.5: I 4]). Using demonstrative discourse, all knowledge can be displayed as a structured system which replicates the order of causes in reality. To attain this ideal, in fact, the premises have to meet yet more conditions beyond the epistemic ones: they have also to be – among other things – necessary, a term Ibn Sīnā understood in ways specific to his logical system (*Burhān* [\*54.1.5: II 1; II 5]; *Iṣārāt* [\*58: 9.2]). Each science must have a subject (or set of subjects) which meets strict requirements as to unity by sharing essential accidents, it must have principles proper to it; there must also be questions as to whether implicate accidentals can be proved to belong to it (*Burhān* [\*54.1.5: II 10; III 1]; *Iṣārāt* [\*58: 9.3]). Some of the principles are taken from other sciences (often, but not always, a higher science devoted to a more abstract subject); setting out the interrelation and hierarchy of the sciences is a second-order systematization of the demonstrative vision (*Burhān* [\*54.1.5: II 8]; *Iṣārāt* [\*58: 9.4]). Finally, the demonstrations need not only have certain and necessary premises, with predicates relevant to their subjects in a stipulated manner (indeed, belonging only to the subjects), and principles which include definitions, axioms, and assents which are either immediate or transferred from another science. For the highest kind of demonstration, the premise set must also replicate the causal order of reality, such that the middle term is the cause for the major term belonging to the minor, though a lower demonstration that merely proves the major to belong is recognised. Ibn Sīnā adopted this crucial distinction between the demonstration of the reasoned fact (*burhān limmī*) and the demonstration of the fact (*burhān annī*) (*Burhān* [\*54.1.5: I 7; II 9]; *Iṣārāt* [\*58: 9.5]). To arrive at a discipline set out using these refined proofs, Ibn Sīnā modified and prescribed a heuristic method which deploys the so-called demonstrative questions (*Burhān* [\*54.1.5: I 5; IV 1]; *Iṣārāt* [\*58: 9.6]); these are – somewhat implausibly – meant to do service in all areas of scientific inquiry.

Let us go back in more detail over four aspects of Ibn Sīnā's demonstration theory. First, he adopted a method to distinguish premises of differing epistemic status; in combination with certain deductive forms, discourses apt for



differing kinds of philosophical contexts are thereby identified. Secondly, Ibn Sīnā's understanding of 'necessity' with respect to demonstrative premises is specific to his system. Thirdly, brief mention must be made of his views on real definition. This prepares the ground for, fourthly, an examination of how his doctrine about demonstrative questions relates to the two cognitive states set out at the beginning of his logic, *taṣawwur* and *taṣdīq*.

(1) Ibn Sīnā provided a list of propositions which express data of various kinds such that they are assented to (or acknowledged as true: *muṣaddaq bihā*) as a function of these data; these epistemic considerations are referred to in the post-Avicennan tradition as 'material aspects of propositions' (Ṭūsī, *Hall* [\*214: 341], on path 6), becoming known later as 'the matter of syllogisms' (Kātibī, *Šamsiyya* [\*216: 166]). Dividing premises according to the data they express is not taken to be an essential division, but may shift according to criteria used (Ṭūsī, *Hall* [\*214: 344]); that is why Ibn Sīnā's expositions can change slightly in the various books in which he set them out (Gutas 2012 [\*263: 394 n.9] lists the treatments, and provides translations of the technical terms: 396–398). The matter in an argument determines the epistemic status or persuasive force each of the premises has which, given a formally appropriate proof, will confer a similar or lesser epistemic status or persuasive force on the conclusion. Demonstrative discourse involves six kinds of premises whose truth is necessarily accepted (*al-wāğib qabūluhā*); in *al-Iṣārāt*, such propositions express (1) primary data (*awwalīyyāt*; e.g. the whole is greater than the part), (2) data from experience (*mušāhadāt*), which include sense-data (*maḥsūsāt*; e.g. that the sun exists, and that it shines) and data from self-reflection (*i'tibārīyya*; e.g. 'I am angry'), (3) tested and proven data, judged to be true after repeated data from experience (*muğarrabāt*; e.g. being struck by wood is painful), (4) data provided by intuitively discovering the middle term of a syllogism (*ḥadsīyyāt*; e.g. that the light of the moon is from the sun), (5) data from sequential and multiple reports (*mutawātirāt*; e.g. the existence of Mecca, Galen and Euclid), and (6) data with implicit syllogisms (*qaḍāyā qiyāsātuhā ma'ahā*; e.g. two is half of four) (*Iṣārāt*, *nahğ* 6; Gutas 2012 [\*263: 396–397]). Principles of a science must come from propositions expressing data of the kinds just listed (Ṭūsī, *Hall* [\*214: 461–462]).

If a syllogism which lies at the base of a series of demonstrations only uses propositions which are immediate in the sense above (or propositions given in another science which bases its proofs on similarly immediate propositions), it will meet the material preconditions for a demonstration. Prima facie, a formal syllogism with epistemically appropriate premises is a demonstration. The formal requirements for a demonstrative syllogism are, however, stricter than those for a syllogism simpliciter, because the middle term ideally should

be the cause – in the sense of being a continuing ground – of the predicate's belonging to the subject. So formally productive syllogisms like Barbara LML are rejected for the purposes of demonstration (Ṭūsī, *Hall* [\*214: 468]; more on this below). It is worth noting that they will still serve for dialectical proofs, proofs which can use epistemically weaker premises.

There are eight other, epistemically weaker premise-kinds listed – all unusable in demonstrations – which are useful in various ways for sub-demonstrative discourse such as dialectic, rhetoric or poetics (Black 1990 [\*295]). Ibn Sīnā classified Islamic theology (*kalām*) as a dialectical discipline, and thereby relegated it to a lower rank than metaphysics, though not necessarily to the status of a misleading pursuit with untrue claims (Gutas 2005 [\*309]). More generally, Ibn Sīnā used a modified version of the Alexandrian context theory (that every stretch of reasoning belongs to different levels of discourse by virtue of the epistemic status of its premises and the nature of their assertion) to account for the cognitive and communicative impact of every kind of discourse. The context theory examines in detail the claim that the syllogism underpins all reasoning, and – recognising that different levels of communication elicit assent by differing means – presents an account of syllogistic forms attenuated (for example, the enthymeme) in tandem with the epistemic matter of their premises (Black 1990 [\*295: 247–258]; specifically regarding poetics Dahiyat 1974 [\*116]).

(2) An interesting aspect of Ibn Sīnā's conditions for demonstrative premises over and above epistemic immediacy has to do with his understanding of Aristotle's stricture that demonstrative premises have to be necessary. There are two aspects worth considering in Ibn Sīnā's contribution on this point (both covered in *Iṣārāt* [\*58: 9.2]): that the necessity be descriptive (*waṣfī*), and – somewhat paradoxically – that the Aristotelian demand that the premises have to be necessary is subject to qualification or exceptions.

The main formal distinction developed in treating the syllogistic in *al-Qiyās* that is deployed in demonstration theory is the distinction between substantial (*dātī*) and descriptive (*waṣfī*) necessities (see above in the section on *al-Qiyās*). Ibn Sīnā claimed in all his treatments of demonstration that the sense of necessity used in demonstration is that of the descriptive reading; e.g. '... what is meant by the necessary in *Kitāb al-Burhān* is more general than the necessary put forward in *Kitāb al-Qiyās*, and its necessity is as long as the subject is described by what it is described by, not the pure necessary' (*Iṣārāt* [\*58: 470–471]), that is, 'every C is necessarily B as long as it is described as C', whereas the necessity used throughout *al-Qiyās* was to be understood as substantial necessity (*mā dāma mawḡūd al-dāt*). Ibn Sīnā elected to use a weaker form of necessity, a single form that covers both descriptive necessities (e.g.

‘everything white is necessarily coloured as long as it is white’) and substantial necessities (e.g. ‘every human is necessarily an animal’) which is trivially true as a descriptonal necessity (‘every human is necessarily an animal as long as it is human’). Why? In scientific reasoning, allowance must be made for predications that apply under a description but not otherwise; the examples in *al-Burhān* tend to concern descriptions of corporeal substances that may be acquired and lost: colours, tastes, bodily features, movement; in short, all the examples come from natural science, and can only be expressed as necessity propositions in a descriptonal reading (*waṣṣṭi*) (Strobino 2015 [\*339]; cf. Schöck 2008 [\*317: 347–353]).

At the same time, Ibn Sīnā insisted that possibility propositions can be premises in a demonstration, seemingly at odds with Aristotle’s demand that demonstrative premises be necessary: ‘Pay no attention to one who says that the demonstrator only uses necessity propositions (or for-the-most-part possibility propositions), nothing else. For if he wants to produce a for-the-least-part possibility conclusion, he uses for-the-least-part possibility premises; in each area he uses what [premise kind] is suited to it’ (*Iṣārāt* [\*58: 469]). It is difficult to know what Ibn Sīnā might have had in mind here: it is possible that he simply meant that the potential to express a property, necessarily possessed by a substance (like laughter by man) is a possibility premise on one understanding. Clearly, using possibility propositions on the understanding given in *al-Qiyās* in demonstrations is problematic, because of a point Ṭūsī makes (in rejecting the use of Barbara LXL – ‘every man is at least once a laugher, every laugher is necessarily rational, therefore every man is necessarily rational – for demonstration): ‘laugher’ as a middle term cannot convey demonstrative knowledge that man is rational because ‘the judgment of rationality would be false in the case of the laughter ceasing’ (Ṭūsī, *Hall* [\*214: 468]; cf. Strobino 2015 [\*339]; Strobino calls this ‘the intermittence problem’).

Indeed, Ṭūsī does take up the suggestion that Ibn Sīnā may have meant by ‘possibility proposition’ here one that records the necessary capacity for a possible property. That may well capture what Ibn Sīnā went on to say in *al-Iṣārāt*: ‘Or Aristotle meant that the truth of the premises of a demonstration are, in their necessity, or possibility, or absoluteness, a necessary truth’ (*Iṣārāt* [\*58: 470]). Ṭūsī took him to mean by this that we are dealing here with a necessity which attaches to the judgment, rather than a mode for the proposition (Ṭūsī, *Hall* [\*214: 470]); this seems to interpret Ibn Sīnā as calling on a distinction like the one introduced between *ḡihat al-rabṭ* and *ḡihat al-sūr* in *al-Ṭbāra* (see Strobino 2015 [\*339]).

(3) The distinctions among the different kinds of definition (*taʿrīf*) are made with respect to the two or more elements that make up a definition.

Only complete, real definition (*ḥadd*) is equal to what is defined ‘in the two ways’ (*Nağāt* [\*55: 149–150]), being both equal in meaning with what is defined (*musāwin fi l-mafhūm*) and coextensive with it (*musāwin fi l-‘umūm*); the lower grades of definition are only coextensive with what is defined. Ibn Sīnā took the goal of real definition to be determining the conception (*taṣawwur*) of an entity in the mind. A definition should be as long as it needs to be. Both the goal and the potential length of a definition distinguish his theory of definition from that of his *kalām* contemporaries, who only sought a concise expression designed to distinguish the reality from other realities. The proximate genus must be given (the genus directly over the species being defined), and all specific differences, ‘though they may be a thousand ... It is necessary for the definition to generate an intelligible form within the soul, one that is equivalent to the existing form in its perfection’ (*Nağāt* [\*55: 151]; the differences may however be signified by containment, see Strobino 2016 [\*344]).

The adequacy of a definition lies in its being sufficient, when taken with the other principles of the science in which it is presented, for the derivation of the essential properties (*al-a’rād al-dātiyya*) of what is defined (‘essential’ being used here in the second sense of per se). Adequate definitions are difficult to acquire, a fact that Ibn Sīnā acknowledged in the preface to *Book of Definitions* (*Ḥudūd* [\*66: 1 Goichon]). He was nonetheless committed to the possibility of doing so, and gave a sketchy account of the process in one of his shorter books *Nağāt* [\*55: 146–149]; this to some degree recapitulates the account in the second book of Aristotle’s *Posterior Analytics*. Ibn Sīnā reprised an Aristotelian position from the second book of the *Posterior Analytics* by insisting that a definition is not acquired through demonstration, dichotomous division, or induction (*Nağāt* [\*55: 146–149]; cf. Strobino 2010 [\*325]); rather, it is acquired heuristically, through structured questioning (Strobino 2016 [\*344]).

(4) The heuristic method Ibn Sīnā recommended for arriving at demonstrations and definitions involves – as did Aristotle’s method in *Posterior Analytics* 2.1 – deploying specific questions. Ibn Sīnā set out a taxonomy of scientific inquiry that examines each question’s contribution to the process of attaining scientific knowledge. What are the fundamental questions (*ummaḥāt, uṣūl*) to an inquiry, that is, fundamental in the sense that they are irreducibly necessary in arriving at scientific knowledge? Some have said three: ‘is it?’, ‘what?’ and ‘why?’; others have expanded the number of scientific questions by including ‘which?’

By contrast, Ibn Sīnā (and Avicennan logicians after him) worked towards reducing the number of the fundamental questions. At the same time, Ibn Sīnā wanted to make it seem plausible that the reduced set were sufficiently flexible to work in different contexts. He also sought to relate the answers they elicited

to the doublet, *taṣawwur* and *taṣdīq*. Ultimately (at least in the *Iṣārāt*), Ibn Sīnā reduced the questions to ‘is it?’ and ‘what?’; following the line of reasoning which brought him to this reduced set elucidates how Ibn Sīnā saw the questions working. So ‘what?’ can receive a nominal definition, an explanation of what the word (e.g. ‘soul’) means; or it can receive a real definition which – as mentioned above – determines a conception (*taṣawwur*) in the mind. Only after an answer to the first ‘what?’ question is it possible to ask ‘is it?’ (This is true for predicates as well as subjects, although the predicates sought can only belong to these subjects, if to anything at all.) Some ask ‘which?’ to distinguish the definiendum from what shares its genus; but as Ibn Sīnā stipulated in path one of *al-Iṣārāt*, the proper answer to ‘what?’ is all the essential constituents, and such an answer will leave nothing with which to answer ‘which?’ Again, if ‘why?’ asks why the predicate belongs to the subject, it is a question seeking a middle term; but the middle term is best solicited by ‘what?’ Here there is a subtlety, and it is that the questions, just as they are made many by some, are reduced in number by others who make the fundamental questions two: a question for conception and a question for assent. On this understanding “why?” can be folded into “what?” such that the controlling questions will be “is it?” and “what?” only’ (Tūsī, *Ḥall* [\*214: 493]; cf. Strobino 2015 [\*340]).

Contemplating the questions in the way Ibn Sīnā approaches them concentrates the syllogiser on exactly the role each question is designed to play at various stages in the process. Ibn Sīnā’s doctrine on the demonstrative questions is an erotetic expressionism that highlights the form of the delivery of the questions, rather than the form of the questions themselves. It is also the area of Ibn Sīnā’s demonstration theory in which we can see most clearly the distinction between the progress towards the contents of an achieved science over time (through heuristic questioning), and its logical achievement, which is its display in demonstrations of the reasoned fact.

#### 4.4.8 al-Safsata (‘Sophistici Elenchi’)

Very little research has been done on Ibn Sīnā’s work on the sophistical fallacies. It may well be disastrous for our understanding of Arabic logic that the topic of sophistics is so badly neglected; there is some evidence that later Arabic philosophers thought that one was more likely to hit on a good argument by avoiding fallacy rather than by following positive rules for the construction of an argument. None the less, Ahwānī has written a substantial introduction to his edition of this part of the *Šifā’* [\*54.1.7: (1)–(25)], and Gutas translated the prologue and an important concluding part of *al-Safsata* into English (Gutas 2014 [\*70: 24–29]).

Ibn Sīnā did not take *Sophistical Refutations* to be the ninth book of the *Topics*, but rather saw it as a free-standing work. His own reworking of the book is – notwithstanding the shifting of some material – fairly close to Aristotle's original [\*54.1.7: (11)]. He wrote *al-Safsāṭa* to help guard against error in thinking, rather than as a resource with which to deal with a living community of sophists [\*54.1.7: (12)]; and he aimed at producing a universal craft (*ṣinā'a kullīyya*) to deal with these errors in thinking (*Safsāṭa* [\*54.1.7: 112]). More than in any of the other books he wrote on logic, it is in *al-Safsāṭa* that his ignorance of Greek, and Greek philosophical literature, is damaging to his project. In particular his lack of familiarity with Plato's dialogues – in particular *Sophistes* – tempted him into an unfair attack on Plato [\*54.1.7: (12)]; the concluding section (Gutas 2014 [\*70: 24–29]) shows Ibn Sīnā in this respect a partisan in support of Aristotle.

Path ten of the *Iṣārāt*, 'On Fallacious Syllogisms', corresponds to material in *al-Safsāṭa*. Path ten is only intended to be a bare outline of the latter, and Ṭūsī refers the reader of *al-Iṣārāt* back to *al-Safsāṭa* on a number of occasions through his commentary (*Hall* [\*214: 504]). As in the case of *al-Burhān*, not all of *al-Safsāṭa* fits into a single path of *al-Iṣārāt*; most of what is not in path ten ends up in path six (*Iṣārāt* [\*58: 358–362]). (It should also be noted that – in the *Ṣifā'* – begging the question (*petitio principii*) is first treated in *al-Qiyās* [\*54.1.4: IX 16], as it is in the corresponding section of the *Prior Analytics*). By placing the material aspects of logic together (that is, putting what is covered in path six directly in front of the material covered in paths nine and ten), later logicians were able to achieve a greater continuity of treatment in their work on demonstration and fallacies.

*Al-Safsāṭa* deals with a number of fallacies corresponding to those presented in *Sophistical Refutations* (given in Ahwānī 1958 [\*54.1.7: (17–18)], along with the Greek originals to which Ibn Sīnā's Arabic terms correspond). Ibn Sīnā accepted as one division – and all divisions and enumerations of fallacies are accidental, as is the nature of the case – Aristotle's division into fallacies dependent on language (*lafẓiyy<sup>an</sup>*) and those independent of language (*ma'nawīyy<sup>an</sup>*). More precisely, Ibn Sīnā recognised six fallacies in respect of expression, and seven in respect of meaning (*Iṣārāt*, path six, [\*58: 358–362]; path 10 [\*58: 504–505]; though in neither text does he mention the many-questions fallacy). None the less, part of Ibn Sīnā's project was to abstract from and reduce the number of the fallacies (Ahwānī 1958 [\*54.1.7: (22)]), and at one point he touched on a possible fundamental reason behind all fallacies (*Safsāṭa* [\*54.1.7: 32, 7–8]): 'The leading reason for this [error], and for every error (*ḍalāla*), is just one:

incapacity in distinguishing between one thing and another, and in distinguishing between a contradictory and a non-contradictory’.

The account in *al-Iṣārāt* presents a subset of the fallacies; it is, as has been mentioned, described by Ṭūsī as a summary (*muḥtaṣar*) of the account in *al-Safṣaṭa*. This subset is presented according to a division which was to become the subject of much debate among the later logicians. Ibn Sīnā began by dividing between fallacies arising from a cause in the syllogism, and fallacies arising from a cause in the premises taken one by one. The primary fallacies which he took to arise from a cause in the syllogism are false cause (*waḍʿu mā laysa bi-ʿillat<sup>in</sup> ʿillat<sup>an</sup>*), begging the question (*al-muṣādara ʿalā l-maṭlūb al-awwal*), and what he called ignorance of composition (*al-ġahl bi-l-taʿlīf*, which probably simply means failing to recognise a productive mood). The fallacies which arise from a cause in the premises include equivocation (*al-iṣtirāk al-lafẓī*), the fallacies of composition (*tarkīb al-lafẓ*) and division (*tafrīq al-lafẓ*), the fallacy of the consequent (*iḥām al-ʿaks*), and the fallacy of the accident (*aḥḍ mā bi-l-ʿaraḍ makāna mā bi-l-ḍāt*). Note that this division groups fallacies that arise independently of linguistic expression (accident, consequent) with fallacies that arise through linguistic expression (equivocation, composition, division). But Ibn Sīnā recognised the Aristotelian division (as noted above), and his own initial division in *al-Iṣārāt*, while introducing a cross-division, is clearly meant to be compatible with – or pedagogically useful in tandem with – the Aristotelian division. Again, Ibn Sīnā introduced considerations of form and matter in his analysis of fallacies, and – to take one example – his analysis of begging the question as a formal fallacy was challenged by logicians considered to be followers of al-Rāzī (Ṭūsī, *Hall* [\*214: 498]).

The fourth lemma in path ten (*Iṣārāt* [\*58: 504–505]) makes a second pass at listing the fundamental fallacies, using a division into fallacies arising either from or independently of linguistic expression. Ibn Sīnā first listed three fallacies with respect to linguistic expression: equivocation (*iṣtirāk al-ism*; though taken in a broad sense, so it presumably covers amphiboly, and fallacies arising from accent and figure), composition (*tarkīb al-mufaṣṣal*), and division (*tafṣīl al-murakkab*). He then listed five fallacies with respect to meaning: consequent (*iḥām al-ʿaks*), accident (*ġaʿl mā laysa bi-l-ʿaraḍ ʿaraḍ<sup>an</sup>*), secundum quid (*sūʾ iʿtibār al-ḥaml*; presumably the same as *iġfāl tawābiʿ al-ḥaml*), false cause (*aḥḍ mā laysa bi-ʿilla ʿillat<sup>an</sup>*), begging the question (*muṣādara ʿalā l-maṭlūbi l-awwal*); to these he added ignorance of the proper form of the syllogism. Because the discussion of fallacies in path ten of *al-Iṣārāt* is twinned with demonstration, it is meant only to deal with fallacies that affect syllogisms; in consequence, Ibn Sīnā omitted the fallacy of many questions (*ġamʿ al-masāʾil*; Ṭūsī, *Hall* [\*214: 503–504]).

Ibn Sīnā concluded the logical section of *al-Iṣārāt* with a hortative peroration. Practise these logical moves; but if after practise you still fall into error, abandon philosophy (*Iṣārāt* [\*58: 505–506]). It is the ability to detect and avoid fallacies that becomes, for Ibn Sīnā, the touchstone of philosophical potential.

#### 4.4.9 Rhetoric and Poetics

##### *Renate Würsch*

Like his predecessor al-Fārābī, Ibn Sīnā discusses rhetoric and poetics within the context of his exploration of logic. Ultimately this is the consequence of the ancient prolegomena tradition that had assigned rhetoric and poetics to the *Organon* since the late Alexandrian period (cf. Schoeler 2013 [\*404: 3–4]). Furthermore the relevant Aristotelian texts were available in Arabic translation: *Rhetoric* edited by Ibn al-Samḥ (PIW 1 § 7.5), *Poetics* in Abū Bišr Mattā's version (Schoeler 2013 [\*404: 3]; PIW 1 § 7.1) – of which translation it seems there were two versions (cf. Gutas, in: Tarán, Gutas 2012 [\*191: 103–104]).

The systematic foundation of assigning rhetoric and poetic to logic was provided by the definition of the respective specific syllogisms for apodeictics, dialectic, sophistics, rhetoric, and poetics. In several independent treatises on rhetoric and poetics, al-Fārābī had elucidated the classification and attribution of the syllogisms and closed gaps in the interpretation of the last two books of the *Organon*, which are particularly tied to individual linguistic and cultural circumstances. In addition he had developed his own original approaches to the theory of persuasion and the evocation of images (cf. PIW 1 § 8.3.4, Vagelpohl 2008 [\*399: 185–188]).

Ibn Sīnā specifically devoted two texts to rhetoric and poetics: the relevant parts of his early summa *al-Ḥikma al-'Arūḍiyya* or *Kitāb al-Mağmū'*: *On the Meanings of the Book Rhetorica* (*Fī Ma'ānī Kitāb Riṭūriqā*) [\*51] and *On the Meanings of the Book of Poetics* (*Fī Ma'ānī Kitāb al-Šī'r*) [\*51], as well as books 8 and 9 in the section on logic of his *Kitāb al-Šifā'* [\*54.1.8; \*54.1.9]. They are in the tradition of al-Fārābī with whose commentaries Ibn Sīnā was familiar and on which he drew (regarding rhetoric cf. Vagelpohl 2008 [\*399: 195], regarding poetics cf. Gutas, in: Tarán, Gutas 2012 [\*191: 104]). He was also familiar with the Arabic versions of Aristotle's original texts, which he read quite critically (regarding rhetoric cf. the instances in Würsch 1991 [\*382: 114–116]), and which he – in the case of the two versions of Abū Bišr's translation of the *Poetics* – compared and examined with regard to correctness (Gutas, in: Tarán, Gutas 2012 [\*191: 104]).



In Ibn Sīnā's exploration of the theory of rhetoric, al-Fārābī's influence is apparent in several instances. Thus Ibn Sīnā's presentation of the system of the kinds of persuasion is a continuation of al-Fārābī's. He goes beyond al-Fārābī in his differentiated view of testimony as a means of persuasion (see Würsch 1991 [\*382: 97, 100]). The concept, fundamental to the analysis of the psychological processes at work in persuasion, of spontaneous, i.e. emerging without lengthy deliberation and collectively, opinion (*bādi' al-ra'y al-muštarak*), which al-Fārābī devised and which is presumably his own original creation (examined in detail by Aouad 1992 [\*383]), left its mark on Ibn Sīnā's works as well (cf. Aouad 1997 [\*388]). The decisive reason for assigning rhetoric to logic, however, was provided by the enthymeme, which Aristotle had already regarded as the 'foundation of persuasion' (σῶμα τῆς πίστεως), and thus as a core element of rhetoric (*Rhet.* 1356b2–5). Calling the enthymeme a 'rhetorical syllogism' likewise goes back to Aristotle. The usual manifestation of the enthymeme is that of an abridged syllogism in which one of the premises, usually the major one, remains unstated (cf. Würsch 1991 [\*382: 26–27], with basic literature on the concept of enthymeme in antiquity). In the Arabic tradition, the term *ḍamīr* (lit. 'interior', 'heart') became established as the name for the enthymeme – presumably because in the formulation of the enthymeme, one of the two premises remained hidden within the speaker's mind. The term *ḍamīr* was already employed by al-Fārābī and continued to be used by Ibn Sīnā and his followers. The true objective of rhetoric had, since Aristotle, been to convince, persuade, or make something credible. That linked this discipline in the Arabic tradition particularly closely with the term *taṣdīq* (assent), literally 'considering to be true' (cf. PIW 1 § 8.4.2, Black 1990 [\*380: 73–78]), which was also central to the doctrine of proof.

Ibn Sīnā's discussion of rhetorical arguments is ultimately based on Aristotle. The latter had identified, as the basis of such arguments, both the necessary and that which is true for the most part, then adding that rhetorical conclusions are composed out of probabilities and of signs (*Rhet.* 1357a32–33). In the case of signs, he distinguished between a general concept of sign (σημείον), which included the non-necessary sign, and a 'necessary' sign (τεκμήριον). In the *Prior Analytics*, Aristotle stated that conclusions based on necessary signs are formed in accordance with the first figure, while conclusions based on non-necessary signs (or indications) are formed in accordance with the second and third figures (his examples are explained in Würsch 1993 [\*382: 592–593]).

The Aristotelian division of premises into those that are necessary and those that are true for the most part is adopted by Ibn Sīnā. He applies it in the paraphrase of the *Rhetoric* in the *Šifā'* [\*54.1.8: 43–45] to probability enthymemes, as well as sign enthymemes, formed in accordance with the three figures,

arriving at eight kinds (*wuǧūh*) of enthymemes. He then adds a 'special case', a ninth kind, namely a syllogism consisting of premises 'possible in the same way' (as their opposites). He provides the following instance of this special case: 'A man is standing over the just-murdered Zayd with his sword drawn – therefore the man is the murderer' (as it may be assumed that someone in this position killed the victim). One may also argue, however, that the man is not the murderer, as the latter would certainly not tarry at the place of his crime but endeavour to reach safety as quickly as possible (*šifāʾ*, *ḥiṭāba* [\*54.1.8: 45–47]; examined in detail and with reference to the principle of opinions arising 'spontaneously and collectively' by Aouad 1997 [\*388: 445–447]; regarding Ibn Sīnā's nine kinds of enthymeme cf. also Würsch 1993 [\*385: 599–600, 605]). Besides the necessary and that which holds true for the most part, there is in sign enthymemes the special case of the jointly possible, i.e. concluding that something is possibly the case, while its opposite is also possible. As Maroun Aouad has demonstrated (cf. Würsch 1991 [\*382: 62 n. 231]), this was mentioned already in al-Fārābī's epitome on rhetoric (*Kitāb al-Ḥiṭāba* [\*202: 113–115]). It is not clear whether al-Fārābī was Ibn Sīnā's inspiration for classifying nine kinds of enthymeme – the classification does not occur in al-Fārābī's epitome on rhetoric, but he also composed a *Great Commentary* on Aristotelian rhetoric that has been lost, with the exception of a fragment in Latin translation (cf. *PIW* 1 § 8.3.4). Ibn Sīnā's classification of the enthymeme into nine kinds is certainly a significant contribution to the Arabic doctrine of rhetorical conclusion following Aristotle, and would later be incorporated by Ibn Rušd.

Ibn Sīnā's interest in the enthymeme is an important component of his general reflections on rhetoric. Remarkably, it is not motivated by the relevance of enthymematic argumentation to political issues – which had been an important field of application of rhetoric in late antiquity in general – but by its usefulness for philosophical education (cf. Reisman 2009 [\*400]).

In Ibn Sīnā's works on poetics, too, al-Fārābī's influence is clearly visible. As the Arabic tradition followed the classification of syllogistic disciplines inherited from late antiquity, according to which the *Poetics*, too, was part of the *Organon*, the 'poetic syllogism' was a focus of interest from the very beginning. Unlike the rhetorical syllogism, the poetic syllogism was not tied to persuasion or assent (*taṣdīq*) but to 'image evocation' (*taḥyīl*). Consequently, at the beginning of his treatise on poetics in the *Šifāʾ*, Ibn Sīnā states that poetics is relevant to the logician only in that it is 'discourse evoking the images' (*kalām muḥayyil*) (*Šifāʾ*, *Šiʿr* [\*54.1.9: 23]). Evoking 'ideas' in the imagination (or fancy, *ḥayāl*) of humans is done by means of images. Metaphor and analogy – constitutive elements when composing poetry – are important means to the evocation of images (on the meaning of *ḥayāl* cf. Heinrichs 1978 [\*375: 263–264]).

Image evocation (*taḥyīl*) is the fundamental concept of philosophically oriented Arabic poetics. It should be mentioned, if only in passing, that Arabic also evolved an autochthonous literary theory that comprised aspects of poetics, rhetoric, and literary criticism, developing great influence and attracting profound admiration (cf. the overview in Heinrichs 1987 [\*377: 177–188]).

The concept of *taḥyīl* does not have its roots in Aristotle's *Poetics*. However, it displays a characteristic that can be linked to a passage in *On the Soul* (433a), where Aristotle says that 'humans often follow their *imagination* against their better judgment' (Schoeler 2013 [\*404: 17]). A central concept of the *taḥyīl* theory, 'imitation' (*muḥākāt*), on the other hand, may be found in the Aristotelian *Poetics* – it alludes to Aristotelian 'mimesis' – although it acquired an entirely different meaning in Arabic, of figurative expression, simile, and metaphor. The process of composing poetry thus occurs through 'imitation' of the entity through an object of comparison that takes effect in a strongly positive or negative way. In this way, a certain image is created for the listener 'which is meant to encourage him to strive for the thing described, or avoid it, and that in such immediate terms that he does not go via assent or false assent' (Heinrichs 1987 [\*377: 190]). The three terms *šīr*, *taḥyīl* and *muḥākāt* occur together for the first time in al-Fārābī's *Kitāb al-Šīr* (Heinrichs 2008 [\*397: 6], 1978 [\*375: 254–255]).

While in al-Fārābī's theory of poetics the evocation of visual images is inspired exclusively by 'imitative' expressions, Ibn Sīnā allows other characteristics of speech as well, e.g. metre and certain figures of speech (Schoeler 2013 [\*404: 5–6]). Furthermore Ibn Sīnā not only linked the evocation of images to 'imitation' but postulated that such emotions as amazement or wonder (*ta'aḡḡub*) and pleasure (*iltidād*) are capable of evoking images (*šifā'*, *Šīr* [\*54.1.9: 24]; cf. Heinrichs 2008 [\*397: 8], Kemal 1991 [\*381: 153–169]).

As with the other disciplines of the *Organon*, the *Poetics*, too, had a specific syllogism assigned to it since late antiquity. Al-Fārābī defined the poetic syllogism as a formally incorrect syllogism of the second figure with two affirmative premises. Al-Fārābī's illustration shows just how closely the poetic syllogism is linked to simile and metaphor: 'This man is beautiful. The sun is beautiful. Therefore this man is a sun'. Ibn Sīnā expanded the poetic syllogism with two new types (Schoeler 2013 [\*404: 12–13], Heinrichs 2008 [\*397: 7]). First, a syllogism of the first figure in Barbara, with a non-assertoric major premise that contains an incorrect assumption. His example is: 'Everything yellow is vomited bile. Honey is yellow. Therefore honey is vomited bile'. The second type is also a syllogism following the first form in Barbara, but with a non-assertoric minor premise. Ibn Sīnā's rather graphic example is: 'The rose is the anus of a mule with dung at the centre' – this statement, used as the non-assertoric minor term in this instance, is a quotation of the poet Ibn al-Rūmī, who hated

roses (cf. Heinrichs 2008 [\*397: 7 n. 26]). ‘Everything that is the anus of a mule with dung in it is filthy and unclean’ (major premise). ‘Therefore the rose is filthy and unclean’ (conclusion). Deborah Black (1990 [\*380: 229–231, cited by Schoeler 2013 [\*404: 8], Heinrichs 2008 [\*397: 6]) argued persuasively that the first type of poetic syllogism introduced by Ibn Sīnā is shaped in the poet’s or speaker’s mind, the second one in the mind of the listener. All types of poetic syllogism have in common that they are presented without being made fully explicit; in this regard, the poetic syllogism displays a certain similarity with the enthymeme.

Ibn Sīnā calls the non-assertoric minor premise of his second type of poetic syllogism the ‘poetic premise’ (cf. Schoeler 2013 [\*404: 14]). Despite the differences between the syllogistic disciplines of rhetoric and poetics, Ibn Sīnā emphasises the kinship and inner connection between the two. At the end of the paraphrase in chapter 6 of the *Poetics* in the *Kitāb al-Šifāʾ* [\*54.1.9: 50], he says: ‘The roots (*uṣūl*) of the evocations of images are adopted from rhetoric, as though they were servants (*ḥadam*) and subjects (*tawābiʿ*) of assents (*taṣḍīqāt*)’.

The influence of Ibn Sīnā’s writings on the subject of Aristotle’s *Rhetoric* and *Poetics* was far-reaching – as was the influence of his ideas in general – and can be demonstrated in the works of several philosophers of subsequent generations. Instances in the Islamic East include Abū l-Barakāt al-Baḡdādī (d. c. 560/1165), Naṣīr al-Dīn al-Ṭūsī (d. 672/1274), and the Syrian Bar Hebraeus (d. 685/1286). In his *Kitāb al-Muʿtabar* [\*207], Abū l-Barakāt used the first section of *Maʿānī Kitāb Riṭūriqā* from Ibn Sīnā’s *Kitāb al-Maḡmūʿ* as his model, quoting the text almost verbatim, with occasional explanatory additions. He employed a similar approach in his presentation of poetics in *Kitāb al-Muʿtabar*, which also follows Ibn Sīnā’s early summa. Naṣīr al-Dīn al-Ṭūsī’s description of rhetoric in his handbook of logic *Asās al-iqtibās* (*The Foundation of the Acquisition of Knowledge*) [\*215] also shows Ibn Sīnā’s influence; regarding al-Ṭūsī’s reception of Ibn Sīnā’s *Poetics* cf. Landau 2012 [\*401]. Finally, the influence of Ibn Sīnā’s writings on rhetoric and poetics in the *Kitāb al-Šifāʾ* is visible in the respective sections of Bar Hebraeus’ *Hēwaṭ ḥekmā* (*Butyrum sapientiae*) [\*217] (on rhetoric cf. Watt 2005 [\*217: 21–34], on poetics Gutas, in: Tarán, Gutas 2012 [\*191: 105]).

In the Islamic West, the most important names in this context are Ibn Rušd (d. 594/1198) and Ibn Ṭumlūs (d. 620/1223). The latter explored Ibn Sīnā’s text on rhetoric from the *Kitāb al-Šifāʾ*, though he looked to Ibn Rušd above all (cf. Aouad 2006 [\*211: LXXI–LXXV, LXXX–LXXXI], 2004 [\*393: 269–270]). It is possible that this work by Ibn Sīnā is the ‘unsatisfactory commentary’ mentioned by Ibn Rušd (Vagelpohl 2008 [\*399: 195], with recourse to Aouad, Rashed 1999

[\*389]), but Ibn Rušd was also willing to be inspired by Ibn Sīnā, for instance in the context of the doctrine of the enthymeme (cf. Wüsch 1993 [\*385: 600–606]). Ibn Sīnā's *Poetics* was also known to the Andalusian Arabic literary theorist Ḥāzīm al-Qarṭāḡannī (d. 684/1285) who quotes from it (cf. Heinrichs 2008 [\*397: 10]).

Some passages from Ibn Sīnā's rhetorical chapter of the *Kitāb al-Šifā'* made their way into Latin-speaking Europe via Hermannus Alemannus (d. 1272) (cf. most recently Celli 2012 [\*671]; cf. also Lyons 1982 [\*192: Introduction], Boggess 1971 [\*374: 246]).

## 4.5 *Metaphysics*

*Amos Bertolacci*

4.5.1 Metaphysics as a Central Topic of the Oeuvre – 4.5.2 A New Concept of Metaphysics – 4.5.3 Developing the Doctrine – 4.5.4 Conclusion

The crucial importance that Ibn Sīnā ascribed to metaphysics, among the theoretical sciences and in the entire system of philosophy, is evident in many respects. Firstly, this discipline is a stable element of all his numerous comprehensive treatments of philosophy (summae of the received philosophical *corpus*, literal commentaries thereon, annotations, school discussions, classifications of the sciences etc.), where it plays the role of crowning discipline of the entire pyramid of knowledge or, conversely, of first and fundamental branch of theoretical philosophy. Moreover, a number of Ibn Sīnā's briefer treatises detail particular segments of this discipline or some of its specific themes. Secondly, in his various treatments of metaphysics, he manifests – with various degrees of completeness – a very original and innovative conception of this discipline, by submitting Aristotle's *Metaphysics* and the ensuing exegetical tradition to a kind of revision that is much more radical, and implies a greater variety of sources, than in the case of the other parts of the transmitted philosophical *corpus*. Thirdly, he paid attention to this part of philosophy throughout his life, in such a way that his view of metaphysics underwent a significant evolution, in terms of attitude towards Aristotle's *Metaphysics* and Aristotle himself, formulations of specific doctrines, and presentation of the epistemological status of this science.

Moreover the special place he accorded metaphysics may be inferred from the fact that he referred to the topos of its 'particular complexity' in several contexts. The most famous instance of this is found in his autobiography where he tells us that as a young man he could not understand the purpose

of Aristotle's *Metaphysics* even though he read the text forty times and almost learnt it by heart in the process (Gohlman 1974 [\*177: 30,7–32,4]). Another instance is found in the introduction to the *Dānišnāma* where Ibn Sīnā – now a mature scholar – explains that of all the parts of philosophy, metaphysics was the only one he had not completely mastered (*Dānišnāma*, *Manṭiq* [\*56.1: 4,4–5; Fr. transl. 22]).

#### 4.5.1 Metaphysics as a Central Topic of the Oeuvre

The views on metaphysics embraced by Ibn Sīnā are expressed in works of various forms and literary style (cf. the overviews in Bertolacci 2006 [\*442: 581–591], Lizzini 2011 [\*450: 583–595], Gutas 2014 [\*70: 416–432. 470–496]). Overviews of differing lengths are found in his writings on the classification of the sciences (cf. the *Maqāla fī Aqsām al-ʿulūm al-ʿaqliyya*, in *Tisʿ rasāʾil* [\*21: 89,17–92,6 ʿĀṣī]) and in considerations of the branches of philosophy in other works such as the *Kitāb fī l-Nafs ʿalā sunnat al-iḥtiṣār* (*Compendium on the Soul*) [\*100: 339–372, esp. 361–365; Engl. Gutas 2014: \*70: 5–7], the *Posterior Analytics* (*al-Burhān*) in the *Šifāʾ* [\*54.1.5: chap. 11 7, 165,3–166,15], *Manṭiq al-Mašriqiyyīn* (*The Eastern Logic*) [\*24: 5–8; cf. Gutas 2000, \*143: 159–180, esp. 167–168], *al-Taʿlīqāt ʿalā ḥawāṣi Kitāb al-Nafs li-Aristū* (*Notes to the Glosses on Aristotle's De anima*) [\*59.3: 75,11], and the *Uyūn al-ḥikma* (*The Elements of Philosophy*) [\*52: 16]. The various summae expand on these overviews, metaphysics always being presented as an integral part of philosophy, together with logic and natural philosophy. Branches of metaphysics are discussed in dedicated smaller texts such as *al-Mabdaʾ wa-l-maʿād* (*The Provenance and Destination*). Ibn Sīnā discusses some metaphysical issues in more detail in works that reflect his thoughts on central philosophical topics (such as *al-Taʿlīqāt*) or present results of his teaching activity within his circle (such as *al-Mubāḥaṭāt*). Only a small portion of his literal commentaries on the Aristotelian corpus is extant, but here, too, metaphysics is the discipline on which we possess the greatest amount of information. In the case of the lost work *al-Ḥāṣil wa-l-maḥṣūl* (*The Available and the Valid*), this is provided by secondary remarks made by Ibn Sīnā or his pupils, or by excerpts incorporated in sections on metaphysics of later summae (cf. Bertolacci [\*467]); of the text *al-Inṣāf* (*Fair Judgment*) one section is extant – that on metaphysics [\*59.1 and 59.2].

Ibn Sīnā's summae differ with regard to the position metaphysics occupies within theoretical philosophy. Usually the theoretical disciplines are presented, after a propaedeutic discussion of logic, in the traditional sequence of natural philosophy, mathematics, and metaphysics, or natural philosophy and metaphysics only, as mathematics is often omitted. This is the case in the following works: *al-Maǧmūʿ* (*The Collection*), also known under the

title *al-Ḥikma al-'Arūḍiyya* (*The Philosophy for 'Arūḍī*); *ʿUyūn al-ḥikma* (*The Elements of Philosophy*); *al-Hidāya* (*The Guidance*); *al-Šifā'* (*The Cure*); *al-Nağāt* (*The Salvation*); *al-Išārāt wa-l-tanbihāt* (*Pointers and Reminders*). A reverse sequence – which Ibn Sīnā himself considered more original – is found in the Persian summa *Dānišnāma*, and possibly in the incompletely extant *al-Ḥikma al-mašriqiyya* (*Eastern Philosophy*). Here, metaphysics does not act as the end but as the beginning of theoretical philosophy (*Dānišnāma*, *Manṭiq* [\*56.1: 3–4; Fr. transl. I 21–22]; *Dānišnāma*, *Ṭabīʿiyyāt* [\*56.2: 2; Fr. transl. II 13–14]; *Manṭiq al-Mašriqiyyīn* [\*24: 8,9–10]). Mathematics was apparently omitted from *al-Ḥikma al-mašriqiyya*. In the *Dānišnāma*, it is found at the end where al-Ġūzġānī added it, allegedly in order to replace Ibn Sīnā's lost original text (Mahdawī 1333/1954 [\*7:110]; cf. the Fr. transl. of the *Dānišnāma* [\*104:II 91–92]). It is not clear which place Ibn Sīnā would have given to mathematics in this book. In the general introduction it is mentioned as the third part of the work (*Dānišnāma*, *Manṭiq* [\*56.1: 3–5; Fr. transl. I 21–22]), in the introduction to natural philosophy as the fourth and last part (*Dānišnāma*, *Ṭabīʿiyyāt* [\*56.2: 2; French transl. II 13–14]).

The two divergent positions of metaphysics in the classification are compatible after all, as certain passages in the *Dānišnāma* as well as *al-Ḥikma al-mašriqiyya* show, which are – despite the overall structure of the work – indebted to the first rather than the second concept of classifying the theoretical disciplines (*Dānišnāma*, *Ilāhiyyāt* [\*56.4: 3–5; Fr. transl. I 90–92; Engl. transl. Morewedge 12–13]; *Manṭiq al-Mašriqiyyīn* [\*24: 6,11–7,4]). Each in its own way, the two classifications emphasise the prominent position that is due to metaphysics. In the more frequent, 'subjective' and didactic sequence, which looks to the degree of abstraction of the objects of knowledge, metaphysics is the science whose subject matter is furthest distant from matter and perception; consequently it follows natural philosophy and mathematics, forming the conclusion and capstone of the edifice of knowledge. Conversely, in the less frequent, 'objective' sequence which looks to the importance of the subject matter, it precedes natural philosophy and mathematics; for metaphysics is independent of both these in so far as it is the only fundamental science, as it establishes the principles for the other theoretical disciplines, guaranteeing the mutual connection and coherence of the entire system of philosophy. The first perspective is applied in texts where, in the sections on logic, physics, and mathematics of his *summae*, Ibn Sīnā points to the subsequent elucidation of several key doctrines in metaphysics, and these are revisited in that part of the *summae* at stake. These kinds of cross-references imply *de facto* that all previously considered philosophical disciplines converge in metaphysics, and they sometimes explicitly affirm its status as the culmination of all theoretical

philosophy (cf. the proem of the section on psychology in the *Šifā'* [\*54.2.6: 3,12 Rahman]). Consonant with the second perspective is the fact that in his classifications of the sciences, most of his summae, and elsewhere, too, Ibn Sīnā states that metaphysics is the discipline that discusses the general and specific epistemological principles whose validity is presumed in the other sciences (*Risāla fī Aqsām al-ʿulūm al-ʿaqliyya*, in *Tisʿ rasāʾil* [\*21: 89,21–22 ʿĀṣī]; *Kitāb fī l-Nafs ʿalā sunnat al-iḥtiṣār* [\*100: 362,6–8]; Engl. transl. in Gutas 2014 [\*70: 18 (7)]; *Šifā'*, *Burhān* [\*54.1.5: chap. II 7, 165,3–7.11–16; chap. III 1, 194,6–11]; *Šifā'*, *Qiyās* [\*54.1.4: chap. I 2, 13,14–17]; *Šifā'*, *Ilāhiyyāt* [\*54.4: chap. I 1, 5,7–8]; *al-Nağāt* [\*55: 493,12–13 Dānišpažuh]; *Dānišnāma*, *Ilāhiyyāt* [\*56.4: 2; transl. Morewedge 14]; *Risāla fī l-Ağrām al-ʿulwiyya*, in *Tisʿ rasāʾil* [\*21: 40,16–19]). In both perspectives, as the concluding step in the acquisition of philosophy as well as in the function of a fundamental, epistemologically independent discipline, metaphysics thus occupies the first rank, superior to all other branches of philosophy.

Add to this a further, epistemologically relevant function assigned to metaphysics within Ibn Sīnā's summae: the part on metaphysics includes a concise overview of practical philosophy, elucidating the foundations on which this branch of philosophy rests. A complete, albeit brief, presentation of the three traditional branches of philosophy – ethics, economics (in the sense of household management) and politics – is found, for instance, in the last two chapters of the *Metaphysics* of the *Šifā'* (*Ilāhiyyāt* [\*54.4: x 4–5]), as an appendix, as it were, to the three chapters on prophecy immediately preceding it. Practical philosophy has been linked to the metaphysical discussion of prophecy in this place because in Ibn Sīnā's view the Prophet is the 'lawgiver' for individual behaviour, family life, and governance (Bertolacci 2020 [\*233]). In other summae too, such as *al-Nağāt*, practical philosophy is mentioned as one of the major topics of the work (cf. the reference to the 'moral qualities and actions [*al-aḥlāq wa-l-aʿfāl*] that contribute to achieving the human soul's return to the celestial world' in the foreword [\*55: 4,5–7]), but the section dedicated to it remains firmly tied to the discussion of metaphysics, and is comparatively briefer. Here, it is once again placed at the end of the section on metaphysics, and is limited to the discussion of prophetic legislation, without providing an independent overview of ethics, economics, and politics.

The position of metaphysics at the beginning of the *Dānišnāma* and of *al-Ḥikma al-mašriqiyya* interrupts its link with practical philosophy, without an alternative connection between practical and theoretical thought being provided. While prophetic legislation is mentioned in the *Dānišnāma* as a topic to be dealt with, in fact it is not discussed, and its analysis, we are told at the end of the part on natural philosophy, is postponed to another, not



otherwise specified, place (*Dānišnāma*, *Ṭabīʿiyyāt* [\*56.2: 146; Fr. transl. II 90]). In *al-Ḥikma al-mašriqiyya*, practical philosophy is arguably assigned to a physical, rather than a metaphysical, context but in fact it is not discussed anywhere. Presented in a full-fledged articulation (ethics, economics, politics, and prophetic legislation), of which Ibn Sīnā intends to convey only the essential points (introduction to *Manṭiq al-Mašriqiyyīn* [\*24: 7,8–8,13]), practical philosophy is presumably limited, in Ibn Sīnā's intentions, to prophetic legislation, as it is in *al-Nağāt*, being linked not to metaphysics but to natural philosophy (in the table of contents at the beginning of the work, practical philosophy is listed after the 'fundamental [part of] natural philosophy' [*al-ʿilm al-ṭabīʿī al-aṣlī*], i.e. after the main branches of natural philosophy, as opposed to the non-fundamental part of natural philosophy, i.e. the applied disciplines of physics: cf. *Manṭiq al-Mašriqiyyīn* [\*24: 8,9–10]). This shift is due to natural philosophy being the last theoretical discipline of the work, and it is justified by the presence of presuppositions of prophecy not only in metaphysics but also in a branch of natural philosophy, namely psychology. The new arrangement was not, however, applied to the work at a practical level, as the part on natural philosophy does not include a presentation of ethical, economic, and political topics (*al-Mašriqiyyūn*, *Ṭabīʿiyyāt* [\*57.3]).

In view of these considerations it comes as no surprise that the titles of some of Ibn Sīnā's summae are presumably derived from topics discussed in their metaphysics parts. Thus *al-Šifāʾ* (*The Cure*) recalls Aristotle's attributing to the dialectical method the ability to cure the ignorance of those who doubt the validity of logical axioms due to objective difficulties – a view shared by Ibn Sīnā (cf. the paraphrase of *Metaph.* 1009a19–21 in *Šifāʾ*, *Ilāhiyyāt* [\*54.4: chap. 1 8, p. 50,8]; also Bertolacci 2006 [\*442: 375–376]). In a similar fashion, 'salvation from drowning in the sea of the misguided' (*al-nağāt min al-ğarq fī baḥr al-ḍalālāt*) in the foreword of the summa named after this phrase (*al-Nağāt* [\*55: 4,7]) is described as a result of the ethical perfection that is achieved when we come to know the topics discussed in metaphysics.

#### 4.5.2 A New Concept of Metaphysics

Ibn Sīnā's considerations of metaphysics combine the endeavour to imbue this discipline with a suitable scientific form with the effort of providing a series of specific metaphysical discussions conducted in accordance with established epistemological standards. The scientific model applied to metaphysics is comprehensive: It concerns its foundation (the subject matter and the goal), arrangement (structure), procedure (method), and function (relationship with other sciences). The individual investigations, too, comprise a wide range of topics, reaching from the most universal concepts to God, the divine sphere,

and the fate of humans in the afterlife. The former concerns that which might be called the ‘form’ of metaphysics, the latter its ‘content’. In both instances the paradigm is Aristotelian. The epistemological frame is provided by the scientific model of the *Posterior Analytics* and its tentative and incomplete application by Aristotle in the *Metaphysics*. The specific discussions refer to individual topics of the *Metaphysics* – complemented by Aristotelian material from elsewhere, the interpretations of the Peripatetic commentators, and pseudo-Aristotelian (in reality Neoplatonic) metaphysical accretions. The concept of ‘existence’ links the two sides of the discussion. With regard to the first aspect (the ‘form’), ‘existent qua existent’ is the subject matter of metaphysics and a particular kind of existent (= the Necessary Existent) its goal. ‘Existent’ together with the ‘one’ defines the structure of the discipline. The method is demonstrative with regard to existence. The proof of the existence of the subject matters of other sciences forms the metaphysical foundation of the principles of the sub-disciplines. With regard to the second aspect (the ‘content’), all topics discussed in metaphysics are directly or indirectly linked to the topic of existence.

Ibn Sīnā’s metaphysical concept is displayed most informatively in the metaphysics part (*Ilāhiyyāt*) of *al-Šifā’*, the most detailed and most important of his summae. This work shows, for the first time in the history of philosophy, that metaphysics may be simultaneously *metaphysica generalis* and *metaphysica specialis*, and that it is capable of (besides other things) proving the existence of God. In addition this text documents how original Ibn Sīnā’s approach to his sources was: On the one hand it shows that the *Ilāhiyyāt* – and *al-Šifā’* in general – are dependent on the older, especially Aristotelian and more generally Peripatetic, philosophical tradition. On the other hand this orientation towards tradition – which Ibn Sīnā emphasises here in comparison with other works such as *al-Hikma al-mašriqiyya* – by no means implies a passive adoption of previous reflections; on the contrary, it leaves space for considerable innovations such as the new configuration of individual disciplines, shifting topics from one science to the other, and the introduction of new doctrines. Thus the *Ilāhiyyāt* of the *Šifā’* not only perpetuates Aristotelian philosophy and its subsequent tradition, but renews the tradition of metaphysics in a way that is much more profound and radical than in other parts of the *Šifā’* (cf. Bertolacci 2006 [\*442]).

The *Ilāhiyyāt* is the only one among Ibn Sīnā’s works on metaphysics to have been translated into Latin in its entirety during the Middle Ages (edition in three volumes by van Riet [\*54.4.b]: I–IV, V–X and Lexiques); a Persian translation was produced during the Safavid era (Panzeca 2017 [\*591]). The numerous quotations from it by Ibn Sīnā’s pupils and commentators document just

how important the work was for the Arabic tradition (Janssens 2012 [\*579], Wisnovsky 2013 [\*584], 2014 [\*585]), as does the wealth of manuscript transmission (Bertolacci 2008 [\*161], Ahmed 2012 [\*576], Witkam 2012 [\*173], Bertolacci 2017–2018 [\*182], Celli 2017–2018 [\*593], Di Vincenzo 2017–2018 [\*594], Bertolacci 2019 [\*459], Bertolacci – Dadkhah 2019 [\*54.4], PhiBor 2014–2019 [\*54.4: section ‘Manuscripts’], Bertolacci 2022 [\*602], Bertolacci – Dadkhah 2022 [\*603]) and the considerable number of commentaries on the work (Wisnovsky 2012 [\*172], 2013 [\*583], Esmaeili 2014–2015 [\*586], PhiBor 2014–2019 [\*54.4: section ‘Indirect Tradition’], Panzeca 2022 [\*604]). The relevance the work has for modern research in the context of history in general and the history of ideas in particular is demonstrated by its having been printed several times (cf. the various editions published since the first edition Tehran AH 1303 [1885] [\*54.4 a]) and translated into several European languages [\*54.4. b; besides the numerous (partial) translations listed there, cf. also the Hebrew anthology by Harvey 2009 (\*41)]. A critical edition of the work is currently being produced (PhiBor 2014–2019 [\*54.4: section ‘Edition’]). The study of manuscripts of the *Ilāhiyyāt* that had not been taken into consideration for the previously published printed versions has allowed a better insight into Ibn Sīnā’s terminology and the historical background of his vocabulary (cf. Bertolacci 2012 [\*450]). It has also brought to light significant structural divergencies, the result of either his own revisions or modifications by his immediate pupils (cf. Bertolacci 2012 [\*167], 2017 [\*676], 2022 [\*464]).

With regard to the ‘form’, i.e. the scientific profile of metaphysics, the *Ilāhiyyāt* indicates that the discipline’s subject matter corresponds with all the aspects Aristotle ascribes to it in *Metaphysics*. As Ibn Sīnā explains, metaphysics is, on the one hand, the study of First Causes and of God (cf. *Metaph.* A 1, 981b28–29; A 2, 982b9–10), because the First Causes and God are its ‘goal’. On the other hand, it is the study of the ‘existent’, (cf. *Metaph.* Γ 1, 1003a20–26), because the ‘existent qua existent’ is its primary subject matter (Quartucci 2017 [\*465]). Finally, metaphysics is the study of immaterial and motionless things (cf. *Metaph.* E 1, 1026a13–23), because the First Causes and God as well as ‘existent qua existent’ are realities of this kind: The First Causes and God are ‘by their nature’ immaterial and motionless, while the ‘existent’ is ‘in principle’ immaterial and motionless, as it behaves in this way at least in some instances.

Correspondingly, the new structure of metaphysics in the *Ilāhiyyāt* is the result of two vertical axes that intersect three horizontal planes. The vertical axes are the study of the ‘existent qua existent’, and the study of the ‘one qua one’ (for the sake of brevity called, respectively, Ontology and Henology here). The horizontal planes are given by the investigation of the species, the properties, and the causes of these two items.

Ontology is the first and primary (vertical) axis of metaphysics, as it concerns the subject matter of the science. It articulates an analysis of the 'existent' in a threefold way: its species (OntologyS, chap. II–III 1; III 3–5; III 7–10, on the categories substance, quantity, quality, and relation), its properties (OntologyE, chap. IV–VI, on priority and posteriority, potency and action, the perfect and the imperfect, the whole and the part, the universal and the particular, cause and effect), and its First Causes and principles (OntologyC, chap. VIII–X 3). As God is the ultimate cause of the 'existent', OntologyC is equal to philosophical theology (for this reason it is called OntologyC/Theology here), as expressed in a proof of the existence of God, an analysis of His essence, and accounts of cosmology, theodicy, eschatology, and prophetology.

Henology, in comparison, is a supplementary and shorter (vertical) axis the topic of which is the concept most closely connected with the 'existent' ('the one'). It is concerned with the species of the 'one' and the 'many' (HenologyS, chap. III 2–6. 9, partially overlapping with the discussion of quantity in OntologyS: on 'the one' by accident and 'the one' by essence, the latter being arranged into 'one' by genus, species, difference, relation, subject, and number; on absolute and relative multiplicity; on the opposition 'one' – 'many') and their properties (HenologyE, chap. VII 1: on sameness by accident, sameness by essence, otherness, alterity, difference, privation, and oppositeness). The culmination of metaphysics is OntologyC/Theology, which Ibn Sīnā calls the 'seal' of the discipline. An introductory section on the foundation of metaphysical knowledge (chap. I 1–4 = Prolegomena: on the traditional introductory investigation of subject matter, goal, benefit, status, name, and structure of the discipline; chap. I 5–8 = Introduction: on the primary concepts; the fundamental distinction between the Necessary Existent of itself, and the potentially existent of itself; the logical axioms) and an appendix on practical philosophy (chap. X 4–5) complete the work (cf. Bertolacci 2002 [\*430], 2006 [\*442: 149–211]).

Compared to Aristotle's *Metaphysics*, the method employed in the *Ilāhiyyāt* is more apodictic (i.e. dependent on stringent demonstrations) as well as less dialectic. On the one hand, Ibn Sīnā elucidates the status and the boundaries of metaphysics as a science founded on demonstration, reworks the arguments of the Aristotelian text in syllogistic form and devotes considerable attention to the truth and certainty of the premises of arguments; this includes recourse to demonstrations by means of methods we might call 'analytical'. On the other hand, he endeavours to limit the dialectic procedures applied by Aristotle. For instance, he collects the doxographies from *Metaphysics* A, M, and N in an appendix to Henology (chap. VII 2–3) and does not place them prominently at the beginning and the end of the work, as was done in the *Metaphysics*. The aporiai from *Metaphysics* B, too, lose weight in his presentation, as he

mentions only very few at different places in the *Ilāhiyyāt*, linking them with their respective solution.

As a result, metaphysics appears more coherent and systematic than in Aristotle, becoming the apex of the system of the sciences. With respect to the other sciences taken into account in the *Šifā'* (logic, natural philosophy, and mathematics), it acts as *regina scientiarum*, ascertaining their principles and establishing connections and a hierarchical order among them. The scientific principles determined by metaphysics are, on the one hand, the logical laws common to all sciences (the axioms), and the universal concepts presupposed by every science without debate ('existent', 'thing', 'necessary', 'one'). On the other hand, metaphysics clarifies the principles appertaining to each individual science and is concerned with their specific subject matter, i.e. the epistemological hypotheses of the respective disciplines. In this way it proves the actual existence and the kind of existence of the subjects of the other sciences (such as existence and kind of existence of universals and categories in logic, matter and form in natural philosophy, discrete and continuous quantity in mathematics). Through the three branches of theoretical philosophy, this foundation also concerns those disciplines that are subordinate to logic, natural philosophy, and mathematics. Practical philosophy, on the other hand, is based in the discussion of prophecy at the end of OntologyC/Theology (chap. x 1–3).

The restructuring of the 'contents' of metaphysics is the result of a selective way of incorporating the purport of the books of the *Metaphysics*, the connection of Aristotle's thought with later – Greek as well as Arabic – metaphysical speculations, and the introduction of some new key concepts. In the *Ilāhiyyāt*, Ibn Sīnā quotes – in differing length and employing different Arabic translations and varying citing techniques – (almost) all fourteen books that are the traditional parts of the *Metaphysics* (perhaps with the exception of Book K); this is done selectively, however, and following an arrangement that differs considerably from the original text. Thus, the topics of Book A, above all the criticism of the Pythagoreans and the Platonists, are not located at the beginning of the *Ilāhiyyāt* but at the end of Henology (chap. vii 2–3). The doctrine of *Metaph.* α 1–2 is moved even further, to OntologyC/Theology (chap. viii 1–3), together with *Metaph.* λ 6–10 (further topics are found scattered in chapters viii 4–8). Book Γ, conversely, does not follow the other books, but is moved to the beginning of the *Ilāhiyyāt* (Prolegomena and Introduction) where the topics taken from it play a fundamental epistemological role (cf. Bertolacci 2004 [\*436], 2006 [\*442: 375–401]). Besides Book Γ, *Metaph.* E 1 inspires some of the themes of the Prolegomena. *Metaph.* E 2–4, on the other hand, provides the background to some secondary topics of the Introduction and of OntologyS.

The doctrine of Book Z (and to a lesser degree Book H) appears in the discussion of substance in OntologyS (Treatise 11) and in the elucidation of the universals (Treatise v) and material and formal causes (chapter vi 4) in OntologyP. A comprehensive synopsis of Book Θ figures in the analysis of potentiality and actuality in OntologyP (chapter iv 2). Book I is the main source of HenologyP (chapter vii 1). Books M and N, finally, are quoted together with Book A at the end of Henology (chap. vii 2–3). The remaining books of the *Metaphysics*, B and Δ, are not resumed in a specific place of the *Ilāhiyyāt* but are scattered throughout. Thus at various points of the introduction to OntologyP and OntologyC/Theology, Ibn Sīnā points to a few aporias from Book B (Bertolacci 2004 [\*435], 2006 [\*442: 403–440]). Similarly, some terminological distinctions deriving from Book Δ (occasionally with a critical tone) serve as linguistic preliminaries in various parts of the *Ilāhiyyāt* (especially Prolegomena, Introduction, OntologyS – HenologyS, OntologyP and HenologyP). In general terms we can say that Ibn Sīnā arranges the books of the *Metaphysics* around three central ‘poles’: (1) the epistemological pole (Prolegomena and Introduction) consisting of Books Γ and E; (2) the ontological-henological pole consisting mainly of Books Z, H, Θ, and I (OntologyS – P and Henology S – P), in which Book B plays the part of ‘trouble shooter’, Book Δ provides the semantic preconditions for the discussion, and Books A, M, and N serve as doxographical addenda; and (3) the theological pole (OntologyC/Theology), which includes as Aristotelian material the books α 2 and Λ 6–10.

In the *Ilāhiyyāt* of the *Šifāʾ*, Ibn Sīnā not only modifies the scientific profile and contents of the *Metaphysics* in the manner described. He also adds topics taken from elsewhere, namely from Aristotle’s other works, from the (Greek and Arabic) Peripatetic tradition, or from his own cultural context. In comparison with the Peripatetic connection, his recourse to the Platonic tradition is weak and indirect, in keeping with his explicit criticism of Plato’s doctrine of ideas, conducted *more Aristotelico* (Marmura 2006 [\*443], Bertolacci 2009 [\*446], Porro 2011 [\*451], Lammer 2022 [\*466]), and his limited and uncertain use of the Neoplatonic texts attributed to Aristotle in Arabic philosophy (*Theologia Aristotelis* and *Liber de Causis*) (D’Ancona 2000 [\*426], Bertolacci 2022 [\*464]); besides, Ibn Sīnā appears to have doubted this attribution, endeavouring to correct the systematic errors in these texts (Adamson 2004 [\*254]).

Thus there are three main sources of Ibn Sīnā’s reshaping of the epistemological profile of the *Metaphysics*; (1) the Corpus Aristotelicum, above all the scientific model of the *Posterior Analytics*, which Aristotle had himself applied tentatively to metaphysics in *Metaph.* Γ and E 1; (2) the Greek commentators of Aristotle, primarily Alexander of Aphrodisias with his wide-ranging considerations of the science of metaphysics (in his commentary on the topic), but also

the authors of the late ancient prolegomena literature, which is the model – directly or indirectly – of the first four chapters of the *Ilāhiyyāt* (Lizzini 2005 [\*441], Bertolacci 2006 [\*442: 169–170]); (3) the Arabic interpreters of Aristotle, first and foremost the metaphysics project presented by al-Fārābī in his *Fī Agrād al-Ḥakīm fī kull maqāla min al-kitāb al-mawsūm bi-l-ḥurūf* (On the goals of ‘the philosopher’ in each of the treatises in the book indicated by the letters [i.e. the *Metaphysics*]; cf. PIW I § 8.3.7) and which might be based on a work on the goals of the works of Aristotle by Ammonios Hermeiou that is lost in the Greek original but mentioned in Arabic sources (cf. Bertolacci 2005 [\*440], 2006 [\*442: 37–64]). The fusion of Aristotelian and non-Aristotelian material is most visible in the OntologyC/Theology of the *Ilāhiyyāt*. The Aristotelian core of these considerations – whose linking *Metaph.* A, 2 with Λ 6–10 is ultimately due to al-Kindī’s selective approach to the *Metaphysics* – is enriched by passages from the works of Alexander of Aphrodisias and Themistius on metaphysics (Bertolacci 2021 [\*459]), motives from the pseudo-Aristotelian *Theologia Aristotelis* and *Liber de Causis* (D’Ancona 2000 [\*426], 2003 [\*431], 2007 [\*445: 46–55], 2008 [\*260: 64–65], Adamson 2004 [\*255], Bertolacci 2022 [\*464]), and insights from the theological sections of some of al-Fārābī’s works. In addition, the examples, terminology, and topics of OntologyC/Theology as well as theological views discussed elsewhere in the book, document Ibn Sīnā’s intention of proving that the rational foundation of the Islamic faith was compatible with the philosophical view of the world of metaphysics (Marmura 1991–92 [\*424], 2012 [\*454]). Viewed in this light, in the *Ilāhiyyāt* of the *Šifā’*, Ibn Sīnā provides the prime example of a ‘contextual’ reading of the *Metaphysics*, i.e. an interpretation of Aristotle’s work that considers not only the original text but also other texts from the Aristotelian corpus, from subsequent tradition, related kinds of metaphysical speculation (especially Neoplatonic pseudo-Aristotelian writings), and the cultural trends in Ibn Sīnā’s own close surroundings (Islamic religion and theology).

Monographs of varying length on relevant metaphysical doctrines have been published, as have a few overviews (cf. most recently Menn 2013 [\*456] and Adamson 2013 [\*455]), although still lacking, so far, is a study analysing and describing the doctrinal purport of Ibn Sīnā’s metaphysics project comprehensively. Some of the doctrines that may be seen to a greater or lesser extent as innovations on his part have a narrower application, and only appear in localized sections of the work; while others are more wide-ranging, linking several parts of the work and a variety of topics due to their fundamental and comprehensive character. The first kind includes the theory of the primary concepts, especially ‘existent’, ‘thing’, ‘one’, and ‘necessary’ (z.B. Koutzarova 2009 [\*447], Treiger 2010 [\*449], Druart 2014 [\*457]), the doctrine of the causes

and its application to cosmology (Janos 2011 [\*498], Lizzini 2011 [\*450], 2013 [\*504]), and the theory of God's essence and actions (Acar 2005 [\*438], 2010 [\*448], McGinnis 2011 [\*499], 2012 [\*502], Lizzini 2014 [\*505]). Most noticeable among the second kind is the distinction between essence and existence, which serves as the theoretical cornerstone of Ibn Sīnā's entire metaphysical system. This distinction means that a triangle or a horse, for instance, has a certain essence (as a three-sided geometrical shape or a four-legged hoofed animal with a flowing mane and tail) that is independent of its existence in external reality or within the human imagination. The distinction between essence and existence forms the basis of many theoretical assumptions in Ibn Sīnā's metaphysics. It justifies, among other things, the distinction between the primary concepts 'thing' (i.e. 'entity possessed of essence') and 'existent' (i.e. 'entity possessed of existence'). It explains why the form of corporeality can have a definite and complete essence (as a three-dimensional extension) even if it is lacking independent existence. And it highlights the sense in which the final cause can be understood as the first type of causality – and consequently as the cause of all causes – although it is realised as the last kind of cause. As far as essence is concerned, the final cause is the first cause because it is the first intended by the agent; viewed in this light it causes all other causes. As far as existence is concerned, however, it is the last cause, as its existence requires the previous existence of all other causes. The best-known application of the essence – existence distinction concerns the theory of the universals and the nature of God. Ibn Sīnā regards universality as a quality that does not per se belong to an essence, but only when the essence exists in human thought, abstracted from the things by which it is put into effect in external reality. As, however, it is not possible in the case of God to distinguish between essence and existence – God does not have an essence but existence, or rather, He has an essence that is identical with His existence – this separation marks the decisive boundary in Ibn Sīnā's cosmos, separating God from all other beings (the many studies of this doctrine begin with Goichon's 1937 [\*420] pioneering work, leading on to fundamental studies such as Wisnovsky 2003 [\*432: 197–263] and more recent overviews by Benevich 2018 [\*348], De Haan 2020 [\*460], Janos 2020 [\*461]).

#### 4.5.3 Developing the Doctrine

While Ibn Sīnā usually presents his philosophy as a stable system, he also points to certain issues he is unable to solve or which require further investigation, some of which regards metaphysics (for instance *Ilāhiyyāt* [\*54.4: chap. v 8, p. 220,13–18; chap. v 5, p. 229,4–5; chap. IX.7, p. 429,4–7]). Thus, whereas his metaphysical production does indeed possess a high degree of coherence, it is



possible to find significant variations in his works on metaphysics and to trace developments in his thought. They concern three main areas: (1) his attitude to the transmitted text of the *Metaphysics* and to Aristotle's authority in general, (2) certain central metaphysical doctrines, and (3) Ibn Sīnā's method of presenting metaphysics as a science.

As for (1), Ibn Sīnā's familiarity with the text of the *Metaphysics* became more profound over the course of his studies, as we learn from the autobiography. At first, he apparently only knew what he calls the 'essential parts' of the work, mainly *Metaph.* α 1–2 and Λ 6–10, reading these in a theological frame of reference in which α 1–2 was regarded as the introduction to Λ 6–10. His focus on these two passages of the *Metaphysics* demonstrates just how much he was inspired by al-Kindī, who had regarded metaphysics as a theological discipline and linked the beginning of Aristotle's work (Book α) directly with the theological conclusion (Book Λ). When Ibn Sīnā read the complete text of the *Metaphysics* later, he recognised the inadequacy of this approach and its exegetical weaknesses. As a result, he followed al-Fārābī's approach from then on, taking all the books of the work as well as its two dimensions – the ontological as well as the theological one – into thorough consideration. This change of direction was expressed in the famous anecdote that describes Ibn Sīnā's 'fateful' encounter in the market square with al-Fārābī's *Fī Aḡrāḍ al-Ḥakīm ...* (*On the Objectives of 'the Philosopher'...*), the short treatise that, according to his own account, revealed to him the guidelines of the entire work (Bertolacci 2001 [\*428], 2006 [\*442: 37–64]).

In addition, it is possible to observe in Ibn Sīnā's metaphysical works a gradual change in his attitude to the authority of Aristotle. This change is expressed in the increasingly indirect style of referring to the Greek philosopher, the decreasing number of explicit quotations and the growth of oblique as well as open criticism. While the change from using the name 'Aristotle' and the title *Metaphysics* to the epithet 'First Teacher' (*al-mu'allim al-awwal*) and the related phrase 'First Teaching' (*al-ta'līm al-awwal*) in Ibn Sīnā's quotations emphasises Aristotle's absolute primacy in philosophy and the authoritative status of his writings, it also reveals an increasing distance from the historical Aristotle and his works, as well as the intention of appreciating the Greek sage for his teachings without following him blindly because of his fame (cf. Gutas 1988/2014 [\*70: 286–293/323–331], Bertolacci 2006 [\*442: 318–319, 560–561, 573], Bertolacci 2022 [\*467]). At the same time the number of quotations from the *Metaphysics* decreases in Ibn Sīnā's works on metaphysics. For instance, there are eight explicit references to *Metaphysics* Λ in the early text *al-Mabda' wa-l-ma'ād*, only four of which are used again in the corresponding passages in the *Ilāhiyyāt* (*Mabda'* [\*121: 61,10] = *Šifā'*, *Ilāhiyyāt* [\*54.4: 392,4]; [\*121: 61,18]

= [\*54.4: 392,9]; [\*121: 62,3] = [\*54.4: 392,15–16]; [\*121: 68,7] = [\*54.4: 401,16]; not included are *Mabda'* [\*121: 34,3; 68,14; 68,21; 85,8]). This decreasing dependence on Aristotle is linked to another 'stylistic' characteristic most visible in the *Ilāhiyyāt* of the *Šifā'*: Ibn Sīnā begins to refer to the author of the *Metaphysics* not only using the epithet 'First Teacher' but also with more general forms of expression such as generic designations, pronouns, verbs ('the ancients' [*al-awwalūna*]; 'a group' [*qawm*]; 'someone' [*man*]; 'they say' [*yaqūlūna*]; 'it was believed' [*zunna*]) and other indefinite expressions, sometimes emphasising widely-held beliefs or ἐνδοξα occasionally discussed by Aristotle (*al-mašhūr* [that which is generally believed] etc.; cf. Bertolacci 2006 [\*442: 319–320]). These explicit references to Aristotle, expressed in an indefinite style, often contain criticism. It seems as though Ibn Sīnā's objective in the *Ilāhiyyāt* was to conceal or camouflage his disagreement with the 'First Teacher' in certain issues by finding an indirect way of expressing it. This implicit and consequently 'potential' dissension became 'actual' criticism in a slightly later work by Ibn Sīnā, the allegedly massive *al-Inṣāf* (*Fair Judgment* [on the Different Philosophical Doctrines]), a literal commentary on the 'extended' *Corpus Aristotelicum*, two parts of which – the exegesis of *Metaph.* Λ 6–10, 1071b5–1075a27 and a more detailed explanation of the *Theologia Aristotelis* – are extant thanks to *reportationes* or summaries by Ibn Sīnā's pupils. The metaphysics part of *al-Inṣāf* is remarkable for the explicit criticism of Aristotle, in addition to being the only extant instance of literal exegesis of the *Metaphysics* by Ibn Sīnā (cf. e.g. *Šarḥ Ḥarf al-Lām li-Ibn Sīnā* [\*59.1: 49,47 Geoffroy, Janssens, Sebtī] = *Aristū 'inda l-'Arab* [\*28: 23,21]; [\*59.1: 69,245] = [\*28: 30,23]; [\*59.1: 71,261–268] = [\*28: 31,11–18]; also Gutas 1988/2014 [\*70: 288 and n. 12/325 and n. 15]; cf. also Pines 1987 [\*422: 17–204, esp. 191–192]). The implicit criticism of Aristotle hinted at in the *Ilāhiyyāt* and other parts of the *Šifā'*, and the explicit polemic against him in *al-Inṣāf*, can be read as a counterpart to the respect, admiration, and esteem Ibn Sīnā shows for Aristotle in his other metaphysical works formally as well as substantially. Overall, he presents himself as a 'critical' evaluator of the Stagirite, i.e. as a follower profoundly convinced of the superiority of the 'First Teacher' compared to the other ancient philosophers on the one hand, and as an independent mind capable of discovering and declaring the flaws and inadequacies of his model on the other.

As for (2), the thorough investigation of some of Ibn Sīnā's metaphysical key concepts highlights significant diachronic changes. They concern above all the two main branches of his metaphysics, i.e. ontology and philosophical theology, although the same tendency may also be observed in the context of more specific subjects (e.g. the development in Ibn Sīnā's teachings that after the death of the body, ordinary humans might experience the sensorily

perceivable aspects of the Islamic afterlife by means of the imagination; see Michot 1986 [\*209: 23–26]). A striking example is provided by the distinction between essence and existence, concerning which Ibn Sīnā's position developed and transformed in several ways. On the one hand, he formulates the distinction, which is only latent in his earlier works, with increasing precision. On the other, he applies it gradually to the context of causality in order to explain that the final cause as well as the efficient cause may be interpreted as the first type of causality, and consequently as the cause of the others, depending on whether priority is granted to essence or to existence respectively. Finally, the distinction is progressively applied to distinguishing the Necessary Existent in itself (i.e. God, whose existence has no cause and is necessary of itself) and other existing things, which are only possible of themselves and necessary due to something else (i.e. the created things whose existence is necessarily tied to their essence by an external cause), in order to emphasise God's oneness and uniqueness (Wisnovsky 2012 [\*582: 27–50, esp. 31–32]). This development has a theological counterpart in Ibn Sīnā's abandonment of the term *šay'īyya* (thingness) used in the *Šifā'* and in *al-Naǧāt*, in favour of the strictly philosophical term *māhīyya* (quiddity) which he prevalently uses to denote essence in the *Išārāt* (Wisnovsky 2003 [\*432: 173–180, 245–263]). Moreover, the proof of the existence of God, which became the starting point of philosophical theology in Ibn Sīnā's metaphysical works, originally allowed two versions: one truly 'metaphysical' argumentation (i.e. a proof independent of empirical data and resting exclusively on immaterial concepts, that leads to God as the Necessary Existent), and a 'physical' argumentation (i.e. a proof based on the theory of movement, that leads to God as the Prime Mover). Later, Ibn Sīnā relegated the second interpretation to the domain of natural philosophy, and ultimately dismissed it altogether (Gutas 1988/2014 [\*70: 263–265/297–300]; cf. Davidson 1987 [\*423: 237–240]).

As regards (3), the *Ilāhiyyāt* mark the culmination of a tendency observable in Ibn Sīnā's earlier and later works as well. Metaphysics, irrespective of its being denoted by a variety of terms ('metaphysics', 'divine science', 'first philosophy', 'wisdom', 'highest science', etc.), is regarded as a self-contained science divided into two parts – ontology and philosophical theology – in accordance with its two fundamental epistemological elements, its 'subject matter' ('existent qua existent') and its 'goal' (God and divine realities). Ibn Sīnā's different metaphysical texts discuss ontology and philosophical theology in varying length, individually and in comparison, but all of them present metaphysics in its entirety as *one* discipline. The only exception, in a certain way, is *al-Hikma al-mašriqiyya*, in which ontology and theology do not constitute two parts of metaphysics but rather two distinct and independent theoretical sciences

denoted by different terms, namely ‘the universal science’ (*al-‘ilm al-kullī*) and ‘the divine science’ (*al-‘ilm al-ilāhī*) (*Manṭiq al-Mašriqiyyīn*, Introduction [\*24: 7,5–7; 8,9–10]; the phrase ‘universal science’ also occurs in the section on logic [\*24: 16,17; 16,20; 17,21]; cf. Gutas 1988/2014 [\*70: 124/137], 2000 [\*143: 168–169]). This dichotomy is based on a twofold classification of the realities investigated by metaphysics (*al-Ḥikma al-mašriqiyya* [\*24: 6,23–7,1; 7,2–4]), contrasting Ibn Sīnā’s customary tendency of seeing the subject matter of metaphysics as *one* group, albeit a polymorphous one, of items (cf. e.g. the *Maqāla fī Aqsām al-ḥikma* [or: *al-‘ulūm al-aqliyya*], in: *Tis‘ rasā’il* [\*21: 84,24–85,2 ‘Āṣī]; *Šifā’, Ilāhiyyāt* [\*54.4: 15,17–16,8]). The dichotomy of metaphysics thus results in a fourfold, rather than the traditional threefold, programmatic division of theoretical philosophy into natural philosophy, mathematics, and the two disciplines of metaphysics – although *al-Ḥikma al-mašriqiyya* as well as the *Dānišnāma-yi ‘Alāī* omit a treatment of mathematics, once again limiting the concrete presentation of theoretical philosophy, after logic, to three parts (the two branches of metaphysics and natural philosophy). The fourfold programmatic division of practical philosophy in the same work (into ethics, economics, politics, and prophetic legislation) is equally unusual, and may have been chosen as a parallel for reasons of symmetry (Ibn Sīnā explicitly states that both fields – theoretical as well as practical philosophy – each comprise four parts: *Manṭiq al-Mašriqiyyīn* [\*24: 7,8–8,7]). All this is evidence of the more original and independent form of presentation Ibn Sīnā chose in *al-Ḥikma al-mašriqiyya* and which distinguishes that text from the *Šifā’* and other summae, as the author himself emphasises. When he states nevertheless that ‘it is customary’ (*qad ġarat al-‘āda*) to call the four parts of theoretical philosophy ‘natural philosophy’, ‘mathematics’, ‘divine science’, and ‘universal science’, but then explains that ‘this division’ (i.e. the bipartition of metaphysics) is not ‘universally accepted’ (*muta‘ārif*) (*Manṭiq al-Mašriqiyyīn* [\*24: 7,5–7], Engl. transl. in Gutas 1988/2014 [\*70: 254/288]), he probably means that the names of the two parts of metaphysics follow tradition, whereas applying them to distinct metaphysical disciplines is an innovation. Abandoning the view of the *Šifā’* – that metaphysics is *one* science with two closely intertwined parts, *metaphysica generalis* and *metaphysica specialis* – and adopting the clear-cut delimitation of universal ontology from philosophical theology in *al-Ḥikma al-mašriqiyya* thus document a refinement of the epistemological frame of reference of metaphysics. Yet the results of this for the content of the discipline is difficult to evaluate, because the section on metaphysics of *al-Ḥikma al-mašriqiyya* has unfortunately been lost.

Conversely, the *Ilāhiyyāt* contain doctrines and positions characteristic of this work, which are missing from other summae. These peculiarities appear

to be linked to the ‘Aristotelian’ character of the *Šifā*, which Ibn Sīnā emphasises in the prologue (*Šifā*, *Manṭiq*, *Madḥal* [\*54.1.1: 10,14]; Engl. transl. in Gutas 1988/2014 [\*70: 52/44]; cf. Di Vincenzo 2021 [\*354: 16,23]). The discussion of the relation between essence and existence, and between the primary concepts corresponding to them – ‘thing’ (‘entity possessed of essence’) and ‘existent’ (‘entity possessed of existence’) – in the *Ilāhiyyāt* appears to be aimed at demonstrating that ‘existent’, or existence, logically precedes and is more universal than ‘thing’, or essence. This tendency of prioritising the ‘existent’ or existence appears in the context of a doctrine that in other works on metaphysics by Ibn Sīnā faces in the opposite direction, regularly presenting existence as an attribute of essence, and consequently as an entity dependent on the latter, not vice versa. According to the current state of knowledge at least, it is unique among the many propositions on essence and existence in Ibn Sīnā’s oeuvre. This peculiarity can be explained in relation to the more general Aristotelian character of the scientific profile of metaphysics in the *Ilāhiyyāt*. The *Ilāhiyyāt* are the only work in which Ibn Sīnā explicitly explores the question of the subject matter of metaphysics, about which Aristotle had left contradictory statements. His solution is that the ‘existent’, one of Aristotle’s options, is the subject matter of the discipline. Consequently, he subordinates in various ways to ‘existent’, together with ‘thing’, also the other primary concepts: the ‘necessary’ is defined in terms of ‘existence’, the ‘necessary’ as well as the ‘one’ are described as properties of the ‘existent’. As a result, the abovementioned tendency of emphasising the priority of the ‘existent’ over the ‘thing’ appears as part of a general strategy: in order to solve an Aristotelian problem (the issue of the subject matter of metaphysics), it is necessary to prove that ‘existent’ is the first and most universal of all primary concepts, and that consequently it deserves to be the only subject matter of the first and most universal of the sciences (Bertolacci 2012 [\*453]).

With regard to the proof of God’s existence, too, the *Ilāhiyyāt* appear original in comparison with Ibn Sīnā’s other metaphysical writings. The work presents a proof of the existence of God that, besides being genuinely metaphysical and not dependent on natural philosophy (i.e. based on pure concepts, not on empirical data), rests on a well-defined doctrine of Aristotle’s *Metaphysics*: the finiteness of the chain that links causes and effects in all four types of causality, and the resultant existence of a first principle in each of them; and the consequence that in the chain of the efficient causes (*causa efficiens*), God is the first principle (*Metaph.* α 2). The proof cited in *al-Nağāt* and other works by Ibn Sīnā, on the other hand, rests on the analysis of concepts with a pedigree in previous Arabic philosophy or Islamic theology (primarily ‘existence’, ‘necessary’, and ‘possible’), based on which a conclusion follows

regarding the indispensability of an Existent the existence of which is necessary, i.e. God, as the cause guaranteeing the existence of all existents which are merely possible of themselves. Although these texts, too, contain traces of the Aristotelian causality argument, in them this line of argumentation is secondary and never accompanied by a comprehensive explanation and dialectic defence against possible objections of the crucial Aristotelian passage in the *Metaphysics*, unlike the procedure Ibn Sīnā adopts in the *Ilāhiyyāt* (chap. VIII 1–3; cf. Davidson 1987 [\*423], Bertolacci 2007 [\*444], De Haan 2016 [\*458], Bertolacci [\*468]). Conversely the kind of conceptual analysis that leads to the proof of the existence of God in the other works is hinted at in the *Ilāhiyyāt* of the *Šifā'* as well, appearing, however, merely as an introductory anticipation of the proof later conducted more comprehensively and with recourse to the doctrine of *Metaph.* α 2.

Both aspects, the emphasis on the fundamental role of the 'existent' in metaphysics as well as the reference to a concrete Aristotelian text for the proof of the existence of God, fit in well with Ibn Sīnā's introductory characterisation of the *Šifā'* as a book that depends to a considerable degree on the Peripatetic tradition.

#### 4.5.4 Conclusion

As a result of the variety of literary genres Ibn Sīnā employed in order to express his views on metaphysics, the thorough revision to which he subjected the epistemological form and the content of the canonical text on the subject, and his capacity for development and the flexibility of his own thought, Ibn Sīnā's account of metaphysics in its most powerful and original form (the *summae*) represents a peak in the history of metaphysical thought. On the one hand, Ibn Sīnā's oeuvre is the last and most comprehensive in a series of exegetic reformulations of Aristotle's *Metaphysics* that took place in Greek and Arabic philosophy. On the other hand, it replaces this work, for the first time in the Peripatetic tradition, with an original treatment of the metaphysical topics, providing metaphysics with the means of further, autonomous development.

Insofar as Ibn Sīnā's most important metaphysical works are inextricably linked with Aristotle's *Metaphysics*, consider all earlier reflections on this work, and incorporate the non-Aristotelian (Neoplatonic, religious and theological) components of metaphysics into the conceptual framework established by Aristotle, they are an expression of the medieval peripatetic tradition. Insofar as, on the other hand, they are not literal commentaries or paraphrases but original explorations of the *Metaphysics* and display epistemological traits overall unknown to Aristotle, they anticipate modern approaches to metaphysics. While al-Fārābī is rightly called 'Second Teacher' in the Arab world,

Ibn Sīnā might merit the name ‘Second Andronicus’. Thanks to his exhaustive reformulation of the epistemology and the doctrine of the *Metaphysics*, his versions of this work might justly be compared to the activity of Andronicus of Rhodes, and his production of metaphysical texts regarded as a kind of ‘second edition’ of the *Metaphysics*, or as a ‘second beginning’ of metaphysical speculation in the Western tradition. This is confirmed by the far-reaching, profound, and lasting impact Ibn Sīnā’s metaphysics had on the subsequent Arabic, Latin, and Hebrew philosophy.

## 4.6 *Physics*

*Jon McGinnis*

4.6.1 Causes, Principles, and Natures – 4.6.2 Motion – 4.6.3 Bodies and Magnitudes – 4.6.4 Place and Time – 4.6.5 Elements and Natural Minima – 4.6.6 Generation and Corruption and the Giver of Forms

Ibn Sīnā’s treatment of the physical or natural sciences (*ṭabīʿīyyāt*), while very much in the Aristotelian tradition, is also a complete reworking and reconceptualization of natural philosophy in light of developments and challenges arising in both the classical Greek world and the medieval Islamic milieu. At its most general, Ibn Sīnā identifies the subject matter of physics with body insofar as it is subject to motion, processes and activities. Beyond general physics (*al-Samāʾ al-ṭabīʿī*), Ibn Sīnā further divides the physical sciences into various special sciences distinguished according to either the kind of motion investigated or the kind of body treated. For example, his book *On the Heavens and Earth* (*Fī l-Samāʾ wa-l-ʿālam*) from the *Cure* (*al-Šifāʾ*) broadly treats elemental bodies as well as rectilinear and circular motion. *On Generation and Corruption* (*Fī l-Kawn wa-l-fasād*) deals with specific kinds of change like alteration and augmentation, which are changes in the categories of quality and quantity respectively, and generation and corruption, which occur in the Aristotelian category of substance, as well as more complex bodies like mixtures. *On Actions and Passions* (*Fī l-Afʿāl wa-l-infiʿālāt*) concerns how bodies affect and are affected by one another with respect to, for example, the primary qualities of hot – cold and wet – dry, which they possess. Ibn Sīnā distinguishes additional special natural sciences according to the specific sort of body or activity being considered, for example, whether the body is inanimate – generally the subject matter of *Meteorology* (*al-Maʿādin wa-l-ātār al-ʿulwiyya*) – or the body is animate – the subject of psychology (literally, the science of the soul or animating principle). Ibn Sīnā further divides psychology into general psychology (*ʿilm al-naḥs*), botany (*Fī l-Nabāt*) and zoology ([*Fī Ṭabāʾiʿ*] *al-ḥayawān*).

Toward providing an overview of the essential elements of Ibn Sīnā's natural philosophy, key concepts from three of his physical works are presented here. These works are his *Physics*, *On the Heavens and the Earth* and *On Generation and Corruption*. The concepts include his general accounts of natural causation, motion and body – the latter two again making up the proper subject matter of natural philosophy – followed by select discussions from the special sciences on certain species of bodies, namely the elements, and certain species of motion or change, namely generation and corruption.

#### 4.6.1 Causes, Principles, and Natures

The hallmark of natural philosophy, and indeed of any science for Ibn Sīnā and the entire Aristotelian tradition, is to uncover and to grasp the basic causes (sing. *ʿilla*) of the given phenomenon under consideration. Like Aristotle before him, Ibn Sīnā identifies four sorts of causes: the material cause or simply matter (*mādda* and *hayūlā*), the formal cause or form (*ṣūra*, which strictly speaking indicates the species form and *hayʾa*, which Ibn Sīnā often uses for the accidental form), the efficient cause or agent (*fāʿil*) and the final cause or end (*ḡāya* or *ḡaraḍ*) (*Šifāʾ, Ilāhiyyāt* [\*54.4(b): VI Marmura] and *Šifāʾ, Ṭabīʿiyyāt, al-Samāʿ al-ṭabīʿī* [\*54.2.1: I 10 McGinnis]; all references below to the *Physics* of the *Šifāʾ* are to this edition).

Form and matter together are the internal causes that constitute a natural body and explain those essential activities and powers that make the body the kind of body that it is. Matter, for Ibn Sīnā, is an inert substratum for form. As such, matter has no activity of its own but is the bearer (*maḥall*) of any passivity to be acted on or potentiality to act that belongs to a body. In contrast, the form is the primary cause of a body's essential activities and its being the actual kind or species that it is, as well as explaining the accidental features and determinations that belong to the body. In general, then, the form is the cause of any actuality that the body has. For Ibn Sīnā, unlike certain other Aristotelians, matter and form are essentially correlatives in the sense that one cannot exist without the other. Thus, unlike Ibn Rušd or Thomas Aquinas, who speak of immaterial forms when discussing the celestial Intellects and angels, such a notion is simply incoherent to Ibn Sīnā. To be sure, Ibn Sīnā recognises immaterial intellects even within his physics; however, he does not identify them with pure form but simply as intellects or spiritual beings. Both form and matter, then, always coexist and in doing so constitute body.

The agent and end are external causes for a natural body. The agent or efficient cause is that which impresses (*ṭabaʿa*) the form into the matter so as to constitute the natural body. The final cause or end is that for the sake of which the agent impresses the form into the matter, and as such the end causes the agent to act so as to impress the form.



Form and matter are again the constitutive principles of a natural body's existence. Insofar as the natural body is subject to change it additionally must have one further principle, namely, privation or relative lack (*'adam*). That is because change requires the acquisition or actualization of some feature or aspect that is initially absent. Thus, for Ibn Sīnā, following Aristotle, motion or change requires three things: (1) the form that comes to be as a result of the change, (2) the matter in which that form comes to be, and (3) the matter's initial privation of that form (*šifā'*, *Physics* [\*54.2.1: 1 2 § 12–13]).

A simple example of an accidental change should make Ibn Sīnā's point. Consider some body that goes from white to black, like, for instance, a piece of white oak that is charred. First, there could be no change *of the wood* unless the wood itself existed so as to undergo the change. The piece of white oak here functions as the underlying matter of the change. Second, in order for the wood to change from white to black, it must first be white, and so is not black. If it is already black, there is no change, but the preservation of something that is already there. This initial whiteness is the privation, namely, of the accidental form of blackness. Third and finally, there is the blackness that comes to be, but, as noted above, form is the cause of any actual determination that some matter might have. Thus, the wood's being blackened at the end of the change is the result of the form of blackness coming to exist in the wood.

Aristotle and the tradition after him had referred to these three – form, matter and privation – as 'principles of nature' (cf. Aristotle, *Physics* 1.7). While Ibn Sīnā happily agrees that these three factors are present in every instance of change, he is not as happy as to whether all three of these features are equally principles (sing. *mabda'*) properly speaking. His concern is that strictly speaking a principle is a cause by which a body subsists and so must be inseparable from it [\*54.2.1: 1 3 § 16], whereas privation is only ever *prior to* the change and passes away with the change [\*54.2.1: 1 3 § 14]. Ibn Sīnā instead contends that privation is a precondition (*šart*) for change rather than a principle. Still, he concedes that if one is lax in one's use of 'principle' so as to understand a principle as 'whatever must exist, however, it might exist, in order that something else exists, but not conversely' (ibid.), privation would count as a principle of change. Ibn Sīnā reasons thusly: the elimination of the privation from something qua changeable renders that thing no longer changeable, where the elimination of that changeable thing itself does not eliminate the privation. In other words, insofar as something is changeable it depends on or requires that there be some privation, whereas conversely privation does not depend on and does not require that there be anything changeable. Thus, privation has a certain ontological priority to the changeable; there can be privation without the changeable but there cannot be the changeable without privation. The idea

that negation, privation and absence are not properly speaking a principle of an actually existing thing is a notion to which Ibn Sīnā appeals frequently in his philosophy, as in his criticism of the existence of a void, which is considered later.

Additionally, Ibn Sīnā also recognises a broader division of causes into physical causes and metaphysical causes [\*54.2.1: I 3 § 3]. The distinction is best approached by considering the Aristotelian division between substance and accidents as found in Aristotle's ten categories. The primary category is that of substance, for example things like humans, dogs, trees, whereas accidents include a substance's quantity, quality, relation, where, when, position, possession, activity and passivity. Metaphysical causes involve what accounts for the existence and continual conservation of a substance, that is, a concrete particular, like you or me. Physical causes in contrast involve that which brings about changes in the accidental features of a body, primarily changes of quality, quantity, location and position. For example, a father is responsible for seeing that his semen becomes located within the mother, and the mother ensures that the right womb temperature for the foetus is maintained and the foetus is fed. Location, temperature, possession of nutriment and the like belong to categories of accidents, not to that of substance. Consequently, for Ibn Sīnā the father and mother are in this case properly (and perhaps only) physical agents, that is, causes of accidental changes that prepare the matter for the form. Thus, there must also be a metaphysical agent, who is the primary cause of the existence and continuation of the species form in the offspring. For Ibn Sīnā, this metaphysical agent is a separate (immaterial) intellect, which he calls the 'Giver of Forms', discussed further below when considering Ibn Sīnā's account of generation and corruption and alteration.

Closely related to causes and principles is the notion of a nature (Gr. φύσις [*physis*], Ar. *tabī'a*), for Ibn Sīnā defines a nature as 'a first principle of motion (*ḥaraka*) and being at rest in that to which it belongs essentially rather than accidentally' [\*54.2.1: I 5 § 5]. Ibn Sīnā's definition of nature should be compared with that of Aristotle's, who defined nature as 'a principle of being moved (*kineisthai*) and being at rest in that to which it belongs primarily, not accidentally but essentially' (Aristotle, *Physics* II 1, 192b21–3). In the same place, Aristotle further adds that trying to prove that natures exist is a fool's errand, since it is self-evident that things have such (internal) causes. There are subtle but significant differences between Aristotle and Ibn Sīnā's seemingly close definitions of nature as well as their attitudes toward proving the existence of nature. In order to appreciate Ibn Sīnā's own novel understanding of nature, a slight detour into Aristotle and the Aristotelian tradition up to Ibn Sīnā is warranted. (For more detailed studies of this tradition see cf. Macierowski,

Hassing 1988 [\*474], Lang 1992 [\*476: 97–124], Lammer 2015 [\*509], 2016 [\*511: chap. IV]).

To begin, a certain ambiguity surrounds Aristotle's account of nature. The ambiguity involves Aristotle's use of the medio-passive verb *κινεῖσθαι* (*kineis-thai*) in his definition of nature. In the above translation, the verb was understood passively as 'being moved'; however, the Greek could also be read in the middle or reflexive voice as 'moving' or even 'moving oneself'. Thus, the issue is whether nature should be taken in a passive sense, that is, as a cause of a substance's *being moved*, or in an active sense, that is, as a cause of a substance's (self-)motion. In *Physics* II 1, Aristotle suggests, but does not explicitly claim, that nature can be understood in both senses: a passive nature, which corresponds with a substance's matter, and an active nature, which corresponds with the form of that substance. Later in the *Physics*, however, when Aristotle presents his proof for an unmoved mover, he argues that nature should be understood exclusively as passive (*Physics* VIII 4, 192b21–3). This conclusion follows upon Aristotle's principle, 'Everything that is moved must be moved by something', for which he argues at *Physics* VII. For if all natural substances were capable of self-motion, there seems no need for an unmoved mover to account for the motion of the cosmos, which is certainly one of the key notions in both Aristotle's physics and metaphysics. (For discussions of Aristotle's *Physics* VII and the Greek and Arabic commentary tradition on it including Ibn Sīnā's critical assessment, see Kukkonen 2002 [\*484], 2014 [\*267].)

This passive conception of nature, however, was to be challenged by the later Aristotelian tradition, as in Alexander of Aphrodisias (active around 200 CE) who was one of Aristotle's more influential Greek commentators. In his treatise, *On the Principles of the Universe in Accordance with the Philosopher Aristotle*, Alexander in effect distinguishes between Nature understood as the sum total of the forces at work throughout the universe, and natures, understood in terms of principles inherent within different, individual substances. The immediate context of Alexander's discussion is his attempt to show that a theory of divine providence is compatible with the Aristotelian system. (Aristotle's description of the unmoved mover as thought *thinking itself* seems to leave little room for its thinking about, and so either knowing of or caring for us; cf. Aristotle, *Metaphysics* 12.9.) Within this context Alexander writes: 'This nature and power [namely, the nature and power of the unmoved movers to produce motion] is the reason for the unity and order of the cosmos. It is analogous to the situation in a single city that has a single ruler who takes up residence in it instead of [living] apart. In like manner, we say that a certain spiritual power flows through the entire cosmos' (Alexander of Aphrodisias, *On the Principles of the Universe* [\*194: § 128]).

Alexander's conception of Nature makes it a power that permeates and gives order and unity to the world. It was this conception of universal Nature that gave the late Christian, Neoplatonic philosopher John Philoponus (c. 490–570) a foothold from which to push back against Aristotle's conception of nature as a passive principle of a thing's being moved and at rest. First, mimicking, while also slightly distorting, Aristotle, Philoponus claims that it is apparent that natural things have within themselves principles of their own motion and rest, which he likens to the souls in animals (Philoponus, Commentary on *Physics* [\*195: 195,24–198,8]). Second, Philoponus claims that while Aristotle's definition of nature captures the activity of a nature, it fails to define nature's substance or being. Adapting Alexander's conception of (universal) Nature, Philoponus goes on to supplement Aristotle's account of nature thus: 'A nature is a life, indeed a power, that permeates bodies, shaping and managing them [as] a principle of motion and rest in that to which it belongs primarily, not accidentally but essentially' (Philoponus, Commentary on *Physics* [\*195: 197,34–198,1]).

For Philoponus, the *activity* of a nature is, on the one hand, to produce motion and rest in that to which it belongs (rather than function as a passive principle of being moved and being at rest as Aristotle argued at *Physics* VIII 4). On the other hand, for Philoponus, the *substance of nature* is a kind of life or power that functions in inanimate objects as the analogue of soul in animate things. Philoponus' account of nature proved immensely popular among philosophers working within the medieval Islamic world (Lammer 2015 [\*509], 2016 [\*511 chap. IV]). Indeed, quite frequently it stood alongside and complemented Aristotle's own definition of nature. It is precisely Philoponus' aligning and almost conflation of soul with nature that Ibn Sīnā ardently resists.

In his chapter, 'On Defining Nature' from the *Physics* of the *Šifā'* [\*54.2.1: 15], Ibn Sīnā begins much like those before him, distinguishing between the motions and actions that proceed from a substance owing to external causes and those that proceed from a substance owing to the substance itself. For instance, water becomes hot as a result of some external heat source, whereas it becomes cool of itself. Ibn Sīnā next identifies two sets of parameters for describing those motions and actions that proceed from a substance owing to that substance itself. Firstly, they proceed from the substance either as a result of volition or without volition; secondly, they proceed either uniformly without deviation or non-uniformly with deviations. Thus, there are four very general ways of dividing and describing all the motions and actions that are found in the cosmos. (1) Some motions and actions proceed as a result of volition and do so in a uniform and unvarying way, like, for example, the motion of the heavenly bodies; the internal cause in these cases, Ibn Sīnā tells us, is a celestial

soul. (2) Other motions and actions proceed as a result of volition but do so in a non-uniform and varying way, like the motions and actions of animals; the internal cause in these cases is an animal soul. (3) Again, other motions and actions do not proceed as a result of volition and are non-uniform and varying, like plant growth; the internal cause in these cases is a plant soul. (4) Finally, some motions and actions may proceed without volition while doing so in a uniform and unvarying way, like the downward motion of earth and the heating of fire; the internal cause in these cases is a nature.

Ibn Sīnā now comments upon Aristotle's definition, followed by a criticism of Philoponus. Ibn Sīnā's definition of nature, already quoted above, is in fact simply an early translation of Aristotle's definition in line with the tradition just seen. Again, that definition makes nature 'a primary principle of motion and rest in that to which it belongs essentially rather than accidentally' [\*54.2.1: 15 § 4]. A 'principle of motion', Ibn Sīnā tells us, means 'an efficient cause from which proceeds the production of motion in another, namely, the moved body' (ibid.). Immediately, we recognise that a nature, which Ibn Sīnā now understands as an efficient cause, is an active cause that produces motion. Such a position is to be contrasted with Aristotle's claim at *Physics* VIII 4 that a nature is not an internal cause of a thing's motion, but of its *being moved*. Next Ibn Sīnā tells us that 'primary' in the definition means that the nature causes the motion in the body without some further intermediary cause. As for 'essentially' (Gr. *καθ' αὐτό* [*kath' hauto*], Ar. *bi-dātihi*), this is an equivocal notion with two senses, Ibn Sīnā explains. In one sense, 'essentially' is predicated relative to the mover, while in another sense it is predicated relative to what is subject to motion, namely the body. Thus, on the one hand, when 'essentially' is said relative to the mover, a substance's nature, as efficient cause, essentially produces those motions and actions that typify the substance as the kind that it is. On the other hand, when 'essentially' is said relative to the body, it refers to the body's essentially being subject to those naturally characteristic motions and actions. In effect, by distinguishing the two relative senses of 'essentially,' Ibn Sīnā has made room for Aristotle's definition to include nature as active and as passive. Finally, concludes Ibn Sīnā, 'accidentally', like 'essentially', is also said in two ways, either in relation to the nature itself or in relation to what is moved. Thus, in the first case, a nature is not essentially a cause of a body's accidental motions, as, for example, when someone is moved while standing still on a boat under full sail. In the second case of 'accidentally', a nature is not essentially a cause of any, as it were, artificial features of a substance. For example, a nature is not essentially a cause of a statue's being heavy; rather, the nature is only essentially the cause of the heaviness of stone from which the statue is made, and only accidentally of the statue's heaviness. To sum up, for Ibn Sīnā, a substance's nature is the immediate efficient cause for all of

the naturally characteristic actions and motions it produces (active nature) as well as explaining why the body is subject to those characteristic actions and motions (passive nature).

The passage added by Philoponus is rendered in the *Šifā* as ‘a power permeating bodies that provides the forms and [the mixture(s) of] temperament’. Ibn Sīnā complains that it adds nothing substantive to Aristotle’s definition but is only needless verbiage. For instance, observes Ibn Sīnā, the phrase ‘a power permeating bodies’ simply means that a body has within itself a certain cause or principle, which, Ibn Sīnā maintains, is already well captured in Aristotle’s ‘the primary principle ... in that to which it belongs ...’. Similarly, to speak of providing the forms and temperaments, that is, how a body conducts itself, is just to identify a body’s naturally characteristic actions and motions. Again, this notion, asserts Ibn Sīnā, is wholly included in Aristotle’s phrase, ‘[the] motion and rest in that to which [the nature] belongs essentially rather than accidentally.’ Ibn Sīnā concludes his analysis of Philoponus’ emendations with the scathing comment, ‘What this man thought is just idle chatter’ [*\*54.2.1: I 5 § 7*].

Philoponus is not the only one whom Ibn Sīnā chides when commenting Aristotle’s discussion of nature. Even Aristotle is rebuked, now for his claim that the existence of natures is self-evident. While we are immediately aware of motions and actions that seemingly proceed from a substance of itself, observes Ibn Sīnā, that there truly exists *internal causes* of these actions and motions is certainly in need of demonstration. Ibn Sīnā provides the example of those who first encounter the motion of a magnet. They might imagine that its motion is a result solely of itself rather than of iron in the vicinity. Moreover, during Ibn Sīnā’s time the question of whether natures existed at all was a hotly debated topic between philosophers in the Graeco-Arabic tradition, like Ibn Sīnā, and thinkers in the *kalām* tradition, that is, the tradition of Islamic speculative theology and cosmology, like al-Bāqillānī (d. 403/1013) and al-Ġazālī (d. 505/1111). While Ibn Sīnā addresses the issue of the existence of natures and offers up a demonstration for their existence in the *Metaphysics* of the *Šifā* (*Ilāhiyyāt* [*\*54.4(b): IV 2. IX 2. IX 5 Marmura*]), he also notes that the science of physics is not the proper place to undertake such an enterprise. That is because the existence of a science’s subject matter, Ibn Sīnā notes following Aristotle, is never demonstrated within the science itself but only in a higher science.

#### 4.6.2 Motion

In the first book of his *Physics* Ibn Sīnā discusses a broad array of issues associated with causation as it relates to natural philosophy. He spends the next two books dealing with the proper subject matter of physics, which again is body

insofar as it is subject to motion. Ibn Sīnā dedicates book two of the *Physics* to motion and the associated topics of place – for whatever moves must be in some place – and the time of a motion, both of which are treated below. Motion (Gr. κίνησις [*kinesis*], Ar. *ḥaraka*) as Ibn Sīnā understands it refers to any process whether it involves change of place or position, change in size or some qualitative change. To appreciate Ibn Sīnā's own innovative understanding of motion, one must again consider the background of Aristotle's account of motion and later developments that occurred among Aristotle's later Greek commentators. (Detailed studies of Ibn Sīnā's account of motion include Hasnawi 2001 [\*480], McGinnis 2006 [\*490], Lammer 2016 [\*511]).

At *Physics* III 1, Aristotle defined motion as the ἐντελέχεια (*entelecheia*) of potential as potential. Aristotle himself apparently coined the term ἐντελέχεια, which might mean either 'actualisation', as in a process, or 'actuality', as in the completion of a process. Given the ambiguity of this term, it was a matter of some concern among later Greek commentators to understand Aristotle's precise meaning. The problem for Aristotle's Greek commentators is that, on the one hand, if ἐντελέχεια were the *actuality* of some potential, then Aristotle's definition would define the completion of a motion rather than the motion itself. On the other hand, if ἐντελέχεια meant *actualisation* and so inherently indicates a process, then Aristotle's definition of motion would be circular. That is because his definition of motion is supposed to connote the most basic process term, and yet a process term would already be presupposed in the very definition. The details of the Greek debate fortunately need not concern us unduly, since the choice of the Arabic translator of Aristotle's *Physics* all but settled the issue for philosophers in the medieval Islamic world by rendering ἐντελέχεια as 'perfection' or 'completion' (*kamāl*). Consequently, for philosophers like Ibn Sīnā, motion is understood as a sort of actuality or perfection, as opposed to an actualisation of a process. The issue before Ibn Sīnā, then, is to explain how motion so defined describes a process rather than the completion of a process.

Greek commentators provided helpful resources for Ibn Sīnā in the form of additional glosses on the term ἐντελέχεια (Ar. *kamāl* and sometimes the hendiadys *kamāl wa-fi'l*). Drawing upon other Aristotelian texts (e.g., *De anima* 2.5), these Greek commentators identified both a first actuality and second actuality. A first actuality is like the student who actually knows a particular language but is not speaking it at that moment; the language has a degree of actuality for the student that is certainly greater than the individual who does not know the specific language at all. Still, this degree of actuality is not fully complete or perfected inasmuch as the student merely has the potential to speak the language but is not actually speaking the language at the moment.

Only when the student is actually doing so is there the fully perfect actuality of speaking the language. This fully perfect actuality is the second actuality.

On the basis of this distinction, Ibn Sīnā, taking advantage of these resources, thus formally defines motion as 'a first perfection of what is in potential insofar as it is in potential' [<sup>\*</sup>54.2.1: II 1 § 3]. To clarify, Ibn Sīnā notes that in every category there are things that are actual and other things that, while actual in one respect, are potential in another. In the case of motion with respect to some state, *x*, the body before the motion is in potentiality to *x* – as well as any number of other states, *y*, *z*, etc. After the motion, the body is in a state of second actuality with respect to *x*, that is, *x* has been fully and completely actualised. During the motion toward *x* the body is in a state of first actuality with respect to *x*.

Ibn Sīnā understands this first actuality as a type of 'being directed toward' *x* (*mutawaġġih*) as opposed to being directed toward *y*, *z*, etc. As long as the body is in a state of directedness toward *x* and there still remains some potentiality with respect to *x*, that is, the state of *x* has not been fully actualised, there is motion. For example, as long as I sit in my office, there are any number of places that I might go; however, once I get up and begin going to the library, as long as I remain directed toward the library but am not actually there, there is my motion to the library.

Up to this point, Ibn Sīnā's discussion of motion is little more than a sophisticated commentary on Aristotle's definition of motion. Ibn Sīnā's analysis, however, goes significantly beyond Aristotle's in that Ibn Sīnā recognises that 'motion' is an equivocal term having two senses. He identifies these two senses of motion with a traversal (*qaṭʿ*) and a medial (*tawassuṭ*) motion. As for motion qua traversal, we sometimes speak of motion as the whole continuous magnitude stretching from the initial potentiality to the final actuality, such as my complete walk from my office to the library. Now at no point does the whole of my walk exist in the way that the whole of the spatial distance covered by the walk exists. Indeed, no sooner do I step outside of my office on my way to the library than some of the initial potentiality ceases to be, and the same is true for each subsequent state of the walk. Instead, observes Ibn Sīnā, the whole and complete walk only ever exists as whole and complete in the mind, namely, I remember my being in my office and then relate that mental impression with my being in the library. In other words, motion qua traversal has no extra-mental existence but only ever has mental existence.

In contrast, medial motion corresponds with motion inasmuch as it exists extra-mentally in the body itself so as to explain that body's motion. In other words, medial motion refers to the form that every moving body must have at any moment it is in motion in order to explain its being in motion right then.



Ibn Sīnā describes this form thus: ‘This is the form of motion existing in the moved thing – namely, an intermediate position between the posited starting and end points, inasmuch as it did not previously exist at any limiting point at which it is posited, nor will it exist there afterwards, unlike [its state at] the points of the two extreme limits’ [\*54.2.1: II 1 § 6].

In effect, what Ibn Sīnā is describing is motion at an instant as opposed to the extended conception of motion captured in motion qua traversal. In other words, motion as it exists extra-mentally occurs just in case a body exists at some place or in some state for only an instant. For if a body is at some place or in some state for only an instant, then at any subsequent instant, it must be at some new place or in some new state. Consequently, between being at the first place or state and the last place or state, the intermediate places or states of the body are constantly different, such that the body has changed or moved and so is in motion.

Such a position is not to concede that spatial, kinematic, or temporal magnitudes are composed of points. Rather, as we shall see when discussing body and magnitude more generally, natural magnitudes are for Ibn Sīnā continuous without any actual intermediate points except by supposition or when the magnitude is actually divided. Instead, when Ibn Sīnā says that medial motion involves a moving body’s being at some place or in some state for only an instant, he means that through a psychological process of conceptually dividing a motion, one can consider a smaller and smaller uniform motion over a smaller and smaller spatial magnitude. In this case, the time needed to cover that smaller and smaller spatial magnitude becomes proportionally smaller too. At the limit (*tarāf*) of this process of conceptual division, there is motion at an instant. In other words, at any point one posits the body in the continuum, it was not there before nor will it be there afterwards. ‘This,’ Ibn Sīnā concludes, ‘is, in fact, the first perfection’ [\*54.2.1: II 1 § 6].

Given this analysis of motion, Ibn Sīnā further adds that associated with motion are six factors. Factor (1) is that which undergoes the motion, namely, body, which is discussed more fully in the next section. Factor (2) is the agent that moves the body. While Ibn Sīnā takes up the topic of whether every moving thing must have a mover in the *Physics* II 2 and mentions Aristotle’s argument for this thesis from Aristotle’s *Physics* VII, he considers Aristotle’s argument as at best dialectical. (For a discussion of Ibn Sīnā’s complaint see Kukkonen 2004.) A definitive answer to the question must in fact await first philosophy, that is, metaphysics (cf. *Šifāʾ, Ilāhiyyāt* [\*54.4(b): VI 1–2. VIII 3 Marmura]). Factor (3) is that in which or with respect to which (*mā fihi*) there is motion, by which Ibn Sīnā means either the place of the body in locomotion or some other category in other types of changes, like change in quality or quantity.

More is said about Ibn Sīnā's conception of place below. Factor (4) is that from which there is motion, namely, the prior state of potentiality, like my being in my office in the example above; factor (5) is that toward which there is motion, namely, the posterior state of full actuality, like my being at the library. Finally, the time it takes for the whole motion is factor (6), also discussed below.

Having discussed motion generally and identified its proper form, Ibn Sīnā next turns to how motion relates to the Aristotelian categories. He dedicates no fewer than two chapters of the *Physics of the Cure* (Šifā', *Physics* 11 2) to the relation of motion to the categories: 2.2 asks what category makes up motion's genus and 2.3 covers the species of motion, that is, the categories in which there is motion or change (Šifā', *Physics* 11 3). These issues are significant in that many earlier commentators saw Aristotle's ten categories – substance, quantity, quality, relation, when, where, position, possession, action, and passion – as the ten highest (and only) genera of existents. In other words, Aristotle's *Categories* was thought to aim at presenting all the different ways something can exist (or at least can exist in the physical world), and presumably such a claim applies to motion too. Ibn Sīnā questions whether this metaphysical point holds true of Aristotle's categories. He happily accepts that Aristotle's categories provides a useful analysis of simple expressions as they occur in logic, but is less certain that there need be only ten genera of existents. This point is apparent in his treatment of the first issue, namely, identifying to which category motion generically belongs inasmuch as Aristotle's categories supposedly provided the most generic ways that things might exist. In the end, he grants that given the canonical ten categories, motion seems most aptly to fall under the category of passion (Gr. *πάσχειν* [*paskhein*]; Ar. *infī'āl*). Still, he is also uncertain whether Aristotle's ten categories are truly exhaustive and at least suggests that motion might be *sui generis* (Šifā', *Physics* [\*54.2.1: 11 2 § 8]; Hasnawi 2004 [\*480], McGinnis 2006 [\*490]).

As for the species of motion (Šifā', *Physics* 11 3), Aristotle and the tradition up to Ibn Sīnā had recognised only three: motion with respect to the categories of quantity, quality and where (or place). Motion with respect to quantity involves augmentation and diminution, while motion with respect to quality includes such changes as alterations in colour, temperature and the like. Finally, on the traditional categorization, there is change of place, that is, locomotion, which for a number of reasons was believed to be the most significant and even primary species of motion. Ibn Sīnā accepts all three kinds of motion identified by the tradition. He additionally, however, includes motion with respect to the category of position, that is, the rotation of an object that remains in the same place, like a spinning orb. The reason for this addition is obvious on consideration: clearly an orb spinning in place is not changing

its quantity or quality and by supposition it is remaining in the same place, yet clearly it is moving. Thus, what kind of change is it undergoing? Only the relative position of its parts changes, claims Ibn Sīnā, and thus he concludes that rotating objects must be changing with respect to the category of position.

The introduction of positional motion, however, brings with it a new challenge. As noted, for Ibn Sīnā one of the factors associated with motion is that it requires a *that from which* there is motion, namely, the starting point, and a *that toward which* there is motion, namely, the ending point (= nos. 4 and 5 in the six-point list above; cf. *Šifāʾ, Physics* [\*54.2.1: II 1 § 12 and 20–22]). His reason for insisting on these factors is that motion is defined as the first actuality of potential as potential. The initial state of potentiality, however, simply corresponds with *that from which* there is motion, while the final state of actuality corresponds with *that toward which* there is motion. The difficulty that positional motion presents is that there need be no starting and ending point for rotation. This observation is all the more poignant if, as Ibn Sīnā believes, the rotation of the heavens has neither beginning nor end.

Ibn Sīnā's response to this challenge involves a sophisticated analysis of the various ways of understanding actuality and potentiality (including an appeal to first and second actualities but also introducing a notion of remote and proximate potentialities; cf. *Šifāʾ, Physics* [\*54.2.1: II 1 § 20–22; II 3 § 13–16] and McGinnis 2006 [\*490]). The general intuition underlying Ibn Sīnā's response is relatively simple. As a matter of supposition one can posit some point in, for instance, the continuous rotational motion of a celestial sphere, such as the sun's being directly overhead. In so positing that point, one indicates an initial point *from which* there is motion, but that same point also indicates a point *toward which* there is the motion. Thus, in our example, a complete sidereal day is actualised when the sun moves from a position of being directly overhead – and so the overhead point is also *that from which* there is a motion – and then returns to that position – and so the overhead point is *that toward which* there is motion. In a sense, then, a single point can be two different points when considered relative to a circularly moving body: there is the point qua *that from which* the body moves and the same point qua *that toward which* the body moves. Being *from* and being *toward* are conceptually different notions even though the position of the point is one and the same. Of course, nothing about this analysis requires that the rotation ceases once the moving body arrives at this point, even though a certain proximate potency has been completely actualised, like a sidereal day. In short, positional motion still is *from* some point *toward* some point. The *from*-point and the *toward*-point for Ibn Sīnā correspond with the potentiality and actuality required of any motion, even though such motion need have no absolute beginning or ending point.

An added benefit of Ibn Sīnā's introduction of this new species of motion is that it provides him an easy answer to one of the great problems of ancient celestial physics. Aristotle defined a thing's "where" or place with the outermost containing limit of the surrounding body (Aristotle, *Physics* IV 4, 212a20). Thus, only a body that has a body outside of and containing it can have a place. Consequently, the outermost celestial sphere 'beyond' which there is absolutely nothing, by definition cannot have a place. The problem, then, is 'How does the outermost celestial sphere move?' That it moves was believed to be a matter of simple observation. We see the stars and all the heavenly bodies make a complete rotation once approximately every twenty-four hours, and what was thought to carry all of them through this daily rotation was the rotation of the outermost sphere itself. Thus, a natural enough question is 'What sort of motion is the outermost celestial sphere undergoing?' Again, Aristotle and the earlier tradition had identified only three species of motion: with respect to quantity, quality and place. Clearly the motion of the heavens is not a change in quantity or quality, but neither can it be changing its place, since the outermost celestial sphere has no place, if place requires a containing body. Ibn Sīnā's introduction of positional motion provides an obvious solution and does so in a way that is not ad hoc, since he has integrated his account of positional motion into his general analysis of motion and motion's relation to the categories.

#### 4.6.3 Bodies and Magnitudes

Ibn Sīnā's understanding of bodies and magnitudes is closely linked to his considerations of two questions: whether magnitudes are of a continuous or an atomic structure, and whether an infinite magnitude can exist. He assumes that a body (*ġism* and occasionally *ġirm*) perceivable to the senses either (1) possesses actual parts or (2) does not possess actual parts. (1) If the body possesses actual parts, their number is either (1a) finite or (1b) infinite. (1a) corresponds to the atomist position, (1b) to that of the Mu'tazilī theologian Ibrāhīm al-Nazzām (d. before 232/847). Position (2), on the other hand, is in line with the Aristotelian tradition, reflecting the doctrine that bodies are continuous and potentially divisible ad infinitum.

Ibn Sīnā makes short work of (1b), the position of al-Nazzām. In his view it can be ruled out if the actual parts of a body possess no magnitude at all (i.e. occupy zero amount of space); in that case, an addition of even infinitely many parts would not possess magnitude. Alternatively, they might possess a certain positive magnitude (i.e. occupy a certain amount of space), however small. In that case, a finite number of parts would add up to a certain measure (e.g. 1 metre). This contradicts al-Nazzām's theory that a body consists of an

infinite number of actual parts, which is consequently absurd (*Iṣārāt, namaṭ* 1.2 [\*58: I 162 *Dunyā*]).

According to position (1a), a body is composed of a finite number of units. In this case there is thus a limit beyond which an individual part cannot be divided further, and the position is consequently called atomism. Atomism had already come under severe criticism from Aristotle (e.g. Aristotle, *Physics* VI 1, and *On Generation and Corruption* I 2). Since his time, the atomist theory had developed further in various respects, and Ibn Sīnā faced new challenges when he tackled it.

Democritus (d. 370 BCE), against whom Aristotle's criticism had primarily been directed, regarded atoms as minute bodies. In his opinion they possessed shape, even hooks and loops in order to interlock (for this and the following cf. van Ess 1991–1997 [\*425: IV 459–463]). The indivisibility ascribed to them by Democritus referred to their physical existence only, while conceptually they were indeed divisible, which Aristotle criticised. Epicurus (d. 270 BCE) developed a different conception, at the centre of which he postulated the notion of minima (ἐλάχιστα), i.e. the smallest constituent parts that make up the atom. They form the smallest possible entities and have no physicality. Consequently, minima are not only physically indivisible but also, unlike Democritus' atom, conceptually indivisible.

Whatever the further development of discussion and transmission (and it is still being investigated), the atomism embraced by most Muslim theologians displays more parallels with Epicurus' doctrine (on atomism in *kalām* cf. van Ess 1991–1997 [\*425: IV 463–477], Dhanani 1994 [\*477], 2015 [\*508]). In their understanding atoms, or more precisely indivisible parts (sg. *al-ḡuz' allaḍi lā yataḡazza'u*), are a spatial magnitude that is indivisible not only physically but also conceptually. Their essential characteristic consists in their occupying space (*mutaḥayyiz*), while not possessing corporeality. A body only comes into being when more than one atom is joined together, the precise number of needed atoms being a hotly debated topic. In fact, the atoms of the Islamic theologians may be imagined as a matrix that occupies all of space. A single atom represents the smallest unit of space necessary for an event or a quality such as 'red', 'hot', 'sweet', 'powerful', and even 'aggregation' to occur, all of which are understood as accidents (*ʿaraḍ*) of an atom. In this respect, *kalām* atoms are comparable with the pixels on a modern-day TV or computer screen in that both are the smallest units relevant for a perceivable effect, be it colour for a pixel or an accident for a *kalām* atom. The form of atomism with which Ibn Sīnā was concerned, then, was 'pixelated', as it were, rather than the merely 'corpuscular' form criticised by Aristotle.

Regardless of what form of atomism one endorsed, a common argument in atomism's favor appeals to the notion of a sensible body's being an aggregation of parts. The argument is directed against the idea that a sensible body can be potentially divisible *ad infinitum*. The most general form of the argument rests on two principles: (1) the impossibility of an *actual* infinity, a premise that most Aristotelians accepted; and (2) an analysis of potentiality in terms of an agent's power, namely, to say that some action is potential is to say that there exists an agent who has the power actually to do that action. As part of a *reductio*-style argument one is asked to assume that (3) bodies are potentially divisible infinitely. In that case, from (2), there must exist some agent (e.g. God) that can actually bring about the division. Let the agent enact the potential division. Either the result is an actual infinity of parts or a finite number of parts. An actual infinity is impossible, however, according to (1). Therefore, the totality of potential parts that can actually be produced from the division is finite, but it was assumed that they were infinite, a contradiction. Since (1), (2) and (3) are mutually incompatible, one of these assumptions must be false. The atomists point to (3), the assumption of infinite divisibility and a potentially infinite number of parts as the culprit. Thus, the argument concludes that the parts from which a sensible body is aggregated must be finite, whether actually or potentially.

Ibn Sīnā's response to this argument against the potentially infinite divisibility of body is considered when discussing his theory of continuity; however, before looking at that theory, let us present his reasons for rejecting atomism. For starters, Ibn Sīnā accepts that division with respect to body is of two sorts: physical division and conceptual division. In physical division, there is the actual fragmentation of a body, with the parts of the body becoming physically separated (e.g. a quantity of water is divided among several vessels). Ibn Sīnā conceded that body may have some physical limit at which it is no longer physically divisible and still remains the same sort of body. To provide a contemporary example of Ibn Sīnā's point, a quantity of water can be divided as water until one reaches a single water molecule; however, division beyond that molecule, while producing Hydrogen and Oxygen atoms, does not produce a smaller water particle. A single water molecule, then, is physically indivisible *qua* water, that is, it no longer remains as water after any further division. Still, inasmuch as a single water molecule occupies some space, however small, one can conceive of half of that water molecule, and so it is conceptually divisible *qua* magnitude.

The atomism Ibn Sīnā rejects is the atomism of minimal parts as championed by Epicurus in antiquity, and by the Islamic theologians in his own time.

Ibn Sīnā's arguments against this conception of atomism takes two forms: One set of arguments attempts to show that a conceptually indivisible atom entails a physical absurdity, while the other set of arguments attempts to show that a conceptually indivisible atom is incompatible with our best mathematics, namely, that of Euclidean geometry. The following examples should give one a sense of how the physical class of arguments work, which are then followed by an example of Ibn Sīnā's mathematical-style argumentation (after *Iṣārāt, namaṭ* 1.1 [\*58: 1 129–130 *Dunyā*] and *Šifā', Physics* [\*54.2.1: III 4]; cf. Lettinck 1999 [\*534]); the arguments, while directed against 'pixelated' atomism, would apply equally well to the 'corpuscular' form. Additionally, Ibn Sīnā has a series of arguments, not considered here, showing the absurdities that would follow on the purported motion of specifically corpuscular atoms.

The first line of argument, from the physical point of view, presumes that an atom as understood by the Islamic theologians is not a body but part of a body; corporeality only ensues as the result of an aggregation of atoms. This being presumed, Ibn Sīnā asks his readers to imagine an aggregation of atoms in a row ABC. These atoms can, as he explains, be aggregated in four ways only: (1) They may be in succession to one another, that is, with gaps between them. (2) They may interpenetrate one another, namely, each atom occupies the same space as the other atoms. (3) They may be contiguous with one another, each atom having its own limits, which, while in contact with the limits of the atoms immediately adjacent to it, nonetheless those limits remain distinct. (4) Finally, the atoms making up ABC may be continuous with one another, that is, immediately adjacent atoms are in contact with one another at a common shared limit.

Models (1) and (2) Ibn Sīnā rejects out of hand, as they contradict our empirical knowledge. In case of (1), the sensible bodies we perceive around us would not constitute a unified whole (in addition, the gaps present conceptually problematic magnitudes). In the case of (2), a sensible body could never be greater than a single imperceptible atom, which also contradicts our experience.

Proposals (3) and (4) are more challenging, as Ibn Sīnā admits, but do not stand up to scrutiny. He mainly relies on two arguments (on the level of physical analysis). The first one states, in summary, that if in the presumed sequence of ABC the atom B is situated between atoms A and C, it shares a contact or boundary with both of them, independently of whether we are starting from model (3) or model (4). These two contacts (we may call them *m* and *n*) are not identical but different. B is consequently conceptually divisible into *m* and *n*, which according to the Islamic theologians it would not be. The second argument states that one should simply hold a sheet, which consists of (presumably)

conceptually indivisible atoms, between oneself and the sun, to realise that it has two different sides, one onto which the light of the sun falls, and one that is facing away from the sun. Here, too, we have a demonstration that seemingly indivisible atoms are conceptually divisible.

These physical considerations are, as has been mentioned, supplemented by mathematical arguments. These rest on the conviction that Euclidean geometry is incommensurable with the atomist ideas of the theologians. Even simple geometrical figures such as diagonals of a square or circles are impossible to realise when conceptually indivisible atoms are presumed, as Ibn Sīnā explains. In illustration, he compares the matrix of the adjacent atoms with the squares of a chessboard. If we take this arrangement as the basis and attempt to construct a right-angled triangle on the chessboard by counting the individual squares (= atoms) in either straight or diagonal sequence, it is impossible – as he demonstrates with detailed calculations – even to understand and approximate the Pythagorean theorem.

Having refuted the atomist concept, Ibn Sīnā explains and defends his preferred account of body. Ibn Sīnā adopts a modified form of Aristotle's theory that body is a continuous spatial magnitude (*Ta'liqāt* [\*60.1: 37–47]; *Šifā'*, *Physics* [\*54.2.1: III 2. III 7]). Aristotle himself had provided different accounts of what is meant by continuity (Gr. συνέχεια, Ar. *ittisāl*) in different passages of his oeuvre, the three foremost among these being: (1) Magnitude AB is continuous if and only if AB can be divided into parts that are always capable of further division (*On the Heavens* I 1). (2) A is continuous with B if and only if the extremities of A and B are one and the same (*Physics* VI 1); (3) A is continuous with B if and only if there is a common boundary at which A and B join together (*Categories*, chap. 6).

Precisely because these three accounts are different, Ibn Sīnā starts his own discussion of continuity, claiming, 'Continuity is an equivocal concept that can be stated in three ways' [\*54.2.1: III 2 § 8]. In the subsequent explanation it does, however, become clear that he does not simply adopt Aristotle's statements but modifies them and weights them differently. (1) In Ibn Sīnā's view, the first account does not define the essence of continuity; rather, it is a relative concept or a description (*rasm*) emphasising a (necessary) accident of continuity. On the basis of this description, it might be said of a collection of discrete objects that move together that they constitute a continuous whole (in a modern example, the engine and the carriages it pulls are a continuum from the point of view of motion). (2) The second formula is also merely an expression of relative continuity. An example is the human arm: the humerus is connected to the ulna and the radius at the elbow, but does not form a genuine continuum with them in spite of this shared point. This only occurs in



(3), which Ibn Sīnā does accept as a definition of the essence of continuity. This formula points to a continuous sensible body that has no parts and can be regarded as a unified whole. Of course individual parts may be postulated in this whole as well, such as the left side and the right side. However, accidental divisions of this kind are the result of the imagination only and vanish with the cessation of the positing. In Ibn Sīnā's words: '[Such parts are] like what happens when our estimative faculty imagines or we posit two parts for a line that is actually one, where we distinguish one [part] from the other by positing. In that way, a limit is distinguished for [the line] that is the same as the limit of the other division. In that case, both are said to be continuous with each other. Each one, however, exists individually only as long as there is the positing, and so, when the positing ceases, there is no longer *this* and *that* [part]; rather, there is the unified whole that actually has no division within it. Now, if what occurs through positing were to be something existing in the thing itself and not [merely] by positing, then it would be possible for an actually infinite number of parts to exist within the body (as we shall explain), but this is absurd' [\*54.2.1: III 2 § 8].

In Ibn Sīnā's view, continuous body has no parts in it, not even potential parts, if by 'potential parts' one means points or the like. Rather, its constituents are – entirely in keeping with the Aristotelian tradition – matter and form; more precisely, matter (*hayūlā*) and the form of corporeality (*ṣūra ḡismiyya*). Ibn Sīnā conceives of matter as wholly passive, having no active qualities or determinant features (regarding details of his theory of matter cf. Hyman 1965 [\*470], Buschmann 1979 [\*471], Stone 2001 [\*481], McGinnis 2012 [\*502], Lammer 2016 [\*511: chap. III 2]). Separated from form, it is nothing but relative privation. As such, matter cannot explain the fact that a sensible body is a unified whole, nor can it be the cause for it being subject to division. Consequently, that which makes the body a whole and potentially susceptible to division can only be the form of its corporeality.

For a determinate body to exist at all, Ibn Sīnā believes, it must have a determinate shape, and so be three dimensional, and so be localised in space. Both of these features are the result of its corporeal form (in more detail Hyman 1965 [\*470], Lizzini 2004 [\*488], Shihadeh 2014 [\*507]). Should the body be physically divided, the particular and individual form of corporeality is not divided but destroyed and replaced with two new particular and individual forms of corporeality corresponding with two new bodies. In other words, it is essentially the form of corporeality that unifies and makes a body numerically and actually one. Additionally, while the form of corporeality makes the body *actually* one, it also makes the body *potentially* many. That is to say, the form of corporeality is the cause of a body's being three-dimensional such that one can posit such divisions as a right side and left side in it.

Moreover, there is a psychological aspect. While for Ibn Sīnā it is true that a continuous body can conceptually be divided without end, such a feature is not the result of any positive attribute latent within the body. Instead, the potentiality for conceptually infinite division refers to a privation in the matter of the body. There is nothing in the body that precludes or prevents one from positing imagined divisions within the body as small as one wants. Indeed, this psychological process of imaging or positing divisions in principle has no end. In our imagination we can always halve a length (e.g. on a yardstick) and halve the result again. However, the points we assume in this process exist in our imagination only; the body remains the unified whole as which it has been defined.

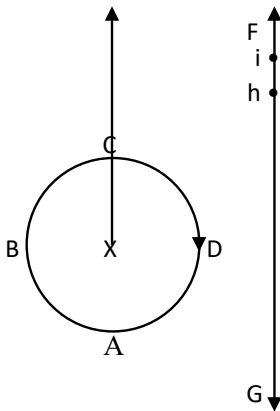
This also explains why Ibn Sīnā can reject the *kalām* argument against a potential division *ad infinitum*, mentioned above. It was based, among other things, on the assumption that potentiality is the capacity of an agent to execute a certain action, and concluded that this was impossible in the case of the division *ad infinitum*. It now becomes clear that this argument does not challenge Ibn Sīnā's doctrine at all, as he understands the potential infinite divisibility of body in terms of an ongoing process of positing successive division that is never completed. This is a conceptual process that, while it has no end by definition, may indeed be executed by a (divine) agent throughout an infinitely long time.

This discussion introduces the concept of infinity or the infinite (*lā nihāya*; Gr. ἄπειρον), which Aristotle discussed in *Physics* III 6. Ibn Sīnā essentially follows his account, defining the infinite as 'that which whatever you take from it – and any of the things equal to that thing you took from it – you [always] find something outside of it' [\*54.2.1: III 7 § 2]. In natural philosophy, the immediate issue is whether an infinity can exist either in quantities that possess some position or in numbers in an ordered series [\*54.2.1: III 7 § 1]. The Islamic theologians were for the most part opposed to predicating the infinite of anything other than God. This opposition included both actual infinity and potential infinity. Ibn Sīnā, by contrast, is quite happy to accept the reality of a potential infinity, but denies that there are material instances of actually infinite quantities (such as an infinitely large body or expanse of space) or an infinitely long line of countable bodies existing simultaneously.

Ibn Sīnā has a number of arguments attempting to show that an actual infinity in nature is impossible, some of which argue by including motion, some without. Examples of both categories will be presented in the following. Some of these entirely follow Ibn Sīnā, while others bear his unique touch.

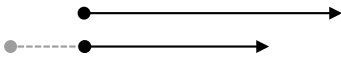
Motion, one of the arguments goes, would be impossible in infinite space. In order to understand this, we must assume a rotating circle ABCD with centre x, in the purportedly infinite space. In addition, we must posit a line, FG, infinite

in both directions, which does not pass through ABCD. Finally, we are to posit an infinitely extended ray,  $XC$ , which is initially pointing in a direction away from  $FG$  and so is not intersecting  $FG$ ; however, as  $ABCD$  rotates constantly,  $XC$  should ultimately, intersect, pass through and then cease intersecting  $FG$ . This scenario, immediately comprehensible to the observer, would be impossible in infinite space, Ibn Sīnā explains, reasoning thus: Let  $XC$  begin to intersect  $FG$  at some first instant,  $T_1$  before which  $XC$  was either pointing away from  $FG$  or parallel to it. At  $T_1$ ,  $XC$  must intersect  $FG$  at some point, call it  $h$ ; however, there must also be some point,  $i$ , which is before  $h$  on  $FG$  (for  $FG$  was posited as infinite on both sides). Consequently,  $XC$  must have intersected  $i$  at some instant  $T_0$ , which is before  $T_1$ . Beyond this, there would have to be a further point at which an even earlier intersection would have taken place, etc. As long as we assume infinite space, an infinite line, and an infinite ray, there cannot be a first instant (or a last instant) of contact between the ray (emerging from the rotating circle) and the line. Consequently, there would be no motion. However, we do know that circular motion occurs in the cosmos, which means that the space occupied by the cosmos cannot be infinite. This argument, which appears in both the *Kitāb al-Nağāt* as well as *al-Šifā'*, is likely to have been particularly powerful during Ibn Sīnā's lifetime, as certain mathematicians at the time posited infinite space and an infinite ray of light, finding themselves in conflict with his explanations (*Šifā'*, *Physics* [\*54.2.1: 11 8 § 8]; *Nağāt* [\*55: 1v 2 § 9; 233–244 *Dānišpažuh*]; on the issue McGinnis 2007 [\*493]; cf. also Rashed 1999 [\*478], who identifies one of these mathematicians).



In both the *Kitāb al-Nağāt* and the *Šifā'*, Ibn Sīnā's preferred non-motion argument against infinite spatial magnitude is a variation of an argument from al-Kindī (cf. the descriptions of his works in PIW 1 § 4.4.3 and 5).

It consists in positing two parallel infinite rays from one of which a finite portion is removed (the dotted line in the diagram). The shortened ray is then superimposed on the other, their respective endpoints lining up. The argument then continues that the two rays cannot be equal as one of them has been shortened, but they cannot be different, either, as the shorter ray is still infinite, and two infinities must be equal. There is thus a logical contradiction that can be resolved only by abandoning the false assumption of an actually infinite spatial magnitude.



As stated above, both these examples loom large in *Kitāb al-Nağāt* as well as the *Šifā'*, but are not mentioned in the *Išārāt* (*Išārāt, namaṭ* 1.11 [\*58: 219–221 Dunyā]). Instead, Ibn Sīnā expands an argument only hinted at in the *Šifā'* [\*54.2.1: III 8 § 5–7], which now becomes his sole argument against the assumption of infinite space. The argument has one posit some actually infinite ray AB and then another actually infinite ray AC, so as to form an acute angle BAC. We should then consider the gap, BC, between the two rays. The farther from A that BC is, the larger BC is. Since the two rays are actually infinitely extended, BC should, in principle, also be actually infinite; however, BC always lies between the rays AB and AC and so of necessity BC is terminated at them, and so BC is finite. Here, too, we have a contradiction that can be avoided only by rejecting the theory that space is infinite.

Intense debates erupted concerning the question of whether this new demonstration provided by Ibn Sīnā would hold water. Leading representatives of the philosophy we call 'post-classical' or 'post-Avicennan' contributed, reaching different conclusions: While Abū l-Barakāt al-Bağdādī (d. 561/1165) and Nağm al-Dīn al-Kātibī al-Qazwīnī (d. 676/1277) found the demonstration wanting, Nāṣir al-Dīn al-Ṭūsī (d. 673/1274) and Mullā Ṣadrā (d. 1050/1640) appear to have found it defensible (cf. McGinnis 2018 [\*513]; on the question of infinity in Ibn Sīnā's oeuvre cf. also Zarepour 2020 [\*514]).

#### 4.6.4 Place and Time

As has been mentioned in the context of the motion of the heavens, on the question of the 'where', or place of a body, Ibn Sīnā follows the position presented by Aristotle. According to the latter, the 'place' (Ar. *makān*, Gr. *τόπος*) of a body is, defined as 'the surface that is the extremity of the containing body' (*Šifā'*, *Physics* [\*54.2.1: II 9 § 1]; in detail Lammer 2016 [\*511: chap. V], who rightly argues that the very fact that Ibn Sīnā defended Aristotle's account of

place makes him virtually unique in the Aristotelian tradition up to him). In order to prove this definition, Ibn Sīnā rules out other possibilities one after the other by – following Aristotle – identifying the logical space for the possible accounts of place [*\*54.2.1: 11 6 § 2*]. He explains that in relation to the body, the place can be either intrinsic to or extrinsic to body, that is, a body's place is either essential or accidental to it. If place is intrinsic to a body, then it is either (1) the matter or (2) the form of the body, whereas if place is extrinsic to it, then the place is either (3) what the body exactly encompasses, that is, an interval (*bu'd*) or (4) what exactly encompasses the body, that is, the surface that is the extremity of the containing body.

Ibn Sīnā quickly eliminates (1) and (2). Place cannot be the matter or the form of a body, as in both these cases it would be impossible for a body to leave its place and occupy another one. (3) and (4), on the other hand, are options worth considering. (4) corresponds exactly to Aristotle's solution, which Ibn Sīnā prefers. First, however, he investigates (3), as another important and much-discussed question is linked to it: whether it is possible for empty space, i.e. a void (*ḥalā'*), to exist and be occupied by the body (on this question *Šifā'*, *Physics* [*\*54.2.1: 11 8*]; for explanations cf. McGinnis 2007 [*\*493: esp. § IV*] and Lammer 2016 [*\*511: chap. v 3*]).

Aristotle had replied to this question in the negative, presenting several physical objections in *Physics* IV, 6–9. Ibn Sīnā reproduces many of Aristotle's physical arguments, often giving them his own unique twist, adding a further consideration that may be regarded as conceptual criticism of the notion of void [*\*54.2.1: 11 8 § 1–4*]. It starts with the principle that everything actually existing within the natural order may be defined by stating the genus and the specific difference. This is not applicable to the void. If we assume that void space has positive existence, it would belong to the category of quantity, which would apply to it either accidentally or essentially. Both, however, are impossible: A void cannot be an accident as there is no substance linked to it. And it cannot be essentially a quantity, as that would make it a species of quantity, which Ibn Sīnā rules out on the basis of detailed considerations. There is consequently no void space. Void is nothing but empty imaginings due to an error of our imagination and our faculty of estimation.

The second factor essentially associated with motion is 'time', which is, Ibn Sīnā believes, a necessary concomitant of motion (regarding his theory of time cf. Shayegan 1986 [*\*472*], McGinnis 2003 [*\*486*], Mayer 2007 [*\*492*], Lammer 2016 [*\*511: chap. VI*]). On this subject, too, detailed considerations by Aristotle were known. These, however, focussed on the question of *what* time is, containing no proof that it does exist at all (although in *Physics* IV 10, Aristotle lists a series of objections to the reality of time).

In his own account, Ibn Sīnā endeavours to close this lacuna [*\*54.2.1: 11 11 § 1–2*]. He begins by mentioning a number of empirically proven facts regarding motion. He then goes on to demonstrate that, and why, these facts are based on a magnitude we call ‘time’. Only having shown that time exists does he then provide a scientifically adequate explanation of what time is.

The facts with which Ibn Sīnā begins are the following. (1) If two bodies moving at the same speed start and stop at the same audible signal (e.g. the sounding of a horn), they traverse the same distance. (2) If two bodies moving at the same speed start at different signals but stop at the same signal, the body that started at the second signal will have traversed a shorter distance than the body that started at the first signal. (3) If two bodies travelling at different speeds start and stop at the same signal, the body that moves more slowly will have traversed a shorter distance than the body that moves faster.

On the basis of these facts, Ibn Sīnā observes that associated with a moving body there is a certain possibility or capacity (*imkān*) to traverse some spatial magnitude. Moreover, this capacity corresponds with the starting and stopping of the motion, where motion itself is a certain sort of magnitude, namely, a kinematic magnitude. When the body is moving slower, a greater amount of this possibility is required to cover the same spatial magnitude as that of the faster moving body. Given the correlation of this ‘potential’ with the spatial as well as the kinetic magnitude, Ibn Sīnā concludes that it must be a magnitude proportional to the distance and the velocity. This is the magnitude we call ‘time’ (*zamān*), as it allows the body to traverse a greater or smaller distance at a fixed speed.

Ibn Sīnā, following Aristotle, goes on to identify this magnitude with a number or measure of motion that has been differentiated into prior and posterior parts (Aristotle, *Physics* IV 1, 219b1–2; *Šifāʾ*, *Physics* [*\*54.2.1: 11 11 § 3*]; cf. also Lammer 2016 [*\*511: chap. VI 2*]). In all three encyclopaedias – *al-Nağāt*, *al-Šifāʾ*, and *al-Išārāt* – Ibn Sīnā says that more precisely time is a magnitude of *circular* motion with respect to priority and posteriority. His insistence on circular motion rather than just motion in general is that only circular motion can potentially have neither beginning nor end, that is, can be infinitely extended into the past and future.

The eternal duration of time and of the world is an established fact for Ibn Sīnā. He posits it in a variety of contexts, supporting it with a series of different arguments. In this place he employs the aforementioned proof of the existence of time in order to prove his assumption of temporal eternity, adducing a thought process that may be regarded as one of his central physical arguments in favour of this theory. The argument has one assume that God created time, and so motion and moving bodies, at some first moment ( $t_0$ ) in the finite past,

for example, 10,000 years ago. Here, let years be measured in apparent solar rotations, and let the present moment be the second termination point of this 10,000-year-long motion. It is certainly possible, Ibn Sīnā points out, that God could have made a time (as well as motion and bodies) 20,000 solar rotations in duration (terminating with the present moment). In this possible scenario, 10,000 years of the 20,000 solar rotations would exactly correspond with the 10,000 years of the real world (extending back to  $t_0$ ), and the remaining duration of this possible 20,000-year motion would correspond with the possibility for an additional 10,000 solar rotations. It would thus be a possibility for the sun or another body to traverse a certain distance at a fixed speed (prior to  $t_0$ ). And this would mean that time already existed, although only God was presumed to exist prior to  $t_0$  (cf. the proof of time as the possibility for a body to cover a distance). This contradiction always arises when a finite duration of time is assumed. Ibn Sīnā concludes that time, and so motion and moving bodies, must have existed infinitely into the past (and for the same reason *mutatis mutandis* must exist infinitely into the future).

#### 4.6.5 Elements and Natural Minima

Besides the general concepts of natural science (such as body, motion, place, and time), in his *Physics*, and his versions of *On the Heavens*, *On Generation and Corruption*, etc., Ibn Sīnā discusses more specific matters as well. These include particular bodies (plants, animals, minerals), the elements (sg. *uṣṭuquṣṣ*), i.e. the (physical) components (sg. *ʾunṣur*) that constitute bodies. According to Ibn Sīnā, the elements are simple bodies. This distinguishes them from, e.g., flesh, blood, or bones, which are in turn composed out of more than one element. Even so, an element is constituted from form and matter (*Ṣifāʾ*, *Ṭabīʿiyyāt*, *al-Samāʾ wa-l-ʿālam*, i.e. *On the Heavens* [\*54.2.2: 1 Qāsim]), which is why it possesses two powers: an active power following upon the element's form and a passive power following upon its matter.

Additionally, Ibn Sīnā specifies different general kinds of elements based upon three genera of natural (local and positional) motions [\*54.2.2: 2 Qāsim]. These natural motions are (1) motion around the centre, (2) motion toward the centre and (3) motion away from the centre. All these are possible because, as we have learnt by now, there is neither infinite space nor a void (cf. *Ṣifāʾ*, *Physics* [\*54.2.1: III 13–14] and *Ṣifāʾ*, *Ṭabīʿiyyāt*, *al-Samāʾ wa-l-ʿālam* [\*54.2.2: 7.8 Qāsim]). Motion, to Ibn Sīnā, is inherently directed. Consequently, there must be directions (sg. *waḡḡh*), and those directions, continues Ibn Sīnā, require some body or bodies to delimit them. In the end, Ibn Sīnā argues that what delimits directions is one body's being surrounded by another, where the surrounding

body provides the direction *towards* and *away from*, and the surrounded body provides the centre around which the surrounding body moves.

Celestial bodies are those that surround and whose natural motion is rotation around a centre. Terrestrial bodies are surrounded bodies subject to rectilinear motion either towards the centre or away from it (or, conversely, away from or towards the surrounding body). The first direction (away from the centre and towards the surrounding body) is called 'upwards' by convention, and the second one 'downwards'. Unlike linear motion, circular motion is 'simple' and 'without opposite', which is why Ibn Sīnā, in keeping with Aristotelian tradition, attributes it to the celestial bodies [\*54.2.2: 4].

The elements constitute the terrestrial realm, moving upwards or downwards. Each of these two genera of motion is divided into two kinds. There is an absolute upward motion (which is directed to the boundary of the surrounding celestial sphere) and a relative upward motion (which stops short of this boundary). The same is true of the downward motion, which may be absolute (to the centre of the body) or relative (not all the way to the centre).

Elements possess basic qualities, namely hot/cold, which are regarded as active powers following the form, and wet/dry, regarded as passive powers following the matter [\*54.2.2: 1]. In keeping with tradition, Ibn Sīnā states there is a correlation between cold and downward movement (towards the centre) and heat and upward movement (away from the centre). Earth and water, the cold and heavy elements, incline downwards; the first one absolutely, the second relatively. Fire and air, the hot and light elements, tend upwards; fire as far as the boundary of the celestial sphere, light less far [\*54.2.2: 2 and 9]. As for the 'passive' basic qualities wet and dry that follow matter, they determine the susceptibility of a body: something wet (such as damp clay) is more susceptible to impression than a dry body (e.g. fired clay).

In conclusion Ibn Sīnā arrives at the well-known classification of the four terrestrial elements: (1) fire, which is hot and dry, and has an absolute upward motion; (2) air, which is hot and wet, and has a relative upward motion; (3) water, which is cold and wet, and has a relative downward motion; (4) and earth, which is cold and dry, and has an absolute downward motion. To this list he adds that (5) the celestial bodies are neither hot nor cold and are neither wet nor dry; rather, they are solely identified in terms of their natural circular motion around the centre. Consequently, the celestial bodies are not subject to the cycle of generation and corruption; the only change they experience is the change of their position [\*54.2.2: 4].

All of this is hardly spectacular, as it follows the traditional Aristotelian line. What is interesting is Ibn Sīnā's explanation of a principle we already



mentioned above, namely his assumption that physically indivisible natural minima exist. In other words: there might be limits beyond which a specific kind of natural body cannot be divided further and remain that same kind of body.

In order to prove this, Ibn Sīnā presents the following consideration (*Šifāʾ*, *Physics* [\*54.2.1: III 12]; regarding the details of the argumentation, which is exceedingly complex, cf. McGinnis 2015 [\*506]): Experience has taught us that the smaller something is compared with its surrounding environment the faster and more easily the surrounding environment acts on what is surrounded (for example, a blast furnace evaporates a kilogram of water more readily than it does a metric ton of water). Let us imagine a small amount of water, say a millilitre, in a measuring cup. The water qua water has the qualities of being cold and wet. Additionally, inasmuch as the water is isolated, and so not part of a lake or other large body of water, it is surrounded by ambient air, for example, which according to the elemental theory that Ibn Sīnā adopts, is hot and wet. Now provided that the quantity of water is sufficiently large it can counteract the heating influence of the surrounding air; however, as one physically separates off smaller and smaller quantities, the natural heat of the surrounding air more readily acts upon the quantity of water. At some point in this separation process, the heat of the air can so readily act upon and indeed overcome the coolness of the small quantity of water that that surrounding air changes it, as it were instantaneously, to the same degree of heat as the air itself. At that degree of smallness or less, a cold-wet element can no longer remain given the action of the surrounding environment and instead there comes to be a hot-wet element, namely air, which demonstrates that natural bodies must have a certain minimal size for them to continue to exist as the bodies they originally are.

#### 4.6.6 Generation and Corruption and the Giver of Forms

Unlike the changes considered thus far – all of which involve changes with respect to various categories of accidents, like quantity, quality, place or position – generation and corruption (*al-kawn wa-l-fasād*) refer to change with respect to the category of substance. Generation and corruption take place when a substance's underlying matter is divested of one species form – that is, the form that makes it the kind of substance that it is – and receives a new species form and so becomes a new kind of substance. A standard example is when bread is digested so as to become flesh and blood. In this case, the bread undergoes corruption, while flesh and blood are generated.

Aristotle had identified a number of puzzles and difficulties associated with generation and corruption, and by the time of Ibn Sīnā, additional puzzles and

difficulties had also emerged. Certainly, not the least of these is whether generation and corruption even occur in the fashion described, suggesting three alternative models. (1) Generation and corruption are an illusion; what actually happens during the change is that a substance or a body becomes visible that was previously already present, but latent. In addition, there are no other forms of change such as alteration (*istiḥāla*) (*Šifāʾ*, *Ṭabīʿiyyāt*, *al-Afʿāl wa-l-infiʿālāt* [\*54.2.4: 2 and 4 Qāsim]). (2) Generation and corruption are not the result of a change in the substantive form but of accidental features that leads to the generation of a new substance [\*54.2.4: 6]. (3) That which we call generation and corruption may simply be a mixture of substances, similar to the mixture of sugar, lemon juice, and water, which becomes lemonade [\*54.2.4: 7]. The third option, which was proposed by Ibn Sīnā himself, has recently been subjected to intensive study (Wood, Weisberg 2004 [\*489]; Stone 2008 [\*495]). Consequently, we shall focus on his remarks on the first two theories below.

Theory (1) regarding latency (*kumūn*), propounded in different varieties by Anaxagoras (496–428 BCE) and the Muslim theologian Ibrāhīm al-Nazzām (d. before 232/847), is rejected by Ibn Sīnā with a complex argumentation [\*54.2.4: 4] that can be summarised as follows. The latent components inherent in a body prior to its transformation must be either actually infinite or finite. The former is impossible (as has already been shown elsewhere). The latter would imply that the finite parts either permeate each other or are located in close proximity to one another. The idea that they permeate each other can be ruled out as in that case a body could only be as large as a single one of its parts, which is patently false. The remaining option is that a finite number of latent parts are located in close proximity to one another. A number of objections can be raised against this option. One of them rests on an empirical observation: if water is heated, and clearly transforms into air, the air necessarily occupies a greater amount of space than the water. This is impossible to explain using the theory of latency (incl. the assumption that the latent parts are located in close proximity to one another). The attempt to explain this process in terms of void space must fail, too, as it has already been demonstrated that void cannot exist. The parts in question can thus only increase as to their volume, which is a form of change or alteration, which the supporters of latency reject. Theory (2), intending to reduce generation and corruption not to a substantive change but to the alteration of accidental features, is also refuted in detail by Ibn Sīnā. He has to take into account the fact that in ancient and medieval tradition, the elements (and substances) earth, water, air, and fire, were of necessity combined with the primary qualities hot/cold and wet/dry. Hot/cold and wet/dry

are paradigmatic instances of qualitative features. The question is, then, what is the relation between these qualitative features and the elementary substantial forms.

As seen above, within the ancient world the qualities hot/cold and wet/dry were viewed as having a special status and even called 'substantial qualities'. In effect, they were not treated like other accidents but like essential qualities of the substantial form of a body, the idea being that there was a close link between the substantial form of a body and the relation (= the proportions) of its primary qualities. On the basis of this assumption, it was easy to explain how the different elements appear to alter into one another, e.g. when *cold* and wet water is heated and becomes *hot* and wet air.

Ibn Sīnā rejects the identification of substantial form with the relation among these qualitative features (*Ṣifā'*, *Ṭabī'yyāt*, *al-Af'āl wa-l-infi'ālāt* [\*54.2.4: 6]; *Ilāhiyyāt* [\*54.4(b): II 1 Marmura]). His criticism is simple: such an account of substantial form entails circular causation, which is, of course, absurd. For if we assume that the substantial form is identical with or essentially dependent on the primary qualities, hot/cold and wet/dry would be essentially prior to the substantial form (or would at least be co-essential with it). Hot/cold and wet/dry, however, are paradigmatic instances of qualities, and 'quality' is one of the categories of accidents. Accidents, in turn, only exist within a substance. They are essentially dependent on the existence of a substance in which they inhere, which is why substance causally precedes qualities. Then we must consider that the substantial form and matter are the inner causes constituting a natural substance (= a body) and explaining its essential effects and powers. The form, here, is the principle of actuality and thus responsible for the body's actual existence, and consequently precedes matter ontologically. As the body is a mixture of form and matter, and as substantial form causally precedes matter, it is also 'prior' to the specific body it constitutes.

The loop is complete: the theory of the alteration of the accidents states that (a) the existence of the substantial form presumes the existence of hot/cold and wet/dry. (b) In fact, the accidents hot/cold and wet/dry can exist only in connection with a natural substance. (c) In order for a natural substance to exist, a substantial form must exist. Allegedly, however, substantial forms purportedly exist only if the accidental qualities, hot/cold and wet/dry exist (a). For Ibn Sīnā, then, substantial form, which is related to the essence (*māhiyya*) of a thing cannot be explained in terms of some more basic physical feature(s) or constituent(s). In the context of natural philosophy, it is possible only to state what a substantial form *does* (= its activity). What it *is* (= its substance) exceeds the boundaries of physics and is a matter for metaphysics

[\*54.4(b): II 1. V 1, VI 1. VI 4 Marmura]. Even so, the sketchy remarks allow us to deduce an argument: no mere change in any accidental feature(s) is sufficient to bring about a substantial change, that is, a change in substantial form, in the underlying subject. Thus, accidental changes alone simply cannot account for generation and corruption. And what is more, as we have seen, there is in all probability no one purely *physical* agent that could be considered as the cause of generation, i.e. the cause of the emergence of substantial forms.

Ibn Sīnā does not shirk this conclusion and indeed finds it compelling enough to introduce a ‘Giver of Forms’ (Ar. *wāhib al-ṣuwar*, Lat. *dator formarum*) into his system of physics. This is a *metaphysical* agent responsible for the existence of substantial form in the physical (sublunar) world. How precisely the relation of the Giver of Forms to the realm of generation and corruption could be described, however, is disputed. The ‘traditional’ interpretation can be traced back as early as Ibn Ruṣd (d. 595/1198) in the Islamic world, and Albertus Magnus (d. 1280) and Thomas Aquinas (d. 1274), in the Latin Christian world (cf. Ibn Ruṣd, *Tafsīr Mā ba’d al-ṭabīʿa* [\*210: VII 17. XII 18]; Thomas Aquinas, *Summa Theologiae* [\*218: q. 3, a. 8]; and Hasse 2012 [\*500]). This interpretation views Ibn Sīnā’s Giver of Forms as the immediate cause of the generation of each token instance of a particular substantial form. For example, on the traditional interpretation, I have the species form human, not because my parents’ causal agency produced my form, but because the ‘Giver of Forms’ gave the form of humanity to some matter, which my parents’ causal agency prepared through a series of accidental changes (and this applies not only to humans, but to all species).

This ‘traditional’ interpretation has recently been challenged by Richardson (2012 [\*503]). According to this new interpretation, Ibn Sīnā holds that the form of the parents has sufficient metaphysical agency to produce another of its kind without the aid of the ‘Giver of Forms’. The function of the latter is, in the new interpretation, merely to guarantee the existence of the various species. Consequently the ‘Giver of Forms’ is not responsible for *my* possessing the form ‘human’ or for any *individual* belonging to a certain species. Rather, its influence on the sublunar world consists in ensuring that there is substantial form ‘being human’ as well as all the other *types* of species in the realm of generation and corruption.

Whichever interpretation is the correct one – by introducing the ‘Giver of Forms’, Ibn Sīnā added an immaterial intellect that does not act on the physical level but through metaphysical impact. This addresses topics that belong within the domain of psychology and metaphysics rather than natural philosophy.

#### 4.7 *Mathematical and Biological Sciences; Meteorology*

*Dimitri Gutas*

##### 4.7.1 Mathematical Sciences – 4.7.2 Meteorology – 4.7.3 Botany – 4.7.4 Zoology

##### 4.7.1 Mathematical Sciences

Ibn Sīnā wrote relatively few works on the mathematical sciences (arithmetic, geometry, astronomy, music), thinking them little controversial (*al-Mašriqiyyūn* [\*57.1: 8]), though from all accounts he was clearly interested in the subject and tried to improve and emend the transmitted material. In general he seems to have worked on the subject during two periods in his life, first during his stay in Ġurġān (c. 403–404/1013–1014), the work from which period was incorporated by al-Ġūzġānī into the *Nağāt* and later translated into Persian by him for the *Dānišnāma*, and later in Iṣfahān in the course of the composition of the *Šifā'* (after 415/1024).

The book on geometry in the *Šifā'* is an epitome of Euclid's magnum opus *The Elements*, arranged in fifteen chapters like the original (cf. the chapter headings in the description of the work above; precise correspondences are listed by al-Daffa, Stroyls 1984 [\*526: 99–110]). There are frequent variations in Ibn Sīnā's presentation, which consist in the omission or displacement of definitions, interpolation of axioms, interpolation or alteration in the order of the propositions, and the addition of some further theorems (De Young 2002 [\*535]; cf. al-Daffa, Stroyls 1984 [\*526: 85–111]). These variations, however, have also to be seen as due not only to Ibn Sīnā but also to the complex transmission of Euclid's *Elements* in Arabic translation, a transmission which included the Arabic translation of some other Greek authors, like Hypsicles, as well as commentaries and additions by Arabic authors that reached Ibn Sīnā (Saliba 1987 in *Elr* [\*9: 88–89]).

The briefer presentation of geometry in *al-Nağāt* and the *Dānišnāma*, in Arabic and in Persian respectively, which is al-Ġūzġānī's version of what he claims is an earlier essay by Ibn Sīnā (Gutas 2014 [69: 460]), differs in structure and organisation from Euclid (Brentjes 2008 [\*541: 449–451]). It includes only those parts of geometry that are useful for the study of the *Almagest* (al-Daffa, Stroyls 1984 [\*526: 79–85]). More detailed investigation is still needed into the rationale of Ibn Sīnā's geometrical theories and their relation to the entire transmission of Euclid in both later Greek and early Arabic tradition (in general cf. Djebbar 1999 [\*533]).

In arithmetic, Ibn Sīnā follows the *Madḥal* (= the Arabic translation of the *Introductio*) by Nicomachus of Gerasa overall (cf. the work description above),

apparently along with other minor sources of both Greek and Arabic origin. The subjects treated in the *Dānišnāma* and the *Šifā'* are listed and discussed by al-Daffa, Stroyls 1984 [\*526: 65–79]).

On the subject of astronomy, Ibn Sīnā reproduces Ptolemy's *Almagest* with modifications, additions, and rearrangements (cf. the description in Saliba 1987 [\*9: 89–90]). To this he added an appendix on the nature of astronomical observations and their conformity with the science of physics ([\*112]; see the contents in Ragep, Ragep 2004 [\*156: 8]). He also invented an astronomical instrument, the text of the treatise on which has been preserved (Wiedemann 1926/1984 [\*113], Sezgin 1985 [\*113]).

In music, Ibn Sīnā distils Greek music theory (his original sources have been examined in D'Erlander 1935 [\*54.3.4: 11, 258–306]), making exhaustive use of al-Fārābī's *Kitāb al-Musiqī al-kabīr* (*The Great Book of Music*) (cf. PIW 1 § 8.3.5). For details cf. the account by Wright 1987 [\*531: ix].

What Ibn Sīnā considered 'lesser' sciences, namely meteorology, botany, and zoology, are treated essentially in the various books of the *Šifā'*, in which he presented the standard accounts of the classical textbooks on these subjects but with his characteristic perspicacity and originality, many aspects of which have yet to be adequately studied.

#### 4.7.2 Meteorology

Manifestly aware of the discrepancy of the position of Book IV in Aristotle's *Meteorologica*, Ibn Sīnā treats its contents separately in the fourth book of the natural sciences (*tabī'yyāt*) of the *Šifā'*, which he calls *al-Af'āl wa-l-infi'ālāt*, actions and affections of the elementary qualities of bodies (hot and cold, dry and moist), while the contents of Books I–III of Aristotle's *Meteorologica* he treats in the fifth book of the natural sciences, entitled *al-Ma'ādin wa-l-Ātār al-uhwiyya*, minerals and meteorological phenomena. Ibn Sīnā's meteorology is not a commentary as such on Aristotle, for the subject matter itself is reshaped, reworked and completed by Ibn Sīnā. *Al-Ma'ādin wa-l-Ātār al-uhwiyya* 'is remarkable for its method, which gives a primary role to empirical observation and factual demonstration, often used to contradict what Ibn Sīnā's predecessors may have asserted' (Mandosio 2018 [\*548: 467–468 and passim, with bibliographical references]). His views on specific meteorological and mineralogical phenomena have been presented in detail by Lettinck 1999 [\*534].

#### 4.7.3 Botany

*On Plants* (*Fī l-Nabāt*) [in the *Šifā'*] is divided into seven chapters, the first six of which cover the same material as in the Arabic translation of Nicolaus of

Damascus's treatise: vegetative sensation, reproduction, growth, digestion, and the different parts of plants. The last chapter, entitled 'On the mixtures of the things that possess a nutritive soul' diverges from Nicolaus's structure; although Galen and other medical writers mention the temperament of individual plants in works of pharmacology, there is no extant philosophical treatment of the subject. The contents of this final chapter on plant mixtures are highly technical, and it is clear that Ibn Sīnā is drawing on his medical background in this part of his discussion. He appeals [also] to pharmacology in his description of plant mixtures. Specifically, he makes reference to *materia medica* to explain how mixtures in plants differ (Das 2017 [\*546: 214–215]).

#### 4.7.4 Zoology

Only three of Aristotle's five zoological works were translated into Arabic as an integrated whole in nineteen books under the general title *Kitāb al-Ḥayawān: Historia animalium* (in *al-Ḥayawān*: Books 1–10), *De partibus animalium* (Books 11–14), and *De generatione animalium* (Books 15–19). Ibn Sīnā follows this scheme in the zoological part of the *Šifā'* and divides it equally into nineteen books. His approach to Aristotelian biology is to update it (as he did with other works of the Aristotelian canon) in accordance with Galenic biology, temporally posterior and therefore more advanced than that of Aristotle. Accordingly Ibn Sīnā treats the Aristotelian zoological works by summarising them, by offering a new synthesis between Aristotelian and Galenic views whenever necessary, and by discarding the Aristotelian views and substituting them by his own updated Galenic material in the *Qānūn*. Further details may be found in the exposition by Musallam 1987 [\*529: 95–99], who emphasises the close connection between zoology and medicine; for a more general overview cf. Coda 2017 [\*545] and especially Kruk 2002 [\*536].

## 5 Influence

### *Dimitri Gutas*

Ibn Sīnā's influence was colossal, both within the Islamic world and without. Without, in Latin translation, Ibn Sīnā's philosophy influenced mightily the medieval and Renaissance philosophers and scholars, just as the Latin translation of his medical *Canon*, often revised, formed the basis of medical instruction in European universities until the 17th century (Hasse 2016 [675: 357–364 and passim]; Siraisi 1987 [\*663]). The Arabophone Jewish and Christian scholars within Islam, to the extent that they were writing for their

respective communities and not as members of the Islamic commonwealth, accepted most of his ideas (notably Mošeh ben Maimon [Maimonides] in his *Arabic Guide for the Perplexed* and Bar Hebraeus in his Syriac *Book of the Cream of Wisdom*). The Jewish communities in Europe used Hebrew translations of some of his works, though they were far less receptive than their Roman Catholic counterparts, preferring Ibn Rušd instead. The Roman Orthodox in Constantinople were quite indifferent to philosophical developments abroad (and inimical to those at home) and came to know Ibn Sīnā's name only through its occurrence in the Greek translations of the Latin scholastics that began after the Fourth Crusade (Akasoy 2003 [\*690]). In his influence on the intellectual history of the world west of India outside of Islam he is second only to Aristotle, as it was intuitively acknowledged in the Islamic world where he is called 'the Pre-eminent Master' (*al-šayḥ al-ra'īs*), after Aristotle, whom Ibn Sīnā called 'the First Teacher' (*al-mu'allim al-awwal*). The numerous areas in philosophy and science where his influence can be seen are being steadily investigated and can be traced in the secondary literature listed below (for overviews cf. esp. Bertolacci 2012 [\*65], Freudenthal, Zonta 2012 [\*625], 2013 [\*628], and Takahashi 2003 [\*651]).

Within the Islamic world itself, Ibn Sīnā's influence was second to none, shaping the development not only of philosophy but of most subsequent intellectual life in the East. It was pervasive and manifold (Wisnovsky 2013 [\*583]), but also in some regards paradoxical.

This is particularly true for the classical philosophical and scientific tradition. On the one hand he is without doubt the one thinker who is most responsible for integrating and, even more significantly, naturalising Hellenic philosophical and scientific thought into Islamic intellectual life. To put it differently, he made premodern Islamic intellectual life the historical extension of the Hellenic tradition in the philosophical sciences, after the Roman Orthodox had abjured it and the Latins in the West had not yet reached it. By the same token, however, the very success of his efforts was also responsible, as history unfolded, for some conflicting developments which affected, some negatively, the very course of philosophy and the sciences in the Islamic world.

At the basic level of scholarly communication and access to sources by scholars in the Islamic world, the dominance and prestige that Avienna enjoyed had as unintended consequence the gradual attenuation of interest in the original works of the Greek authors: after Ibn Sīnā, intellectuals by and large read no more Aristotle and Galen, they read and consulted Ibn Sīnā instead. The scholar and polymath 'Abd al-Laṭīf al-Baġdādī's plea to his contemporaries in the 7th/13th century, to abandon, namely, Ibn Sīnā's works and read instead Plato and Aristotle for philosophy and Hippocrates and Galen for medicine, is



emblematic of the situation prevailing in the Islamic heartlands from Egypt to Iran (Gutas 2011 [\*575]). Even during the philosophical ‘revival’ of the Safavid era in Iran (10th/16th to 12th/18th centuries), when the scholarly interest in the translated philosophical literature had grown stronger once again, ensuring the survival of many a philosophical manuscript that might otherwise have been lost forever (cf. Endress 2001 [\*145]), the Greek classics that were read were studied in the context of Ibn Sīnā’s philosophy and of his formulation of the problems, whether in support or in opposition (Pourjavady, Schmidtke 2015 [\*587]). Nevertheless, the popularity of his thought and the long shadow of his influence lent classical ideas, in whatever guise, a longevity they would not otherwise have enjoyed.

At a broader historical level of the intellectual and religious life in Islamic societies, his influence is also paradoxical in that it contained the germs of the transmogrification of his philosophy in a number of ways. The achievement of Ibn Sīnā’s philosophy in historical terms, and what made it immensely successful and irresistible, is that it constituted a comprehensive, integrated, rationally justified, and internally self-consistent account of reality which incorporated and explained religions, revelation, and the Islamic tradition, thus ‘deriving the principles of religious doctrines from philosophy’, as the Mālikī jurist al-Māzarī (d. 536/1141) stated (cf. Gutas 2014 [\*70: 367]). Briefly, it presented a scientific system as a worldview, demanding or necessitating adherence. With the exception of al-Fārābī, whose *Mabādī’ al-mawǧūdāt* and *Mabādī’ ārā’ ahl al-madīna al-fāḍila* may be regarded as philosophical summae on theologically relevant topics (cf. Rudolph 2008 [\*219] and PIW 1 § 8.3.9), philosophers prior to Ibn Sīnā had always composed treatises on discrete subjects and abstruse commentaries on the canonical philosophical texts, all of which were matters for specialists that could not and did not claim endorsement or allegiance from society as a whole; Ibn Sīnā’s all-embracing scientific system did. As such, it potentially set itself up, and eventually *was* set up as history unfolded, as the opposite and contradictory world-view to that presented by Islamic doctrine.

The history that unfolded was what historians have called the ‘Sunni revival’ of the mid-5th/11th century in Baghdad and the Islamic heartlands, as a result of which a conservative religious ideology, based on literal adherence to Quranic tenets, was adopted and promoted by the rulers and the supporting organic intellectuals. Heterodoxy was equal to unbelief, and unbelief to apostasy – a capital crime – as argued by the jurist al-Ġazālī (d. 505/1111) who, acting as the mouthpiece of this conservative ideology in the service of the ‘Abbāsid caliph and the Seljuk overlords, equated Ibn Sīnā’s philosophical system to heterodoxy and certain of its tenets to apostasy, thus sanctioning the capital punishment for philosophers (Griffel 2017 [\*590], with references to his

earlier works; on al-Ġazālī cf. § 3 below, where other aspects of his thought are presented as well). This changed the nature of philosophical discourse in the eastern Islamic world. It was no longer an open-ended investigation of reality, with free expression and an exchange of ideas and words, but as certain subjects were censored and declared off-limits following the dictates of revelation, it could only operate within certain parameters; and most ominously, the free expression of scientific ideas was elevated to a legal issue, subject to sanctions.

At this point, the germ that gave rise to new developments within the new ideological climate was ironically Ibn Sīnā's own *Išārāt*, which set the parameters within which the now altered philosophical discourse continued. Although formally this work may be considered a summa of all philosophy like the rest of his summae, it is not. Ibn Sīnā says in his introduction that it contains the fundamental principles and essential elements (*uṣūl wa-ġumal*) of logic, physics, and metaphysics. And what it does contain of these sciences – what, in other words, he considers or presents as the core principles and elements of these sciences – are, logic apart (which is in any case the method to study the rest), subjects broadly of theological interest: the necessary existent and the devolution of the universe from it, the structure of the cosmos and the place of humans in it, and the rational human soul in its relation to the supernal world and its fate after death. None of the remaining subjects in metaphysics and physics (meteorology, or the parts of *On the Soul* other than the rational soul, or zoology and botany), and certainly none of the mathematical or practical sciences, is treated.

This led to the *Išārāt* being seen as Ibn Sīnā's statement on religious matters. Ibn Taymiyya famously – and from the critics' point of view, rightly – called it 'the copy [of the Quran] for the philosophers' (*muṣḥaf al-falāsifa*) (*Dar'* 1x 254, quoted in Michot 2018 [598: 120]). Ibn Qayyim al-Ġawziyya, his pupil, claimed that Naṣīr al-Dīn al-Ṭūsī harboured the desire to turn it into the 'Quran for the elite' (*Qur'ān al-ḥawāṣṣ*) (*Ijāzat al-lahfān* 11, 267, quoted in Mayer 2012 [\*580: 106]), apparently because he himself regarded the *Išārāt* in precisely this light.

Over time, this gave rise to a long stream of commentaries, but by the same token, it restricted the compass of the altered philosophical discourse of independent treatises to these broadly theological subjects with which it deals (cf. Wisnovsky 2013 [\*583: 193–198]). The commentaries explicated Ibn Sīnā's text in doctrinally neutral areas, but misinterpreted it in sensitive areas to match the commentators' theological stand. Faḥr al-Dīn al-Rāzī's (*Aṣarī*) commentary set the tone for the Sunnis, while Naṣīr al-Dīn al-Ṭūsī's did the same for the Twelver Shiites (Rapoport 2018 [\*231: 435–449]). The altered discourse of the independent treatises morphed into a new genre of theological writing that is best described as 'paraphilosophy', that is, theology simulating, or consciously

assuming philosophical discourse, insofar as it was different from the traditional Muslim theological works until the 6th/12th century (Gutas 2018 [\*596]). Muslim scholars were naturally conscious of the distinction between philosophy and this 'paraphilosophy'. The librarian of the Ottoman sultan Bāyezīd II listed the latter works under the rubric 'Islamic philosophy' (*ḥikma islāmīyya*), whereas he listed the works of Ibn Sīnā and earlier philosophers under the rubric 'philosophical philosophy' (*ḥikma falsafīyya*), manifestly meaning, as he explains, 'heterodox philosophy, philosophy not composed in harmony with the Islamic revelation' (Gutas 2019 [\*600]). Eventually, 'paraphilosophy' merged with theology (*kalām*), while philosophy as such, as it had been practised by Ibn Sīnā and the earlier philosophers in Islam, came to an end. Ibn Sīnā's philosophical system, defanged from its offending parts, continued to circulate as frozen doctrine, with possible variations that have yet to be studied. How precisely later intellectual history evolved will be the subject of the third volume in this series (PIW 3), which will be dedicated to the developments between the 7th/13th and the 11th/18th centuries. Ibn Sīnā himself was called, again accurately but with damning praise, 'the seal of the philosophers' (*ḥātam al-ḥukamā'*), meaning both the best and also the last of the philosophers (al-Qūnawī [d. 672/1274], quoted in Gutas 2018 [\*596]).

The 'transmogrification' of Ibn Sīnā's philosophy in the Islamic world was effected in yet another way, less subtle than the preceding. About a century and a half after his death, there began to develop a tradition that presented his teachings as having esoteric and exoteric aspects, the esoteric part claiming to represent his true, and mystical, philosophy. Although he never ceased to be regarded as the unchallenged representative of Peripatetic philosophy in Islam, this aspect tended to fade in the background (or, among more conservative scholars, it tended to be indulged), as the allegedly mystical side was seen to represent his true teachings. In support of this thesis a number of pseudographic works began to be attributed to him, and with the passage of time the 'mystical' persona of Ibn Sīnā became dominant in popular perception (Reisman 2010 [\*574]). Especially in Iran, where in later centuries (and also because of his Persian origins) he was elevated to a most revered status, he was considered – and is considered to this day – the master of mystical illumination and esoteric 'gnosis' (*irfān*) the origins of which allegedly go back to a pre-Islamic Persian spirituality. In this way, the classical philosophical and scientific tradition which Ibn Sīnā systematised, rationalised, and integrated into Islamic intellectual life is not recognised, and the vast majority of Muslim scholars to this day remain unaware of this accomplishment. As an example one need mention only the contemporary Moroccan philosopher Muḥammad al-Ġabirī, who, in his effort to introduce traditional rationalist thinking into modern Islamic discourse, presents Ibn Ruṣd as the true champion of

rationalism and pits him against an allegedly obscurantist Ibn Sīnā, the source and origin of the plight of modern Islamic intellectual life (cf. von Kügelgen 1994 [\*561: 275–279. 283–285]).

Western scholarship has been hardly less guilty in this regard. In the 19th century, European scholars took their cue from the traditional Muslim view of Ibn Sīnā as a mystic, and, aided by the European predisposition of their time to view ‘Orientals’ as mystical and irrational, concentrated on investigation of the ‘esoteric’ aspects of his philosophy. Most influential in this regard have been, in the 20th century, the studies by the French orientalist Henri Corbin. With the current resurgence of Islamic apologetic and anti-Western discourse, there are some in Western academia who, following Corbin’s lead, present the ‘mystical’ side of Ibn Sīnā as part of the age-old ‘oriental spirituality’ that is far ahead of the West in its apprehension of eternal truths. Ibn Sīnā has thus become a cult figure (Gutas 2000 [\*46], 2002 [\*263]; Rapoport 2018 [\*231: 47–61]).

This state of affairs has unconscionably delayed the serious study of Ibn Sīnā the philosopher and the translation and presentation of his works for an audience that is interested in philosophy. In recent decades new scholarship has begun to look critically at his works and to reclaim for him the position of eminence that is his due in the history of philosophy in general and of Aristotelianism in particular.

## 6 Secondary Sources

Reference Works. Dictionaries [\*1–\*15] – Overviews. Conference Proceedings. Collections [\*30–\*76] – Life and Works [\*90–\*187] – Metaphysics of the Rational Soul: Religion, Ethics, Politics [\*201–\*234] – Theory of the Soul and Epistemology [\*241–\*276] – Syllogistic Logic [\*280–\*356] – Rhetoric and Poetics [\*370–\*405] – Metaphysics [\*420–\*464] – Physics [\*470–\*515] – Mathematical and Biological Sciences; Meteorology [\*520–\*553] – Influence and Reception: (a) In the Islamic World [\*560–\*601]; (b) In Judaism [\*620–\*630]; (c) In Arab Christianity [\*640]; (d) In Syriac Christianity [\*650–\*654]; (e) In Latin Christianity [\*660–\*683]; (f) In Greek Christianity [\*690].

### *Reference Works. Dictionaries*

1 GAL = Carl Brockelmann: *Geschichte der arabischen Litteratur*, 2 vols; 3 suppl. vols. Leiden, 1937–1949 (2nd ed.). – Edition adapted to the supplement volumes.

2 Ergin, Osman. “İbni Sina Bibliyografyası.” In *Büyük Türk Filozof ve Tıp Üstadı İbni Sina* 1937 [\*27: last fascicle].

3 Goichon, Amélie-Marie. *Lexique de la langue philosophique d'Ibn Sīnā*. Paris, 1938.

- 4 Goichon, Amélie-Marie. *Vocabulaires comparés d'Aristote et d'Ibn Sînā*. Paris, 1939.
  - 5 Anawati, Georges C. *Mu'allafāt Ibn Sînā*. Cairo, 1950.
  - 6 al-Sayyid, Fu'ād. *Ibn Sînā. Mu'allafātuhi wa-šurūḥuhā l-maḥfūẓatu bi-Dār al-Kutub al-Miṣriyya*. Cairo, 1370/1950.
  - 7 Mahdawī [Mahdavi], Yaḥyā. *Fihrist-i nuṣṣahā-yi muṣannaḡāt-i Ibn-i Sînā*. Tehran, 1333 h.š./1954.
  - 8 Ergin, Osman. *İbni Sina Bibliografyası*. Istanbul, 1956. – Review by Rudolf Sellheim, *Oriens* 11 (1958): 231–39.
  - 9 EI<sup>r</sup> = *Encyclopædia Iranica*. Ed. by Ehsan Yarshater, vols 1 ff. London, 1982 ff.; some articles have been revised: <http://www.iranicaonline.org/articles/avicenna-index>; "Avicenna" (multiple authors, 1987) III 66–110; contents: (i) M. Mahdi: Introductory note; (ii) D. Gutas: Biography (revised in D. Gutas 2014 [\*71: no. 1]); (iii) Sh. B. Abed: Logic; (iv) M.E. Marmura: Metaphysics; (v) D. Gutas: Mysticism (revised in Gutas 2014 [\*71: no. XIII]); (vi) F. Rahman: Psychology; (vii) M. Mahdi: Practical sciences; (viii) G. Saliba: Mathematics and physical sciences; (ix) O. Wright: Music; (x) B. Musallam: Medicine and biology; (xi) M. Achena: Persian works; (xii) S. van Riet: The impact of Avicenna's philosophical works in the West; (xiii) U. Weisser: The influence of Avicenna on medical studies in the West.
  - 10 Janssens, Jules L. *An Annotated Bibliography on Ibn Sînā* (1970–1989). Leuven, 1991. – Id. *An Annotated Bibliography on Ibn Sînā. First supplement* (1990–1994). Louvain-la-Neuve, 1999. – Id. *An Annotated Bibliography on Ibn Sînā. Second supplement* (1995–2009). Tempe (AZ), 2017.
  - 11 d'Alverny, Marie-Thérèse. *Avicenna Latinus. Codices*, descripts Marie-Thérèse d'Alverny. Addenda collegerunt Simone Van Riet et Pierre Jordogne. Louvain-la-Neuve, Leiden, 1994.
  - 12 Ġihāmī, Ġirār (Gérard Jéhamy). *Mawsū'at muṣṭalahāt Ibn Sînā (al-Šayḥ al-Ra'īs)*. Beirut, 2004.
  - 13 EI<sup>2</sup> = *The Encyclopaedia of Islam: New edition*. Ed. by Clifford Edmund Bosworth et al., 11 vols, 6 suppl. vols. Leiden, 1960–2005.
  - 14 *Encyclopaedia of Islam*, THREE [EI Three]. Ed. by Marc Gaborieau et al., vols 1 ff. Leiden, 2007 ff.
  - 15 SEP = *Stanford Encyclopedia of Philosophy*. Ed. by Edward N. Zalta. Stanford, 1995 ff.: <https://plato.stanford.edu>.
- Overviews. Conference Proceedings. Collections*
- 30 Wickens, G.M., ed. *Avicenna. Scientist & Philosopher. A millenary symposium*. London, 1952.
  - 31 *Avicenna Commemoration Volume*. Kolkata, 1956.
  - 32 *Le livre du Millénaire d'Avicenne* (2–7 Ordibehesht 1333/22–27 April 1954), 4 vols. Tehran, 1956. – Repr. Tehran, 2005.
  - 33 Afnan, Soheil M. *Avicenna. His Life and Works*. London, 1958. – Repr. Westport, 1980.
  - 34 Corbin, Henry. *Avicenna and the Visionary Recital*, transl. by Willard R. Trask. London, 1960 [1961]. – Engl. transl. from the French. Tehran, 1954.

- 35 Anawati, Georges C. "Études Avicenniennes." *Revue Thomiste* 61 (1961): 109–135.
- 36 Lerner, Ralph and Muhsin Mahdi, eds. *Medieval Political Philosophy. A sourcebook*. New York, 1963.
- 37 Brentjes, Burchard and Sonja Brentjes. *Ibn Sina (Avicenna), der fürstliche Meister aus Buchara*. Leipzig, 1979.
- 38 Sagadeev, Artur Vladimirovich. *Ibn-Sina*. Moscow 1980, 1985 (2nd ed.).
- 39 Jolivet, Jean and Roshdi Rashed, eds. *Études sur Avicenne*. Paris, 1984.
- 40 Sezgin, Fuat, Mazen Amawi, Carl Ehrig-Eggert, and Eckhard Neubauer, eds. *Studies on Ibn Sīnā and His Medical Works*, 4 vols. Frankfurt a.M., 1995.
- 41 Stroumsa, Sarah, ed. *The Collected Works of Shlomo Pines III. Studies in the History of Arabic Philosophy*. Jerusalem, 1996.
- 42 de Libera, Alain, Abdelali Elamrani-Jamal and Alain Galonnier eds. *Langages et philosophie. Hommage à Jean Jolivet*. Paris, 1997.
- 43 Nasr, Seyyed Hossein and Mehdi Aminrazavi, eds. *An Anthology of Philosophy in Persia I*. New York, Oxford, 1999.
- 44 Sezgin, Fuat, Mazen Amawi, Carl Ehrig-Eggert, and Eckhard Neubauer, eds. *Abū'Alī ibn Sīnā (d. 428/1037). Texts and studies*, 5 vols. Frankfurt a.M., 1999.
- 45 Strohmaier, Gotthard. *Avicenna*. Munich, 1999. – Review by Rüdiger Arnzen, *International Journal of the Classical Tradition* 9 (2002–2003): 324–327.
- 46 Gutas, Dimitri. *Greek Philosophers in the Arabic Tradition*. Aldershot, 2000.
- 47 Morewedge, Parviz. *The Mystical Philosophy of Avicenna*. Binghamton (NY), 2001.
- 48 Wisnovsky, Robert, ed. *Aspects of Avicenna*. Princeton, 2001.
- 49 Janssens, Jules L. and Daniel De Smet, eds. *Avicenna and His Heritage*. Leuven, 2002.
- 50 Reisman, David C. and Ahmed H. al-Rahim, eds. *Before and After Avicenna. Proceedings of the first conference of the Avicenna study group*. Leiden, 2003.
- 51 McGinnis, Jon and David C. Reisman, eds. *Interpreting Avicenna. Science and Philosophy in Medieval Islam*. Leiden, 2004.
- 52 Marmura, Michael E. *Probing in Islamic Philosophy. Studies in the Philosophies of Ibn Sīnā, al-Ghazālī and Other Major Muslim Thinkers*. Binghamton (N.Y.), 2005.
- 53 Goodman, Lenn E. *Avicenna*. Ithaca, London, 2006 (2nd ed.).
- 54 Janssens, Jules L. *Ibn Sīnā and His Influence on the Arabic and Latin World*. Aldershot, 2006.
- 55 Adamson, Peter, ed. *Classical Arabic Philosophy. Sources and Reception*. London, Turin, 2007.
- 56 McGinnis, Jon and David C. Reisman. *Classical Arabic Philosophy. An Anthology of Sources*. Indianapolis, Cambridge, 2007.
- 57 Rahman, Shahid, Tony Street, and Hassan Tahiri, eds. *The Unity of Science in the Arabic Tradition*. Dordrecht, 2008.
- 58 Uluslararası İbn Sīnâ Sempozyumu (Bildiriler. 22–24 Mayıs 2008, İstanbul). *International Ibn Sina Symposium. Papers*, 2 vols. Istanbul, 2008.

- 59 Langermann, Y. Tzvi, ed. *Avicenna and His Legacy. A Golden Age of Science and Philosophy*. Turnhout, 2009.
- 60 Gutas, Dimitri. *İbn Sînâ'nın Mirası*. Ed. and Turk. transl. by M. Cüneyt Kaya. Istanbul, 2004, 2010. 2020 (3rd ed.).
- 61 Gutas, Dimitri. "The study of Avicenna. Status quaestionis atque agenda." *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010): 45–69. – Repr. in Gutas 2014 [\*71: no. XVII].
- 62 McGinnis, Jon. *Avicenna*. Oxford, 2010.
- 63 Germann, Nadja. "Avicenna and Afterwards", in J. Marenbon ed., *The Oxford Handbook of Medieval Philosophy*, Oxford University Press, Oxford 2012, 83–105.
- 64 Gutas, Dimitri. "Die Wiedergeburt der Philosophie und die Übersetzungen ins Arabische." In Rudolph 2012 [\*68: 55–91]. – Engl. transl. in Rudolph, Hansberger, Adamson 2017 [\*68: 95–142].
- 65 Hasse, Dag Nikolaus and Amos Bertolacci, eds. *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics*. Berlin, 2012.
- 66 Lizzini, Olga. *Avicenna*. Rome, 2012.
- 67 Opwis, Felicitas and David C. Reisman, eds. *Islamic Philosophy, Science, Culture, and Religion. Studies in honor of Dimitri Gutas*. Leiden, 2012.
- 68 *Philosophie in der islamischen Welt*. Vol. 1: 8.–10. Jahrhundert. Ed. by Ulrich Rudolph in collaboration with Renate Würsch. Basel, 2012. – Engl. transl. *Philosophy in the Islamic World* 1. 8th–10th Centuries. Ed. by Ulrich Rudolph, Rotraud Hansberger and Peter Adamson. Leiden, 2017.
- 69 Adamson, Peter, ed. *Interpreting Avicenna*. Cambridge, 2013.
- 70 Gutas, Dimitri. *Avicenna and the Aristotelian Tradition. Introduction to Reading Avicenna's Philosophical Works. Second, revised and enlarged edition, including an inventory of Avicenna's authentic works*. Leiden, 2014. – Amended and expanded version of the first edition of 1988.
- 71 Gutas, Dimitri. *Orientations of Avicenna's Philosophy. Essays on his Life, Method, Heritage*. Farnham, 2014.
- 72 Alwishah, A. and J. Hayes, eds. *Aristotle and the Arabic Tradition*. Cambridge, 2015.
- 73 Gutas, Dimitri. "Ibn Sina [Avicenna]". In *SEP* [\*15], 2016: <https://plato.stanford.edu/archives/fall2016/entries/ibn-sina/>.
- 74 Hasse, Dag Nikolaus and Amos Bertolacci, eds. *The Arabic, Hebrew and Latin Reception of Avicenna's Physics and Cosmology*. Berlin, 2018.
- 75 Al Ghouz, Abdelkader, ed. *Islamic Philosophy from the 12th till the 14th Century*. Bonn, 2018.
- 76 Sebti, Meryem and Daniel de Smet, eds. "The reception of Avicenna's theory of providence in Post-Avicennism." *Intellectual History of the Islamicate World* 7 (2019): 1–121.
- Life and Works*
- 90 Mehren, Michael August Ferdinand. *Traité mystiques d'Abou Alî al-Hosain b. Abdallah b. Sînâ ou d'Avicenne*, 4 fascicles.

Leiden, 1889–1899. – Repr. in *Islamic Philosophy* 35. Frankfurt a.M., 1999.

91 Nallino, Carlo Alfonso. “Filosofia «Orientale» od «Illuminativa» d'Avicenna?” *Rivista degli Studi Orientali* 10 (1923–25): 433–467. – Repr. in Sezgin et al. 1999 [\*44: II 1–35].

92 Ruska, Julius. “Die Alchemie des Avicenna.” *Isis* 21 (1934): 14–51.

93 Gauthier, Léon. *Ḥayy ben Yaqdhān. Roman philosophique d'Ibn Thofail*. Beirut, 1936 (2nd ed.).

94 Fackenheim, Emil L. “A treatise on love by Ibn Sina.” *Mediaeval Studies* 7 (1945): 208–228.

95 Anawati, Georges C. “La tradition manuscrite orientale de l'œuvre d'Avicenne.” *Revue Thomiste* 51 (1951): 407–440. – Repr. in G.C. Anawati, *Études de philosophie musulmane*. Paris, 1974, 229–262.

96 Goichon, Amélie-Marie. *Ibn Sīnā (Avicenne). Livre des directives et remarques*. Beirut, Paris, 1951. – Repr. in *Islamic Philosophy* 37. Frankfurt a.M., 1999.

97 Pines, Shlomo. “Ibn Sīnā et l'auteur de la Risālat al-Fuṣūṣ fī l-ḥikma: Quelques données du problème.” *Revue des Études Islamiques* 19 (1951): 121–24. – Repr. in Stroumsa 1996 [\*41: 297–300].

98 Vajda, Georges. “Les notes d'Avicenne sur la «Théologie d'Aristote».” *Revue Thomiste* 51 (1951): 346–406. – Repr. in Sezgin et al. 1999 [\*44: IV 104–164].

99 al-Aḥwānī, Aḥmad Fu'ād. *Nukat fī aḥwāl al-Ṣayḥ al-Ra'īs Ibn Sīnā (Dikrā Ibn Sīnā III)*. Cairo, 1952.

100 Nafīsī, Sa'īd. *Sargudašt-i Ibn-i Sīnā*. Tehran, 1331 h.š./1952.

101 Pines, Shlomo. “La «Philosophie orientale» d'Avicenne et sa polémique contre les Bagdadiens.” *Archives d'Histoire Doctrinale et Littéraire du Moyen Âge* 27 (1952): 5–37. – Repr. in Stroumsa 1996 [\*41: 301–333]. – Repr. in Sezgin et al. 1999 [\*44: III 255–287].

102 Rahman, Fazlur. *Avicenna's Psychology. An English translation of Kitāb al-Najāt, Book 11, Chapter vi*. London, 1952.

103 Nafīsī, Sa'īd. *Zindagī wa kār wa andīša wa rūzqār-i Pūr-i Sīnā*. Tehran, 1333 h.š./1954. – Repr. as *Zindagī, ātār wa afkār-i ḥakīm-i Irānī-yi Ibn-i Sīnā*. Tehran, 1388 h.š./2009.

104 Achena, Mohammad and Henri Massé. *Avicenne. Le Livre de science (Dānesh-nāmeḥ)*. Paris 1955–1958, 1986 (2nd revised ed.). – Repr. of the 1st ed. in *Islamic Philosophy* 44. Frankfurt a.M., 1999.

105 Anawati, Georges C. “Le manuscrit Nour Osmaniyye 4894.” *Mélanges de l'Institut Dominicaine d'Études Orientales* 3 (1956): 381–386.

106 Minorsky, Vladimir. “Avicenne l'homme.” In *Le livre du millénaire d'Avicenne 1956* [\*32: IV 3–12].

107 Anawati, Georges C. “La Ḥikma 'arūḍiyya d'Ibn Sīnā.” In *Proceedings of the Twenty-second Congress of Orientalists*, vol. 2. Ed. by Zeki Velidi Togan. Leiden, 1957, 171–176.

108 Goichon, Amélie-Marie. *Le Récit de Ḥayy Ibn Yaqzān commenté par des textes d'Avicenne*. Paris, 1959.



- 109 Goichon, Amélie-Marie. *Avicenne. Livre des definitions*. Cairo, 1963.
- 110 Lazard, Gilbert. *La langue des plus anciens monuments de la prose persane*. Paris, 1963.
- 111 Soreth, Marion. "Text- und quellenkritische Bemerkungen zu Ibn Sīnā's *Risāla fī l-'Iṣq*." *Oriens* 17 (1964): 118–131.
- 112 Marmura, Michael E. *Ibn Sīnā. Fī l-thbāt al-nubuwwāt*. Beirut, 1968.
- 113 Lucchetta, Francesca. *Avicenna. Epistola sulla vita futura*. Padua, 1969.
- 114 Pines, Shlomo. "An Arabic summary of a lost work of John Philoponus." *Israel Oriental Studies* 2 (1972): 320–352 [Appendix, "Notes on an unpublished treatise of Avicenna," 347–352, on Ibn Sīnā's *Ḥukūma* (GP 3)]. – Repr. in *The Collected Works of Shlomo Pines. II: Studies in Arabic versions of Greek texts and in Mediaeval science*. Jerusalem, 1986, 294–326.
- 115 Shehaby, Nabil. *The Propositional Logic of Avicenna*. Dordrecht, 1973. – Review by F. Zimmermann, *Der Islam* 53 (1976): 307.
- 116 Dahiyat, Ismail M. *Avicenna's Commentary on the Poetics of Aristotle. A critical study with an annotated translation of the text*. Leiden, 1974.
- 117 Gohlman, William E. *The Life of Ibn Sina*. Albany (N.Y.), 1974.
- 118 Lüling, Günther. "Ein anderer Avicenna. Kritik seiner Autobiographie und ihrer bisherigen Behandlung." *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, Suppl. 111.1 (1977): 496–513.
- 119 Leaman, Oliver. "Does the interpretation of Islamic philosophy rest on a mistake?" *International Journal of Middle Eastern Studies* 12 (1980): 525–38.
- 120 Meyer, Egbert. "Philosophischer Gottesglaube. Ibn Sīnās Thronschrift." *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 130 (1980): 226–278.
- 121 Michot, Jean (Yahya). "Les sciences physiques et métaphysiques selon la *Risālah fī aqsām al-'ulūm* d'Avicenne. Essai de traduction critique." *Bulletin de Philosophie Médiévale* 22 (1980): 62–71.
- 122 van Riet, Simone. "Données biographiques pour l'histoire du *Shifā* d'Avicenne." *Bulletin de la Classe des Lettres et des Sciences Morales et Politiques, Académie Royale de Belgique* 66 (1980): 314–329.
- 123 Masumi, Abu Mahfuzul Karim. "Fresh light on Ibn Sina's <Sarguzasht>." *Indo-Iranica* 34 (1981): 20–40.
- 124 Michot, Jean (Yahya). "Tables de correspondance des <Ta'liqāt> d'al-Fārābī, des <Ta'liqāt> d'Avicenne et du <Liber Aphorismorum> d'Andrea Alpago." *Mélanges de l'Institut Dominicain d'Études Orientales* 15 (1982): 231–250.
- 125 Gutas, Dimitri. "Paul the Persian on the classification of the parts of Aristotle's philosophy. A milestone between Alexandria and Bagdād." *Der Islam* 60 (1983): 231–67. – Repr. in Gutas 2000 [\*46: no. IX].
- 126 Janssens, Jules L. "Le Dānesh-Nāmeḥ d' Ibn Sīnā. Un texte à revoir?" *Bulletin de Philosophie Médiévale* 28 (1986): 163–177. – Repr. in Janssens 2006 [\*54: no. VII].
- 127 Gutas, Dimitri. "Philoponos and Avicenna on the separability of the

intellect. A case of Orthodox Christian – Muslim agreement.” *Greek Orthodox Theological Review* 31 (1986): 121–29. – Repr. in Gutas 2000 [\*46: no. XI].

128 Achena, Mohammad. “Avicenna. Persian Works.” In *Elr*, 1987 [\*9: xi].

129 Gutas, Dimitri. “Notes and texts from Cairo MSS 11. Texts from Avicenna’s library in a copy by ‘Abd-ar-Razzāq al-Šignāhī.” *Manuscripts of the Middle East* 2 (1987): 8–17. – Revised version in Gutas 2014 [\*71: no. III].

130 Gutas, Dimitri. “Avicenna ii. Biography.” In *Elr* III (1987), 67–70. – Revised version in Gutas 2014 [\*71: no. I].

131 Gutas, Dimitri. “Avicenna’s maḡhab. With an appendix on the question of his date of birth.” *Quaderni di Studi Arabi* 5–6 (1987–1988): 323–336. – Repr. in Gutas 2014 [\*71: no. II].

132 ‘Abdul Ḥaq, Muḥammad. “Ibn Sīnā’s interpretation of the Qurān.” *The Islamic Quarterly* 32 (1988): 46–56.

133 Šawqī, Ġalāl. “Manẓūmāt al-Šaiḥ al-Raʿīs Ibn Sīnā fi l-ṭibb wa-ḥifẓ al-šihḥa.” In Ġ. Šauqī 1990 [\*38: 585–632].

134 Michot, Jean (Yahya). “Un important recueil avicennien du VII<sup>e</sup>/XIII<sup>e</sup> s. La majmū’a Hüseyin Çelebi 1194 de Brousse.” *Bulletin de Philosophie Médiévale* 33 (1991): 121–129.

135 Strohmaier, Gotthard. “Avicenna und al-Bīrūnī im Dialog über aristotelische Naturphilosophie.” In *Antike Naturwissenschaft und ihre Rezeption*. Ed. by K. Döring and G. Wöhrle. Bamberg, 1992 115–130. – Repr. in Strohmaier, *Von Demokrit bis Dante*. Hildesheim, 1996, 342–357.

136 Janssens, Jules L. “Le maʿārij al-quḍs fi madārj maʿrifat al-naḥs. Un élément-clé pour le dossier Ghazzālī-Ibn Sīnā.”

*Archives d'Histoire Doctrinale et Littéraire du Moyen Âge* 60 (1993): 27–55. – Repr. in Janssens 2006 [\*54: no. VIII].

137 Gutas, Dimitri. “Pre-Plotinian philosophy in Arabic (other than Platonism and Aristotelianism). A review of the sources.” In *Aufstieg und Niedergang der Römischen Welt*, Teil 11, Band 36.7. Ed. by Wolfgang Haase. Berlin, New York, 1994, 4939–4973. – Repr. in Gutas 2000 [\*46: no. I].

138 Lizzini, Olga. “La Metafisica del Libro della Guida. Presentazione e traduzione della terza parte (bāb) del Kitāb al-Hidāya di Avicenna.” *Le Muséon* 108 (1995): 367–424.

139 Hernández, Miguel Cruz. *La vida de Avicenna como introducción a su pensamiento*. Salamanca, 1997.

140 Hasse, Dag Nikolaus. “King Avicenna. The iconographic consequences of a mistranslation.” *Journal of the Warburg and Courtauld Institutes* 60 (1997): 230–243.

141 Janssens, Jules L. “Les Taʿlīqāt d’Ibn Sīnā. Essai de structuration et de datation.” In A. de Libera et al. 1997 [\*42: 109–122]. – Repr. in Janssens 2006 [\*44: no. VI].

142 Michot, Jean (Yahya). “La réponse d’Avicenne à Bahmanyār et al-Kirmānī. Présentation, traduction critique et lexique arabe-français de la Mubāḥṭha III.” *Le Muséon* 110 (1997): 143–221.

143 Gutas, Dimitri. “Avicenna’s Eastern («Oriental») Philosophy. Nature,

- contents, transmission." *Arabic Sciences and Philosophy* 10 (2000): 159–180. – Repr. in Gutas 2014 [\*71: no. v].
- 144 Michot, Jean (Yahya). *Ibn Sînâ. Lettre au vizir Abû Sa'd. Editio princeps d'après le manuscrit de Bursa, traduction de l'arabe, introduction, notes et lexique.* Beirut, Paris, 2000.
- 145 Endress, Gerhard. "Philosophische Ein-Band-Bibliotheken aus Isfahan." *Oriens* 36 (2001): 10–58.
- 146 Lucchetta, Francesca. "Le dieci questioni di Avicenna." *Quaderni di Studi Arabi* 19 (2001): 101–134.
- 147 David C. Reisman: Avicenna at the ARCE, in Wisnovsky 2001 [\*48: 131–182].
- 148 Tamer, Georges. *Islamische Philosophie und die Krise der Moderne. Das Verhältnis von Leo Strauss zu Alfarabi, Avicenna und Averroes.* Leiden, 2001.
- 149 Gutas, Dimitri. "The study of Arabic philosophy in the twentieth century. An essay on the historiography of Arabic philosophy." *British Journal of Middle Eastern Studies* 29 (2002): 5–25.
- 150 Reisman, David C. *The Making of the Avicennan Tradition. The Transmission, Contents, and Structure of Ibn Sînâ's al-Mubâḥaṭât (The Discussions).* Leiden, 2002.
- 151 Strohmaier, Gotthard. "Avicenne et le phénomène des écrits pseudépigraphiques." In Janssens, De Smet 2002 [\*49: 37–46].
- 152 Berjak, Rafiq and Muzaffar Iqbal. "Ibn Sînâ – al-Bîrûnî correspondence." *Islam & Science* 1 (2003): 91–98. 253–260; 2 (2004) 57–62. 181–187; 3 (2005) 57–62. 166–170.
- 153 Reisman, David C. "Stealing Avicenna's books. A study of the historical sources for the life and times of Avicenna." In Reisman and al-Rahim 2003 [\*50: 91–126].
- 154 Gutas, Dimitri. "Avicenna's marginal glosses on De anima and the Greek commentatorial tradition." In *Philosophy, Science & Exegesis in Greek, Arabic & Latin Commentaries. Essays in honour of Richard Sorabji*, vol. 2. Ed. by Peter Adamson, H. Baltussen and M.W.F. Stone. London, 2004, 77–88.
- 155 Janssens, Jules L. "Avicenna and the Qur'an. A Survey of his Qur'anic commentaries." *Mélanges de l'Institut Dominicain d'Études Orientales* 25–26 (2004): 177–92.
- 156 Ragep, F. Jamil and Sally P. Ragep. "The astronomical and cosmological works of Ibn Sînâ. Some preliminary remarks." In *Sciences, techniques et instruments dans le monde iranien (x<sup>e</sup>–xix<sup>e</sup> siècle)*. Ed. by N. Pourjavady, Ž. Vesel. Tehran, 2004, 3–15.
- 157 Reisman, David C. "The Pseudo-Avicennan corpus 1. Methodological considerations." In McGinnis, Reisman 2004 [\*51: 3–21].
- 158 Sebtî, Meryem. "Une épître inédite d'Avicenne, Ta'alluq al-nafs bi-l-badan (De l'attachement de l'âme et du corps). Édition critique, traduction et annotation." *Documenti e Studi sulla Tradizione Filosofica Medievale* 15 (2004): 141–200.
- 159 Michot, Jean (Yahya). "Al-Nukat wa-l-fawā'id. An important Summa of Avicennian falsafa." In Adamson 2007 [\*55: 90–124].
- 160 Michot, Jean (Yahya). "Le riz trop cuit du Kirmânî. Présentation, édition, traduction et lexique de l'Épître d'Avicenne contestant l'accusation

- d'avoir pastiché le Coran." In *Mélanges offerts à Hossam Elkhadem par ses amis et élèves*. Ed. by Frank Daelemans, Jean-Marie Duvoisquel, Robert Halleux and David Juste. Brussels, 2007, 81–129.
- 161 Bertolacci, Amos. "On the manuscripts of the *Ilāhiyyāt* of Avicenna's *Kitāb al-Šifā'*." In *Islamic Thought in the Middle Ages. Studies in texts, transmission and translation, in honour of Hans Daiber*. Ed. by Anna Akasoy and Wim Raven. Leiden, 2008, 59–75.
- 162 Eichner, Heidrun. "Ibn Sīnā's Epistle on Prayer (*Risāla fī al-salat*).” In *Uluslararası İbn Sînâ Sempozyumu 2008* [\*58: 11 171–182].
- 163 McGinnis, Jon. *Avicenna. The Physics of the Healing*. Provo (Utah), 2009.
- 164 Wisnovsky, Robert. "Jowzjāni." In *Elr* [9: xv, fasc. 1 (2009)] 82–84.
- 165 Szpiech, Ryan "In search of Ibn Sīnā's 'Oriental Philosophy' in Medieval Castile." *Arabic Sciences and Philosophy* 20 (2010): 185–207.
- 166 Ahmed, Asad Q. *Avicenna's Deliverance. Logic*. Karachi, 2011.
- 167 Bertolacci, Amos. "How many recensions of Avicenna's *Kitāb al-Šifā'*?" *Oriens* 40 (2012): 275–303.
- 168 Gutas, Dimitri. "Platon – Tradition arabe." In *Dictionnaire des Philosophes Antiques*. Ed. by Richard Goulet. Paris, 2012, 845–863.
- 169 Janssens, Jules L. "Ibn Sīnā's *Ta'liqāt*. The presence of paraphrases of and super-commentaries on the *Ilāhiyyāt* of the *Šifā'*." In Opwis, Reisman 2012 [\*67: 201–22].
- 170 Kaya, M. Cüneyt. "Şukūk 'alā 'Uyūn. 'Uyūnū'l-mesā'il'in Fārābī'ye Âidiyeti Üzerine." *İslâm Araştırmaları Dergisi* 27 (2012): 29–67.
- 171 Sebtı, Meryem. "La question de l'authenticité de l'Épître des états de l'âme (*Risāla fī aḥwāl al-nafs*) d'Avicenne." *Studia Graeco-Arabica* 2 (2012): 331–354.
- 172 Wisnovsky, Robert. "Indirect evidence for establishing the text of the *Shifā'*." *Oriens* 40 (2012): 257–273.
- 173 Witkam, Jan J. "Avicenna's copyists at work. Codicological features of the two Leiden manuscripts of the *Kitāb al-Shifā'*." *Oriens* 40 (2012): 223–255.
- 174 Lameer, Joep. "Avicenna's concupiscence." *Arabic Sciences and Philosophy* 23 (2013): 277–289.
- 175 Reisman, David C. "The life and times of Avicenna. Patronage and learning in Medieval Islam." In Adamson 2013 [\*68: 7–27].
- 176 Geoffroy, Marc, Jules Janssens, and Meryem Sebtı, eds.: *Commentaire sur le Livre Lambda de la Métaphysique d'Aristote (Chapitres 6–10) par Ibn Sīnā (Avicenne)*. Paris, 2014.
- 177 Gutas, Dimitri. "The author as pioneer[ing genius]. Graeco-Arabic philosophical autobiographies and the paradigmatic Ego." In *Concepts of Authorship in Pre-modern Arabic Texts*. Ed. by Lale Behzadi and Jaakko Hämeen-Anttila. Bamberg, 2015, 47–62.
- 178 Kaya, M. Cüneyt. "A new source for al-Âmirî studies. *Al-Majālis al-sab' bayna al-Shaykh wa al-Âmirî*." *Nazariyat. Journal for the History of Islamic Philosophy and Sciences* 1/2 (2015): 1–34.
- 179 Janssens, Jules L. "Abû al-Barakât al-Baghdādî and his use of Ibn Sīnā's *al-Hikma al-arûdiyya* (or another work

closely related to it) in the logical part of his Kitāb al-Mu‘tabar.” *Nazariyat* 3 (2016): 1–22.

180 Madelung, Wilferd and Toby Mayer. *Avicenna's Allegory on the Soul. An Ismaili Interpretation. An Arabic edition and English translation of 'Alī b. Muḥammad b. al-Walīd's al-Risāla al-mufīda*. Arabic edition by Wilferd Madelung; translated and introduced by Toby Mayer. London, 2016.

181 Moseley, Geoffrey. *Plato Arabus. On the Arabic Transmission of Plato's Dialogues. Texts and studies*. (PhD Diss., Yale University, New Haven, 2017).

182 Bertolacci, Amos. “Avicenna's Kitāb al-Šifā’ (Book of the Cure/Healing). The manuscripts preserved in Turkey and their significance.” *Mélanges de l'Université Saint-Joseph* 67 (2017–2018): 265–304.

183 Lizzini, Olga L. and Jean-Baptiste Brenet. *Avicenne* (?). *Épître sur les prophéties. Texte arabe et introduction par O.L. Lizzini, traduction et notes par J.-B. Brenet*. Paris, 2018.

184 Biesterfeldt, Hans Hinrich. “Eine arabische Klassifikation der Wissenschaften aus dem 4./5. Jahrhundert H.” *Studia Graeco-Arabica* 10 (2020): 261–270.

185 Biesterfeldt, Hans Hinrich and M. Cüneyt Kaya. “An Aristotelian classification of the sciences – by Avicenna?” *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften* 22 (2020): 1–21.

186 Kaya, M. Cüneyt. “İbn Sînâ'nın Kitābu aḫsāmī'l hikme ve tafsīlilhāsi. Tahkik ve tercüme.” *Tahkik İslami İlimler Araştırma ve Neşir Dergisi* 3/1 (Haziran/ Juni 2020): 1–40.

187 Sebtı, Meryem. “L'authenticité de la Risāla fī Ithbāt al-nubuwwāt.” In *Raison et quête de la sagesse. Hommage à Christian Jambet*. Ed. by Mohammad Ali Amir-Moezzi. Turnhout, 2020, 445–506.

### *Metaphysics of the Rational Soul: Religion, Ethics, Politics*

201 Gardet, Louis. *La pensée religieuse d'Avicenne (Ibn Sina)*. Paris, 1951.

202 Rahman, Fazlur. *Prophecy in Islam*. London, 1958. – Repr. Chicago, 2011.

203 Wickens, G.M. *The Nasirean Ethics by Naṣīr ad-Dīn Ṭūsī*. London, 1964.

204 Hourani, George F. “Ibn Sīnā's ‘Essay on the Secret of Destiny.’” *Bulletin of the School of Oriental and African Studies* 29 (1966): 25–48.

205 Rundgren, Frithiof. “Avicenna on love. Studies in the ‘Risāla fī māhīyat al-‘iṣq’ I.” *Orientalia Suecana* 27–28 (1978–1979): 42–62.

206 Michot, Jean (Yahya). “Le commentaire avicennien du verset ‘Puis Il se tourna vers le ciel ...’.” Édition, traduction, notes.” *Mélanges de l'Institut Dominicain d'Études Orientales* 14 (1980): 317–328.

207 Michot, Jean (Yahya). “Prophétie et divination selon Avicenne. Présentation, essai de traduction critique et index de l'«Épître de l'âme de la sphère».” *Revue Philosophique de Louvain* 83 (1985): 507–535.

208 Bell, Joseph Norment. “Avicenna's Treatise on love and the nonphilosophical Muslim tradition.” *Der Islam* 63 (1986): 73–90.

209 Michot, Jean (Yahya). *La destinée de l'homme selon Avicenne. Le retour à*

*Dieu (ma'ād) et l'imagination.* Leuven, 1986.

210 Sabri, Tahani. "Traité d'Avicenne sur le destin (al-qadar). Traduction et commentaire." *Revue des Études Islamiques* 55–57 (1987–1989 [1992]): 181–204.

211 Heath, Peter. "Disorientation and reorientation in Ibn Sina's Epistle of the bird. A reading." In *Intellectual Studies on Islam. Essays written in honor of Martin B. Dickson*. Salt Lake City, 1990, 163–183.

212 Karlığa, Bekir. "Mustafa Behçet Efendi ve Ibn Sînâ'nın Yeni Bir Ahlâk Risalesi." *Tip Tarihi Araştırmaları* 6 (1997): 121–142.

213 Druart, Thérèse-Anne. "The human soul's individuation and its survival after the body's death. Avicenna on the causal relation between body and soul." *Arabic Sciences and Philosophy* 10 (2000): 259–273.

214 Karlığa, Bekir. "Un nouveau traité d'éthique d'Ibn Sînâ inconnu jusqu'à nos jours." In Janssens, D. De Smet 2002 [\*49: 21–35].

215 Anwar, Etin. "Ibn Sînâ's philosophical theology of love. A study of the *Risālah fī al-'Ishq*." *Islamic Studies* 42 (2003): 331–45.

216 Jaffer, Tariq. "Bodies, souls and resurrection in Avicenna's *ar-Risāla al-Aḍḥawīya fī amr al-ma'ād*." In Reisman, al-Rahim 2003 [\*50: 163–174].

217 al-Akiti, Muhammad Afifi. "The three properties of prophethood in certain works of Avicenna and al-Ġazālī." In McGinnis, Reisman 2004 [\*51: 189–212].

218 Marmura, Michael E. "Some questions regarding Avicenna's theory of the temporal origination of the human rational soul." *Arabic Sciences and Philosophy* 18 (2008): 121–138.

219 Rudolph, Ulrich. "Reflections on al-Fārābī's *Mabādī' ārā' ahl al-madīna al-fāḍila*." In *In the Age of al-Fārābī. Arabic Philosophy in the Fourth/Tenth Century*. Ed. by Peter Adamson. London, 2008, 1–14.

220 De Smet, Daniel and Meryem Sebtī. "Avicenna's philosophical approach to the Qur'ān in the light of his *Tafsīr Sūrat al-Ikhlāṣ*." *Journal of Qur'anic Studies* 11 (2009): 134–48.

221 Lizzini, Olga. "Vie active, vie contemplative et philosophie chez Avicenne." In *Vie active et vie contemplative au Moyen Âge et au seuil de la Renaissance*. Ed. by Christian Trottman. Rome, 2009, 207–239.

222 Gutas, Dimitri. "Avicenna. The metaphysics of the rational soul." *The Muslim World* 102 (2012): 417–425. – Repr. in Gutas 2014 [\*71: no. IX].

223 Janssens, Jules L. "Al-Birr wa-l-ithm, Piety and Sin. Possible Farabian influences on the young Ibn Sînâ." *Ishraq. Islamic Philosophy Yearbook* 3 (2012): 412–22.

224 Kaya, M. Cüneyt. "Prophetic legislation. Avicenna's view of practical philosophy revisited." In *Philosophy and the Abrahamic Religions. Scriptural Hermeneutics and Epistemology*. Ed. by Torrance Kirby, Rahim Acar, and Bilal Baş. Newcastle upon Tyne, 2013, 205–223.

- 225 Swain, Simon. *Economy, Family, and Society from Rome to Islam*. Cambridge, 2013.
- 226 Kaya, M. Cüneyt. "In the shadow of 'Prophetic legislation'. The venture of practical philosophy after Avicenna." *Arabic Sciences and Philosophy* 24 (2014): 269–296.
- 227 Heath, Peter. "Ibn Sīnā's Qur'anic hermeneutics." In *The Spirit and the Letter. Approaches to the Esoteric Interpretation of the Qur'an*. Ed. by Annabel Keeler and Sajjad Rizvi. Oxford, 2016, 217–239.
- 228 Lizzini, Olga. "Desiderio di sapere, piacere dell'intelletto ed elitarismo. Intorno all'escatologia di Avicenna." *Quaderni di Studi Arabi* 11 (2016): 75–92.
- 229 Mousavian, Seyed N. and Seyed Hasan S. Mostafavi. "Avicenna on the Origination of the Human Soul." *Oxford Studies in Medieval Philosophy*, 5, (2017): 41–86.
- 230 Marjani, Issam. "Avicenne, commentaire de la Sourate al-A'lā. Traduction française du texte établi à l'aide d'un «nouveau» témoin et relevé des emprunts de Faḥr al-Dīn al-Rāzī dans son exégèse de la sourate." *Studia Graeco-Arabica* 8 (2018): 205–232.
- 231 Rapoport, Michael A. *The Life and Afterlife of the Rational Soul. Chapters VIII–X of Ibn Sīnā's Pointers and Reminders and Their Commentaries*. (PhD Diss., Yale University, New Haven, 2018).
- 232 Dubé, Jonathan. "Ḥayy ibn Yaqzān's parable of the two generous men in Avicenna's Decree and Determination (R. fi l-Qaḍā' wa-l-qadar)." In Sebtī, De Smet 2019 [\*76: 35–60].
- 233 Bertolacci, Amos. "The metaphysical proof of prophecy in Avicenna." In *Prophecy and Prophets in the Middle Ages*. Ed. by A. Palazzo, A. Rodolfi. Florence, 2020, 39–75.
- 234 Sebtī, Meryem. *Avicenne: Prophétie et gouvernement du monde*, Editions du Cerf, 2021.
- Theory of the Soul and Epistemology*
- 241 al-Ahwānī (El Ahwany), Aḥmad Fu'ād. "La théorie de la connaissance et la psychologie d'Avicenne." *La Revue du Caire* 27, No. 141 (June 1951): 23–43.
- 242 Gätje, Helmut. "Avicenna als Seelenarzt." In *Avicenna Commemoration Volume* 1956 [\*31: 225–228].
- 243 Gätje, Helmut. "Philosophische Traumlehren im Islam." *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 109 (1959): 258–285.
- 244 Gätje, Helmut. *Studien zur Überlieferung der aristotelischen Psychologie im Islam*. Heidelberg, 1971.
- 245 Strohmaier, Gotthard. "Avicenna's Lehre von den «inneren Sinnen» und ihre Voraussetzungen bei Galen." In *Le opere psicologiche di Galeno*. Ed. by P. Manuli, M. Vegetti. Naples, 1988, 231–242. – Repr. in G. Strohmaier, *Von Demokrit bis Dante*. Hildesheim, 1996, 330–341.
- 246 Davidson, Herbert Alan. *Alfarabi, Avicenna, and Averroes on Intellect. Their Cosmologies, Theories of the Active Intellect, and Theories of Human Intellect*. New York, 1992.

- 247 Black, Deborah L. "Estimation (wahm) in Avicenna. The logical and psychological dimensions." *Dialogue* 32 (1993): 219–258.
- 248 Black, Deborah L. "Avicenna and the ontological and epistemic status of fictional beings." *Documenti e Studi sulla Tradizione Filosofica Medievale* 8 (1997): 425–453.
- 249 Gutas, Dimitri. "Avicenna. De anima (v 6). Über die Seele, über Intuition and Prophetie." In *Interpretationen. Hauptwerke der Philosophie. Mittelalter*. Ed. by Kurt Flasch. Stuttgart, 1998, 90–107.
- 250 Hasse, Dag Nikolaus. "Das Lehrstück von den vier Intellekten in der Scholastik. Von den arabischen Quellen bis zu Albertus Magnus." *Recherches de Théologie et Philosophie Médiévales* 66 (1999): 21–77.
- 251 Hasse, Dag Nikolaus. *Avicenna's De anima in the Latin West*. London, Turin, 2000.
- 252 Sebti, Meryem. *Avicenne. L'âme humaine*. Paris, 2000.
- 253 Gutas, Dimitri. "Intuition and thinking. The evolving structure of Avicenna's epistemology." *Princeton Papers. Interdisciplinary Journal of Middle Eastern Studies* 9 (2001): 1–38. – Repr. in Wisnovsky 2001 [\*48: 1–38].
- 254 Adamson, Peter. "Correcting Plotinus. Soul's relationship to body in Avicenna's Commentary on the Theology of Aristotle." In *Philosophy, Science & Exegesis in Greek, Arabic & Latin Commentaries. Essays in honour of Richard Sorabji*, vol. 2. Ed. by Peter Adamson, H. Baltussen, and M.W.F. Stone. London, 2004, 59–75.
- 255 Adamson, Peter. "Non-Discursive thought in Avicenna's Commentary on the Theology of Aristotle." In McGinnis, Reisman 2004 [\*51: 87–111].
- 256 Hall, Robert E. "Intellect, soul and body in Ibn Sīnā. Systematic synthesis and development of the Aristotelian, Neoplatonic and Galenic Theories." In McGinnis, Reisman 2004 [\*51: 62–86].
- 257 Gutas, Dimitri. "Intellect without limits. The absence of mysticism in Avicenna." In *Intellect et imagination dans la Philosophie Médiévale (Actes du XI<sup>e</sup> Congrès International de Philosophie Médiévale de la S.I.E.P.M., Porto, du 26 au 31 août 2002)*. Ed. by M. C. Pacheco and J.F. Meirinhos. Turnhout, 2006, 351–372.
- 258 Gutas, Dimitri. "Imagination and transcendental knowledge in Avicenna." In *Arabic Theology, Arabic Philosophy. From the Many to the One. Essays in celebration of Richard M. Frank*. Ed. by James E. Montgomery. Leuven, 2006, 337–354.
- 259 Black, Deborah L. "Avicenna on self-awareness and knowing that one knows." In Rahman, Street, Tahiri 2008 [\*57: 63–87].
- 260 D'Ancona, Cristina. "Degrees of abstraction in Avicenna. How to combine Aristotle's De anima and the Enneads." In *Theories of Perception in Medieval and Early Modern Philosophy*. Ed. by S. Knuttila and P. Kärkkäinen, Berlin etc., 2008, 47–71.
- 261 McGinnis, Jon. "Avicenna's naturalized epistemology and scientific



- method." In Rahman, Street, Tahiri 2008 [\*57: 129–151].
- 262 Mühlethaler, Lukas. "Ibn Kammūna (d. 683/1284) on the argument of the flying man in Avicenna's *Ishārāt* and al-Suhrawardī's *Talwīhāt*." In Langermann 2009 [\*59: 179–203].
- 263 Gutas, Dimitri. "The empiricism of Avicenna." *Oriens* 40 (2012): 391–436.
- 264 Black, Deborah L. "Certitude, justification, and the principles of knowledge in Avicenna's epistemology." In Adamson 2013 [\*68: 120–142].
- 265 Hasse, Dag Nikolaus. "Avicenna's epistemological optimism." In Adamson 2013 [\*68: 109–119].
- 266 Alpina, Tommaso. "Intellectual Knowledge, Active Intellect, and Intellectual Memory in Avicenna's *Kitāb al-Nafs* and Its Aristotelian Background." *Documenti e studi sulla tradizione filosofica medievale*, 25, (2014): 131–183.
- 267 Kukkonen, Taneli. "Ibn Sīnā and the early history of thought experiments." *Journal of the History of Philosophy* 52 (2014): 433–59.
- 268 Kaukua, Jari. *Self-Awareness in Islamic Philosophy. Avicenna and beyond*. Cambridge, 2015.
- 269 Mousavian, Seyed N. and Seyed Hasan Saadat Mostafavi. "Avicenna on the origination of the human soul." *Oxford Studies in Medieval Philosophy* 5 (2017): 41–86.
- 270 Adamson, Peter and Fedor Benevich. "The Thought Experimental Method: Avicenna's Flying Man Argument." *Journal of the American Philosophical Association*, 4.2, (2018): 147–164.
- 271 Alpina, Tommaso. "The Soul of, the Soul in Itself, and the Flying Man Experiment." *Arabic Sciences and Philosophy. A Historical Journal*, 28.2, (2018): 187–224.
- 272 Alpina, Tommaso. "Knowing the Soul from Knowing Oneself. A Reading of the Prologue to Avicenna's *Kitāb al-Nafs* (Book of the Soul)." *Atti e Memorie dell'Accademia Toscana di Scienze e Lettere 'La Colombaria'*, 82 (68), (2018): 443–458.
- 273 Kaukua, Jari. "Avicenna's Outsourced Rationalism." *Journal of the History of Philosophy*, 58.2, (2020): 215–240.
- 274 Adamson, Peter. "From Known to Knower: Affinity Arguments for the Mind's Incorporeality in the Islamic World." *Oxford Studies in the Philosophy of Mind* 1 (2021): 373–96.
- 275 Alpina, Tommaso. *Subject, Definition, Activity. Framing Avicenna's Science of the Soul*. Berlin, Boston, 2021.
- 276 Alpina, Tommaso. "Retaining, Remembering, Recollecting. Avicenna's Account of Memory and Its Sources." in V. Decaix, C. Thomsen Thörnqvist eds., *Memory and Recollection in the Aristotelian Tradition: Essays on the Reception of Aristotle's De memoria et reminscientia*, *Studia Artistarum* 47, Brepols Publishers, (2021): 67–92.
- 277 Gutas, Dimitri. "*Ittiṣāl*, Contact, of the Human and Supernal Intellects in Avicenna: The Goal of Ethics, the Foundation of Epistemology." in D. De Smet and M. Sebtī, eds., *Penser avec Avicenne. De l'héritage grec à la*

*réception latine, en hommage à Jules Janssens*, Leuven, 2022: 169–178.

### *Syllogistic Logic*

280 Sprenger, Aloys. "The logic of the Arabians." In A. Sprenger, *A Dictionary of the Technical Terms Used in the Sciences of the Musalmans*. Calcutta, 1862, 1–37.

281 Rescher, Nicholas. "Avicenna on the logic of 'conditional' propositions." In N. Rescher, *Studies in the History of Arabic Logic*. Pittsburgh, 1963, 76–86.

282 Rescher, Nicholas. "Averroes' Quaesitum on assertoric (absolute) propositions." *Journal of the History of Philosophy* 1 (1963): 80–93.

283 Rescher, Nicholas. *The Development of Arabic Logic*. Pittsburgh, 1964.

284 Lohr, Charles. "Logica Algazelis. Introduction and critical text." *Traditio* 21 (1965): 223–290.

285 Rescher, Nicholas. *Temporal Modalities in Arabic Logic*. Dordrecht, 1967.

286 Madkour, Ibrāhīm. *L'Organon d'Aristote dans le monde arabe. Ses traductions, son étude et ses applications*. Paris 1934, 1969 (2nd ed.).

287 Gyekye, Kwame. "The term *istithnā* in Arabic logic." *Journal of the American Oriental Society* 92 (1972): 88–92.

288 Gyekye, Kwame. *Ibn al-Ṭayyib's Commentary on Porphyry's Eisagoge. Arabic text edited with introduction and a glossary of Greek-Arabic logical terms*. Beirut, 1975.

289 Marmura, Michael. "Avicenna's chapter on universals in the Isagoge

of his *Shifā'*." In *Islam Past and Present Challenge. Studies in honour of W.M. Watt*. Ed. by Alford Welch and Pierre Cachia. Edinburgh, 1979, 34–56. – Repr. in Marmura 2005 [\*52: 33–59].

290 Marmura, Michael. "Avicenna on the division of the sciences in the Isagoge of his *Shifā'*." *Journal of the History of Arabic Science* 4 (1980): 239–251. – Repr. in Marmura 2005 [\*52: 1–15].

291 Sabra, Abdelhamid I. "Avicenna on the subject matter of logic." *The Journal of Philosophy* 77 (1980): 746–764.

292 Zimmermann, F.W. *Al-Fārābī's Commentary and Short Treatise on Aristotle's De Interpretatione*. Oxford, 1981.

293 Gätje, Helmut. "Zur Lehre von den Voraussetzungsschlüssen bei Avicenna." *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 2 (1985): 140–204.

294 Maróth, Miklós. *Ibn Sīnā und die peripatetische «Aussagenlogik»*. Leiden, 1989.

295 Black, Deborah L. *Logic and Aristotle's Rhetoric and Poetics in Medieval Arabic Philosophy*. Leiden, 1990.

296 Marmura, Michael. "The fortuna of the Posterior Analytics in the Arabic Middle Ages." In *Knowledge and the Sciences in Medieval Philosophy*, vol. 1. Ed. by S. Knuuttila et al. Helsinki, 1990, 85–103.

297 Bäck, Allan. "Avicenna's conception of the modalities." *Vivarium* 30 (1992): 217–255.

298 Marmura, Michael. "Quiddity and universality in Avicenna."

- In Parviz Morewedge, *Studies in Neoplatonism* V. Albany, 1992, 77–87. – Repr. in Marmura 2005 [\*52: 61–70].
- 299 Gutas, Dimitri. “Aspects of literary form and genre in Arabic logical works.” In *Glosses and Commentaries on Aristotelian Logical Texts. The Syriac, Arabic and Medieval Latin Traditions*. Ed. by Charles Burnett. London, 1993, 29–64.
- 300 Barnes, Jonathan. *Aristotle. Posterior Analytics*. Oxford, 1994 (2nd ed.).
- 301 Maróth, Miklós. *Die Araber und die antike Wissenschaftstheorie*. Leiden, 1994.
- 302 Thomann, Johannes. “Avicenna über die physiognomische Methode.” In *Geschichten der Physiognomik. Text – Bild – Wissen*. Ed. by Rüdiger Campe and Manfred Schneider. Freiburg i.Br., 1996, 47–63.
- 303 Street, Tony. “Toward a history of syllogistic after Avicenna. Notes on Rescher’s studies on Arabic modal logic.” *Journal of Islamic Studies* 11 (2000): 209–228.
- 304 Street, Tony. “‘The eminent later scholar’ in Avicenna’s Book of the syllogism.” *Arabic Sciences and Philosophy* 11 (2001): 205–218.
- 305 Street, Tony. “An outline of Avicenna’s syllogistic.” *Archiv für Geschichte der Philosophie* 84 (2002): 129–160.
- 306 Thom, Paul. *Medieval Modal Systems. Problems and Concepts*. Aldershot, 2003.
- 307 Burnett, Charles. “The translation of Arabic works on logic into Latin in the Middle Ages and the Renaissance.” In *Handbook of the History of Logic*, vol. 1. Ed. by Dov Gabbay and John Woods. Amsterdam, 2004, 597–606.
- 308 Street, Tony. “Arabic logic.” In *Handbook of the History of Logic*, vol. 1. Ed. by Dov Gabbay and John Woods. Amsterdam, 2004, 523–596.
- 309 Gutas, Dimitri. “The logic of theology (kalām) in Avicenna.” In Perler, Rudolph 2005 [\*310: 59–72]. – Repr. in Gutas 2014 [\*71: no. VI].
- 310 Perler, Dominik and Ulrich Rudolph, eds. *Logik und Theologie. Das Organon im arabischen und im lateinischen Mittelalter*. Leiden, Boston, 2005.
- 311 Movahed, Zia. “Ibn-Sina’s anticipation of the formulas of Buridan and Barcan.” In *Logic in Tehran*. Ed. by Ali Enayat et al. Wellesley, Mass., 2006, 248–255.
- 312 Schöck, Cornelia. *Koranexegese, Grammatik und Logik. Zum Verhältnis von arabischer und aristotelischer Urteils-, Konsequenz- und Schlusslehre*. Leiden, 2006.
- 313 Hasnawi, Ahmed. “Boèce, Averroès et Abū al-Barakāt al-Baġdādī, témoins des écrits de Themistius sur les Topiques.” *Arabic Sciences and Philosophy* 17 (2007): 203–265.
- 314 Ahmed, Asad Q. “The jiha/tropos-mādda/hülē distinction in Arabic logic and its significance for Avicenna’s modals.” In Rahman, Street, Tahiri 2008 [\*57: 229–253].
- 315 Germann, Nadja. “Logik zwischen ‘Kunst’ und ‘Wissenschaft’. Avicenna zum Status der Logik in seiner Isagoge.” *Recherches de Théologie et Philosophie Médiévales* 75 (2008): 1–32.

- 316 Hasnawi, Ahmad. "Avicenna on the quantification of the predicate (with an appendix on [Ibn Zur'a])." In Rahman, Street, Tahiri 2008 [\*57: 295–328].
- 317 Schöck, Cornelia. "Name, derived name and description in Arabic grammar, Muslim dialectical theology and Arabic logic." In Rahman, Street, Tahiri 2008 [\*57: 329–360].
- 318 Thom, Paul. "Logic and metaphysics in Avicenna's modal syllogistic." In Rahman, Street, Tahiri 2008 [\*57: 361–376].
- 319 Lagerlund, Henrik. "Avicenna and Tūsī on modal logic." *History and Philosophy of Logic* 30 (2009): 227–239.
- 320 Movahed, Zia. "A critical examination of Ibn-Sina's theory of the conditional syllogism." In Jāvidān Kherad, *Sophia Perennis (Teheran)* 1 (2009): 5–21.
- 321 Eichner, Heidrun. "Al-Fārābī and Ibn Sīnā on universal science and the system of the sciences. Evidence of the Arabic tradition of the Posterior Analytics." *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010): 71–95.
- 322 El-Rouayheb, Khaled. "Introduction," In *Afḍal al-Dīn al-Khūnājī. Kashf al-Asrār 'an Ghawāmiḍ al-Afkār*. Ed. by Kh. El-Rouayheb. Tehran, 2010, iii–lix.
- 323 El-Rouayheb, Khaled. *Relational Syllogisms and the History of Arabic Logic 900–1900*. Leiden, 2010.
- 324 Street, Tony. "Avicenna's twenty questions on logic. Preliminary notes for further work." *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010): 97–111.
- 325 Strobino, Riccardo. "Avicenna on the indemonstrability of definition." *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010): 113–163.
- 326 Ahmed, Asad Q. "Systematic growth in sustained error. A case study in the dynamism of post-classical Islamic scholasticism." In *The Islamic Scholarly Tradition. Studies in history, law and thought in honor of Professor Michael Allan Cook*. Ed. by Behnam Sadeghi, Asad Q. Ahmed, Michael Bonner. Leiden, 2011, 343–378.
- 327 Cerami, Cristina. "Signe physique, Signe métaphysique. Avicenne et Averroès sur la démonstration des causes premières." in *Nature et Sagesse. Les rapports entre physique et métaphysique dans la tradition aristotélicienne*. Volume in honor of Pierre Pellegrin, C. Cerami (ed.). Peeters, Louvain 2012.
- 328 Chatti, Saloua. "Logical oppositions in Arabic logic. Avicenna and Averroes." In *Around and Beyond the Square of Opposition*. Ed. by J.-Y. Beziau, Dale Jacquette. Basel, 2012.
- 329 El-Rouayheb, Khaled. "Post-Avicennan logicians on the subject matter of logic. Some thirteenth- and fourteenth-century discussions." *Arabic Sciences and Philosophy* 22 (2012): 69–90.
- 330 Kalbarczyk, Alexander. "The Kitāb al-Maḳūlāt of the Muḥtaṣar al-awsaṭ fī l-mantiq. A hitherto unknown source for studying Ibn Sīnā's reception of Aristotle's Categories." *Oriens* 40 (2012): 305–354.
- 331 Menn, Stephen. "Fārābī in the reception of Avicenna's Metaphysics. Averroes against Avicenna on being

- and unity." In Hasse, Bertolacci 2012 [\*65: 51–96].
- 332 Street, Tony. "Medieval and modern interpretations of Avicenna's modal syllogistic." In Opwis, Reisman 2012 [\*67: 233–55].
- 333 Thom, Paul. "Syllogisms about possibility and necessity in Avicenna and Tūsī." In *Insolubles and Consequences. Essays in honour of Stephen Read*. Ed. by Catarina Dutilh Novaes, Ole Thomassen Hjortland. Milton Keynes, 2012, 239–248.
- 334 Eichner, Heidrun. "The Categories in Avicenna. Material for developing a developmental account?" In *The Reception of Aristotle's Categories in the Byzantine, Arabic and Latin Traditions*. Ed. by Sten Ebbesen, John Marenbon, Paul Thom. Copenhagen, 2013, 57–84.
- 335 Klima, Gyula. "The Medieval problem of universals." In *SEP* [\*15], 2013: <https://plato.stanford.edu/archives/fall2013/entries/universals-medieval/>.
- 336 Chatti, Saloua. "Syncategoremata in Arabic logic. Al-Fārābī and Avicenna." *Journal of the History and Philosophy of Logic* 35 (2014): 167–197.
- 337 Karimullah, Kamran I. *Avicenna (d. 1037), Logical Theory, and the Aristotelian Tradition*. (PhD Diss., The Institute of Islamic Studies at McGill University, Montreal, 2014).
- 338 Di Vincenzo, Silvia. "Avicenna against Porphyry's definition of differentia specifica." *Documenti e Studi sulla Tradizione Filosofica Medievale* 26 (2015): 129–183.
- 339 Strobino, Riccardo. "Time and necessity in Avicenna's theory of demonstration." *Oriens* 43 (2015): 338–367.
- 340 Strobino, Riccardo. "«What if that (is) why?» Avicenna's taxonomy of scientific inquiries." In Alwishah, Hayes 2015 [\*72: 50–75].
- 341 Thom, Paul. "The division of the Categories according to Avicenna." In Alwishah, Hayes 2015 [\*72: 30–49].
- 342 Caminada, Niccolò. "A quotation of an anonymous 'logician' in Avicenna's Categories." *Documenti e studi sulla tradizione filosofica medievale*, 27, (2016): 195–238.
- 343 Di Vincenzo, Silvia. "Avicenna's reworking of Porphyry's 'common accident' in the light of Aristotle's Categories." *Documenti e Studi sulla Tradizione Filosofica Medievale* 27 (2016): 163–194.
- 344 Strobino, Riccardo. "Per se, inseparability, containment, and implication. Bridging the gap between Avicenna's theory of demonstration and logic of the predicables." *Oriens* 44 (2016): 181–266.
- 345 Benevich, Fedor. "Fire and heat. Yahyâ b. 'Adî and Ibn Sīnā on the essentiality of being substance or accident." *Arabic Sciences and Philosophy* 27 (2017): 237–67.
- 346 Hodges, Wilfrid. "Ibn Sīnā on reductio ad absurdum." *Review of Symbolic Logic* 10.3 (2017): 587–601.
- 347 Hodges, Wilfrid and Spencer Johnston. "Medieval modalities and modern methods. Avicenna and Buridan." *IfCoLog Journal of Logics and their Applications* 4.1 (2017): 1029–1073.
- 348 Benevich, Fedor. *Essentialität und Notwendigkeit. Avicenna und die aristotelische Tradition*. Leiden, 2018.

- 349 Kalbarczyk, Alexander. *Predication and ontology. Studies and texts on Avicennian and post-Avicennian readings of Aristotle's Categories*. Berlin, Boston, 2018.
- 350 Kalbarczyk, Nora. *Sprachphilosophie in der islamischen Rechtstheorie. Zur Avicennischen Klassifikation der Bezeichnung bei Fahr ad-dīn ar-Rāzī*. Leiden, 2018.
- 351 Strobino, Riccardo. "Ibn Sina's logic." In *SEP* [\*15], 2018: <https://plato.stanford.edu/entries/ibn-sina-logic/>.
- 352 Strobino, Riccardo. "Varieties of demonstration in Alfarabi." *History and Philosophy of Logic* 40 (2018): 42–62.
- 353 Chatti, Saloua. *Arabic logic from Al-Farabi to Averroes. A study of the early Arabic categorical, modal and hypothetical syllogisms*. Cham, 2019.
- 354 Di Vincenzo, Silvia. *Avicenna. The Healing. Logic: Isagoge. A new edition, English translation and commentary on the Kitāb al-Madḥal of Avicenna's Kitāb al-Šifā'*. Berlin, 2021.
- 355 Strobino, Riccardo. *Avicenna's Theory of Science. Logic, Metaphysics, Epistemology*. California, 2021.
- 356 Chatti, Saloua. "On Some Ambiguities in Ibn Sīnā's Analysis of the Quantified Hypothetical Propositions." *Arabic Sciences and Philosophy*, 32.1, (2022): 67–107.
- Rhetoric and Poetics*
- 370 Margoliouth, David Samuel. *Analecta orientalia ad Poeticam Aristotelem*. London, 1887. – Repr. Hildesheim, 2000.
- 371 Tkatsch, Jaroslaus. *Die arabische Übersetzung der Poetik des Aristoteles und die Grundlage der Kritik des griechischen Textes*, 2 vols. Vienna, Leipzig, 1928–1932). – Vol. 2 edited posthumously by A. Gudeman and Th. Seif.
- 372 Walzer, Richard. "Zur Traditionsgeschichte der aristotelischen Poetik." *Studi Italiani di Filologia Classica*, N.S. 11 (1934): 5–14. – Repr. in R. Walzer, *Greek into Arabic*. Oxford, 1962, 129–136.
- 373 Heinrichs, Wolfhart. *Arabische Dichtung und griechische Poetik. Ḥāzīm al-Qarṭāǧānīs Grundlegung der Poetik mit Hilfe aristotelischer Begriffe*. Wiesbaden, 1969.
- 374 Boggess, William F. "Hermannus Alemannus's Rhetorical Translations." *Viator* 2 (1971): 227–250.
- 375 Heinrichs, Wolfhart. "Die antike Verknüpfung von phantasia und Dichtung bei den Arabern." *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 128 (1978): 252–298.
- 376 Schoeler, Gregor. "Der poetische Syllogismus. Ein Beitrag zum Verständnis der <logischen> Poetik der Araber." *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 133 (1983): 43–92.
- 377 Heinrichs, Wolfhart. "Poetik, Rhetorik, Literaturkritik, Metrik und Reimlehre." In *Grundriss der arabischen Philologie*. 11: *Literaturwissenschaft*. Ed. by Helmut Gätje. Wiesbaden, 1987, 177–207.
- 378 Aouad, Maroun. "Aristote. La Rhétorique. Tradition syriaque et arabe." In *Dictionnaire des philosophes antiques*,

- vol. 1. Ed. by Richard Goulet. Paris, 1989 ff., 455–472.
- 379 Black, Deborah L. “The ‘imaginative syllogism’ in Arabic philosophy. A medieval contribution to the philosophical study of metaphor.” *Mediaeval Studies* 51 (1989): 242–267.
- 380 Black, D. 1990 [\*295].
- 381 Kemal, Salim. *The Poetics of Alfarabi and Avicenna*. Leiden, 1991.
- 382 Würsch, Renate. *Avicennas Bearbeitungen der aristotelischen Rhetorik. Ein Beitrag zum Fortleben antiken Bildungsgutes in der islamischen Welt*. Berlin, 1991.
- 383 Aouad, Maroun. “Les fondements de la Rhétorique d’Aristote reconsidérés par Fārābī, ou le concept de point de vue immédiat et commun.” *Arabic Sciences and Philosophy* 2 (1992): 133–180.
- 384 Lameer, Joep. “Aristotelian Rhetoric and Poetics as logical arts in medieval Islamic philosophy.” *Bibliotheca Orientalis* 50 (1993): 563–582 (= Review of Black 1990 [\*295]).
- 385 Würsch, Renate. “Die Lehre vom Enthymem in der Rhetorik des Aristoteles und ihre Weiterentwicklung bei Avicenna und Averroes.” In *Argumentationstheorie. Scholastische Forschungen zu den logischen und semantischen Regeln korrekten Folgerns*. Ed. by Klaus Jacobi. Leiden, New York, Cologne, 1993, 589–606.
- 386 Heinrichs, Wolfhart. “Takhyīl and its tradition.” In *Gott ist schön und Er liebt die Schönheit. Festschrift für Annemarie Schimmel*. Ed. by Alma Giese and J. Christoph Bürgel. Bern, 1994, 227–247.
- 387 Aouad, Maroun. “Définition par Averroès du concept de <point de vue immédiat> dans le Commentaire moyen de la rhétorique.” *Bulletin d’Études Orientales* 48 (1996): 115–130.
- 388 Aouad, Maroun. “Définition du concept de loué selon le point de vue immédiat dans la Rhétorique du Šifā.” In *Perspectives arabes et médiévales sur la tradition scientifique et philosophique grecque*. Ed. by Ahmad Hasnawi, Abdelali Elamrani-Jamal and Maroun Aouad. Leuven, 1997, 409–451.
- 389 Aouad, Maroun and Marwan Rashed. “L’exégèse de la Rhétorique d’Aristote. Recherches sur quelques commentateurs grecs, arabes et byzantins.” *Medioevo* 23 (1997): 43–189.
- 390 Aouad, Maroun and Marwan Rashed. “Commentateurs «satisfaisants» et «non satisfaisants» de la Rhétorique selon Averroès.” In *Averroes and the Aristotelian tradition. Sources, constitution and reception of the philosophy of Ibn Rushd (1126–1198)*. Ed. by G. Endress, J.A. Aertsen and K. Braun. Leiden, 1999, 83–124.
- 391 Aouad, Maroun. “Les prémisses rhétoriques selon les Iṣārāt d’Avicenne.” In *Théories de la phrase et de la proposition de Platon à Averroès*. Ed. by Philippe Büttgen, Stéphane Diebler, and Marwan Rashed. Paris, 1999, 281–304.
- 392 Aouad, Maroun and Gregor Schoeler. “Le syllogisme poétique selon al-Fārābī. Un syllogisme incorrect de la deuxième figure.” *Arabic Sciences and Philosophy* 12 (2002): 185–196.
- 393 Kemal, Salim. *The Philosophical Poetics of Alfarabi, Avicenna and Averroës. The Aristotelian Reception*. London, New York, 2003.

- 394 Aouad, Maroun. "Le syllogisme poétique selon le Livre de la Poétique d'Ibn Ṭumlūs." In *Words, Texts and Concepts Cruising the Mediterranean Sea. Studies [...] dedicated to Gerhard Endress*. Ed. by Rüdiger Arnzen and Jörn Tielmann. Leuven, 2004, 259–270.
- 395 Lyons, Malcolm C. "Ibn Sīnā and Aristotle. A study in technique." In *Words, Texts and Concepts Cruising the Mediterranean Sea. Studies [...] dedicated to Gerhard Endress*. Ed. by Rüdiger Arnzen and Jörn Tielmann. Leuven, 2004, 95–110.
- 396 Schoeler, Gregor. "Poetischer Syllogismus – bildliche Redeweise – Religion. Vom aristotelischen Organon zu al-Fārābīs Religionstheorie." In Perler, Rudolph 2005 [\*310: 45–58].
- 397 Heinrichs, Wolfhart. "Takhyīl. Make-believe and image creation in Arabic literary theory." In van Gelder, Hammond 2008 [\*398: 1, 1–14].
- 398 van Gelder, Geert Jan and Marlé Hammond, eds. *Takhyīl. The imaginary in classical Arabic poetics*, 2 vols. Exeter, 2008.
- 399 Vagelpohl, Uwe. *Aristotle's Rhetoric in the East. The Syriac and Arabic Translation and Commentary Tradition*. Leiden, Boston, 2008.
- 400 Reisman, David C. "Avicenna's enthymeme. A pointer." *Arabica* 56 (2009): 529–542.
- 401 Landau, Jacob. "Naṣīr al-Dīn Ṭūsī and poetic imagination in the Arabic and Persian philosophical tradition." In *Metaphor and Imagery in Persian Poetry*. Ed. by Ali Asghar Seyed-Gohrab. Leiden, 2012, 15–65.
- 402 Rudolph, Ulrich. "Al-Fārābī." In Rudolph 2012 [\*68: 363–457].
- 403 Gutas, Dimitri. "The Poetics in Syriac and Arabic transmission." In Tarán, Gutas 2012 [\*19: 77–128].
- 404 Schoeler, Gregor. "The 'Poetic syllogism' revisited." *Oriens* 41 (2013): 1–26.
- 405 Celli, Gaia. "Avicenna and Aristotle's Rhetoric: Lexical Options." In: Commenting on Aristotle's "Rhetoric" from antiquity to the present (2018): 89–115.
- Metaphysics*
- 420 Goichon, Amélie-Marie. *La distinction de l'essence et de l'existence d'après Ibn Sīnā*. Paris, 1937. – Repr. Frankfurt a.M., 1999. [*Islamic Philosophy* 38]
- 421 Marmura, Michael E. "Avicenna's proof from contingency for God's existence in the *Metaphysics* of the Shifā." *Medieval Studies* 42 (1980): 337–352. – Repr. in Marmura 2005 [\*52: 131–148].
- 422 Pines, Shlomo. "Some distinctive metaphysical conceptions in Themistius' Commentary on Book Lambda and their place in the history of philosophy." In *Aristoteles. Werk und Wirkung. Paul Moraux gewidmet*, vol. 2. Ed. by J. Wiesner. Berlin, New York, 1987, 177–204.
- 423 Davidson, Herbert A. *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy*. New York, Oxford, 1987.
- 424 Marmura, Michael E. "Avicenna and the kalām." *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 7 (1991–1992): 172–206. – Repr. in Marmura 2005 [\*52: 97–130].



- 425 van Ess, Josef. *Theologie und Gesellschaft im 2. und 3. Jahrhundert Hidschra. Eine Geschichte des religiösen Denkens im frühen Islam*, 6 vols. Berlin, New York, 1991–1997.
- 426 D'Ancona, Cristina. "Avicenna and the Liber de Causis. A contribution to the dossier." *Revista Española de Filosofía Medieval* 7 (2000): 95–114.
- 427 Wisnovsky, Robert. "Notes on Avicenna's concept of thingness (*shay'yya*)." *Arabic Sciences and Philosophy*, 10.2, (2000): 181–221.
- 428 Bertolacci, Amos. "From al-Kindī to al-Fārābī. Avicenna's progressive knowledge of Aristotle's Metaphysics according to his autobiography." *Arabic Sciences and Philosophy* 11 (2001): 257–295.
- 429 Druart, Thérèse-Anne. "Shay' or Res as Concomitant of 'Being' in Avicenna." *Documenti e studi sulla tradizione filosofica medievale*, 12, (2001): 125–42.
- 430 Bertolacci, Amos. "The structure of metaphysical science in the *Ilāhiyyāt* (Divine Science) of Avicenna's *Kitāb al-Šifā'* (Book of the Cure)." *Documenti e Studi sulla Tradizione Filosofica Medievale* 13 (2002): 1–69.
- 431 D'Ancona, Cristina. "The *Timaeus* model for creation and providence. An example of continuity and adaptation in early Arabic philosophical literature." In *Plato's Timaeus as Cultural Icon*. Ed. by G. J. Reydam-Schils. Notre-Dame, IN, 2003, 206–237.
- 432 Wisnovsky, Robert. *Avicenna's Metaphysics in Context*. Ithaca, N.Y., 2003.
- 433 Wisnovsky, Robert. "Towards a history of Avicenna's distinction between immanent and transcendent causes." In Reisman, al-Rahim 2003 [\*50: 49–68].
- 434 Janssens, Jules L. "Avicenne et sa «paraphrase-commentaire» du Livre Lambda (*Kitāb al-inṣāf*)." *Recherches de Théologie et Philosophie Médiévales* 70 (2003): 401–416.
- 435 Bertolacci, Amos. "The reception of Book B (Beta) of Aristotle's Metaphysics in the *Ilāhiyyāt* of Avicenna's *Kitāb al-Šifā'*." In McGinnis, Reisman 2004 [\*51: 157–174].
- 436 Bertolacci, Amos. "La ricezione del libro Γ della Metafisica nell'*Ilāhiyyāt* del *Kitāb Al-Šifā'* di Avicenna." In *Aristotele e i suoi esegeti neoplatonici. Logica e ontologia nelle interpretazioni greche e arabe*. Ed. by V. Celluprica, C. D'Ancona, and R. Chiaradonna. Naples, 2004, 173–210.
- 437 Rashed, Marwan. "Ibn 'Adī et Avicenne: sur les types d'existants." in V. Celluprica, C. D'Ancona, R. Chiaradonna eds., *Aristotele e i suoi esegeti neoplatonici. Logica e ontologia nelle interpretazioni greche e arabe*. Atti del convegno internazionale, Roma, 19–20 ottobre 2001, Bibliopolis, Napoli (2004): 107–171.
- 438 Acar, Rahim. *Talking about God and Talking about Creation. Avicenna's and Thomas Aquinas' Positions*. Leiden, Boston, 2005.
- 439 Adamson, Peter. "On knowledge of particulars." *Proceedings of the Aristotelian Society* 105 (2005): 273–294.
- 440 Bertolacci, Amos. "Ammonius and al-Fārābī. The sources of Avicenna's

concept of metaphysics." *Quaestio* 5 (2005): 287–305.

441 Lizzini, Olga. "Utility and gratuitousness of metaphysics. Avicenna. Ilāhiyyāt 1.3." *Quaestio* 5 (2005): 307–344.

442 Bertolacci, Amos. *The Reception of Aristotle's Metaphysics in Avicenna's Kitāb al-Šifā'*. Leiden, 2006.

443 Marmura, Michael E. "Avicenna's critique of Platonists in Book VII, Chapter 2 of the Metaphysics of his Healing." In *Arabic Theology, Arabic Philosophy. From the Many to the One. Essays in celebration of Richard M. Frank*. Ed. by James E. Montgomery. Leuven, 2006, 355–370.

444 Bertolacci, Amos. "Avicenna and Averroes on the proof of God's existence and the subject-matter of metaphysics." *Medioevo* 32 (2007): 61–97.

445 D'Ancona, Cristina. "Ex uno non fit nisi unum. Storia e preistoria della dottrina avicenniana della prima intelligenza." In *Per una storia del concetto di mente*. Ed. by E. Canone. Florence, 2007, 29–55.

446 Bertolacci, Amos. "Different attitudes to Aristotle's authority in the Arabic medieval commentaries on the Metaphysics." *Antiquorum Philosophia* 3 (2009): 145–163.

447 Koutzarova, Tiana. *Das Transzendente bei Ibn Sina (Avicenna). Zur Metaphysik als Wissenschaft erster Begriffs- und Urteilsprinzipien*. Leiden, 2009.

448 Acar, Rahim. "Creation. Avicenna's metaphysical account." In *Creation and the God of Abraham*. Ed. by David B. Burrell, Carlo Cogliati, Janet

Martin Soskice, and William R. Stoeger. Cambridge, 2010, 77–90.

449 Treiger, Alexander. "Avicenna's notion of transcendental modulation of existence (taškik al-wujūd, analogia entis) and its Greek and Arabic sources." *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010): 165–198.

450 Lizzini, Olga. *Fluxus* (fayḍ). *Indagine sui fondamenti della metafisica e della fisica di Avicenna*. Bari, 2011.

451 Porro, Pasquale. "Antiplatonsime et néoplatonsime chez Avicenne (Ilāhiyyāt, livre VII)." In *Adorare caelestia, gubernare terrena*. Ed. by P. Arfè, I. Caiazzo, and A. Sannino. Turnhout, 2011, 113–145.

452 Bertolacci, Amos. "A hidden hapax legomenon in Avicenna's Metaphysics. Considerations of the use of anniyya and ayyiyya in the Ilāhiyyāt of the Kitāb al-Šifā'." In *The Letter before the Spirit. The Importance of Text Editions for the Study of the Reception of Aristotle*. Ed. by A.M.I. van Oppenraay and R. Fontaine. Leiden, Boston, 2012, 289–309.

453 Bertolacci, Amos. "The distinction of essence and existence in Avicenna's Metaphysics. The text and its context." In *Opwis, Reisman 2012* [\*67: 257–288].

454 Marmura, Michael E. "Avicenna and traditional Islamic belief." In *The Judaeo-Christian-Islamic Heritage. Philosophical and Theological Perspectives*. Ed. by R.C. Taylor and I.A. Omar. Milwaukee, WI, 2012, 173–192.

455 Adamson, Peter. "From the Necessary Existent to God." In *Adamson 2013* [\*69: 170–189].

- 456 Menn, Stephen. "Avicenna's metaphysics." In Adamson 2013 [68: 143–169].
- 457 Druart, Thérèse-Ann. "Ibn Sina and the ambiguity of being's univocity." In *Views on the Philosophy of Ibn Sina & Mulla Sadra Shirazi*. Ed. by Mokdad Arfa Mensia. Carthage, 2014, 15–24.
- 458 De Haan, Daniel D. "Where does Avicenna demonstrate the existence of God?." *Arabic Sciences and Philosophy* 26 (2016): 97–128.
- 459 Quartucci, Alfonso. "Avicenna's notion of al- mawḍū' al-awwal ('first subject') in Ilāhiyyāt, I, 1–2 and its Latin Reception." *Documenti e studi sulla tradizione filosofica medievale* 28 (2017): 441–480.
- 460 De Haan, Daniel D. *Necessary Existence and the Doctrine of Being in Avicenna's Metaphysics of the Healing*. Leiden, Boston, 2020.
- 461 Janos, Damien. *Avicenna on the Ontology of Pure Quiddity*. Berlin, 2020.
- 462 Alpina, Tommaso. "Is the Heaven an Animal? Avicenna's Celestial Psychology between Cosmology and Biology", in R. Salles ed., *Biology and Cosmology in Ancient Philosophy: from Thales to Avicenna*, Cambridge University Press, Cambridge, 2021, 261–278.
- 463 Bertolacci, Amos. "«The excellent among the earlier scholars». Alexander of Aphrodisias in Avicenna's Metaphysics." In *Alexander of Aphrodisias in the Middle Ages and the Renaissance*. Ed. by P. B. Rossi, M. Di Giovanni, A. Robiglio. Turnhout, 2021, 33–58.
- 464 Bertolacci, Amos. "God's existence and essence. The Liber de causis and school discussions in the Metaphysics of Avicenna." In *Reading Proclus and the Liber de causis*, vol. 3. Ed. by D. Calma. Leiden, 2022, 251–280.
- 465 Lammer, Andreas H. "Doxography and Philosophical Method: Avicenna's Treatment of Presocratic Opinions." In *Received Opinions: Doxography in Antiquity and the Islamic World Vol. 160. Philosophia Antiqua: Studies in Ancient Philosophy*. Ed. by A.H. Lammer and M. Jas. Leiden, Boston, 2022, 302–332.
- 466 Bertolacci, Amos. "On the Arabic Titles of Aristotle's *Metaphysics*: The Case of "Book of Letters", *Quaestio 22* (2022): *For a History (and Prehistory) of Ontology: Method, lexicon, concepts*, ed. Francesco Fronterotta and Alice Ragni, 107–146.
- 467 Bertolacci, Amos. "An Excerpt of Avicenna's Early Exegesis of Aristotle's *Metaphysics* in a Later *Summa*: Avicenna on *Metaph.* Alpha Elatton 2 in the *Ilāhiyyāt* of the *Šifā'*", in Proceedings of the Conference "Philosophy and Translation in the Islamic World", Zurich, 21–22 June 2018. Ed. U. Rudolph and R. Wisnovsky (in preparation).
- Physics*
- 470 Hyman, Arthur. "Aristotle's 'first matter' and Avicenna's and Averroes' 'corporeal form'." In *Harry Austryn Wolfson Jubilee Volume*. Ed. by S. Lieberman et al. Jerusalem, 1965, 384–406. – Repr. in A. Hyman (ed.),

*Essays in Medieval Jewish and Islamic Philosophy*. New York, 1977, 335–56.

471 Buschmann, Elisabeth.

*Untersuchungen zum Problem der Materie bei Avicenna*. Frankfurt a.M., 1979.

472 Shayegan, Yegane. *Avicenna on Time*. (PhD Diss., Harvard University, Cambridge, Mass., 1986).

473 Lettinck, Paul. "Ibn Sīnā on atomism. Translation of Ibn Sīnā's Kitāb al-Shifā', al-Ṭabī'īyyāt 1. Al-Samā' al-ṭabī'ī, Third treatise, Chapters 3–5." *Al-Shajarah* 4 (1988): 1–51.

474 Macierowski, E. M. and R.F. Hassing. "John Philoponus on Aristotle's definition of nature." *Ancient Philosophy* 8 (1988): 73–100.

475 Freudenthal, Gad. "(Al-)Chemical foundations for cosmological ideas. Ibn Sīnā on the geology of an eternal world." In *Physics, Cosmology and Astronomy, 1300–1700*. Ed. by A. Unguru. Dordrecht, Boston, London, 1991. 47–73.

476 Lang, Helen S. *Aristotle's Physics and Its Medieval Varieties*. Albany, NY, 1992.

477 Dhanani, Alnoor. *The Physical Theory of Kalam. Atoms, Space, and Void in Basrian Mu'tazili Cosmology*. Leiden, 1994.

478 Rashed, Roshdi. "Al-Qūhī vs. Aristotle. On motion." *Arabic Sciences and Philosophy* 9 (1999): 3–24.

479 Rashed, Marwan. "Théodicée et approximation: Avicenne." *Arabic Sciences and Philosophy*, 10, (2000): 223–257.

480 Hasnawi, Ahmad. "La définition du mouvement dans la Physique du Šifā' d'Avicenne." *Arabic Sciences and Philosophy* 11 (2001): 219–255.

481 Stone, Abraham D. "Simplicius and Avicenna on the essential corporeity of material substance." In Wisnovsky 2001 [\*48: 73–130].

482 Hasnawi, Ahmad. "Avicenne et le livre IV des Météorologiques d'Aristote." In *Aristoteles chemicus. Il IV libro dei «Meteorologica» nella tradizione antica e medievale*. Ed. by Cristina Viano. Sankt Augustin, 2002, 133–143.

483 Hasnawi, Ahmad. "La Physique du Šifā'. Aperçus sur la structure et son contenu." In Janssens, De Smet 2002 [\*49: 67–80].

484 Kukkonen, Taneli. Alternatives to alternatives. Approaches to Aristotle's arguments per impossibile." *Vivarium* 40 (2002): 137–73.

485 Dhanani, Alnoor. "Rocks in the heavens?! The encounter between 'Abd al-Ġabbār and Ibn Sīnā." In Reisman, al-Rahim 2003 [\*50: 127–144].

486 McGinnis, Jon. "The topology of time. An analysis of medieval Islamic accounts of discrete and continuous time." *The Modern Schoolman* 81 (2003): 5–25.

487 Hasnawi, Ahmad. "Le statut catégoriel du mouvement chez Avicenne. Contexte grec et postérité médiévale latine." In *De Zénon d'Elée à Poincaré. Recueil d'études en hommage à Roshdi Rashed*. Ed. by R. Morelon and A. Hasnawi. Leuven, 2004, 607–22.

- 488 Lizzini, Olga. "The relation between form and matter. Some brief observations on the 'Homology argument' (Ilāhiyāt, 11.4) and the deduction of fluxus." In McGinnis, Reisman 2004 [\*51: 175–185].
- 489 Wood, R. and M. Weisberg. "Interpreting Aristotle on mixture. Problems about elemental composition from Philoponus to Cooper." *Studies in the History and Philosophy of Science* 35 (2004): 681–706.
- 490 McGinnis, Jon. "A medieval Arabic analysis of motion at an instant. The Avicennan sources to the forma fluens/fluxus formae debate." *British Journal for the History of Science* 39 (2006): 189–205.
- 491 McGinnis, Jon. "Positioning heaven. The infidelity of a faithful Aristotelian." *Phronesis* 51 (2006): 140–161.
- 492 Mayer, Toby. "Avicenna against time beginning. The debate between the commentators on the Ishārāt." In Adamson 2007 [\*55: 125–149].
- 493 McGinnis, Jon. "Avoiding the void. Avicenna on the impossibility of circular motion in a void." In Adamson 2007 [\*55: 74–89].
- 494 McGinnis, Jon. "Logic and science. The role of genus and difference in Avicenna's logic, science and natural philosophy." *Documenti e Studi sulla Tradizione Filosofica Medievale* 18 (2007): 165–187.
- 495 Stone, Abraham D. "Avicenna's theory of primary mixture." *Arabic Sciences and Philosophy* 18 (2008): 99–119.
- 496 Janssens, Jules L. "The reception of Ibn Sinā's Physics in later Islamic thought." *Ilahiyat Studies* 1 (2010): 15–36.
- 497 McGinnis, Jon. "Avicennan infinity. A select history of the infinite through Avicenna." *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010): 199–222.
- 498 Janos, Damien. "Moving the orbs. Astronomy, physics, and metaphysics, and the problem of celestial motion according to Ibn Sinā." *Arabic Sciences and Philosophy* 21 (2011): 165–214.
- 499 McGinnis, Jon. "The ultimate Why question. Avicenna on why God is absolutely necessary." In *The Ultimate Why Question. Why Is There Anything at all Rather than Nothing Whatsoever?* Ed. by John F. Wippel. Washington, 2011, 65–83.
- 500 Hasse, Dag Nikolaus. "Avicenna's 'Giver of forms' in Latin philosophy, especially in the works of Albertus Magnus." In Hasse, Bertolacci 2012 [\*65: 225–49].
- 501 Janos, Damien. *Method, Structure, and Development in al-Fārābī's Cosmology*. Leiden, 2012.
- 502 McGinnis, Jon. "Making something of nothing. Privation, possibility and potentiality in Avicenna and Aquinas." *The Thomist* 76 (2012): 551–575.
- 503 Richardson, Kara. "Avicenna and Aquinas on form and generation." In Hasse, Bertolacci 2012 [\*65: 251–74].
- 504 Lizzini, Olga L. "Causality as relation: Avicenna (and al-Gazālī)." *Quaestio* 13 (2013): 165–195.
- 505 Lizzini, Olga L. "A mysterious order of possibles. Some remarks on the views of Avicenna and Aquinas on creation. Al-Ilāhiyyāt, the Quaestiones De potentia and Beatrice Zedler's interpretation."

*American Catholic Philosophical Quarterly* 88 (2014): 237–270.

506 Kukkonen 2014 [\*267].

507 Shihadeh, Ayman. “Avicenna’s corporeal form and proof of prime matter in twelfth-century critical philosophy. Abū l-Barakāt, al-Mas‘ūdī and al-Rāzī.” *Oriens* 42 (2014): 364–96.

508 Dhanani, Alnoor. “The impact of Ibn Sīnā’s critique of atomism on subsequent kalām discussions of atomism.” *Arabic Sciences and Philosophy* 25 (2015): 79–104.

509 Lammer, Andreas. “Defining nature. From Aristotle to Philoponus to Avicenna.” In Alwishah, Hayes 2015 [\*72: 121–142].

510 McGinnis, Jon. “A small discovery. Avicenna’s theory of minima naturalia.” *Journal of the History of Philosophy* 53 (2015): 1–24.

511 Lammer, Andreas. *The Elements of Avicenna’s Physics. Greek Sources and Arabic Innovations*. (PhD Diss., Ludwig-Maximilians-Universität, Munich, 2016).

512 Gannagé, Emma. “Between Medicine and Natural Philosophy: Avicenna on properties (khawāṣṣ) and qualities (kayfiyyāt).” In N. El-Bizri, E. Orthmann (eds.), *The Occult Sciences in Pre-Modern Islamic Culture* (Beirut: Ergon-Verlag, in association with the Orient-Institut Beirut, Max Weber Stiftung, 2018), 41–66.

513 McGinnis, Jon. “Mind the gap. The reception of Avicenna’s new argument against actually infinite space.” In *Writing in Light. Illuminationist texts and textual studies in honor of the late Hossein Ziai*.

Ed. by Ali Gheissari, John Walbridge, and Ahmed Alwishah. Leiden, 2018.

514 Zarepour, M.S. “Avicenna on mathematical infinity.” *Archiv für Geschichte der Philosophie* 102 (2020): 379–425.

515 Alpina, Tommaso. “Are Animals a Matter of Complexion? *Mizāj* as a Keystone of Avicenna’s Scientific Project,” *Early Science and Medicine* (in print).

*Mathematical and Biological Sciences; Meteorology*

520 Wiedemann, Eilhard. “Avicennas Schrift über ein von ihm ersonnenes Beobachtungsinstrument.” *Acta Orientalia* 11 (1926): 81–167. – Repr. in E. Wiedemann, *Gesammelte Schriften zur arabisch-islamischen Wissenschaftsgeschichte*, vol. 2. Ed. by D. Girke and D. Bischoff. Frankfurt a.M., 1984, 1117–1203.

521 d’Erlanger, Baron Rodolphe. *La musique arabe*. Paris, 1930–1959.

522 El Hefny, Mahmoud. *Ibn Sīnā’s Musiklehre hauptsächlich an seinem Nağāt erläutert. Nebst Übersetzung und Herausgabe des Musikabschnittes des Nağāt*. Berlin-Wilmersdorf, 1931.

523 Ullmann, Manfred. *Die Medizin im Islam*. Leiden, 1970.

524 Saliba, George. “Ibn Sīnā and Abū ‘Ubayd al-Jūzjānī. The problem of the Ptolemaic equant.” *Journal for the History of Arabic Science* 4 (1980): 377–403. – Repr. in G. Saliba, *A History of Arabic Astronomy*. New York, 1994, 85–112.

525 Hameed, Hakeem Abdul. *Avicenna’s Tract on Cardiac Drugs*. Karachi, 1983, 11–75.

- 526 al-Daffa, Ali A. and John J. Stroyls. "Ibn Sīnā as a mathematician." In A.A. Daffa and J.J. Stroyls, *Studies in the Exact Sciences in Medieval Islam*. Dhahran, Saudi Arabia, 1984, 60–118.
- 527 Rashed, Roshdi. "Mathématiques et philosophie chez Avicenne." In Jolivet, Rashed 1984 [\*39: 29–39].
- 528 Sezgin, Fuat. "Qaḍīyyat iktīšāf al-āla al-raṣādiyya 'aṣā Ya'qūb." *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 2 (1985): 7–73.
- 529 Musallam, Basim. "[Avicenna] Biology and medicine." In *Elr*, 1987 [\*9: x].
- 530 Saliba, George. "[Avicenna] Mathematics and physical sciences." In *Elr*, 1987 [\*9: viii].
- 531 Wright, Owen. "[Avicenna] Music." In *Elr*, 1987 [\*9: ix].
- 532 Shehadi, Fadlou. *Philosophies of Music in Medieval Islam*. Leiden, 1995, 66–80.
- 533 Djebbar, Ahmed. "Les mathématiques dans l'oeuvre d'Ibn Sīnā (370/980–428/1037)." In *Journées d'études. Avicenne. Marrakech 25–26 septembre 1998*. Marrakesh, 1999, 51–70.
- 534 Lettinck, Paul. *Aristotle's Meteorology and Its Reception in the Arab World*. (Leiden 1999).
- 535 De Young, Gregg. "Euclidian geometry in two medieval Islamic encyclopaedias." *Al-Masāq* 14 (2002): 47–60.
- 536 Kruk, Remke. "Ibn Sīnā on animals. Between the First Teacher and the physician." In Janssens, De Smet 2002 [\*49: 325–341].
- 537 Gutas, Dimitri. "Medical theory and scientific method in the age of Avicenna." In Reisman, al-Rahim 2003 [\*50: 145–162].
- 538 Luther, Irina. "The conception of the angle in the works of Ibn Sīnā and al-Šīrāzī." In McGinnis, Reisman 2004 [\*51: 112–125].
- 539 Wright, Owen. "Die melodischen Modi bei Ibn Sīnā und die Entwicklung der Modalpraxis von Ibn al-Munadjjdīm bis zu Šaḫī al-Dīn al-Urmawī." *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 16 (2004–2005) 224–308.
- 540 Ardeshtir, Mohammad. "Ibn Sīnā's philosophy of mathematics." In Rahman, Street, Tahiri 2008 [\*57: 43–61].
- 541 Brentjes, Sonja. "Euclid's Elements. Courtly patronage and princely education." *Iranian Studies* 41 (2008): 441–463.
- 542 Pormann, Peter E. "The formation of the Arabic pharmacology. Between tradition and innovation." *Annals of Science* 68 (2011): 493–515.
- 543 Pormann, Peter E. "Avicenna on medical practice, epistemology, and the physiology of the inner senses." In Adamson 2013 [\*69: 91–108].
- 544 Tawara, A. "Avicenna's denial of life in plants." *Arabic Sciences and Philosophy* 24 (2014): 127–138.
- 545 Coda, Elisa. "Il «Libro degli animali» (Kitāb al-Hayawān). Materiali di studio sulla zoologia aristotelica nel Medioevo arabo ed ebraico." In *La zoologia di Aristotele e la sua ricezione dall'età ellenistica e romana alle culture medievali*. Ed. by Maria Michela Sassi, Elisa Coda, and Giuseppe Feola. Pisa, 2017, 205–235.
- 546 Das, Aileen. "Beyond the disciplines of medicine and philosophy.

Greek and Arabic thinkers on the nature of plant life." In *Philosophy and Medicine in the Formative Period of Islam*. London, 2017, 206–217.

547 Karimullah, Kamran I. "Avicenna and Galen, philosophy and medicine. Contextualising discussions of medical experience in medieval Islamic physicians and philosophers." *Oriens* 45 (2017): 105–49.

548 Mandosio 2018 [\*680].

549 Alpina, Tommaso. "Is Nutrition a Sufficient Condition for Life? Avicenna's Position between Natural Philosophy and Medicine." in R. Lo Presti, G. Korobili eds., *Nutrition and Nutritive Soul in Aristotle and Aristotelianism*, De Gruyter – Topics in Ancient Philosophy, Berlin-Boston (2020): 221–258.

550 Das, Aileen. *Galen and the Arabic Reception of Plato's Timaeus*, Cambridge University Press, Cambridge 2020.

551 Fatigati, Michael. "Avicenna on Vegetative Faculties and the Life of Plants." in F. Baldassarri, A. Blank, *Vegetative Powers: The Roots of Life in Ancient, Medieval and Early Modern Natural Philosophy*, (2021): 73–89.

552 Alpina, Tommaso. "Exercising Impartiality to Favor Aristotle: Avicenna and "the accomplished anatomists" (*aṣḥāb al-taṣrīḥ al-muḥaṣṣilūna*)." *Arabic Sciences and Philosophy*, 32.2, (2022): 137–178.

553 Alpina, Tommaso. "Translating Method: Inference from Behavior to Anatomy in Avicenna's Zoology." in K. Krause, M. Auxent, D. Weil (eds.), *Premodern Experience of the Natural*

*World in Translation*, Routledge, London-New York (2022): 136–152.

### *Influence and Reception*

#### *(a) In the Islamic World*

560 Gutas, Dimitri. "Ibn Ṭufayl on Ibn Sīnā's Eastern Philosophy." *Oriens* 34 (1994): 222–241. – Repr. in Gutas 2014 [\*71: no. XVI].

561 von Kügelgen, Anke. *Averroes und die arabische Moderne. Ansätze zu einer Neubegründung des Rationalismus im Islam*. Leiden, 1994.

562 Endress 2001 [\*145].

563 Gutas, Dimitri. "The heritage of Avicenna. The golden age of Arabic philosophy, 1000–ca. 1350." In Janssens, De Smet 2002 [\*49: 81–97]. – Repr. in Gutas 2014 [\*71: no. XIV].

564 Janssens, J. and D. De Smet 2002 [\*49].

565 Wisnovsky, Robert. "The nature and scope of Arabic philosophical commentary in post-classical (ca. 1100–1900 AD) Islamic intellectual history. Some preliminary observations." In *Philosophy, Science & Exegesis in Greek, Arabic & Latin Commentaries. Essays in honour of Richard Sorabji*, vol. 2. Ed. by Peter Adamson, H. Baltussen, and M.W.F. Stone. London, 2004, 149–191.

566 Madelung, Wilferd. "An Ismaili interpretation of Ibn Sīnā's Qaṣīdat al-nafs." In *Reason and Inspiration in Islam. Theology, Philosophy and Mysticism in Muslim Thought. Essays in honour of Hermann Landolt*. Ed. by Todd Lawson. London, New York, 2005, 157–168.



- 567 Endress, Gerhard. "Reading Avicenna in the Madrasa. Intellectual genealogies and chains of transmission of philosophy and the sciences in the Islamic East." In *Arabic Theology, Arabic Philosophy. From the Many to the One. Essays in celebration of Richard M. Frank*. Ed. by James E. Montgomery. Leuven, 2006, 371–422.
- 568 Janssens, J. 2006 [\*54].
- 569 Lameer, Joep. *Conception and belief in Ṣadr al-Dīn Shīrāzī. Al-Risāla fī l-taṣawwur wa-l-taṣdīq*. Tehran, 2006.
- 570 Langermann, Y.T. 2009 [\*59].
- 571 al-Rahim, Ahmed H. "Avicenna's immediate disciples. Their lives and works." In Langermann 2009 [\*59: 1–25].
- 572 Ahmed, Asad Q. "Interpreting Avicenna. Urmawī/Taḥṭānī and the later logical tradition on propositions." *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010): 313–42.
- 573 Akasoy, Anna. "Ibn Sīnā in the Arab West. The testimony of an Andalusian Sufi." *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010): 287–312.
- 574 Reisman, David C. "The Ps.-Avicenna Corpus II. The Ṣūfistic turn." *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010): 243–258.
- 575 Gutas, Dimitri. "Philosophy in the twelfth century. One view from Baghdad, or the repudiation of al-Ghazālī." In *In the Age of Averroes. Arabic Philosophy in the Sixth/Twelfth Century*. Ed. by Peter Adamson. London, Turin, 2011, 9–26. – Repr. in Gutas 2014 [\*71: no. xv]
- 576 Ahmed, Asad Q. "The Shifā' in India I. Reflections on the evidence of the manuscripts." *Oriens* 40 (2012): 199–222.
- 577 Griffel, Frank: "Al-Ghazālī's use of 'original human disposition' (fiṭra) and its background in the teachings of al-Fārābī and Avicenna." *The Muslim World* 102 (2012): 1–32.
- 578 Hasse, D. and A. Bertolacci 2012 [\*65].
- 579 Janssens, Jules L. "Al-Lawkarī's reception of Ibn Sīnā's Ilāhiyyāt." In Hasse, Bertolacci 2012 [\*65: 7–26].
- 580 Mayer, Toby. "The absurdities of infinite time. Shahrastānī's critique of Ibn Sīnā and Tūsī's defense." In *Medieval Arabic Thought. Essays in honour of Fritz Zimmermann*. Ed. by Rotraud Hansberger, M. Afifi al-Akiti, and Charles Burnett. London, Turin, 2012, 105–134.
- 581 Treiger, Alexander. *Inspired Knowledge in Islamic Thought. Al-Ghazālī's Theory of Mystical Cognition and Its Avicennian Foundation*. London, 2012.
- 582 Wisnovsky, Robert. "Essence and existence in the eleventh- mid twelfth-century East (Mašriq). A sketch." In Hasse, Bertolacci 2012 [\*65: 27–50].
- 583 Wisnovsky, Robert. "Avicenna's Islamic reception." In Adamson 2013 [\*69: 190–213].
- 584 Wisnovsky, Robert. "Avicennism and exegetical practice in the early commentaries on the Ishārāt." *Oriens* 41 (2013): 349–378.
- 585 Wisnovsky, Robert. "Towards a genealogy of Avicennism." *Oriens* 42 (2014): 323–363.
- 586 Esmaeili, Mohammad J. "The commentary tradition on the Ilāhiyyāt of

- the *Shifā'*. An historical and bibliographical survey." In Jāvidān Kherad, *Sophia Perennis* (Tehran) 24 (2014–2015): 110–131.
- 587 Pourjavady, Reza and Sabine Schmidtke. "An eastern Renaissance? Greek philosophy under the Safavids (16th–18th centuries AD)." *Intellectual History of the Islamicate World* 3 (2015): 248–290.
- 588 Di Vincenzo, Silvia. "Early exegetical practice on Avicenna's *Šifā'*: Faḥr al-Dīn al-Rāzī's Marginalia to logic." *Arabic Sciences and Philosophy* 28 (2018): 31–66.
- 589 Di Vincenzo, Silvia. "A hidden source? Considerations of Averroes' recourse to Avicenna's *Madḥal* of the *Šifā'* in the Middle Commentary on Porphyry's *Isagoge* – Review essay of R. Hisette (ed.): *Commentum medium super libro Porphyrii. Translatio Wilhelmo de Luna adscripta, Averrois Opera Series B, Averroes Latinus X* (Leuven 2016)." *Documenti e Studi sulla Tradizione Filosofica Medievale* 29 (2018): 125–136.
- 590 Griffel, Frank. "Al-Ghazālī's (d. 1111) Incoherence of the philosophers." In *The Oxford Handbook of Islamic Philosophy*. Ed. by Khaled El-Rouayheb and Sabine Schmidtke. Oxford, 2017, 191–209.
- 591 Panzeca, Ivana. "On the Persian translations of Avicenna's *Ilāhiyyāt*." *Documenti e Studi sulla Tradizione Filosofica Medievale* 28 (2017): 553–567.
- 592 Ansari, Rosabel P. "Ibn Kemal, Dawānī and the Avicennan lineage." *Mélanges de l'Université Saint-Joseph* 67 (2017–2018): 237–64.
- 593 Celli, Gaia. "The Ms. Süleymaniye Kütüphanesi, Ayasofya 2442. A 13th century copy of the K. al-*Šifā'* with Syriac and Greek marginalia." *Mélanges de l'Université Saint-Joseph* 67 (2017–2018): 305–326.
- 594 Di Vincenzo, Silvia. "Reading Avicenna's *Kitāb al-Šifā'* in the Ottoman world. The circulation of the work within the school of As'ad al-Yānyawī." *Mélanges de l'Université Saint-Joseph* 67 (2017–2018): 327–350.
- 595 al-Rahim, Ahmed H. *The Creation of Philosophical Tradition. Biography and the Reception of Avicenna's Philosophy from the Eleventh to the Fourteenth Century A.D.* Wiesbaden, 2018.
- 596 Gutas, Dimitri. "Avicenna and after. The development of paraphilosophy. A history of science approach." In Al Ghouz 2018 [\*75: 19–71].
- 597 Hasse, D. and A. Bertolacci 2018 [\*74].
- 598 Michot, Yahya (Jean). "Ibn Taymiyya's commentary on Avicenna's *Ishārāt*, namaṭ x." In Al Ghouz 2018 [\*75: 119–210].
- 599 Wisnovsky, Robert. "On the emergence of Maragha Avicennism." *Oriens* 46 (2018): 263–331.
- 600 Gutas, Dimitri. "Philosophical manuscripts. Two alternative philosophies." In *Treasures of Knowledge. An Inventory of the Ottoman Palace Library (1502/3–1503/4)*. Ed. by Gülru Necipoğlu, Cemal Kafadar, and Cornell H. Fleischer. Leiden, 2019, 1, 907–933.
- 601 Sebtī, M. and D. De Smet 2019 [\*76].

- 602 Bertolacci, Amos. "Avicenna's *Šifā'* and a Commentary on It in Twenty-five Volumes: the Bodleian Pococke Collection and Faḥr al-Dīn al-Rāzī", In *Penser avec Avicenne. De l'héritage grec à la réception latine, en hommage à Jules Janssens*, ed. Daniel De Smet and Meryem Sebti. Leuven, Paris, Bristol (CT), 2022, 255–282.
- 603 Bertolacci, Amos and Gholamreza Dadkhah. "Avicenna's *Šifā'* from Safavid Iran to the Mughal Empire: On Ms. Rampur Raza Library, 3476." *Entangled Religions. Interdisciplinary Journal for the Study of Religious Contact and Transfer* 13.5 (2022) ("Safavid and Mughal Empires in Contact: Intellectual and Religious Exchanges between Iran and India in the Early Modern Era"), on-line at <https://er.ceres.rub.de/index.php/ER/issue/view/302>.
- 604 Panzeca, Ivana. "Traditions, transmissions, translations: An Overview on the Commentaries of Ibn Sīnā's Kitāb al-*Šifā'* preserved in India." *Palermo Occasional Papers* 1 (2022): 9–64.
- 605 Gutas, Dimitri. "The Qur'ān of the elite'. Ibn Sīnā's *Išārāt* as it relates to his earlier *summae* and determines later paraphilosophies." Forthcoming.
- (b) *In Judaism*
- 620 Lévy, Tony. "L'histoire des nombres amiables. Le témoignage des textes hébreux." *Arabic Sciences and Philosophy* 6 (1996): 63–87.
- 621 Zonta, Mauro. "The role of Avicenna and of Islamic 'Avicennism' in the 14th-century Jewish debate around philosophy and religion." *Oriente Moderno* n.s. 19 = 80 (2000) 647–660. – Special issue: *Religion versus science in Islam. A medieval and modern debate*. Ed. by Carmela Baffioni. Naples, 2001.
- 622 Janssens, J. and D. De Smet 2002 [\*49].
- 623 Harvey, Warren Zev. "Maimonides' Avicennism." *Maimonidean Studies* 5 (2008): 107–119.
- 624 Harvey, Stephen. "Avicenna's influence on Jewish thought. Some reflections." In Langermann 2009 [\*59: 327–340].
- 625 Freudenthal, Gad and Mauro Zonta. "Avicenna among medieval Jews. The reception of Avicenna's philosophical, scientific and medical writings in Jewish cultures, East and West." *Arabic Sciences and Philosophy* 22 (2012): 217–287.
- 626 Hasse, D. and A. Bertolacci 2012 [\*65].
- 627 Zonta, Mauro. "Possible Hebrew quotations of the metaphysical section of Avicenna's Oriental Philosophy and their historical meaning." In Hasse, Bertolacci 2012 [\*65: 177–195].
- 628 Freudenthal, Gad and Mauro Zonta. "The reception of Avicenna in Jewish cultures, East and West." In Adamson 2013 [\*69: 214–241]. – Abridged version of Freudenthal, Zonta 2012 [\*625].
- 629 Elgrably-Berzin, Gabriella. *Avicenna in Medieval Hebrew Translation. Ṭodros Ṭodrosi's Translation of Kitāb al-Najāt, on Psychology and Metaphysics*. Leiden, 2015.
- 630 Hasse, D. and A. Bertolacci 2018 [\*74].

(c) *In Arab Christianity*

640 Treiger, Alexander. Review of Adamson 2013 [\*69]. *Ilahiyat Studies* 5 (2014): 141–142.

(d) *In Syriac Christianity*

- 650 Furlani, Giuseppe. “La versione siriana del Kitāb al-Iṣārāt wat-tanbihāt di Avicenna.” *Rivista degli Studi Orientali* 21 (1946): 89–101. – Repr. in Sezgin et al. 1999 [\*44: II 109–122].
- 651 Takahashi, Hidemi. “The reception of Ibn Sīnā in Syriac. The case of Gregory Barhebraeus.” In Reisman, al-Rahim 2003 [\*50: 249–281].
- 652 Teule, Herman G.B. “The transmission of Islamic culture to the world of Syriac Christianity. Barhebraeus’ translation of Avicenna’s Kitāb al-iṣārāt wa-l-tanbihāt. First soundings.” In *Redefining Christian Identity. Cultural Interaction in the Middle East since the Rise of Islam*. Leuven, 2005: 167–184.
- 653 Teule, Herman G.B. “A theological treatise by Iṣo’yahb bar Malkon preserved in the theological compendium Asfār al-asrār.” *Journal of Eastern Christian Studies* 58 (2006): 235–252.
- 654 Teule, Herman G.B. and Carmen Fotesco Tauwinkl, eds. *The Syriac Renaissance*. Leuven, Walpole (MA), 2010.

(e) *In Latin Christianity*

- 660 Gilson, Étienne. “Les sources gréco-arabes de l’augustinisme avicennisant.” *Archives d’Histoire Doctrinale et Littéraire du Moyen Âge* 4 (1929): 5–149.
- 661 Goichon, Amélie-Marie. *La philosophie d’Avicenne et son influence en Europe*

*médiévale*. Paris, 1944, 1951 (2nd ed.). – Engl. transl. by M.S. Khan, *The Philosophy of Avicenna and Its Influence on Medieval Europe*. Delhi, 1969.

- 662 d’Alverny, Marie-Thérèse. “Avicenna Latinus [I–XI].” *Archives d’Histoire Doctrinale et Littéraire du Moyen Âge* (1961–1972). – Repr. in d’Alverny 1994 [\*665].
- 663 Siraisi, Nancy. *Avicenna in Renaissance Italy*. Princeton, 1987.
- 664 d’Alverny, Marie-Thérèse. *Avicenne en Occident*. Paris, 1993.
- 665 d’Alverny, Marie-Thérèse. *Avicenna Latinus. Codices*. Addenda collegerunt Simone Van Riet et Pierre Jordogne. Louvain-la-Neuve, Leiden, 1994.
- 666 Kischlat, Harald. *Studien zur Verbreitung von Übersetzungen arabischer philosophischer Werke in Westeuropa 1150–1400. Das Zeugnis der Bibliotheken*. Münster, 2000.
- 667 Janssens, J. and D. De Smet 2002 [\*49].
- 668 Janssens, J. 2006 [\*54].
- 669 Burnett, Charles. “Nīranj. A category of magic (almost) forgotten in the Latin West.” In *Natura, scienze e società medievali. Studi in onore di Agostino Paravicini Bagliani*. Ed. by Claudio Leonardi and Francesco Santi. Florence, 2008, 37–66.
- 670 Janssens, Jules L. “Ibn Sīnā (Avicenna). The Latin translations of.” In *Encyclopedia of Medieval Philosophy. Philosophy between 500 and 1500*, 2 vols [continuous pagination]. Ed. by Henrik Lagerlund. Dordrecht, 2011, 2020 (2nd revised ed.), 798–805.

- 671 Celli, Gaia. "Some observations about Hermannus Alemannus' citations of Avicenna's Book of the Rhetoric." *Oriens* 40 (2012): 477–513.
- 672 Daiber, Gaia. "Ibn Sīnā in the Latin Middle Ages." In H. Daiber, *Islamic Thought in the Dialogue of Cultures*. Leiden, 2012, 118–132.
- 673 Di Vincenzo, Silvia. "Avicenna's Isagoge, Chap. I, 12, De Universalibus. Some observations on the Latin translation." *Oriens* 40 (2012): 437–476.
- 674 Hasse, D. and A. Bertolacci 2012 [\*65: 197–387].
- 675 Bertolacci, Amos. "The reception of Avicenna in Latin Medieval culture." In Adamson 2013 [\*69: 242–269].
- 676 Hasse, Dag Nikolaus. *Success and Suppression. Arabic Sciences and Philosophy in the Renaissance*. Cambridge (Mass.), London, 2016.
- 677 Alpina, Tommaso. "Al-Ġūzġānī's Insertion of *On Cardiac Remedies* in Avicenna's *Book of the Soul*: the Latin Translation as a Clue to his Editorial Activity on the *Book of the Cure*?" *Documenti e studi sulla tradizione filosofica medievale*, 28, (2017): 365–400.
- 678 Bertolacci, Amos. "The Latin translation and the original version of the *Ilāhiyyāt* (Science of Divine Things) of Avicenna's." *Documenti e Studi sulla Tradizione Filosofica Medievale* 28 (2017): 481–514.
- 679 Saliba, George. "Avicenna's *Shifā'* (Sufficiencia): in Defense of Medieval Latin Translators." *Der Islam. Journal of the History and Culture of the Middle East*, 94.2, (2017): 423–433.
- 680 *Avicenne. Logica (logique du Šifā')*. Texte latin, édition critique de la traduction médiévale par Françoise Hudry. Paris, 2018.
- 681 Hasse, D. and A. Bertolacci 2018 [\*74].
- 682 Mandosio, Jean-Marc. "Follower or opponent of Aristotle? The critical reception of Avicenna's Meteorology in the Latin world and the legacy of Alfred the Englishman." In Hasse, Bertolacci 2018 [\*74: 459–534].
- 683 Di Vincenzo, Silvia. "Avicenna's legacy to the thirteenth-century Latin reception of Porphyry. The case of Albert the Great's *Super Porphyrium de v Universalibus*." *Documenti e Studi sulla Tradizione Filosofica Medievale* 30 (2019): 1–55.
- 684 Bertolacci, Amos. "The Translator's Cut. Cultural experience and philosophical narration in the early Latin translations of Avicenna". In *Premodern Experience of the Natural World in Translation*, ed. Katja Krause, Maria Auxent and Dror Weil. New York, London, 2023, 303–324.
- (f) *In Greek Christianity*
- 690 Akasoy, Anna. "George Gemistos Pletho and Islam." In Πρακτικά διεθνούς συνεδρίου αφιερωμένου στον Πλήθωνα και την εποχή του. Μυστράς, 26–29 Ιουνίου 2002 (Proceedings of the International Congress on Plethon and His Time. Mystras, 26–29 June 2002). Ed. by Λίνος Γ. Μπενάκης –Χρήστος Π. Μπαλόγλου (Αθήνα-Μυστράς 2003) 339–353.

# Philosophy after Ibn Sīnā (5th/11th century)

1 Ibn Sīnā's Companions – 2 Continuing Ibn Sīnā's Tradition: Abū l-'Abbās al-Lawkarī –  
3. Critical Approaches to Philosophy: Nāṣir-i Ḥusraw – 4 Secondary Literature

## 1 Ibn Sīnā's Companions

*Ahmed H. al-Rahim and David C. Reisman †*

1.1 Primary Sources – 1.2 Introduction – 1.3 Abū 'Ubayd al-Ġūzġānī – 1.4 Bahmanyār b. al-Marzubān – 1.5 Ibn Zayla – 1.6 Abū Sa'īd al-Ma'ṣūmī

### 1.1 Primary Sources

Bio-bibliographical Testimonies [\*1–\*7] – Reference Works by other Philosophers [\*11–\*19] – Individual Editions [\*23–\*38]

#### *Bio-bibliographical Testimonies*

1 Nizāmī 'Arūdī Samarqandī, Nağm al-Dīn Aḥmad b. 'Umar (fl. 551/1156). *Čahār maqāla*. Ed. by Muḥammad b. 'Abd al-Wahhāb Qazwīnī. Leiden, London, 1910.  
2 al-Bayhaqī, Ḥahīr al-Dīn Abū l-Ḥasan 'Alī b. Zayd Ibn Funduq, (d. 565/1169–1170). *Tatimmat Šiwān al-ḥikma*. Ed. by Muḥammad Šafī', fasc. 1: Arabic text. Lahore, 1935 [quoted here]. – Ed. by Muḥammad Kurd 'Alī, *Ta'rīḥ ḥukamā' al-Islām*. Damascus, 1365/1946. – Repr. 1396/1976. – Ed. by Mamdūḥ Ḥasan Muḥammad. Cairo, 1417/1996. – Abridged Engl. transl. by Max Meyerhof, "Alī al-Bayhaqī's *Tatimmat Šiwān al-Ḥikma*. A Biographical

Work on Learned men of the [sic] Islam." *Osiris* 8 (1948): 122–217.

3 al-Qiftī, Ġamāl al-Dīn 'Alī b. Yūsuf (d. 646/1248). *Ta'rīḥ al-ḥukamā' [Iḥbār al-'ulamā' bi-aḥbār al-ḥukamā']*, epitome by Muḥammad b. 'Alī al-Zawzanī]. Ed. by Julius Lippert, *Ibn al-Qiftī's Ta'rīḥ al-ḥukamā'*. Leipzig, 1903.

4 Ibn Abī Uṣaybi'a, Muwaffaq al-Dīn Aḥmad b. al-Qāsim (d. 668/1270). *Uyūn al-anbā' fī ṭabaqāt al-aṭibbā'*. Ed. by August Müller, 2 vols. Cairo, 1299/1882, Königsberg, 1884. – Ed. and Engl. transl. by Emily Smith-Savage, Simon Swain, Geert van Gelder. *A Literary History of Medicine. The 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā' of Ibn Abī Uṣaybi'ah*, I–III.2. Leiden, 2020. [The page numbers of

Müller's editions are inserted into the Arabic text in square brackets].

5 al-Šahrazūrī, Šams al-Dīn Muḥammad b. Maḥmūd (d. after 687/1288). *Nuzhat al-arwāḥ wa-rawḍat al-afrāḥ fī ta'rīḥ al-ḥukamā' wa-l-falāsifa*. – Ed. by Ḥwaršid Aḥmad, 2 vols. Hyderabad, 1976 [quoted here]. – Ed. by 'Abd al-Karīm Abū Šuwayrib as *Ta'rīḥ al-ḥukamā' qabla zuḥūr al-islām wa-ba'dahu*. Tripoli, 1988. – Repr. Paris, 2007.

6 Hāğğī Ḥalīfa, Muštafa b. 'Abdallāh, Kātib Çelebī (d. 1067/1657). *Kašf al-ẓunūn 'an asāmī l-kutub wa-l-funūn. Lexicon bibliographicum et encyclopaedicum*. – Ed. by Gustav Flügel, 7 vols. Leipzig/London, 1835–1858. – Ed. by Şerefettin Yaltkaya, Rifat Bilge, 2 vols. İstanbul, 1941–43 [quoted here].

7 al-Ḥwānsārī, Muḥammad Bāqir b. Zayn al-Ābidīn (d. 1313/1895). *Rawḍāt al-ğannāt fī aḥwāl al-'ulamā' wa-l-sādāt*. – Ed. by Asad Allāh Ismā'īliyan, Muḥammad Taqī al-Kašfī, 8 vols. Tehran, 1970–1972 [quoted here]. – Repr. Beirut, 1991.

#### Reference Works by other Philosophers

11 William E. Gohlman. *The Life of Ibn Sina. A Critical Edition and Annotated Translation*. Albany, 1974.

12 Ibn Sīnā, Abū 'Alī al-Ḥusayn (d. 428/1037). *Al-Šifā', al-Manṭiq, al-Madḥal*. Ed. by Ibrāhīm Madkūr et al. Cairo, 1371/1952.

13 Ibn Sīnā. *Al-Nağāt min al-ğaraq fī baḥr al-ḡalālāt*. Ed. by Muḥammad Taqī Dānišpażūh. Tehran, 1364/1985. – Ed. and Germ. transl. of the section on music

theory by Mahmoud El Hefny 1931 [\*1] 57–79 [Germ. transl.], 83–99 [Ar. text].

14 Ibn Sīnā. *Dānišnāma-yi 'Alā'ī: Riyāḍiyyāt* [Primary source as yet unedited; cf. § 1.1 above \*56.3]. – French transl. by Mohammad Achena, Henri Massé. *Livre de science*, vol. 2. Paris, 1955, 1986 (2nd ed.), 91–276. – Ed. of the section on music theory by Taqī Biniš. In *Siḥ risāla dar mūsīqī*. Tehran, 1992, 17–29.

15 Ibn Sīnā. *Al-Ta'liqāt*. Ed. by 'Abd al-Raḥmān Badawī. Cairo, 1392/1973. – Another recension of the text ed. by Sayyid Ḥusayn Mūsawiyān. Tehran, 1391 SH/2013.

16 Ibn Sīnā. *Al-Mubāḥaṭāt*. Ed. by Muḥsin Bīdārfar. Qum, 1371/1992.

17 Ibn Sīnā. *İbtāl aḥkām al-nuğūm*. Ed. by Hilmi Ziya Ülken. *İbn Sīnā Risāleleri*, vol. 2. İstanbul, 1953, 49–67. – Repr. Frankfurt a.M., 1999 [*Islamic Philosophy* 43].

18 al-Bīrūnī, Abū l-Rayḥān (d. c. 442/1050). *Ibn Sīnā: al-As'ila wa-l-ağwiba. Questions and Answers*. Ed. by Mehdi Mohaghegh, Seyyed Hossein Nasr. Kuala Lumpur, 1995. – Engl. transl. by Rafik Berjak, Muzaffar Iqbal. "Ibn Sīnā – al-Bīrūnī Correspondence." *Islam & Science*, 1 (2003) 91–98; 253–260; 2 (2004) 57–62; 181–187; 3 (2005) 57–62; 166–170; 4 (2006) 197–201; 5 (2007) 53–60.

19 al-Lawkarī, Abū l-'Abbās (d. after 517/1123–1124). *Bayān al-ḥaqq bi-dimān al-šidq. Al-'ilm al-ilāhī*. Ed. by Ibrāhīm Dībāğī. Tehran, 1374/1994.

20 al-Ḥafri, Šams al-dīn Muḥammad ibn Aḥmad (d. 942/1535), *Risāla fī İbtāt wāğib al-wuğūd bi-l-ḡat wa-şifātihi*. Ed.

by Firouzeh Saatchian, *Gottes Wesen – Gottes Wirken Ontologie und Kosmologie im Denken von Šams-al-Dīn Muḥammad al-Ḥafīrī* (gest. 942/1535) Berlin, 2011, 12–142.

### Individual Editions

*al-Ġūzġānī*

23 *Mulaḥḥas Kitāb kayfiyyat tarkīb al-aflāk*. Ed. and Engl. transl. by G. Saliba [\*6].

*Bahmanyār b. Marzubān*

28 *Risāla fī Mawḍū‘ ʿilm mā baʿd al-ṭabīʿa*. Ed. and Germ. transl. by Salomon Poper, *Behmenjār ben el-Marzubān, der persische Aristoteliker aus Avicenna's Schule. Zwei metaphysische Abhandlungen von ihm, Arabisch und Deutsch mit Anmerkungen herausgegeben*. Leipzig, 1851, 1–16 [Ar. pagination].

29 *Risāla fī Marātib al-mawġūdāt*. Ed. together with [\*28], 17–28 [Ar. pagination]. – Ed. and Pers. transl. by Ismāʿīl Wāʿiẓ Ġawādī, *Risāla-yi Marātib al-mawġūdāt-i Bahmanyār b. Marzubān*. In *Ġāwidān ḥirad*, 3/2. 1397/1977, 56–73.

30 *Kitāb al-Taḥṣīl*. Ed. by Murtaḍā Muṭaḥḥarī. Tehran 1970. – Pers. transl.

in ʿAbdallāh Nūrānī, Muḥammad Taqī Dānišpaẓūh (eds.), *Ġām-i ġāhān-numāy*. Tehran, 1983.

*Ibn Zayla*

34 *Al-Kāfī fī l-mūsīqī*. Ed. by Zakariyyā Yūsuf. Cairo, 1964.

35 *Tafsīr Risālat Ḥayy b. Yaqẓān*. Excerpts ed. and transl. by August F. Mehren. *Traité mystiques d'Abū Ali al-Hosain b. Abdallāh b. Sīnā ou d'Avicenne: Fasc. I, L'Allégorie mystique Hay ben Yaqẓān*. Leyde, 1889, 1–22 [Ar. pagination], 1–24 [transl.]. – Repr. Frankfurt a. M. 1999 [*Islamic Philosophy*, 35], 1–50. – Ed. by Muḥammad al-Maʿšūmī, *Risālat Ḥayy b. Yaqẓān maʿa šarḥihā li-Ibn Sīnā*. In *Maġallat al-maġmaʿ al-ʿilmī al-ʿarabī* 29/3–4, 30/1–3 (1954–1955) 406–416; 563–572; 91–105; 288–298; 427–439.

*al-Maʿšūmī*

38 *Difāʿ Abī Saʿīd al-Maʿšūmī ʿan Ibn Sīnā*. Ed. by M. Mohaghegh, S. H. Nasr 1995 [\*18: 59–87] – Engl. transl. by R. Berjak, M. Iqbal 2005–2007 [\*18: VI–VIII].

## 1.2 Introduction

Ibn Sīnā's reception history begins with Abū ʿUbayd al-Ġūzġānī, Bahmanyār, Ibn Zayla, and Abū Saʿīd al-Maʿšūmī. These four authors are usually described as his pupils, but this is not quite correct. Al-Ġūzġānī was primarily Ibn Sīnā's secretary and assistant, and according to his own account studied logic and astronomy under him. Bahmanyār, Ibn Zayla, and al-Maʿšūmī, on the other hand, should be seen as colleagues, companions, correspondents, or counterparts in philosophical conversation rather than as pupils of the 'master'. As all four belonged to his inner circle, they will be called Ibn Sīnā's companions in



this context. If we follow the Arabic and Persian bio-bibliographical sources, they were the earliest adherents and champions of his eastern, i.e. Ḥurāsānian philosophical school (*al-mašriqiyyūn*). At the same time, they were also independent philosophers and scientists who challenged Ibn Sīnā's method or teachings (*madhhab*) as well as the way in which Ibn Sīnā attempted to synthesise neo-Platonising Aristotelianism with the Islamic environment. Both are reflected in the extant textual corpus they produced. It includes not only synopses and interpretations of Ibn Sīnā's writings that can be regarded as the earliest models of the subsequent tradition of commentaries, but also independent philosophical and scientific works. In their literary sketches, some biographers of the Islamic tradition described Ibn Sīnā's teaching sessions with his companions. These descriptions served to present him and his immediate pupils in accordance with the pedagogical ideas of the later Islamic tradition. How little these biographers knew about Ibn Sīnā's companions in actual fact, however, is demonstrated by the numerous incorrect attributions concerning their works. This circumstance, together with the fact that so many textual testimonies of medieval Islamic civilisation have been lost, is evidence of just how much Ibn Sīnā overshadowed the Islamic philosophical history that followed him.

Without uncritically adopting his teachings, al-Ġūzġānī, Bahmanyār, Ibn Zayla, and al-Ma'šūmī thus played an important part in the creation of an early Ibn Sīnā tradition. Above all, their commitment to a comparatively traditional neo-Platonising Aristotelianism located between the purely commenting style of the so-called Baghdad school (cf. PIW 1 § 7) and Avicennism shows that they retained their independence of the 'master'. This is true above all of Bahmanyār who may be regarded as the most important of the four with respect to his own works, his writings structurally following a clearly Avicennan systematic approach. As for al-Ġūzġānī, he adhered to established philosophical genres and forms in his works, at the same time promoting Ibn Sīnā's reputation and profile. Besides his task of administering and editing his teacher's oeuvre, he composed the literary biography or hagiography *Sīrat al-Šayḥ al-ra'īs* (*The Life of the Uncontested Master of the Peripatetics*), creating an idealised portrait imbuing Ibn Sīnā with philosophical authority that exceeded even that of Aristotle in the Islamic world (Gohlman 1974 [\*n]). This includes a lively description of the nocturnal reading and drinking circles. They took place in Ibn Sīnā's residence, presumably in Hamadan (c. 405–415/1015–1024), at the time when he found himself in the service of the Būyid emir Abū Ṭāhir Šams al-Dawla (r. 387–ca. 411/997–ca. 1020). The narrative confirms the extent to which al-Ġūzġānī contributed to the creation of *al-Šifā'* (*The Cure*), Ibn Sīnā's summa magna of the Aristotelian sciences, even composing the introduction. Every night, al-Ġūzġānī tells us, the students (*ṭalabat al-'ilm*) gathered in Ibn

Sīnā's house where he (al-Ġūzġā nī) and another student took turns reading from *al-Šifā'* and *al-Qānūn [fī l-ṭibb]* (*The Canon of Medicine*). This was followed by singers' performances, and everybody drinking wine together (*maġlis al-šarāb*). At this time, lessons took place at night because Ibn Sīnā had to work for the emir during the day (Gohlman 1974 [\*11: 54–57]. In *Tatimmat Šiwān al-ḥikma* (*The Supplement to the Treasury of Wisdom*), Ibn Funduq (d. 565/1169–1170) embellishes al-Ġūzġānī's account with some additional details that would be adopted into later biographies of Ibn Sīnā. According to him, Abū 'Ubayd and al-Ma'šūmī took turns reading (*yaqra'u*) from *al-Šifā'* and *al-Qānūn [fī l-ṭibb]*, respectively, as well as (according to Šafī's edition) Ibn Zayla from *al-Išārāt* and Bahmanyār from *al-Hāsil wa-l-maḥṣūl* (*The Available and the Valid*) [\*2: 49]; following him Šahrazūri [\*5: 11 111]). While Ibn Funduq's account bears hagiographical traits, his description identifies Ibn Sīnā's immediate companions by linking each one with a particular work by the 'master' (regarding the dating of the *Išārāt*, which were composed only later, see Michot 1997 [\*10: 153–164] and 2007 [\*17: 82–83]; Reisman 2002 [\*11: 564–565]; Gutas 2014 [\*22: 155–191]). As for the nocturnal gatherings in Hamadan, it is probable that they were reading sessions (*maġālis al-qirā'a*), followed by merrymaking and wine-drinking, during which al-Ġūzġānī and possibly others would recite the working version of one of Ibn Sīnā's works to be listened to (*samā'*) in order to manufacture a holograph (*dustūr*) or an archetypal copy (*al-nuṣṣa al-dustūr*) of the manuscript intended for publication.

### 1.3 *Abū 'Ubayd al-Ġūzġānī*

Abū 'Ubayd (or Abū 'Ubayd Allāh) 'Abd al-Wāḥid b. Muḥammad al-Ġūzġānī is the only one of the four companions to be mentioned by name in Ibn Sīnā's auto-/biography, where Ibn Sīnā writes that he met al-Ġūzġānī on his arrival in Ġūrġān (403 – c. 404/1013 – c. 1014). According to tradition, Ibn Sīnā fled from Hamadan to Isfahan together with two of his slaves, al-Ġūzġānī, and the latter's brother in 414/1023, all of them dressed as Sufis. In his introduction to *al-Šifā'*, al-Ġūzġānī declares that he decided in his adolescence to study under Ibn Sīnā and to serve him, as he wished to acquire 'genuine knowledge' (*al-ma'ārif al-ḥaqīqīyya*) in the 'philosophical sciences' (*al-'ulūm al-ḥikmīyya*) (Gutas 2014 [\*22: 29]). As a result of his own reading as well as the accounts of others, he says, he reached the conviction that Ibn Sīnā was the most compelling scholar of his time (Gutas 2014 [\*22: 30]). He had also heard that Ibn Sīnā had written many works (*taṣānīf*) and handed these out most generously without keeping copies for himself. This was the reason why al-Ġūzġānī offered Ibn Sīnā, who was around thirty-two at the time, to take care of the preservation of his works, in order that Ibn Sīnā would be able to dedicate himself to writing (Gutas 2014

[\*22: 30]). As he reports, he visited Ibn Sīnā regularly (*aḥtalifu ilayhi*), studied Ptolemy's *Almagest* with him (*aqra'u*), and requested a dictation on logic from him, whereupon Ibn Sīnā dictated *al-Muḥtaṣar al-awsaṭ fi l-mantiq* (*The Middle Compendium on Logic*) (Gohlmann 1974 [\*11: 44–45]; cf. the partial translation in Gutas 2014 [\*22: 462]). Al-Ġūzġānī also played a part in the creation of Ibn Sīnā's *al-Nağāt* (*The Salvation*). This presents logic, physics, and metaphysics (in the form composed by Ibn Sīnā), but not the mathematical sciences (*al-riyāḍiyyāt*). After describing *al-Nağāt* as 'incomplete' – apologetically, as it were – because the original version did not follow the traditional Peripatetic model as to its form, al-Ġūzġānī went on to add the sections dealing with the quadrivium (arithmetic, geometry, astronomy, music; adding the same sections in Persian translation in the *Dānišnāma* [\*14]). He referred to the following works by Ibn Sīnā which had been composed independently of *al-Nağāt*: a book on the principles of geometry (*uṣūl al-handasa*) intended as a compendium (*muḥtaṣar*) to Euclid; Ibn Sīnā's astronomical work *al-Arṣād al-kullīyya wa-ma'rifat tarkīb al-aflāk* (*The Comprehensive Observations and the Knowledge of the Structure of the Spheres*), an abridged version of the *Almagest* (this was a posthumous addition; cf. Gutas 2014 [\*22: 423, 460–469]; and Ragep 2004 [\*14: 5–7]); as well as Ibn Sīnā's *al-Muḥtaṣar fī 'ilm al-mūsīqī* (*The Compendium of Musical Science*). The only subject in which al-Ġūzġānī was unable to find a suitable short text was arithmetic; he consequently summarised the book on arithmetic from the *Šifā'* in the form of an epistle and incorporated this into *al-Nağāt* (Mahdawī 1954 [\*3: 234–235]; Gutas 2014 [\*22: 422–423]; al-Rahim 2018 [\*23: 42]). In his function as Ibn Sīnā's assistant, he may have undertaken these additions in order to protect his 'master' from criticism levelled at him by self-styled Aristotelian traditionalists, especially those connected with the Baghdad school. Ibn Sīnā, on the other hand, the philosophical maverick who did not follow tradition to the letter, clearly had neither time nor interest for reworking the mathematical sections of *al-Šifā'* for different purposes. This poses the question of how faithful or how innovative the redaction of the quadrivium from the *Šifā'* that al-Ġūzġānī incorporated in *al-Nağāt* and, in Persian, in the *Dānišnāma*, actually is.

Al-Ġūzġānī provides interesting information on his professional position as Ibn Sīnā's secretary (*kātib*) and amanuensis (*mudawwin*), and on the difficulties attendant on recovering his teacher's dispersed works. According to him, Ibn Sīnā was much occupied by his service in the financial administration of the Ziyārid sultan (Falak al-Ma'ālī Manūčīhr, d. 420/1029), which is why he had barely any opportunity to write or dictate works of his own. As a result, he referred al-Ġūzġānī to commentaries and books he had written earlier in his homeland. These, however, were scattered in many places and difficult to recover. As al-Ġūzġānī explains, it was not Ibn Sīnā's custom (*'ada*) to prepare

a holograph of his draft (*yuhriġa min al-sawād*) or a fair copy (*yuharrira min al-dustūr*). Instead, he limited himself to either dictating the text or preparing a copy which he then handed over to the person who had commissioned it from him. In addition, he appears to have been afflicted more than once by personal calamities and catastrophes as a result of which his books were destroyed or lost (Gutas 2014 [\*22: 30–33]; al-Rahim 2018 [\*23: 43]). All of this shows that al-Ġūzġānī played an important, if not the decisive, part in preserving and transmitting Ibn Sīnā's works.

Al-Ġūzġānī furthermore ensured contact with courtly culture, which was essential in providing patronage for philosophy. In this context his introduction to *al-Šifā'*, in which he created a kind of propagandistic hagiography of Ibn Sīnā, is particularly significant. Its twofold aim was to charm himself into the good graces of possible sponsors, and to discredit his 'master's' opponents in Hamadan (especially Abū l-Qāsim al-Kirmānī) and elsewhere from a philosophical point of view. To this end he praises Ibn Sīnā's prominent intellect and philosophical wit with the words: 'I recount these stories [...] in order that one might be amazed at [Ibn Sīnā's] ability to compose the *Physics* and the *Metaphysics* within twenty days, without access to books, following only the dictation of his heart which was, [furthermore], troubled by [all manner of] suffering' (Gutas 2014 [\*22: 34]; al-Rahim 2018 [\*23: 43–44]). In the same place, al-Ġūzġānī provides the first of two explanations of the origin of the *Šifā'*. According to this, all hope of recovering the lost works (*taṣānīfuḥu l-fā'ita*; meaning: *al-Hāsil wa-l-maḥṣūl*) had been abandoned at the time, and consequently the companions (the text says 'we') asked Ibn Sīnā to write the work down once more. His reply was: 'I have neither time nor inclination to dedicate myself to detailed textual analysis and commenting. If, however, you are satisfied with what is available in my mind, then I could write a comprehensive work (*taṣnīf ġāmi'*), in the order (*tartīb*) that appears appropriate to me (*yattaḥiq lī*).'<sup>1</sup> This was done, Ibn Sīnā writing a text on *Physics* twenty pages long before being interrupted anew by administrative tasks (*Šifā'* [\*12: 2]; Gutas 2014 [\*22: 31n.8]; al-Rahim 2018 [\*23: 44]). The second version of this story is included in the biography of Ibn Sīnā which al-Ġūzġānī wrote after the 'master's' death. It tells us, similarly, that Ibn Sīnā composed the *Šifā'* on request, but due to lack of time was able to write down only his own teachings without including the opinions of others. In this version, however, al-Ġūzġānī claims that he (singular) had made the request, thus ensuring that he alone would be linked to the inception of Ibn Sīnā's magnum opus (Gutas 2014 [\*22: 102–104]; al-Rahim 2018 [\*23: 44]).

Leaving aside al-Ġūzġānī's obvious self-praise, the fact that the written transmission of the *Šifā'* would hardly have been possible were it not for al-Ġūzġānī's position as secretary remains remarkable – to say nothing of

the transmission of other works by Ibn Sīnā, to which he also contributed. Furthermore, both explanations mentioned contain the narrative that Ibn Sīnā's innovative synthesis of Aristotelianism differed philosophically from the works of the Baghdad Aristotelians including all their commentaries and counter-commentaries (*al-munāẓara ma'a l-muḥālifīn*) as well as from Abū l-Qāsim al-Kirmānī (apparently a pupil [*ḡulām*] of Abū l-Ḥasan al-ʿĀmirī [d. 381/992]), and also the last representative of the Baghdad school, the Nestorian Christian Abū l-Faraǧ ʿAbdallāh Ibn al-Ṭayyib al-ʿIrāqī (d. 435/1043) (regarding both cf. PIW 1 § 5.2.3 and § 7.6). This precisely is the significance of the *Šifāʾ* and its redactor al-Ġūzǧānī for the subsequent history of philosophy: This summa was the fundamental corpus of the Aristotelian philosophical science for the following generations of philosophers and philosophical theologians, replaced the traditional Aristotelianism that had lasted from Alexandria in late antiquity to mediaeval Baghdad, and consequently made Avicennism the object of future hermeneutic-philosophical investigations. Al-Ġūzǧānī's contribution to developing the Avicennan tradition should thus not be underestimated. He not only administered and preserved his 'master's' writings, but also encouraged him to write his lost works down anew, which appears to have led to the emergence of new texts as well. In this way he ensured that Ibn Sīnā focused on philosophy, without overlooking that his political engagement was indispensable in order to be granted the patronage necessary for this undertaking. Al-Ġūzǧānī furthermore initiated the biographical and hagiographical tradition of Ibn Sīnā, as his contributions to this genre formed the foundation for all further literary versions presented by later generations of followers and critics. Finally, it appears that he stayed with Ibn Sīnā until the latter's death in 428/1037. The year of his own death is, unfortunately, unknown to us.

Al-Ġūzǧānī's own intellectual interests were primarily focussed on the mathematical sciences, especially astronomy – Ibn Sīnā having contributed more than a little to separating it from astrology. The fact that these scientific interests encouraged al-Ġūzǧānī to study the *Almagest* together with Ibn Sīnā may also serve as an explanation as to why it was a particular concern of his to add the (missing) mathematical sections in *al-Naǧāt* and in the *Dānišnāma*. As for al-Ġūzǧānī's own texts, finally, there are no fewer than six works attributed to him – in addition to his contributions to Ibn Sīnā's summae – which still await in-depth investigation.

(1) The first work entitled *Ḥilāṣ kayfiyyat tarkīb al-aflāk* (*Short Treatise on the Form of the Arrangement of the Spheres*) is a critical commentary on selected problems in Abū l-ʿAbbās Aḥmad b. Muḥammad al-Farǧānī's (d. after 247/861) *Ġawāmiʿ ʿilm al-nuǧūm wa-l-ḥarakāt al-samāwiyya* (*Epitome of the Science of the Stars and the Celestial Movements*) (Ragep 2009 [\*19: 302]; al-Rahim 2018

[\*23: 46–47]), a widely read compendium on Ptolemy's *Almagest*. It comprises eight chapters (*fuṣūl*) on the following topics: (i) introduction; (ii) structure of the work; (iii) use of the diopter; (iv) the varying visibility section of the sky; (v) precession of the fixed stars as compared to the ecliptic (with an account of Ibn Sīnā's famous observation of the transit of Venus in the year 422/1032; cf. Kapoor 2013 [\*21]); (vi) arcs rising simultaneously with parts of the ecliptic; (vii) on the fact that the arcs described by the sun in its daily course are not parallel with the celestial equator; (viii) on the problem of the equant in the models of the planetary movement proposed by Ptolemy. In the *Ḥilāṣ*, al-Ġūzġānī reports that Ibn Sīnā and (presumably) he had carried out an observation of the inclination of the ecliptic in Isfahan between 414/1023 and 428/1037. In the context of this observation and the equant problem, he records that he carried out observations over eight years while in Isfahan in order to explain (*tabyīn*) what Ptolemy had reported with reference to his own observations (Gohlman 1974 [\*11: 80–81]).

(2) The second work is al-Ġūzġānī's own excerpt (*mustahraġ*) of the *Ḥilāṣ*, the *Mulaḥḥaṣ Kitāb kayfiyyat tarkīb al-aflāk* (*Compendium of the Book on the Form of the Arrangement of the Spheres*) (for a translation and edition see Saliba 1980 [\*6: 380–387/388–403]). It focuses entirely on the problem of the Ptolemaic equant, discussed in the last chapter (viii) of the *Ḥilāṣ*, copies the entire chapter and adds a section transmitted only here. Its significance lies in the criticism of earlier Arab scientists: They did not provide correct tables of the planets' orbits and the unity of the 'planetary hypotheses' according to Ptolemy. The *Mulaḥḥaṣ* reveals knowledge of the astronomical works of Abū Ġa'far Muḥammad al-Ḥāzin (d. c. 360/970), Abū l-'Abbād b. al-Faḍl al-Nayrīzī (fl. late 4th/9th cent.), and Tābit b. Qurra (d. 288/901) as well as Ibn al-Hayṭam (d. 430/1040), a contemporary of al-Ġūzġānī's.

In the context of the equant problem, it appears to have been al-Ġūzġānī's intention to align his cosmological assumptions with the available observational data. Of particular importance is his description of the obliquity of the ecliptic, which was probably based on the abovementioned observations carried out in Isfahan. As he explains, the obliquity decreased as the result of adopting an additional orb. With a nod to astrology, he hypothesises that the rate of increase in the ecliptic could lead to a worldwide flood bringing about the end of civilisation. In the context of his greater physical planetary model, al-Ġūzġānī goes on to say that there are forty-two spheres surrounding the earth, and that the total number of epicycles is thirty-one. This leads him to conclude the total number of seventy-three orbs in his cosmography. One of the central issues in this kind of theoretical astronomy is accounting for the ecliptic. Here al-Ġūzġānī appears to overlook that simply displacing the eccentric

orb with an equant orb does not solve the problem to bring about the hypothesis of the equant motion. Later astronomers were not particularly impressed by al-Ğüzğānī's theory. He even declares, in keeping with the hagiography of his 'master', that Ibn Sīnā had solved the tiresome problem of the equant but not told the solution to anyone, not even him, al-Ğüzğānī. The model of the observed movement of the spheres as presented by al-Ğüzğānī in the *Mulaḥḥaṣ* is explicitly rejected as invalid (*bāṭil*) by Quṭb al-Dīn al-Šīrāzī (d. 710/1311), in *Fa'altu fa-lā talum* as well as in the *Ihtiyārāt-i Muẓaffarī* (MS Istanbul, Ayasofya 2575), which has the title of the *Mulaḥḥaṣ* as *Tarkīb al-aflāk* (for an edition and translation of the section containing the criticism of al-Ğüzğānī's model see Niazi 2011 [\*20: 283]). Al-Šīrāzī furthermore declares bluntly that, with his solution to Ptolemy's theory for the epicycle centre, al-Ğüzğānī 'embarrassed himself'. According to Saliba this criticism means that al-Ğüzğānī neither solved nor understood the equant problem, as he saw in it merely the equivalence of the eccentric and epicyclical hypotheses that was proved in the *Almagest*. Those of his ideas on the subject that made sense at all consisted in a return to some pre-Ptolemaic planetary models without an equant, which genuinely were a combination of uniform circular movements (Saliba 1980 [\*6: 379]).

Ibn Funduq, who mentions neither the *Ḥilāṣ* nor the *Mulaḥḥaṣ*, attributes the following three books to al-Ğüzğānī (*Tatimma* [\*2: 94]). (3) An apparently lost commentary elucidating the difficulties in Ibn Sīnā's *Qānūn* (*fassara muškilāt*) and thus probably the earliest among the numerous commentaries on this medical work. (4) A *Kitāb al-Ḥayawān* (*Book of Animals*), also lost, in Persian; Ibn Funduq mentions a copy in the possession of the Nizāmiyya library (*ḥizāna*) in Nishapur (this might have been a Persian translation of Ibn Sīnā's discussion of zoography in *al-Šifā*). (5) A *Šarḥ Risālat Ḥayy b. Yaqẓān* (*Commentary on the Epistle Ḥayy b. Yaqẓān*) probably attributed incorrectly to al-Ğüzğānī; this is the translation of a commentary on Ibn Sīnā's philosophical allegory, written shortly after his death and dedicated to the Kākūyid 'Alā' al-Dawla (d. 422/1041). Note that this is not to be confused with Ibn Zayla's Arabic *šarḥ* on the same work; cf. Gutas 2014 [\*22: 343, 483] who does not, however, rule out the possibility that this text was by al-Ğüzğānī. (6) Ḥāğğī Ḥalīfa (d. 1067/1658), finally, lists a spurious commentary (*šarḥ*) by al-Ğüzğānī on *al-Qaṣīda al-Ayniyya* (*Kašf al-ẓunūn* [\*6: 11 1342], al-Rahim 2018 [\*23: 47]), a poem on the soul that had probably been attributed incorrectly to Ibn Sīnā as well (Gutas 2014 [\*22: 453–456]).

#### 1.4 *Bahmanyār b. al-Marzubān*

Bahmanyār, who may have been 'the aristocratic young man' to whom Ibn Sīnā addressed a famous letter, was notable for his independent and thoroughly

original approach to philosophy. In Ibn Sīnā's autobiography, which al-Ġūzġānī continued as a biography, his name is not mentioned at all. In *al-Mubāḥaṭāt* (*The Discussions*), a posthumous collection of Ibn Sīnā's correspondence with members of his immediate circle, on the other hand, he is addressed with the title 'the excellent master' (*al-šayḥ al-fāḍil*) or simply 'the master' (*al-šayḥ*) (*Mubāḥaṭāt* [\*16: 38, 49, 54–55, 61]; cf. Reisman 2002 [\*12: 185]). These honorifics are evidence that Ibn Sīnā regarded him more as a colleague than as the pupil or 'faithful companion' as the sources usually depict him.

Bahmanyār's earliest biographer was Ibn Funduq, who called him simply 'Bahmanyār' (*Tatimma* [\*2: 91–92]). Al-Šahrazūrī (d. after 687/1288) added the patronymic b. al-Marzubān to this name (*Nuzha* [\*5: 38]). Ibn Abī Uṣaybi'a (d. 667/1270) was the first to call him by the more complete name Abū l-Ḥasan Bahmanyār b. al-Marzubān (*ʿUyūn* [\*4: 11 19]). Al-Ḥwānsārī (d. 1313/1895) continued to use the agnomen (*kunya*) Abū l-Ḥasan, adding the relational toponym (*nisba*) 'non-Arab' (*al-ʿġamī*) and – following Ibn Funduq in this instance – 'from Azerbaijan' (*al-Āḍarbāyġānī*) (*Rawḍāt* [\*7: 11 159]). Niẓāmī 'Arūdī (d. after 551/1156), whom several modern biographers follow, gives him the title *Kiyā Raʿīs* or simply *Kiyā* (*Čahār Maqāla* [\*1: 82]), but these titles appear to be the result of mistaking him for a certain Kiyā Abū Ġāfar Muḥammad b. al-Ḥasan (or al-Ḥusayn) al-Marzubānī (or Ibn Marzubān), to whom Ibn Sīnā once addressed a letter (Michot 1992 [\*8: 154]; Reisman 2002 [\*12: 186–187]; Gutas 2014 [\*22: 53–58]). The source of the conflation of the names of al-Kiyā and Bahmanyār was presumably al-Ḥuḍayrī (apud Dībāġī in his edition of Lawkarī's *Bayān al-ḥaqq* [\*19: 9–10]), who declared, without naming his source, that towards the end of his life Ibn Sīnā gave Bahmanyār the title '*al-Kiyā*' meaning 'the leader' (*raʿīs* or *muqaddim*), just as he called other students 'astute' (*faqīh*) or 'wise' (*ḥakīm*). Consequently, the reference to Bahmanyār in one of the fascicles of the *Mubāḥaṭāt* (MS Berlin, Petermann II, 466) as Abū l-Ḥusayn Bahmanyār b. al-Marzubān al-Kātib (chancellery secretary) seems more reliable, as he might indeed have served the Būyid Maġd al-Dawla as his secretary (cf. Reisman 2002 [\*12: 185, 191]). Ibn Funduq provides further information on Bahmanyār's life and work, in more detail than the *Mubāḥaṭāt* and Ibn Sīnā's letters: Bahmanyār was a companion of Abū 'Alī [Ibn Sīnā], and a Zoroastrian from Azerbaijan, who was not particularly well versed in Arabic (*kalām al-ʿarab*). The texts called *al-Mabāḥiṭ* (in another reading: *al-Mubāḥaṭāt*), he claims, consisted mainly of Bahmanyār's *quaestiones* (*masā'il*) to Ibn Sīnā which sought answers to difficult philosophical questions (*ġawāmiḍ al-muškilāt*). Among his own works were *Kitāb al-Taḥṣīl*, *Kitāb al-Zīna fī l-manṭiq*, *Kitāb al-Baḡa wa-l-saʿāda*, *Kitāb al-Mūsīqī* as well as numerous epistles (*rasā'il*) (*Tatimma* [\*2: 91]).



There can be no question that Bahmanyār was one of Ibn Sīnā's companions and a member of his inner circle. It is more difficult to determine when they met for the first time, how intensive their contact was, and whether Bahmanyār ever took part in the nocturnal philosophical gatherings in Hamadan reported by al-Ġūzġānī. According to Nizāmī 'Arūḍī, he met Ibn Sīnā in Isfahan when the latter was in the service of his sponsor and protector 'Alā' al-Dawla between 415 and 428/1024 and 1037. Apart from this account, adopted by, among others, al-Šāhrazūrī and al-Ḥwānsārī, there is no information on their first meeting in the biographies. It does appear possible all the same that they met as early as 404/1014 in Rayy. If we assume that Bahmanyār was the son of the *ispahbād* (*amūr*) Marzubān, and that besides the honorifics mentioned above he was possibly addressed in a letter as 'the aristocratic young man, one of the commander's sons', he might have taken part in Ibn Sīnā's literary salon in Rayy. His father Marzubān held the post of *ispahbād* (Lord of Firrīm) in Rustam, had connections to the Būyid family in Rayy, and worked in Māzandarān in the Elburz mountains. Bahmanyār thus probably came from an aristocratic family; his interest in philosophy may well have been that of an educated and intelligent amateur before he became a recognised scholar in his own right in later years. It is of particular interest that at an earlier time, Bahmanyār had links to Abū l-Qāsim al-Kirmānī, a political as well as intellectual opponent of Ibn Sīnā's. The correspondences documented in the *Mubāḥaṭāt* reveal that he and Kirmānī read from Ibn Sīnā's works, especially parts of the *Šifā'*, and that this was apparently the reason for Bahmanyār's long-distance correspondence and for his getting in touch with Ibn Sīnā. As for his religious affiliation, it is not certain whether Bahmanyār professed Zoroastrianism, or Sunni or Shiite Islam. While his family background suggests a connection with Zoroastrianism, his *kunya* Abū l-Ḥasan or l-Ḥusayn indicates that he was a Muslim, at least nominally. Al-Ḥwānsārī speculates that Bahmanyār's maternal uncle (*ḥāl*) was the same Abū Maṣṣūr Bahrām b. Ḥwaršīd b. Yazdyār to whom Bahmanyār dedicated his philosophical summa, *Kitāb al-Taḥṣīl* (*The Validated Knowledge* [\*30]), and that he like his nephew was a Zoroastrian (*maġūsī*) until the time when both converted to Islam.

As regards Bahmanyār's death, Ibn Funduq refers to 'thirty years after Ibn Sīnā's [death]', which would date it to the year 458/1066–1067. This could be correct only if we assume that Bahmanyār was very young indeed when he corresponded with Ibn Sīnā, and when he made a name for himself as a respected philosopher with his *Kitāb al-Taḥṣīl*. Brockelmann, on the other hand, writes – possibly as the result of misreading al-Šāhrazūrī – that Bahmanyār died in 430/1038–1039, which would support the idea that he was Ibn Sīnā's colleague rather than his pupil (cf. Qazwīnī's notes in *Čahār maqāla* [\*r: 252 n.4],

Qarā'ī Garakānī 2004 [\*15: 217]). In view of the long relationship between them as well as the complete absence of textual evidence to the contrary, we may assume that like Ibn Zayla and al-Ma'ṣūmī, Bahmanyār died shortly after Ibn Sīnā. Ibn Funduq's providing a much later date for his death may be an attempt to move him chronologically closer to Abū l-'Abbās al-Faḍl b. Muḥammad al-Lawkarī (d. after 517/1123–1124). He greatly valued the chain of transmission (*isnād*), Ibn Sīnā – Bahmanyār – Lawkarī (in keeping with the topos 'a meeting of great minds'), as such a connection would buttress his claim that Ibn Sīnā's philosophy spread in Ḥurāsān under al-Lawkarī (*Tatimma* [\*2: 120–121]; al-Rahim 2018 [\*23: 15–28]).

In the bio-bibliographical tradition, Bahmanyār is seen as Ibn Sīnā's commentator, especially in the context of *al-Mubāḥaṭāt* and *al-Ta'liqāt*. In several versions parts of which are likely to go back to Bahmanyār, the former includes questions by him and by Ibn Zayla and indirectly by Abū l-Qāsim al-Kirmānī, asked either orally or in writing, as well as Ibn Sīnā's answers (*al-Mubāḥaṭāt* [\*16]; al-Rahim 2018 [\*23: 51 n. 86]). They provide a definitive source for the part played by Bahmanyār and Ibn Zayla in the creation of the Ibn Sīnā tradition. As long as a critical edition of the text is not available, information may be found in Reisman's detailed analysis of the manuscripts and the transmission environment (Reisman 2002 [\*12: passim]). As for *al-Ta'liqāt* (*The Notes* [\*15], a collection of remarks on Ibn Sīnā's fundamental terms of logic, physics, and metaphysics), they were linked to Bahmanyār incorrectly, presumably because of his alleged connection with al-Lawkarī who compiled the table of contents (*fihrist*) for this work in 503/1109–1110. As a result of this mistake, it has been claimed that at least two recensions of the text were 'transmitted by (*riwāya*) Bahmanyār on the authority of (*'an*) al-Fārābī (!) and Ibn Sīnā' (Mahdawī 1954 [\*3: 60–64]). As Janssens has shown, however, the *Ta'liqāt* belong with Ibn Zayla's written record of his philosophical discussions with Ibn Sīnā (Janssens 1997 [\*9]). Here at least the "connection" with al-Lawkarī was not via Bahmanyār but via Ibn Zayla.

No fewer than eight philosophical works are attributed to Bahmanyār. (1) The first one, the *Kitāb al-Taḥṣīl* which, as has been mentioned, bears a dedication to his uncle Bahrām b. Ḥwaršīd, is a summa of the philosophical sciences written between 415/1024 and 428/1037. Its structure, although not necessarily its philosophical substance, harks back to Ibn Sīnā's *Dānišnāma*, as does al-Ġazālī's *Maqāṣid al-falāsifa* (*The Intentions of the Philosophers*; cf. § 3.3.5 below). Bahmanyār's approach to philosophy follows Ibn Sīnā's deliberations on the theory of the soul and the human faculty of thought, or intellect, as the foundations of the entire philosophical system. In the *Taḥṣīl*, this is reflected in a new arrangement of the Aristotelian disciplines which follows Ibn Sīnā's innovative

ideas on the rational soul at the centre of philosophical studies. Bahmanyār's approach to the subject, which already took shape in the *Mubāḥaṭāt*, encouraged him to present Ibn Sīnā's ideas in the sequence logic – metaphysics – physics, reflecting the latter's re-formulation of the Aristotelian system as the development of the soul towards its intellectual 'salvation'. Physics, complete with psychology, marks the goal of philosophical investigation, replacing metaphysics as the crown of the philosophical sciences. *Al-Taḥṣīl* was translated into Persian anonymously, with the title *Ġām-i ġahān numāy* (*The Chalice that Reveals the World*). 'Abd al-Laṭīf al-Baġdādī (d. 629/1231–1232), a significant critic of Ibn Sīnā's, obviously regarded the book as an important Peripatetic synopsis of the philosophical sciences, and is said to have verified (*ḥaṣṣala*) the validity of the arguments himself ('Uyūn [\*4: 11 204]). Al-Ḥwānsārī was of the opinion that it was – albeit not completely – composed in accordance with the Peripatetics' traditional method, which would agree with the impression of a certain disagreement between Bahmanyār and Ibn Sīnā, recently confirmed by Janssens (cf. Janssens 2003 [\*13] and 2007 [\*15]). Al-Ḥwānsārī also notes that Šams al-dīn Muḥammad ibn Aḥmad al-Ḥafīrī (d. 942/1535), known as Fāḍil Ḥafīrī or 'Allāma Ḥafīrī, glossed (*naqala 'anhu fī ḥāṣiyyatihi*) sections of the *Taḥṣīl* in his *Risāla fī Itbāt wāġib al-wuġūd bi-l-dāt wa-ṣifātihi* (*Epistle on Establishing the Necessary of Existence per se and His Attributes*) (Saatchian 2011 [\*20]). In the bio-bibliographical tradition Bahmanyār's *al-Taḥṣīl* is linked to Ibn Sīnā's *al-Ḥāṣil wa-l-maḥṣūl* because of the linguistic proximity of the two titles. In addition, the text appears to have directly influenced Faḥr al-Dīn al-Rāzī's bridging of the traditional boundary between physics and metaphysics. The success of this work together with his intensive correspondence with the 'master' have made Bahmanyār the most famous thinker among Ibn Sīnā's immediate companions.

Further works from his pen are: (2) The *Maqāla fī ārā' al-maššā'in fī umūr al-naḥs wa-quwāhā* (*Treatise on the Opinions of the Peripatetics on the Soul and its Faculties*), an essay with a focus on the human soul and the souls of the spheres. (3) The *Risāla fī Mawḍū' 'ilm mā ba'd al-ṭab'ā* (*Epistle on the Subject Matter of Metaphysics*), which goes back in part to excerpts from the metaphysics of *al-Šifā'* (excerpts also included in *al-Mubāḥaṭāt* [\*28]). (4) The *Risāla fī Marātib al-mawġūdāt* (*Epistle on the Degrees of Existing Things*), which has been incorrectly attributed to al-Fārābī (cf. PIW 1 § 8.3.11) as well as al-Ma'šūmī, but was in fact written by Bahmanyār and known under the title *Risāla fī Itbāt al-mufāraqāt* (*Epistle on Establishing the Existence of Separate Entities*), too [\*29]). (5) The *Kitāb fī Itbāt al-'uqūl al-fa'āla wa-l-dalāla 'alā 'adadihā wa-itbāt al-nuḥūs al-samāwīyya* (*Book on the Evidence of the Existence of Active Intellects, the Proof of their Number and the Evidence of the Existence of Celestial Souls*), probably by Bahmanyār as well (cf. al-Rahim 2018 [\*23: 53–54]).

(6) The *Kitāb al-Bahġa wa-l-sa'āda* (*Resplendence and Bliss*), an apparently lost treatise on ethics. (7) The *Kitāb al-Zīna fī l-manṭiq* (*The Adornment of Logic*), also lost, a synopsis of logic. While the *Kitāb fī l-Mūsīqī* (*On Music*) was attributed to Bahmanyār for a long time, it is in fact by Ibn Zayla.

### 1.5 *Ibn Zayla*

We do not know much about Ibn Zayla's professional development. It seems that he was a jurist (*faqīh*), but this assumption is based solely on the form of address used by Ibn Sīnā in some of their correspondence. Like Bahmanyār, Ibn Zayla is not mentioned in Ibn Sīnā's auto-/biography. Ibn Funduq and al-Šahrazūrī have his name as Abū Maṣṣūr al-Ḥusayn b. Ṭāhīr b. Zayla, while Ibn Abī Uṣaybi'a spells the patronymic Ibn Zaylān. Perhaps the most reliable information is found in a manuscript within which his magnum opus *al-Kāfī fī l-mūsīqī* (*That Which is Sufficient on Music*) has been transmitted (MS London, British Library Or. 2361, also MS Tehran, Nat. Lib. 1651). Here, his name is given as Abū Maṣṣūr al-Ḥusayn b. Muḥammad b. 'Umar Ibn Zayla [\*34: 17]. The variant Abū l-Izz from Ibn Sīnā's *Ibtāl aḥkām al-nuġūm* (*The Rejection of Astrology* [\*17: 49]) does not, however, appear to be correct, as it is either the result of a copyist's mistake or refers to a relative of his (Gutas 2014 [\*22: 397–398]). According to Ibn Funduq, Ibn Zayla came from Isfahan, and according to Ibn Abī Uṣaybi'a he was a Zoroastrian, although this might be a conflation with similar statements about Bahmanyār. In any case Ibn Zayla's name suggests that he was ostensibly a Muslim.

Like Bahmanyār, Ibn Zayla corresponded with Ibn Sīnā. It is also possible that he met him as a young man in Isfahan in person. Similar to Bahmanyār, Ibn Zayla appears to have had connections to Ibn Sīnā's philosophical nemesis Abū l-Qāsim al-Kirmānī in Hamadan. In any case Ibn Zayla became a member of Ibn Sīnā's philosophical circle in Hamadan. He appears to have studied astrology (possibly with the older al-Kirmānī) which would be in keeping with Ibn Sīnā dedicating *Ibtāl aḥkām al-nuġūm* (*The Rejection of Astrology*) to him, in which he deplored Ibn Zayla's belief in the validity of this pseudo-science. In the *Mubāḥaṭāt* he asks Ibn Sīnā questions on his theory of the soul, claiming in this context that some statements at the beginning of *al-Šifā'* are self-contradictory and deviate from the consensus of the Peripatetic scholars. He asks Ibn Sīnā to correct himself and to elucidate his view in greater detail, if possible. Subsequently Ibn Sīnā reprimands him for his presumptuousness, threatening to put an end to the discussion altogether. Later, however, Ibn Sīnā approaches Ibn Zayla again, addressing him with honorific titles such as 'master' (*mawlā, ra'īs*) and 'wise one' or 'philosopher' (*ḥakīm*). This indicates that he regarded him as a colleague rather than a pupil, but shows, too, that he

tried to remove him from al-Kirmānī's influence (Reisman 2002 [\*12: 199–200]; al-Rahim 2018 [\*23: 55–56]). Ibn Zayla's age, his frank tone, and the fact that like Bahmanyār he studied under al-Kirmānī, also suggest that he was not really a pupil of Ibn Sīnā. He died in 440/1048–1049, only around ten years after Ibn Sīnā. Finally, there are hints in two texts, the abovementioned *Ibtāl* and a letter by Ibn Sīnā, that there were periods of 'seclusion' or 'withdrawal' (*awqāt al-ḥalawāt*, 'uzla'); it is never explained, however, precisely to what and to whom this refers.

In the longer version of the list of Ibn Sīnā's works, we read that he dictated 'notes' to Ibn Zayla (*allaqahu 'anhu*). According to Ibn Abī Uṣaybi'a, the latter worked as Ibn Sīnā's annotator for a *Kitāb al-Ta'ālīq*. If this title should be identical with the better known *Ta'liqāt*, Ibn Zayla would have played a certain part in its publication. It is more likely, however, that his questions to Ibn Sīnā or his own notes were mixed with the holograph or an edited version of the *Ta'liqāt*. There is certainly no reason to assume that Ibn Sīnā drafted a book of this title that was then transmitted by Ibn Zayla on his authority. On the whole, the bio-/bibliographical tradition likes to link Ibn Zayla – who wrote a commentary on *Ḥayy b. Yaqẓān* [\*35] – to Ibn Sīnā's 'allegorical' works. The *Mubāḥaṭāt*, however, document that he was interested in more conventional Peripatetic topics such as the classification of the sciences, the question of the subject of logic (as investigated in the introduction on the section on logic of *al-Šifā'*), problems of physics (also according to *al-Šifā'*), as well as more general questions discussed in Aristotle's *Metaphysics*. All this seems to show that Ibn Zayla was a confirmed Aristotelian.

Among the works linked to him are: (1) The *Šarḥ Risālat Ḥayy b. Yaqẓān* (*Commentary on Ibn Sīnā's Epistle Ḥayy b. Yaqẓān*), which is likely to have in fact been written by him (Gutas 2014 [\*22: 484]; al-Rahim 2018 [\*23: 56–57]), although some authors regard it as Ibn Sīnā's own commentary on *Ḥayy b. Yaqẓān* (in that case it would be Ibn Sīnā's only self-commentary, and one of the earliest instances of this genre; Reisman 2002 [\*12: 93 n. 174]). (2) The abovementioned *al-Kāfi fī l-mūsīqī* (*That Which is Sufficient on Music*), a theoretical work on musicology that refers to texts by Ibn Sīnā, al-Kindī, and apparently also al-Fārābī. (3) According to Šahrazuri a book entitled *al-Iḥtišār min Ṭabī'iyyāt al-Šifā'* (*Compendium of the Physics in al-Šifā'*), which does not appear to be extant. If the attribution is correct, this would be the earliest compendium on the second book of Ibn Sīnā's summa. (4) According to Ibn Funduq [\*2: 93] he wrote a *Kitāb fī l-Nafs* (*On the Soul*), which does not appear to be extant, either. (5) *Mīn ġumlat al-mağmū' fī l-ilāhiyyāt 'an asl-Šayḥ Abī-Manšūr Ibn Zayla* (*On the Compilation of the Metaphysics on the Authority of Ibn Zayla*), a gloss on two sections from Aristotle's *Metaphysics* found in a compendium

(*mağmū'a*) together with works from Ibn Sīnā's library. The latter may have been transmitted on the authority of Ibn Zayla and was in the possession of 'Abd al-Razzāq al-Ṣiġnāhī, who may have been a pupil of Lawkārī's (Gutas 2014 [\*22: 150–155]; Reisman 2002 [\*12: 203]). (6) And finally, *Talḥīs li-ṣifāt waġīb al-wuġūd* (*Concise Elucidation of the Attributes of the Necessary-existing*), a brief treatise from the pen of a certain al-Ṣayḥ al-Ḥakīm Abū Maṣṣūr, which led to speculation that Ibn Zayla might be its author (in MS Leiden, Or 184:3 (ff. 12b–20a); also Reisman 2002 [\*12: 44–45, 201–202]).

### 1.6 *Abū Sa'īd al-Ma'ṣūmī*

It is likely that like Ibn Zayla, al-Ma'ṣūmī was a jurist. He was probably closest in age to Ibn Sīnā out of all his companions, although he is sometimes called his favourite pupil. Like Bahmanyār and Ibn Zayla, he is not mentioned in Ibn Sīnā's auto-/biography. He probably died shortly after Ibn Sīnā, according to Brockelmann in 430/1038–1039 (dating the year of his death to 460/1048, as suggested by al-Ziriklī, on the other hand, appears doubtful; cf. al-Rahim 2018 [\*23: 58 n. 126]). According to Ibn Funduq, Ibn Sīnā once said to al-Ma'ṣūmī that his position (*manzila*) was similar to that of Aristotle with Plato (*Tatimma* [\*2: 96]). This tradition is questionable, not least because it recalls the *ḥadīth* according to which Islam's prophet, Muhammad, once said to 'Alī ibn Abī Ṭalib, the first imam of the Shi'a, that his position was similar to that of Aaron with Moses. Al-Ma'ṣūmī's full name is given by Ibn Funduq as Abū 'Abdallāh Aḥmad (or Muḥammad) b. Aḥmad (or 'Abdallāh) b. Aḥmad al-Ma'ṣūmī 'the jurist' (*al-faqīh*), with reference to the form of address in Ibn Sīnā's *Risāla fī l-Iṣq* (*Epistle on Love*) (cf. *Tatimma* [\*2: 95]). In Ibn Sīnā's correspondence with Abū Rayḥān al-Bīrūnī (d. c. 442/1050), which was written around 389/999–1000, however, he is referred to as Abū Sa'īd Aḥmad b. 'Alī al-Ma'ṣūmī, which was presumably his correct name [\*18: 59]. This correspondence, published under the title of *al-Aġwiba 'an Masā'il Abī Rayḥān al-Bīrūnī* (*Ibn Sīnā's Answers to al-Bīrūnī's Questions*), appears to be a milestone in the relationship between al-Ma'ṣūmī and Ibn Sīnā. It consists of eight questions on topics from Aristotle's *De caelo* addressed by al-Bīrūnī to Ibn Sīnā, followed by the latter's answers and questions to al-Bīrūnī in return, to which al-Ma'ṣūmī reacted in his turn. The correspondence may conceivably be traced back to an actual debate between Ibn Sīnā and al-Bīrūnī, although its written form, especially in view of Ma'ṣūmī's answers (*ġawābāt*) to al-Bīrūnī, does not necessarily suggest this. Al-Ma'ṣūmī's passionate dedication to the correspondence is described impressively by Ibn Funduq (*Tatimma* [\*2: 95]). This would also agree with Ibn Sīnā sending his *Risāla fī l-Iṣq* with a warm dedication to al-Ma'ṣūmī. This was at an early point in time, when Ibn Sīnā had, for example, not yet met

al-Ġuzġānī. Consequently, al-Maʿšūmī is likely to have had the longest contact with the ‘master’ of all the companions presented here.

Besides the Bīrūnī correspondence, there are two further works linked to al-Maʿšūmī: Ibn Funduq attributes to him a *Kitāb fī l-Mufāraqāt wa-īdād al-ʿuqūl wa-l-aflāk wa-tartīb al-mubdaʿāt* (*Book on the Separate Entities, the Numbering of the Intellects and Spheres, and the Order of Created Things*), a neo-Platonic cosmogony and cosmology which does not appear to be extant. He mentions details on a single copy allegedly in the possession of the Nizāmiyya madrasa in Nishapur. The book, he says, was loved by all philosophers (*maʿšūq kaffat al-ḥukamāʾ*) but sadly disappeared after Ġamāl al-Mulk Abū-Ġaʿfar Muḥammad, Nizām al-Mulk’s (m. 485/1092) eldest son ‘borrowed’ or possibly confiscated it (*aḥadahu*). In addition, Ibn Funduq mentions a *Risāla fī ʿĀlim-īyyat Allāh* (*Epistle on God the Knowing*) apparently attributed to al-Maʿšūmī, doubting, however, that he was actually the author (*Tatimma* [\*2: 96]).

## 2 Continuing Ibn Sīnā’s Tradition: Abū l-ʿAbbās al-Lawkarī

*Frank Griffel*

2.1 Primary Sources – 2.2 Life – 2.3 Works – 2.4 Doctrine – 2.5 Influence

### 2.1 Primary Sources

Testimonies on his Life, Works, and Influence [\*41–\*45] – Works and Editions [\*51–\*56]

*Testimonies on his Life, Works, and Influence*

41 al-Bayhaqī, Ṣaḥīr al-Dīn Abū l-Ḥasan ʿAlī b. Zayd Ibn Funduq (d. 565/1169–1170). *Tatimmat Šiwān al-ḥikma*. Ed. by Muḥammad Šafiʿ, fasc. 1: Arabic text. Lahore, 1935. – Engl. transl. of excerpts, including an English index, by Max Meyerhof, “Alī al-Bayhaqī’s *Tatimmat Šiwān al-Ḥikmah*. A Biographical Work on Learned Men of the Islam.” *Osiris* 8 (1948): 122–217. – Repr. of both works in *Historiography and Classification of*

*Science in Islam* VIII. Ed. by Fuat Sezgin. Frankfurt a.M., 2005.

42 al-Naysābūrī, Muʿīn al-Dīn Muḥammad b. Maḥmūd (d. c. 590/1194). *Itmām Tatimmat Šiwān al-ḥikma*, MS Istanbul, Murad Molla 1431. – Inedited continuation of al-Bayhaqī’s *Tatimmat Šiwān al-ḥikma*. Extant in several Istanbul MSS, e.g. Beşir Aga 494. The entry on al-Lawkarī is partially edited in [\*41: 204].

43 Yāqūt b. ʿAbdallāh, al-Ḥamawī al-Rūmī (d. 626/1229). *Jacut’s*

*Geographisches Wörterbuch*. Ed. by Ferdinand Wüstenfeld, 6 vols. Leipzig, 1866–1873.

44 Ibn al-ʿIbrī, Abū l-Faraġ Gregorios (Bar Hebraeus) (d. 685/1286). *Taʾ rīḥ muḥtaṣar al-duwal*. Ed. by Anṭūn Ṣāliḥānī, Beirut, 1890, 1958 (2nd ed.).

45 al-Šahrazūrī, Šams al-Dīn Muḥammad b. Maḥmūd (d. after 687/1288). *Nuzhat al-arwāḥ wa-rawḍat al-afrāḥ fī taʾrīḥ al-ḥukamāʾ wa-l-falāsifa*. Ed. by Ḥwaršīd Aḥmad, 2 vols. Hyderabad, 1976.

### Works and Editions

51 *Bayān al-ḥaqq bi-ḍamān al-ṣīdq*. – Partial edition of the beginning, including the introduction, up to the end of the first book, i.e. the part that corresponds to the *Isagoge*: *Bayān al-ḥaqq bi-ḍamān al-ṣīdq*, *al-Manṭiq*, *al-Madḥal*. Ed. by Ibrāhīm Dībāġī. Tehran, 1364/1985. – Partial edition of the entire third part of the work, i.e. metaphysics and philosophical theology (*al-ʿilm al-ilāhī*): *Bayān al-ḥaqq bi-ḍamān al-ṣīdq*, *al-ʿilm al-ilāhī*. Ed. by Ibrāhīm Dībāġī. Tehran, 1373/1414/1995. The bulk of *Bayān al-ḥaqq*, i.e. books 2–9 of logic and the entire part on natural sciences, has not yet been edited. Several manuscripts of the work are known, all of them preserved in Iranian libraries with the exception of MS Paris, BnF 5900 (containing the section on natural sciences). One single manuscript, MS Tehran, Dānišgāh 250, contains the entire works (described in [\*35: (III.1) 162–166]). This is also the oldest manuscript, copied in

601/1204–1205 in Isfahan. Other manuscripts usually contain one of the work's three parts only, frequently the third one on metaphysics and philosophical theology.

52 *al-Risāla al-mulḥaqa bi l-ʿilm al-rubūbiyya*, MS Tehran, Dānišgāh 250, fol. 212<sup>r</sup>–218<sup>r</sup>. – A brief, until now inedited, text on philosophical theology which immediately follows the third part of al-Lawkarī's *Bayān al-ḥaqq* in this MS. In four chapters (sg. *bāb*) it summarises al-Lawkarī's teachings on the attributes of God, on the separate celestial intellects, on the human soul, and on prophecy and proximity to God (*wilāya*).

53 *al-Fuṣūl al-muntaḥaba min ʿilm al-aḥlāq*. MS Tehran, Dānišgāh 250, fol. 218<sup>r</sup>–223<sup>r</sup>. A brief, until now inedited, text on ethics and politics appended to al-Lawkarī's *Bayān al-ḥaqq* in this MS. The text is incomplete and breaks off abruptly in the fifth chapter (*bāb*) on the constitution of the model state (*al-madīna al-fāḍila*). The preceding chapters of the text discuss the acquisition of virtuous character traits (sg. *ḥulq*, pl. *aḥlāq*) through the correct kind of education, politics, and social contacts.

54 *Šarḥ-i qaṣīda-yi Asrār al-ḥikma*. Ed. by Ilāha Rūhī-Dil. Tehran, 1382/2003. – A Persian didactic poem on the different disciplines of philosophical scholarship including al-Lawkarī's own Persian commentary.

55 *Risāla fī l-ʿUlūm al-falsafīyya al-arbaʾa*, MS Tehran, Dāniškada-yi adabiyāt 15ḡ, fol. 45<sup>v</sup>–50<sup>v</sup>. – A brief Arabic introduction to the four parts



of the philosophical sciences, i.e. logic, mathematics, natural sciences, and metaphysics/philosophical theology. According to Dānišpažūh 1960 [\*36: 360], it closely follows the fourth *faṣl* of Ibn Sīnā's *Risāla fi l-Ṭṣq*.

56 *ʿAwīš al-masāʾil*, MS Qum, Kitābhāna-yi ʿumūmī-i Ḥaẓrat-i Āyat Allāh al-ʿUzmā Naḡafī Marʿašī, 12388,

fol. 155–168. – A brief synopsis of Avicennan philosophy using 30 ‘difficult’ (*ʿawīš*) questions which are discussed in detail. In four parts: 9 questions on logic (*manṭiq*), 11 questions on the natural sciences (*ṭabīʿiyyāt*), 7 on mathematics (*riyāḍiyyāt*), and 3 on metaphysics/philosophical theology (*ilāhiyyāt*). Described in [\*37: (xxx1) 306–309].

## 2.2 *Life*

Abū l-ʿAbbās al-Faḍl b. Muḥammad al-Lawkarī lived and worked during the second half of the 5th/11th century until the early 6th/12th century in Marv in Ḥurāsān, in present-day Turkmenistan. We have one unambiguous date from his life only, an entry in a manuscript of Ibn Sīnā's *al-Taʿlīqāt*, according to which al-Lawkarī compiled the table of contents (*fihrist*) for a recension of this text in 503/1109–1110 (MS Istanbul, Ahmet III 3204, fol. 19<sup>v</sup>; on the context of this entry cf. Gutas 2014 [\*45: 160–164]). Reisman 2002 [\*42: 82] assumes that al-Lawkarī compiled this recension of *al-Taʿlīqāt* as well as a prominent recension of Ibn Sīnā's *al-Mubāḥaṭāt*. Beyond these there are only two sources on al-Lawkarī, a short biographical article by al-Bayhaqī (d. 565/1169–1170) in his *Tatimmat Ṣiwān al-ḥikma* [\*41: 120–122], which was copied by later historians such as al-Šahrazūrī [\*45: (11) 54–55], as well as a further brief entry in *Iṭmām Tatimmat Ṣiwān al-ḥikma* by Muʾīn al-Dīn al-Naysābūrī (d. c. 490/1194) together with four of his poems or poem fragments ([\*42: fol. 141<sup>v</sup>–142<sup>v</sup>], partial edition in [\*41: 204]).

Around fifty years after al-Lawkarī's death, al-Bayhaqī reports that he studied under Bahmanyār b. al-Marzubān (d. 458/1066–1067), a direct pupil of Ibn Sīnā, and spread the philosophical sciences in Ḥurāsān, which covers the northeast of present-day Iran and west of Afghanistan. Al-Lawkarī's connection with Bahmanyār can be confirmed by certain correspondences in their teachings as well as by the fact that both are mentioned in chains of transmission by later scholars. Those chains were analysed by al-Rahim 2003, 2009, and 2018 [\*52: 220–222, \*58: 11, 19; \*61: 51, 61f.], who argues, however, that they are a later construction. Al-Rahim assumes that Bahmanyār died years before 458/1066–1067, and hence before al-Lawkarī grew to maturity, which makes a direct master-student relationship unlikely. Rather, al-Bayhaqī created such a connection to support his claim that someone closely linked to Avicenna spread Avicennism in Ḥurāsān. As for al-Lawkarī's approximate life dates, they are undisputed. We may thus assume that al-Lawkarī was born before the

middle of the 5th/11th century and died after 503/1109. He or his family came from Lawkar, a place in the river oasis of the Murḡāb south of Marv [\*43: (IV) 370], from where he moved to one of the learned centres in the west of Iran, where he studied Avicennism most likely with Bahmanyār, later returning to Marv. Here he instructed students and may have been part of a group of scholars or a court (*maḡlis*), for he certainly intended to dedicate his magnum opus to a patron or a ruler whom it has not yet been possible to identify [\*57: 112 *al-Madḥal*].

Al-Naysābūrī mentions [\*42: fol. 141<sup>v</sup>, cf. also \*7: 204] that al-Lawkarī together with ‘Umar al-Ḥayyām (d. 517/1123–1124) and two other scholars contributed to the astronomical work for the calendar reform under the Seljuk sultan Malik Ṣāh, a project carried out during the years 467/1074 and 468/1075 at the observatory in Isfahan. Al-Bayhaqī also reports that al-Lawkarī was a landowner (*dihqān*?) in the Marv district, that he went blind in old age, that his death was caused by an illness, and that he composed not only philosophical works but also poetry, even his own *dīwān*. While some Arabic and Persian poems have survived [\*57: 72–74 *al-Madḥal*; \*42: fol. 141<sup>v</sup>–142<sup>v</sup>] and al-Bayhaqī [\*47: 120] and biographical notes call him a ‘man of letters’ (*adīb*), the information on a *dīwān* from his pen may be based on his having been mistaken for the poet Abū l-Ḥasan ‘Alī b. Muḥammad al-Ġaznawī al-Lawkarī, who had lived around a century earlier (cf. Marcotte 2006 [\*55: 135]). In his influential *Geschichte der arabischen Litteratur*, Brockelmann mentions [\*31: (I) 460] that al-Lawkarī died in 517/1123–1124. This, however, appears to be a confusion with the date of ‘Umar al-Ḥayyām’s death determined by Wittstein [\*51: 3] in 1895. Al-Rahim 2018 [\*61: 61–54] and Griffel 2021 [\*63: 183–190] offer the most comprehensive treatment of al-Lawkarī’s life and his students.

### 2.3 Works

*Bayān al-ḥaqq bi-damān al-ṣidq* – Presentation of the Truth (or: the True Teachings) in an Honest Fashion

Al-Lawkarī’s magnum opus is a compendium of the philosophical sciences in Arabic. In the introduction, the author dedicates the book to a patron who has yet to be identified (called *mawlānā*), or at least this was his intention, as the name is missing from the only manuscript that contains the introduction. He may have intended to insert it later. Al-Lawkarī also writes that during his study of philosophy he came to know long books that were frequently difficult to memorise as

well as shorter compendia, but that he never came across a book of medium length (*kitāb mutawassit*), which was the reason why he decided to write *Bayān al-ḥaqq*. Al-Lawkarī tells us that it was his intention to summarise the philosophical works of Ibn Sīnā and al-Fārābī and add comments on parts of them (*al-ṣarḥ wa-l-talḥiṣ ma‘an*). He chose the works of these two because they – Ibn Sīnā’s works above all – had superseded all other philosophical books [\*57: 111–112 *al-Madḥal*]. *Bayān al-ḥaqq* is indeed an extended synopsis of Ibn Sīnā’s *al-Ṣifā*, which takes into account the further developments of Avicennan

doctrine undertaken by al-Lawkarī's teacher Bahmanyār. Over lengthy passages, al-Lawkarī quotes *al-Šifā'*, or at least presents a paraphrase closely following the text.

Structure: The text consists of three parts: logic (*al-mantiq*), natural sciences (*al-ṭabī'iyyāt*), and metaphysics/philosophical theology (*al-'ilm al-ilāhī*). These three parts are in turn divided into individual books which in the case of logic and the natural sciences adhere to the established textual canon of Peripatetic philosophy, i.e. the canon of Aristotle's major works.

Logic consists of nine books, the seven books of the *Organon* beginning with the book that corresponds to the *Isagoge* (*al-Madḥal*) and ending with *Sophistical Refutations* (*al-Muḡālaṭa*), and the two books on rhetoric and poetics (*al-Hiṭāba* and *al-Aqāwīl al-šī'rīyya*) which were studied as parts of the *Organon* in the eastern Peripatetic tradition.

The part on natural sciences consists of eight books: *Physics* (*al-Samā' al-ṭabī'ī*), *On the Heavens* (*al-Samā' wa-l-'ālam*), *On Generation and Corruption* (*al-Kawn wa-l-fasād*), *On Minerals* (*al-Ma'ādīn*), *Meteorology* (*al-Āṭār al-'ulwīyya*), *On the Soul* (*al-Nafs*), *On Plants* (*al-Nabāt*), and *On Animals* (*al-Ḥayawān*).

The third part is divided in two sub-parts, one on metaphysics as the science of existence per se as the most universal thing (*al-'ilm al-kullī*) and a second one on philosophical theology (*'ilm al-rubūbiyya*), namely on the attributes of God, about how the celestial spheres and their souls emanate from God, on the causation of motion, on the human soul, on prophecy and proximity to God, as well as about the benefit of acts of religious worship (*'ibādāt*) and the destiny of the souls after

death. These two sub-parts are in turn divided into individual chapters (sg. *faṣl*), 40 in the first and 38 in the second sub-part. The two texts *al-Risāla al-mulḥaqa bi l-'ilm al-rubūbiyya* [\*52] and *al-Fuṣūl al-muntaḥaba min 'ilm al-aḥlāq* [\*53], which have previously been treated as separate works, may well have been regarded by al-Lawkarī as chapters 39 and 40 in the sub-part on philosophical theology and would thus be genuine parts of *Bayān al-ḥaqq*. Unfortunately, they were not considered in the edition of the third part of *Bayān al-ḥaqq*.

*Šarḥ-i qaṣīda-yi Asrār al-ḥikma*

*Commentary on the Didactic Poem The Secrets of Philosophy*

This Persian work is al-Lawkarī's commentary on his own Persian didactic poem *Asrār al-ḥikma* (*The Secrets of Philosophy*). Marcotte 2006, 2012 [\*55, \*59] describes and analyses the work. The poem comprises 151 lines whose main objective is to present individual tenets of the Avicennan system in an easily memorised fashion and linked by an end rhyme. Similar to al-Lawkarī's philosophical magnum opus, this poem is divided into several parts of differing lengths. In this instance there are five parts: logic (*mantiq*), natural sciences (*ṭabī'iyyāt*), mathematics (*riyāḍīyyāt*), metaphysics and philosophical theology (*ilāhīyyāt*), as well as ethics and politics (*'amalīyyāt wa-ḥuḷqīyyāt*). In his commentary, al-Lawkarī quotes a lemma at a time, usually of one to four lines in length, and explains in more detail the information that he could only hint at in the didactic poem. The commentary, which naturally follows the structure of the poem, reaches a length of around 90 pages.

## 2.4 Doctrine

The fact that al-Lawkarī's works are synopses of larger works by more important philosophical authors, above all Ibn Sīnā, means that we cannot attribute an independent doctrine to al-Lawkarī. First and foremost, he wanted to be a loyal disciple of Ibn Sīnā, and nowhere in his works does he give the impression of wishing to claim originality for himself. On the contrary, the 'sincere fashion'

in which al-Lawkarī presents his exposition of the true teachings may well be a reference to the loyalty with which he described Ibn Sīnā's teachings. Despite this loyalty to the 'eminent master' (*al-šayḥ al-ra'īs*), there are some developments visible in his work that first emerged with his teacher Bahmanyār b. al-Marzubān and now become more distinct with al-Lawkarī himself.

Al-Lawkarī wrote around 50 to 75 years after Ibn Sīnā. During this time Avicennism had become established as the leading trend within the philosophical movement in the Islamic world. At the same time, there was a discussion of Ibn Sīnā's teachings within individual schools of Islamic theology. The two discourses of *falsafa* and *kalām* grew closer together after Ibn Sīnā's death – which does not mean, of course, that they had previously been entirely independent of each other.

Around 50 years after Ibn Sīnā's death, the theologians of the Aš'arī school in Nishapur engaged in an intensive discussion of his doctrine. Religious scholars such as al-Ġuwaynī (d. 478/1085) and al-Ġazālī (d. 505/1111) discovered the great theological potential in Ibn Sīnā's ideas. Two fields are particularly significant in this context: (1) Ibn Sīnā's doctrine of the soul which, building on the teachings of earlier *falāsifa*, presents rational and scientific explanations of all or at least the majority of psychological phenomena linked to the Muslim faith. Ibn Sīnā's rational explanation of prophecy, for instance, was accepted readily by Aš'arīs such as al-Ġazālī. (2) In his metaphysics, Ibn Sīnā distinguishes two goals. On the one hand, metaphysics is the study of 'that which exists insofar as it exists' (*al-mawǧūd bi-mā huwa mawǧūd*), on the other it studies God and His attributes. This distinction, which occurs in nearly all of Ibn Sīnā's writings on metaphysics, can be traced back to his study of a text by al-Fārābī. It was pursued further by his pupil Bahmanyār b. al-Marzubān and his pupil al-Lawkarī.

While Ibn Sīnā's distinction of the two goals of studying metaphysics has been well documented and analysed by Gutas (2014 [\*45: 270–287]) and Bertolacci (2002 [\*43], 2006 [\*44]), few studies exist regarding the subsequent development under Bahmanyār and al-Lawkarī, who continued the path first taken by Ibn Sīnā. Janssens has argued in several publications (2003 [\*53]; 2007 [\*57]; 2012 [\*60]) that with his approach to metaphysics, Bahmanyār placed himself in opposition to Ibn Sīnā, and that this would consequently also apply to al-Lawkarī. However, the structure of al-Lawkarī's metaphysics may also be seen as developing Ibn Sīnā's, even without assuming an opposing approach. Eichner (2007 [\*57: 155f.]) has argued that Bahmanyār and al-Lawkarī are part of a process of rethinking how to present Avicennan philosophy that leads to "dissolving the unity of metaphysics" in the philosophical words of Faḥr al-Dīn al-Rāzī (d. 606/1210) and later thinkers.

While the division into the triad of logic, natural sciences, and metaphysics/philosophical theology (*al-ʿilm al-ilāhī*) in al-Lawkarī's *Bayān al-ḥaqq* goes back to Ibn Sīnā, and the internal arrangement of the first two parts follows Ibn Sīnā's *al-Šifā'* in the main, in the third part al-Lawkarī applies a distinction that is found neither in Ibn Sīnā's nor in Bahmanyār's works. In the third part on *al-ʿilm al-ilāhī* (the divine science), al-Lawkarī first discusses metaphysics as the science of 'that which exist insofar as it exists without qualification' (*al-mawǧūd bi-mā huwa mawǧūd muṭlaqan*) [\*51: 265 *al-ʿilm al-ilāhī*]. This (sub-)section of his work discusses the universal knowledge (*al-ʿilm al-kullī*), which he regards as equivalent to Aristotle's *Metaphysics*. In the second (sub-)section of the *ilāhiyyāt*, al-Lawkarī focusses on the knowledge of lordship (*ʿilm al-rubūbiyyāt*), which he regards as equivalent to the subject matter of the pseudo-Aristotelian book *Theology* (*Uṭlūǧiyyā*). Al-Lawkarī does not comment on the authorship of this work. While the proof of the existence of God is discussed in the part on metaphysics proper (*mā ba'd al-ṭabī'a*), that is in the part on universal knowledge, the attributes (*ṣifāt*) and special qualities (*ḥawāṣṣ*) of God are part of the knowledge of sovereignty. In this part, al-Lawkarī discusses all the fields of philosophical theology, i.e. evidence of the uniqueness of God, of His perfection, of His being the efficient cause (*ḡāʾil*) of all things and events in the world, that God provides comprehensively (*ʿināya*) for all his creatures, and that this world is the best of all possible worlds. In addition, this part also discusses those elements of Ibn Sīnā's psychology that are relevant to theology, namely the continued existence of the souls after death, the three properties of prophecy, the explanation of divine revelation (*waḥy*), and at the end a chapter on the benefits of acts of worship for this life as well as the afterlife (Marcotte 2019 [\*62]).

As in Ibn Sīnā works, logic, natural science, metaphysics, and theological topics are linked by a comprehensive philosophical system in al-Lawkarī's works. His treatment of the topics of theology in a separate part of his *Bayān al-ḥaqq* emphasises the far-reaching achievements made by the Avicennan system in this field. Al-Lawkarī presents the theological doctrine of the Avicennan system with a depth and clarity not found in Ibn Sīnā's own works with the possible exception of *al-Išārāt wa-l-tanbihāt*. Due to its brevity and the complexity of presentation, this latter book, however, is of only limited suitability as an introduction to Ibn Sīnā's philosophical theology. In contrast, the third part of al-Lawkarī's *Bayān al-ḥaqq* achieves precisely this, i.e. a clear and more or less easily understandable introduction into those of Ibn Sīnā's teachings that discuss topics that were also at the centre of discussions in Muslim theology.

Thanks to the structure of his work and the further development of Ibn Sīnā's ideas, al-Lawkarī moves Avicennism closer to the discourse of religious scholars in Islam. Future studies will have to investigate the question of whether

such an approximation also takes place in the individual ideas al-Lawkarī presents in his work. His account of the Avicennan teachings on prophecy and divine revelation (in particular in *al-Risāla al-mulḥiqa bi-l-ʿilm al-rubūbiyya* [\*52]), for instance, regards the properties of the ‘friends [of God]’ (*awlīyāʾ*) as a lower degree of prophecy. As these ‘friends of God’ include above all the Sufis, meaning the mystics of Islam, al-Lawkarī’s work poses new questions on the relationship between mysticism and philosophy in the Avicennan movement.

The approximation between Avicennan philosophy and Ašʿarī *kalām*, however, also means that al-Lawkarī distances himself from the latter more distinctly than Ibn Sīnā had considered necessary. This is particularly relevant in the part on the natural sciences, where al-Lawkarī mentions the atomists (*al-qāʾilūn bi-l-ğuzʾ alladī lā yatağazzaʾ*) already in the introduction as the main opponents of an Aristotelian-Avicennan natural science. This refers above all to the Ašʿarī *mutakallimūn* (*kalām* theologians) whose occasionalist teachings involved strict atomism and the rejection of Aristotelian hylomorphism. Unlike Ibn Sīnā, al-Lawkarī found himself compelled to defend Aristotelian ontology as one of the foundations of Peripatetic philosophy against attacks by the occasionalist Ašʿariyya (Griffel 2000 [\*41: 344–346] and Marcotte 2006 [\*55: 143–145]).

## 2.5 Influence

Al-Lawkarī’s oeuvre addresses not only those already initiated into the philosophical sciences, but also seeks to overcome the traditional boundary between the philosophical discourse in Islam and the discourse of Muslim theologians, and tries to win over *kalām* theologians to the ideas of Ibn Sīnā. The names of four of al-Lawkarī’s pupils, transmitted by his biographer al-Bayhaqī [\*41: 122–125; 136–137; 155], among them Quṭb al-Dīn al-Ṭabasī (d. 539/1145), al-Ḥasan al-Qaṭṭān al-Marwazī (d. 548/1153), and ʿAbd al-Razzāq al-Šignāḥī, show that this was indeed successful (on them see Griffel 2021 [\*63: 187–190]). The most important of the four was Asʿad al-Mayhanī (d. 523/1130 or 527/1132–1133), who had a successful career teaching at the Nizāmiyya madrasa in Baghdad, where his colleagues included, among others, al-Šahrastānī. Al-Mayhanī’s career shows that in the generation after al-Lawkarī, philosophical education in the Avicennan style was not incompatible with holding a teaching position at a leading institution dedicated above all to propagating Šāfiʿī jurisprudence and Ašʿarī theology. Al-Mayhanī was the author of a textbook, believed to be lost, that was still used by several Nizāmiyya madrasas decades after his death (Griffel 2009 [\*46: 71–74]).

Later scholars hardly ever referred to al-Lawkarī. Bar Hebraeus [\*44: 442–443] reports that a Christian physician from Edessa who died in 625/1227–1228 had acquired his education in philosophy mainly from ‘the book by al-Lawkarī’.

Mullā Ṣadrā (d. 1050/1640) mentions him briefly in *al-Aṣfār al-arbaʿa* (Marcotte 2006 [\*55: 156]). He achieved a certain fame thanks to Naṣīr al-Dīn al-Ṭūsī's (d. 672/1274) inclusion of his name among a chain of scholars through whom Naṣīr al-Dīn hoped to connect his philosophical education in an unbroken sequel of teacher – pupil relationships to Ibn Sīnā (al-Rahim 2003 [\*52: 220–221]). In this philosophical *isnād* (chain of transmitters), al-Lawkarī is Bahmanyār's pupil and at the same time the teacher of Ibn Ġaylān al-Balḥī (d. 590/1195). We know of the latter that he began studying as an adolescent at the Niẓāmiyya madrasa in Marv in 523/1129. Consequently, he cannot have studied under al-Lawkarī as the latter was unlikely alive twenty years after 503/1109–1110, when at an already old age, he worked on *al-Taʿlīqāt*. In the case of Naṣīr al-Dīn al-Ṭūsī's *isnād*, as well as other similar ones, we are in all probability looking at historiographical constructs inspired by al-Lawkarī's presence in Marv and al-Bayhaqī's belief that he spread the philosophical sciences in Ḥurāsān. While he may well have been a student of Bahmanyār and also played a part in the dissemination of Avicennan philosophy in north-eastern Iran, the success of Ibn Sīnā's ideas among the scholars of Ḥurāsān boosted al-Lawkarī's later reputation. This probably led to a certain exaggeration of his importance as a transmitter of philosophical knowledge.

### 3 Critical Approaches to Philosophy: Nāṣir-i Ḥusraw

*Hermann Landolt and Renate Wüirsch*

3.1 Primary sources – 3.2 Life – 3.3 Works – 3.4 Doctrine

#### 3.1 Primary Sources

Sources on his Life and Works [\*71–\*75] – Sources used by Nāṣir-i Ḥusraw [\*81–\*83] – Philosophical Texts by Nāṣir-i Ḥusraw [\*91–\*94]

##### *Sources on his Life and Works*

71 Nāṣir-i Ḥusraw (d. 465/1072 or later). [Safarnāma] *Sefer Nameh. Relation du voyage de Nassiri Khosrau, célèbre poète et philosophe persan ...* texte persan, publié d'après trois manuscrits, avec une traduction en français accompagnée d'une introduction analytique

[par] Charles Schefer. Paris, 1881. Repr. Amsterdam, 1970. – On the alleged autobiography, VII–XVII. – Further editions: Berlin, 1341/1922, with an intro. by M. Ġanīzāda. – Muḥammad-i Dabīrsiyāqī (Tehran 1335/1956). – Germ. transl. by Uto von Melzer, ed. by Manfred Mayrhofer, Nosratollah

Rastegar, *Safarnāme: Das Reisetagebuch des persischen Dichters Nāṣir-i Ḥusraw*. Graz, 1993. – Germ. transl. by Seyfeddin Najmabadi, Siegfried Weber, *Safarname. Ein Reisebericht aus dem Orient des 11. Jahrhunderts*. Munich, 1993. – Engl. transl. by Wheeler M. Thackston, *Nāṣer-e Khosraw's Book of Travels*. Albany, 1986. An excerpt reprinted in Hermann Landolt, Samira Sheikh, and Kutub Kassam (eds.), *An Anthology of Ismaili Literature*. London, New York, 2008, 71–76.

72 Nāṣir-i Ḥusraw. *Dīwān*. Ed. by Muḡtabā Mīnuwī. Tehran, 1372/1993. – Ed. by Muḡtabā Mīnuwī, Mahdī Muḥaqqiq. Tehran, 1978. – Ed. by Sayyid Naṣrallāh Taqawī. Repr. Mahdī Suhaylī. Iṣfahān, 1339/1960–1961.

73 Abū l-Ma'ālī Muḥammad al-Ḥusaynī (wr. 485/1092). *Bayān al-adyān*. In Charles Schefer, *Chrestomathie persane*, vol. 1. Paris, 1883–1885, 161. – Complete edition with detailed commentary by Hašim Raḡī. Tehran, 1342/1964. – New (improved) edition by 'A. 'I. Āštīyānī and M. T. Dānišpažūh. Tehran, 1376/1997.

74 Rašīd al-Dīn Faḍl Allāh (d. 718/1318). *Ġāmi' al-tawārīḥ. Qismat-i ismā'īlīyān wa faṭīmīyān wa nizāriyān wa dā'iyyān wa rafīqān*. Ed. by Muḥammad Taqī Dānišpažūh, Muḥammad Mudarrisī. Tehran, 1338/1960, 77. 97.

75 Ġamāl al-Dīn 'Abdallāh-i Kāšānī (d. c. 738/1337). *Zubdat al-tawārīḥ. Baḥš-i faṭīmīyān wa nizāriyān*. Ed. by Muḥammad Taqī Dānišpažūh. Tehran, 1366/1987–1988. Further information in Poonawala 1977 [\*77: 112–113].

### Sources used by Nāṣir-i Ḥusraw

81 Rasā'il Iḥwān al-Ṣafā' wa-Ḥullān al-Wafā'. Ed. by Buṭrūs al-Bustānī, 4 vols. Beirut, 1376/1957.

82 al-Siġistānī, Abū Ya'qūb Ishāq b. Aḥmad (d. c. 361/971). *Kaṣf al-maḥḡūb (Le Dévoilement des choses cachées. Traité ismaélien du IV<sup>me</sup> siècle de l'Hégire)*. Ed. by Henry Corbin. Tehran, Paris, 1949. – 2nd rev. ed. Tehran, 1979. – Partial Engl. transl. and intro. by Hermann Landolt. In *An Anthology of Philosophy in Persia*, vol. 2. Ed. by Seyyed Hossein Nasr, Mehdi Aminrazavi. Oxford, 2001, 71–124. – 2nd ed. London, New York, 2008, 74–129.

83 al-Siġistānī, Abū Ya'qūb. *Kitāb al-Yanābī'*. – Ed. and partial French transl. by Henry Corbin, in *Trilogie ismaélienne*. Tehran, Paris 1961, 1–97 (ed.), 5–127 (transl.). – Ed. by Muṣṭafā Ġālib. Beirut, 1965. – Repr. of partial French transl. by H. Corbin (without the Arabic text), in *Trilogie ismaélienne*. Lagrasse, 1994, 9–164. – Engl. transl. by Paul E. Walker, in *The Wellsprings of Wisdom. A Study of Abū Ya'qūb al-Sijistānī's Kitāb al-Yanābī'*. Salt Lake City, 1994, 37–111. – Partial Engl. transl. by Latimah Parvin Peerwani, in *An Anthology of Philosophy in Persia*, vol. 2. Ed. by S. H. Nasr and M. Aminrazavi [cf. \*82], 124–137.

### Philosophical Texts by Nāṣir-i Ḥusraw

91 Ġāmi' al-ḥikmatain: *Le livre réunissant les deux sagesse, ou: Harmonie de la philosophie grecque et de la théosophie ismaélienne*. Ed. by Henry Corbin, Moh. Mo'in. Tehran, Paris, 1953; Repr. Tehran, 1984. – French transl. by Isabelle



de Gastines. Paris, 1990. – Engl. transl. by Eric Ormsby. *Between Reason and Revelation. Twin Wisdoms Reconciled*. London, 2012. – Partial Engl. transl. by Latimah Parvin Peerwani, in *An Anthology of Philosophy in Persia*, vol. 2. Ed. by S. H. Nasr and M. Aminrazavi [cf.\*82], 291–311.

92 *Gušāyīš wa rahāyīš*. Ed. and Engl. transl. by Faquir M. Hunzai. *Knowledge and Liberation*. London, 1998. – Partial Engl. transl. by F. M. Hunzai, in *An Anthology of Philosophy in Persia*, vol. 2. Ed. by S. H. Nasr and M. Aminrazavi [cf.\*82], 311–329. – Rev. Engl. transl. of sections 6–11 by F. M. Hunzai, in *An*

*Anthology of Ismaili Literature*. Ed. by Hermann Landolt, Samira Sheik and Kutub Kassam. London, New York, 2008, 102–110. – Older ed. by Saʿīd-i Nafīsī, *The Book of Unfettering and Liberation*. Leiden, 1950. – Ital. transl. by Pio Filippini-Ronconi, *Il libro dello scioglimento e della liberazione*. Naples, 1959.

93 *Ḥwān al-iḥwān*. Ed. by Yaḥyā al-Ḥaššāb, Cairo, 1359/1940. – Ed. by ʿAlī Qawīm, Tehran, 1338/1959.

94 *Zād al-musāfir*. Ed. by Muḥammad ʿImādī-Ḥāʾirī, Tehran 1384/2005. – Ed. by Muḥammad Baḍl al-Raḥmān. *Zād al-musāfirīn*, Berlin, 1341/1923; Repr. Tehran, 1383/2004.

### 3.2 *Life*

Abū Muʿīn Nāṣir b. Ḥusraw b. Ḥārīt al-Qubādiyānī al-Marwazī was born in 394/1003–1004 in Qubādiyān, a region on the right bank of the upper Oxus (Bosworth 1986 [\*78: 286]), present-day Qabodiyon in southwest Tajikistan. The year of his birth is certain, as Nāṣir-i Ḥusraw himself refers to it in one of his poems (*Dīwān* [\*72: 173,9]); in another he mentions Qubādiyān as his original homeland (*Dīwān* [\*72: 297, 23]).

Hardly anything is known about Nāṣir-i Ḥusraw's family and early education. His *Safarnāma* tells us that he had two brothers, one of whom accompanied him on his travels in the Near East. While Nāṣir-i Ḥusraw emphasises (*Dīwān* [\*72: 175, 1–15]) that he studied many fields of the sciences – among them those of Euclid and Aristotle – he does not transmit the names of any teachers. His professional position as an official of the Seljuk finance administration in Marv indirectly suggests, however, that he did not come from a family with a scholarly tradition. His amusing account of his encounter with a bumbling pupil of Ibn Sīnā's in Simnān shows that he claimed a good (and up-to-date) philosophical education for himself [\*71: 4 Pers./9 Fr. (Schefer), 8–9 (Melzer), 28 (Najmabadi, Weber), 2–3 (Thackston)].

In 437/1045, when he was just over forty years old, Nāṣir-i Ḥusraw decided to go on pilgrimage to Mecca. In the account of his travels, the *Safarnāma*, which has become a classic text of Persian prose literature, he gives the reason for his pilgrimage: a dream he had in Ġūzġānān which commanded him to change his life [\*71: 2–3 Pers./3–4 Fr. (Schefer), 6 (Melzer), 24 (Najmabadi,

Weber), 1 (Thackston)]. The dream can be seen as the expression of a mental crisis possibly linked to Nāṣir-i Ḥusraw's conversion to the Ismā'īliyya (Daftary 2003 [\*118: 122 Germ.]). As a result, he left his employment in Marv and set off for Nishapur on 23 Ša'bān 437/5 March 1046. The journey that followed (map in Hunsberger 2000 [\*96: XXII–XXIII]; Melzer [\*71: front cover]) took him to Mecca four times altogether, in addition to which he spent almost three years in Egypt whose capital Cairo was the resplendent centre of the Fatimid Ismā'īliyya. He returned to Iran only in 444/1052. Probably, Nāṣir-i Ḥusraw's Ismā'īli convictions were already strengthened decisively by his sojourn in Cairo, but his conversion must have taken place in his East Iranian homeland. It is possible that Cairo was the main objective of his journey from the very first, with Mecca coming only second (Daftary 1990 [\*114: 216]). In the Fatimid capital, Nāṣir was given training as an Ismā'īli missionary (*dā'ī*), he met the caliph-imam al-Mustanṣir bi-llāh (Daftary 1990 [\*114: 216], Hunzai 2013 [\*167: 31]), and established close ties with the highest-ranking *dā'ī* of the time, al-Mu'ayyad fi l-dīn al-Širāzī (d. 470/1078). In his travel account, Nāṣir-i Ḥusraw already expressed his reverence for al-Mustanṣir bi-llāh, calling him *amīr al-mu'minīn* (commander of the faithful), and continued to praise him in some of his later poems. In his treatise *Zād al-musāfirīn* composed in 453/1061, probably already in exile in Yumgān, he explicitly states that it was on the orders of al-Mustanṣir that he was appointed to bring the true doctrine to the followers in the 'island' (*ġazīra*) of Ḥurāsān (the term 'islands' referred to regions where the Ismā'īli mission was active; cf. Daftary 2003 [\*118: 106–126 Germ.]). Similarly, in *Ġāmi' al-ḥikmatayn* he declares that he had come to 'this land' (*īn zamīn*) on the 'orders of the imam of truth' (*ba-farmān-i imām-i ḥaqq*) [\*9: 16–17; 31–32 Ormsby].

From 444/1052 onwards, Nāṣir-i Ḥusraw began to promote the Ismā'īli cause in Balḥ, calling himself the *ḥuġġa* of Ḥurāsān (several instances in the *Dīwān*, cf. e.g. [\*72: 296, 24]). *Ḥuġġa* (proof) was a rank in the Ismā'īli hierarchy, and the title also became Nāṣir-i Ḥusraw's nom de plume as a poet (de Blois 1992 [\*79: 201]). As a representative of the Ismā'īliyya in Ḥurāsān, Nāṣir-i Ḥusraw appears to have played an important part in the dissemination of the doctrine in the East Iranian region, and also carried it into the Caspian province of Ṭabaristān (Māzandarān), as his opponent Abū l-Ma'ālī Muḥammad b. 'Ubayd Allāh describes with displeasure in his heresiographical treatise *Bayān al-adyān* (wr. 485/1092) ([\*73: 161]; Daftary 1990 [\*114: 216]).

Nāṣir's sojourn in Balḥ, a place governed by the Sunni Seljuks, yet became increasingly dangerous for him with time. At a not precisely determined point in time before 453/1061 (Daftary 1990 [\*114: 217]), the hostility of the Sunni scholars ('*ulamā*') forced him to flee. He found sanctuary in the distant

mountain valley of Yumgān in Badaḥšān (the present-day Kokcha valley in the Afghan part of Badaḥšān), which was governed by an Ismāʿīlī emir, Abū l-Maʿālī ʿAlī b. al-Asad, at the time; he remained in Yumgān for the rest of his life. In a poem [\*72: 281,20] he mentions having been in Yumgān for fifteen years; Rašīd al-Dīn's *Ġāmiʿ al-tawārīḫ*, a historical source which mentions his time in Yumgān, tells us that he stayed there for 'up to twenty years' (*tā bīst sāl*) [\*74: 77]. In 462/1070, Nāṣir-i Ḥusraw completed *Ġāmiʿ al-ḥikmatayn*, a work he had written at the request of his Ismāʿīlī protector. From then on, his trail is lost; the year of his death is unknown, with 465/1072 but also later dates having been suggested (Poonawala 1977 [\*77: 111]; Daftary 2003 [\*118: 123 Germ.]; Nanji 1993 [\*81: 1006]). His tomb on a hill near the village of Ġurm near Faiḍābād in northeastern Afghanistan has survived and is still a place of local worship (Halm 1997 [\*117: 55]) as well as a representative example of the rich local building tradition in that remote mountainous region (see Schadl 2009 [\*99] for a comprehensive discussion).

It is not possible to determine with certainty to what degree Nāṣir-i Ḥusraw was able to maintain contact with the Ismāʿīlī centre in Cairo. His theological-philosophical work was probably composed in Yumgān, as was a major part of his poetry. Thanks to his Ismāʿīlī protector, he seems to have been safe from Sunni persecution, but the exile forced on him by circumstances was a cause for repeated laments (Daftary 1990 [\*114: 217]). Several treatises, the titles of which he mentions in his extant works, have been lost, and there are works attributed to him which have been proved to be inauthentic (for a list cf. Poonawala 1977 [\*77: 122–125 no. 12–41]).

Nāṣir-i Ḥusraw was the founder of the Ismāʿīlī communities of Badaḥšān which would later join the Nizārī branch of the Ismāʿīliyya. They continue to exist to this day in Afghan Badaḥšān as well as in the Badaḥšān province of Tajikistan in Central Asia, with its offshoots in the Ismāʿīlī communities in Hunza (North Pakistan). The Ismāʿīlis of this region venerate Nāṣir-i Ḥusraw under the name Pīr or Šāh Sayyid Nāṣir (Halm 1997 [\*117: 55]). A further tradition on Nāṣir-i Ḥusraw has no links to the Ismāʿīliyya nor, indeed, with historical reality: Based on a dubious 'autobiography' and on later Persian poets' biographies, it transforms him into a powerful magician (and follower of the Twelver Šīʿa) who lived to over a hundred years (de Blois 1992 [\*79: 202–203]; Browne 1905 [\*92: 326–327]).

Nāṣir-i Ḥusraw's poetry above all made a more lasting impression on posterity; it was received in the Ismāʿīlī environment (such as among the Nizārīs of Alamūt, cf. Landolt 2011 [\*182: 386, n. 68]) as well as beyond the Ismāʿīliyya and above all in Sufi circles (regarding ʿAyn al-Quḍāt al-Hamadānī, cf. Landolt 2011 [\*182]).

### 3.3 Works

As Nāṣir-i Ḥusraw frequently used philosophical terminology in his poetry, it is increasingly considered as an additional source for his philosophical–theological ideas (regarding e.g. the topic of the intellect, see Esmaeili 2012 [\*161], Hunzai 2012 [\*163]). Representative poems containing philosophical reflections (especially on the soul and the intellect) have been studied by Hunsberger 2012 [\*162], Landolt 2011 [\*182], and Lewisohn 2007 [\*157], 2012 [\*164]. The didactic poem *Rawšanāʾt-nāma* (*Book of Light*), which makes use of philosophical concepts in manifold ways, was – as most recently asserted by Pourjavady with convincing arguments (2021 [\*165: 142–144]) – in all probability not composed by Nāṣir-i Ḥusraw. The prose text also entitled *Rawšanāʾt-nāma*, which Wladimir Ivanow published under the title *Šiṣ faṣl* and which is of a more propaedeutic character, can be ignored here. *Ḥwān al-iḥwān* and *Wağh-i dīn* have not been included in the present list, either, as *Ḥwān al-iḥwān* consists mainly of quotations from the works of Nāṣir-i Ḥusraw's Ismāʿīlī predecessors (especially Abū Yaʿqūb al-Siğistānī), while *Wağh-i dīn* is interested in Ismāʿīlī Quranic exegesis rather than in philosophical questions.

#### *Ġāmiʿ al-ḥikmatayn*

##### *The Unification of the Two Wisdoms*

Commentary on a qasida by Abū l-Hayṭam Aḥmad b. al-Ḥasan al-Ġurġānī, an older Ismāʿīlī fellow-believer of Nāṣir-i Ḥusraw, in which a variety of questions of philosophical and theological import are asked but not answered. No further work by Abū l-Hayṭam is known, but another commentary on the qasida by his pupil Muḥammad b. Surḥ-i Nisābūrī (ed. Corbin, Moʾin 1955 [\*105]). Nāṣir-i Ḥusraw composed *Ġāmiʿ al-ḥikmatayn* at the request of the emir of Badaḥšān, ʿAlī b. Asad b. al-Ḥārīt, completing the work in 462/1070.

After a general introduction, Nāṣir-i Ḥusraw begins by quoting the entire text of the qasida, 82 verses long in the version known to him – six verses longer than Muḥammad

b. Surḥ-i Nisābūrī has ([\*105]; cf. Lazard 1964 [\*109: 1: 25 n. 3]). For the commentary, he subsequently divides it into thirty parts (in the Corbin edition, which numbers from the start, this comprises chapters 4–33) with minor rearrangements of the text: first verses 31–36, then 5–30, and finally verses 37–82, leaving verses 1–4 without commentary.

The 'two wisdoms' the work is set to reunite are, on the one hand, the philosophy of the Greek sages, namely Aristotle, Plato, [Pseudo-]Plutarch, Pythagoras, Socrates, and Empedocles – of the philosophers of the Arab world, Nāṣir mentions only Abū Bakr al-Rāzī and Ṭābit b. Qurra – and on the other the religious doctrine of the 'people given divine support' (*ahl-i taʿyīd*) from the Prophet's family, i.e. the Ismāʿīliyya under Fatimid leadership (regarding the title of the work cf. also Meier 1955 [\*136: 193–194]). The title of the work reflects the tradition of 'harmonisation' of late antiquity, which was also adopted by Islamic philosophical tradition (cf. al-Fārābī's *al-Ġamʿ bayna raʾyay al-ḥakīmāyn Aflāṭūn al-ilāhī wa-Aristūṭālīs* [*The Harmony Between the Opinions of the Two Sages, the Divine Plato and Aristotle*], cf. PIW 1 § 8). This does not, however, refer to a harmony in the sense of equal value, but rather to the apologetic idea that goes back to late ancient Christian models (e.g. Justin, Clement; see also Hadot 1995 [\*82: 355–378]), namely that the ancient philosophers possessed merely a hint (*šammaʿt*) of the truth represented by the prophets (and possessed by the Ismāʿīlī imams, in Nāṣir's view). In Nāṣir's commentary, the opinions of the Greek philosophers follow the Ismāʿīlī points of view, the latter acquiring more weight thanks to this arrangement.

Nāṣir-i Ḥusraw expresses critical opinions on other theological trends within Islam, such as the Karrāmiyya and the Muʿtazila. He also presents – quite positively, calling it a 'fine showpiece' (*nuktaʾī ṭurfa*) – a refutation written by the notorious freethinker Ibn al-Rēwandī, who had said in response to the claim of (non-Ismāʿīlī) Muslim circles (the

Ḥašwiyya, cf. van Ess 1997 [\*152: IV 336]): An unbeliever is someone who claims that the world is uncreated (van Ess 1995 [\*152: VI 457]; cf. Stroumsa 1999 [\*154: 77 n. 167]). It is not his intention to ridicule the createdness of the world as such, but rather the claim of certain theologians that the creation was preceded by a limited period of time. As is to be expected in the Fatimid period, the Ismā'īlī doctrine in the *Ġāmi'* reflects ideas strongly informed by neo-Platonic but ultimately creationist thought (Landolt 2005 [\*155: 328, col. 2]).

The commentary on the qasida is prefaced by a separate introduction dedicated mainly to the concept of God. It is followed by the thirty sections of the commentary on the following topics: 1. The four parts of discourse (according to Aristotle): command (*amr*), question (*istiḥbār*), request (*su'āl*, explained as *ḥwāstan-i čizī*), and categorial statement (*ḥabar*); untruth (*durūḡ*) can occur in the last-named only (verse 31). – 2. Explanation of four basic terms: 'form' (*hay'at*), i.e. different forms of individuals belonging to the same *forma specifica*; 'proprium' (*ḥāṣṣa*); 'sign' (*rasm*), i.e. definition *per accidens* by means of genus and proprium; definition of essence (*ḥadd*). Then an appendix containing a detailed catalogue of brief definitions of essence from the fields of metaphysics, theology, ethics, natural philosophy (verse 32). – 3. On the concept of the self (verses 33–36). – 4. Body, soul, and intellect (verses 5–8). – 5. The seven luminous bodies; their effects on the sublunar world (verse 9). – 6. The seven 'ideal states': (a) absolute duration (*dahr*); (b) truth (*ḥaqq*); (c) joy (*surūr*); (d) proof (*burhān*); (e) life (*zindagī*); (f) perfection (*kamāl*); (g) self-sufficiency (*ḡunya*, rather than the reading in the edited text *ḡayba*; cf., also confirming this sequence in Abū Ya'qūb al-Siḡistānī cf. Madelung 1996 [\*47: 85–86]) (verses 10–11). – 7. Universal nature (*tabrī'at-i kullī*) (verses 12–13). – 8. Different kinds of spiritual beings: angel, *parī*, and *dīv* (verses 14–15). – 9. The One (*yakī*) (verses 16–17). – 10. Genus (*ḡins*) and species (*naw'*) (verses 18–19). – 11. Good fortune and misfortune; the concepts 'today', 'yesterday', and 'tomorrow' (verses

20–23). – 12. The effective properties (*ḥawāṣṣ*) of mineral elements, living beings, and locations (verses 24–28). – 13. The capacity of discourse (*nuṭq*), speech (*kalām*) as a sum of statements (*qawl*); definition of statement as a brief, meaningful unit of discourse (*suḥan*) (verse 29). – 14. Different terms to denote eternity: *azal*, *daimūmat*, *ḥulūd*, *abad* (verse 30). – 15. The effective properties of the moon (verses 37–39). – 16. Why humans are in need of being educated although they are 'stronger' (*qawītar*) than animals; their rule (*tasalluṭ*) over the animals is decreed by God (verses 40–42). – 17. The creation (*ibdā'*) of the world *ex nihilo*, more precisely: not from a 'thing'; controversy over the uncreatedness or createdness of matter, the world, the Quran. This chapter includes a systematic arrangement of the relevant opinions into four groups: (1) *Dahriyān* (deniers of all kinds of createdness of the world); (2) *Aṣḥāb-i Hayūlā* (meaning Abū Bakr al-Rāzī), according to whom only the form but not matter itself is created; (3) *Ḥašwiyān-i ummat*, according to whom only matter but not form is created; (4) 'People with divine support,' 'whose opinion is also shared by a few philosophers,' according to whom the world is primordially created (*muḥtara'*) as to its form as well as its matter (verses 43–44). – 18. Species (*anwā'*) and individual (*ṣaḥṣ*); deliberations on precedence (*pīšī*) (verses 45–49). – 19. Intellect (*'aql*) and knowledge (*'ilm*) (verses 50–55). – 20. That which perceives (*mudrik*) and perception (*idrāk*) (verse 56). – 21. The creation of heaven and earth; deliberation of the question whether one of these should be accorded precedence (verses 57–59). – 22. Precedence (or priority) as a concept of time (verse 60). – 23. On the relationship between the universal and the particular (verses 61–62). – 24. Planets and signs of the zodiac (verse 63). – 25. Sun and moon (verses 64–65). – 26. Stars of ill fortune (Saturn, Mars) and stars of good fortune (Jupiter, Venus) (verse 66). – 27. The nature of male and female (verse 67). – 28. Difficulty explaining certain physical phenomena (verses 68–69). – 29. On the motivation of the qasida's author for giving his questions poetic form but not answering them (verses

70–74). – 30 Knowledge is equal to life, ignorance to death (verses 75–82).

*Guṣāyis wa-rahāyis*

*Opening and Liberation*

Answers to thirty questions on philosophical and theological issues, composed at the request of an Ismā'īlī fellow believer. Regarding the title of the undated text, the author remarks that it elucidates (literally 'opened', *guṣāda*) closed words (*suḥan-i basta*) 'in order that the souls of the honest believers should find opening and liberation in it'. He bases his argument on the Quran as well as on 'evidence (*dalā'il*) from the scope of vision (*āfāq*) and souls (*anfus*) [i.e. the external and the internal world], natures (*ṭabā'iyi*), and elements (*arkān*)' (Hunzai [\*92: 1 Pers., 23 Engl.]). Greek philosophers are neither mentioned nor quoted in the text, but there is no denying the influence of *falsafa*. Ismā'īlī terminology is used only in passing, but Nāṣir mentions the 'imam of our time' (i.e. the Fatimid caliph al-Mustaṣṣir bi-llāh, on whose permission he claims to be basing his deliberations (chap. 22 [\*92: 50 Pers., 83 Engl.]). The copyist's pertinent remarks in the manuscript on which Sa'id-i Nafīs's edition is based show that the work was subjected to censorship at the hands of anti-Ismā'īlī editors [\*92: XII, list of interpolations]).

The thirty questions discussed concern the following fields (cf. also the classification in Morewedge 1998 [\*153: 12]): the doctrine of time (1–3); body and matter at the creation of the world (4–5); ontology (6–7); soul and substance (8–11); cosmology and physics (12–20); philosophical theology (21–30). They consider in detail: 1. Deliberations on the phenomenon of time. – 2. The eternal (*qadīm*) and that which came into being within time (*muḥdat*). – 3. Time and creation. – 4. On the [refutation of the] theory of the anthropomorphists that God has a body (*ḡism*). – 5. The subtle (*latīf*) and the dense (*katīf*). – 6. Necessary (*wāḡib*) existing (universal intellect) and potentially (*mumkin*) existing (universal soul). – 7. Non-equating 'nothing' (*na-čīz*) and 'is not' (*nist*). – 8. The nature of the human soul. – 9. On the existence of the

soul. – 10. Definition of substance. – 11. The relation between soul and body. – 12. Six proofs of the temporal createdness (not eternal existence) of the world. – 13. Kinds of matter (*hayūlā*, Pers. *ārāsta šuda-yi awwal*). – 14. Form (*šūra*, Pers. *čihra*) and its relation to matter. – 15. The movement of the particles of solar dust (*darra*). – 16. The material and the spiritual world. – 17. Precipitation and ascent of water, water as a link between earth and air. – 18. Further questions on the circulation of water. – 19. The scales of balance. – 20. On the growth of plants. – 21. Createdness of the Quran as God's word. – 22. The divine word (*kalima*) as the cause of all being (*sabab-i hama-yi būdanīhā*). – 23. The empire (*mulk*) of God. – 24. Specific boundness of all being. – 25. Humans in a state of limbo (*āwīziš*) between animals and angels. – 26. Explanation of the term *ṭawāb* (divine reward). – 27. Explanation of the term *širāṭ* (road, path). – 28. Explanation of the term *ḥisāb* (accounting, reckoning). – 29. Explanation of the term *tarāzū* (scales). – 30. On human freedom.

*Zād al-musāfir[īn]*

*The Traveller's [Travellers'] Provision*

*Zād al-musāfir[īn]* – *The Traveller's [Travellers'] Provision* is designed as the broad answer to the question of humanity's 'whence and whither'. The work was composed with 'permission of the lord of this time', i.e. the Fatimid caliph al-Mustaṣṣir bi-llāh, in 453/1061, probably in Badaḡšān. It discusses classic fundamental questions of natural philosophy, epistemology, and theology, seeking to convince the reader by means of logical argumentation that neither the doctrine of the world without beginning, nor the creationism (based on Platonic premises) of the famous physician and philosopher Abū Bakr al-Rāzī – who is quoted at length – nor that of kalām, but rather the doctrine proclaimed in the name of the Ismā'īliyya, of the all-encompassing soul created beyond time but effective within time, represents true Islam. Of the all-encompassing soul he claims that, while it is based in pure reason, it must be learnt by means of using the senses, especially by *seeing* what occurs in nature, and by

*listening* to the 'knowledgeable'; that in this way it will lead to the 'right' understanding of that which created the material world and holds it together at its core (which is not God in person, but the all-encompassing soul as the delegate of the all-encompassing intellect), and thus allows the ascent of individual souls (interpreted as parts of the all-encompassing soul) to higher spheres (commonly called 'paradise'). The idea, previously championed by the 'Pure Brethren', of a gradual development of the soul through plant, animal, and human soul to becoming intellect, plays an important part in this context.

Several aspects of the work are striking. Firstly, the author's critical approach to different types of 'materialists' (*Dahriyān*, *Ṭabī'iyān*), especially to the so-called 'believers in primary matter' (*aṣḥāb al-hayūlā*) including the teachings of the little-known Abū l-'Abbās al-Īrānšahrī and of Abū Bakr al-Rāzī (who is said to have adopted good ideas from Īrānšahrī but then falsified them in a materialistic and purely quantitative sense), as well as his treatment of the qualitative physics of the Peripatetics. Secondly, the central significance of two kinds of creation: the unconditioned, timeless generation (*ibdā'*) of the all-encompassing intellect and the spiritual world that emanates from it on the one hand, and on the other the creation (*ḥalq*) within time of the physical world out of matter and form, which leads to detailed analyses of the concept of time. And finally, a thorough refutation of several varieties of the doctrine of the transmigration of souls (including the one the author attributes to his otherwise revered Ismā'īlī predecessor Abū Ya'qūb al-Siġzī [= al-Siġistānī]), but also of the

simple belief in the resurrection of the flesh which he rejects as a kind of 'doctrine of the transmigration of souls' as well.

The Persian book consists of a brief introduction and 27 chapters with the following headings: 1. On speech as a way of conveying knowledge to those present. – 2. On writing as a way of conveying knowledge to those absent. – 3. On the external senses. – 4. On the internal senses. – 5. On the body and its parts. – 6. On movements and its types. – 7. On the soul (*naḥs*). – 8. On matter (*hayūlā*). – 9. On space/place (*makān*). – 10. On time. – 11. On [different kinds of] composition (*tarkīb*). – 12. On the agent and the patient. – 13. On the advenience (*ḥadaṭ*) of the world. – 14. On the proof that there is a creator (*ṣāni'*). – 15. On the essence of the creator [or creatrix] of the physical world. – 16. On the true generator (*mubdī'-i ḥaqq*) and that which he generates [directly]. – 17. On God's speech and writing. – 18. On [the experience of various kinds of] enjoyment, including proof. – 19. On the reason of being (*'illat-i būdiš*) of the physical world. – 20. On the question of why God was 'inactive' before he created the world. – 21. How the soul is connected to the body. – 22. Why the soul is connected to the body. – 23. On the proof that everything which has a particular form [and can be recognised as such] allows us to deduce a creator of this form. – 24. On [the verb forms] 'was', 'is', and 'will be'. – 25. On the question of whence humans came and whither they go. – 26. On the explanation [i.e. refutation] of the doctrine of the transmigration of souls. – 27. On the proof that there is reward and punishment [in the spiritual world].

### 3.4 Doctrine

3.4.1 Sources and Reception – 3.4.2 Cosmogony – 3.4.3 Time and Eternity – 3.4.4 Soul and Intellect – 3.4.5 Ethics

#### 3.4.1 Sources and Reception

In Western reception Nāṣir-i Ḥusraw has long been perceived above all as a poet – he is among the most important didactic poets in the Persian

language – and as an Ismāʿīlī missionary, but the words Berthels wrote about him in 1936 [\*73: 939] remain valid: ‘It would be particularly important to devote attention to his philosophical system which is of far-reaching significance for the history of intellectual life in Persia’. An in-depth investigation of his philosophy appears all the more urgent as doubts concerning the originality of Nāṣir-i Ḥusraw’s philosophical thought have arisen since Berthels’ assessment, and contradictions have been discovered in Nāṣir’s philosophical works (e.g. as regards the relationship between the rational [human] soul and the universal soul: in detail cf. De Smet 2010 [\*158: 110–121]). It would also be important to identify and study the sources used by Nāṣir (on the state of research concerning all these issues cf. De Smet 2010 [\*158: 103–104, n. 11]).

Nāṣir-i Ḥusraw’s poetry as well as his theological–philosophical prose have been transmitted exclusively in Persian, although some of the prose writings appear to have been based on Arabic originals (cf. de Blois 1992 [\*79: 203]). Parts of his oeuvre were subjected to Sunni censorship and are consequently extant only in corrupt versions (Daftary 1990 [\*114: 215, n. 137]), as Jan Rypka had already conjectured (1968 [\*75: 187]). Even so, Nāṣir-i Ḥusraw’s reference to his Ismāʿīlī predecessors is clear; he relates theories by Abū Yaʿqūb al-Siġistānī (executed after 361/971) in *Ḥwān al-iḥwān* [\*93: 112, 113, 115, 117] and by Ṣayḥ Naḥṣabī (i.e. Abū ‘Abdallāh Muḥammad b. Aḥmad al-Nasafī [Naḥṣabī] al-Bardāʿī, executed 332/943), whose *Kitāb al-Maḥṣūl* he quotes in *Ġāmīʿ al-ḥikmatayn* [\*91: 171–172] and *Ḥwān al-iḥwān* [\*93: 111, 112, 113, 115] (regarding the *Kitāb al-Maḥṣūl*, of which only fragments survive, cf. Daftary 1990 [\*114: 167–168, 235–236]). Nāṣir-i Ḥusraw probably lacked access to the work of his elder contemporary Ḥamid al-Dīn al-Kirmānī; there are certainly no traces of Kirmānī’s Ismāʿīlī adaptation of al-Fārābī’s system of the ten celestial intelligences in Nāṣir-i Ḥusraw’s works (Landolt 2005 [\*156: 6–7], De Smet 2010 [\*158: 106]). The *Epistles of the Pure Brethren* (cf. PIW 1 § 9.4.2; their link with the Ismāʿīliyya is disputed), on the other hand, were known to him – although he does not name them – as Baffioni 2013 [\*166] was able to prove on the basis of unmistakeable quotations from the *Rasāʾil* translated into Persian in Nāṣir’s work. Moreover, his deliberations on the four kinds of matter and the corresponding numbers [\*91: 149] or his altogether un-Avicennan definition of the Active Intellect as the first generated entity (*nuḥustīn mubdaʿ* [\*91: 89, 8–9]) correspond precisely to the usage of the Iḥwān al-Ṣafāʾ (cf. *Rasāʾil* [\*81: 11 6–7; 111 183–184, 203] on the kinds of matter, or I 54 on the Active Intellect).

Nāṣir-i Ḥusraw demonstrates his familiarity with the Greek philosophical tradition. In particular, he must have been aware of late antique authors and texts, as indicated by his references to John Philoponus [\*94: 253 Ḥāʾirī, 287 Badl al-Raḥmān], [Pseudo-]Plutarch [\*91: 197], *On the Nature of the Human Being* (which he attributes to Porphyry rather than Nemesius [\*93: chap. 43],



cf. Landolt [\*82: 77–78 (2001). 80 (2008)]) as well as the pseudo-Aristotelian text *Book of the Apple* [\*91: 99]. Among the philosophers of the Islamic period, Nāṣir-i Ḥusraw appears to have devoted critical reception primarily to Abū l-Abbās al-Īrānšahrī and Abū Bakr al-Rāzī. Evidence of this is provided not only by the relevant remarks on the theories of the ‘believers in primary matter’ but also by Nāṣir’s reference to his (lost) work *Bustān al-‘uqūl*, in which he claimed to have refuted Rāzī [\*91: 137; \*24: 309 Ḥā’irī, 339 Badl al-Raḥmān]. This was presumably mainly prompted by al-Rāzī’s criticism of prophecy (cf. *prw* 1 § 6), which was diametrically opposed to Ismā’īlī–Fatimid ideas.

It is remarkable that, apart from the abovementioned encounter with his disciple in Simnān, Nāṣir-i Ḥusraw does not mention Ibn Sīnā by name anywhere in his works. It is impossible to reconstruct the reasons for this, but Nāṣir-i Ḥusraw’s silence on Ibn Sīnā does not rule out that he could have studied his philosophy. His deliberations on the concept of time in *Ḥwān al-iḥwān*, for instance, [\*93: chap. 21, p. 65 Qawīm] are related to Ibn Sīnā’s *Ta’līqāt* [\*15: 98–99. 422–423 Mūsawiyān].

### 3.4.2 Cosmogony

In Nāṣir-i Ḥusraw’s eyes, the first cause of all (potential) being (*sabab-i hama-yi būdanīhā*) is – in accordance with the Quran – the divine word (*kalima*), i.e. the creator’s command *kun* (‘be!’). Supported by the necessary (*wāğib*) existing universal intellect, the contingently (*mumkin*) existing universal soul becomes the force that shapes the world. The universal soul mediates between existence and non-existence; the command of God, envisioned as separate from the intellect, being pure activity and the foundation of all being, is accorded a kind of ‘unqualified’ (*muṭlaq*) existence. The intellect is the first generated entity that is not (as all other ‘things’) created out of a ‘thing’ but out of something that possesses neither being nor not-being (*mubda’*) [\*92: 27 Engl., 4 Pers.]; it is followed by the universal soul. As to its rank, the intellect is above the soul or, put metaphorically, the soul is the ‘child’ of the intellect (*farzand-i ‘aql*) or its ‘tablet’ (*lawḥ*), because its essence belongs to form, and the place of form is in the soul [\*91: 230]. According to the description in *Ġāmi‘ al-ḥikmatayn*, while the ancient philosophers searching for the ultimate cause did recognise the oneness (*tawḥīd*) of God, they only got as far as the universal or world soul. Ismā’īlī doctrine, in contrast, claims a ‘higher approach’ by postulating – probably influenced by Plotinus, although he is not named – a kind of trinity above the world soul, which corresponds to the three kinds of ‘eternity’ (see below): 1. the pure One (*yakī-yi maḥīd*) beyond being and not-being; 2. the ‘unity’ (*waḥdat*), identified with the timeless act of generation (*ibdā’*) and the creator’s word *kun*; 3. the one that is capable of becoming plural (*yakī-yi mutakattir*),

i.e. the intellect or νοῦς (*ʿaql*). Under this last-named, the universal soul and its representative, nature, become active as the true agents in space and time (Landolt 2005 [\*155: 328 col. 2–329 col. 1]).

Thus, God did not create the world directly but indirectly, by generating the universal soul through His command [\*92: 29 Engl., 5 Pers.]. Thanks to the inherent force granted it by God, the latter was able, despite its immaterial nature, to generate the dense matter of which the world consists. The activity of the universal soul depends on six preconditions, out of which the following emerge: (1) the celestial sphere not subject to decay (*bī-farsāyiš*), (2) the four elements, (3) the seven planets, (4) the expanse of space in which the universal body is located, (5) the unending movement within this body, i.e. the sphere, (6) elapsing time (*zamān-i guḏaranda*). It is only through the last-named that the visible manifold manifestations of this world are revealed [\*92: 36 Engl., 12 Pers.].

The emergence of a ‘new’ (*ḥādīṭ*) thing in the world is of necessity tied to five kinds of cause (*ʿillat*): *fāʿila* (efficient), *ālātī* (instrumental), *hayūlānī* (material), *ṣūrī* (formal), *ḡāʾī* (final); translated into examples these are the cabinetmaker who makes the throne, the saw as the tool, the wood as the material, the form of the throne as the idea within the cabinetmaker’s soul, and the king’s sitting on the throne as the aim and end of the entire process [\*91: 6–7]. These five causes go back to the Aristotelian tradition; Nāṣir adds location and time and ascribes the doctrine of the ‘seven causes’ specifically to the Ismāʿīlīs [\*91: 9].

The universal intellect, the universal soul, and the created world are all subject to God’s command. The command, however, is not part of God but an effect or a trace that contains nothing of His essence, comparable to the writing of a writer. God’s essence transcends existence as well as non-existence. Translated into the language of the Quran, the universal intellect corresponds to the (divine) pen (*qalam*), and the universal soul to the tablet (*lawḥ*). The activity of writing generates ‘the visible book’ (*kitāb-i dīdānī*), i.e. creation – while the Quran is ‘the audible book’ (*kitāb-i ṣanūdanī*). Both are the work of God [\*91: 232].

Nāṣir regards the continual change in the world as evidence of its createdness – an argument he levels against the Dahriyya [\*92: 56 Engl., 27 Pers.]. On the other hand, he does not seem to have embraced the opinion, as some traditionalist Islamic circles did, that he who says that the world is uncreated is an unbeliever; otherwise he would hardly have quoted Ibn al-Rēwandī’s refutation without even a hint of criticism.

God, the One, is free from matter and form. He has no body, His essence is above matter, instrument, capacity, form, similarity, and action [\*92: 27 Engl., 4 Pers.]. The force that creates the world (universal soul and universal

intellect), the creation, and the creatures are all contained within God's eternal (*qadīm*) word of creation. God's perfection is contained within His oneness – everything that is multiple, is imperfect. The kingdom of God, too, is one and not material (consequently not identical with this world), it has no beginning and no end, and nothing beyond it [\*92: 89–90 Engl., 55 Pers.].

The term 'world' (*ʿālam*) is, according to Nāṣir, derived from 'knowledge' (*ʿilm*), as the traces of (divine) knowledge are visible everywhere within it [\*92: 61 Engl., 32 Pers.]. The elements' place in the cosmic order is determined by their density (*kaṭāfat*) or subtlety (*laṭāfat*); air is denser than fire, water denser than air, earth denser than water. The elements move either naturally (*ṭabīʿ*) or by external compulsion (*qasrī*); the natural inclination of water and earth is downward in direction of the centre of the earth, while the natural inclination of air and fire is directed upward. Correspondingly, the upward inclination of water and earth and the downward inclination of air and fire are the result of external compulsion [\*92: 67–68 Engl., 37–38 Pers.]. However, in the Ismāʿīlī understanding, 'natural' movement is only seemingly natural, as it follows the 'compulsion' of the world soul [\*94: 40–42 Ḥāʾirī, 40–43 Badl al-Raḥmān]. The elements unfold their effects by means of a connection with matter. Matter in its turn is either absolute or relative. Relative matter may be perceived with the senses – such as for instance a chair made from wood. Absolute matter is comprehensible only to the intellect, i.e. it is intelligible but not perceivable to the senses – the concept 'wood' does not allow sensory perception. The fact that wood can exist at all is due to the effect of the elements [\*92: 56–57 Engl., 28 Pers.].

The variety and continued existence of the material world are determined by the disparity of the elements which are opposed to each other, as well as by pairing elements. Everywhere in the material world this principle of duality is manifest, and it is also effective beyond the material world. Phenomena, such as the rational soul and the human intellect, which are not part of the material world, indicate the existence of a higher spiritual world; they provide, as it were, a bridge to this spiritual world [\*92: 63 Engl., 34 Pers.].

Nāṣir-i Ḥusraw understands the human body – as did the author of the *Epistles of the Pure Brethren* – as a microcosm which reflects the material world, the macrocosm [\*91: 282]. Microcosm and macrocosm correspond to one another. The sun, for instance, is the heart of the macrocosm, the moon its brain, and the remaining planets are the five senses. On the microcosm level, humans have the same organs, and the Ismāʿīlī hierarchy is structured along the same lines. At its head are the messenger (*rasūl*) as the sun and the legatee (*waṣīyy*) as the moon, followed by the lower ranks, corresponding to the five planets, 'leader' (*imām*), 'gate' (*bāb*), 'proof' (*ḥuǧǧa*), 'missionary' (*dāʿī*), and 'authorised' (*maʿdūn*) [\*91: 291].

### 3.4.3 Time and Eternity

Time is linked to the action of an agent (*kār-kun*). It is dependent on the movement of the celestial spheres – if the celestial spheres did not exist, neither would time [\*92: 25 Engl., 2 Pers.]. Time was generated indirectly along with the world, by God the creator's command (*ibdā'*); this act of generation was timeless (*bī-zamān*) [\*91: 261]. Only God is eternal, according to Nāṣir, but He precedes the world not in a temporal sense: his priority is not temporal but essential. As there was no time before the creation of the world, the question of whether the eternal almighty Creator allowed some time to pass before creating the world although He could have created it earlier, is found to be pointless [\*92: 33 Engl., 9 Pers.]. That the human soul cannot erase time from its imagination is because it is tied to a body which is in turn subject to time [\*92: 26 Engl., 3 Pers.].

The same question is discussed in detail in *Zād al-musāfir*. Nāṣir above all delves into an argument brought by Philoponus against Proclus' concept of the 'eternal duration of the world', according to which it is necessary to distinguish between two kinds of potentiality and activity: (1) the ability to carry out an action (this implies a first actualisation of the potential ability, but at the same time a second potentiality, as the ability need not be exercised), and (2) 'actually' exercising it (second actuality). This allows us to say that even before the moment of the creative act, God was 'actually' the creator, and that the world was nevertheless created within time. While Nāṣir does consider this argument to be better than the usual arguments proposed by *kalām*, in the end he rejects it as it involves a category error, like all questions concerning measurable time before time was created. On the other hand, one cannot say that there was no time at all before created time, as that would amount to the eternal duration of the world. In fact, he says, the creator exists before creation within an immeasurable duration equal to a kind of 'eternity' (*dahr-i-nā-paymūda*) [\*94: 253–260 Ḥā'irī, 278–286 Baḍl al-Raḥmān].

In the answer to a question on this topic posed by the author of the qasida, Nāṣir-i Ḥusraw seeks to distinguish different senses of 'eternity' in *Ġāmi' al-ḥikmatayn* [\*91: 187–191]. Here, the term *azal* is of central significance – according to the philosophical definition, whatever possesses the quality *azal* exists without a cause (*'illat*), while that which exists and has a cause, has 'come into being' (*muḥḍat*). Based on this simple definition of the difference between 'eternal' and 'come into being', Nāṣir-i Ḥusraw arrives at a specifically Ismā'īlī distinction between different kinds of eternity: 1. the absolutely transcendent eternal (*azal*), 2. the eternal and unique act of generation (*azaliyyat* = *ibdā'*), 3. that which has become eternal as a result of this act (*azalī*), i.e. the intellect or the first existing one. Two further terms for 'eternity', *daimūma* and *ḥulūd*, denote, in Nāṣir-i Ḥusraw's synopsis of the opinion of the followers of the

‘divine truth’ (*ḥikmat-i ilāhī*), ‘duration of the cause’ (*dawām-i ‘illat*) and ‘eternal sojourn in one place’ (e.g. the sojourn of the souls [not the bodies] in paradise or hell). Similarly, in *Zād* [\*94: 175–176 Ḥā’irī, 195 Baḍl a-Raḥmān] Nāṣir-i Ḥusraw distinguishes three kinds of ‘eternity’ – a subject already discussed by Abū Ya’qūb al-Siğistānī in his *Kitāb al-Maqālīd*.

#### 3.4.4 Soul and Intellect

As subtle form and dense matter, soul and body are linked like the form of a signet ring to the silver [\*92: 53 Engl., 25–26 Pers.]. The soul exists thanks to its essence (*qā’im ba-dāt-i ḥwīš*), not through the body, and is one of the substances (*ḡawāhir*), not the accidents (*a’rāḍ*). Following Platonic-Aristotelian tradition, Nāṣir-i Ḥusraw distinguishes three parts of the soul – vegetative, animal, and rational (*nāṭiqa*, Pers. *gūyanda*) – the last of which, being the noblest in the sublunar world, is accorded to humans only. The soul harmonises opposite elements, uniting them by means of a force bestowed on it by God; it moves the body and keeps it alive. Being substance, it is a perceiving (*mudrik*) force, its aid to perception are the five senses [\*91: 251].

The ruler of body and soul is the intellect which points from the visible (*šāhid*) to the invisible (*ḡāyib*) [\*91: 107]. Its activity (*fī’l*) is knowledge (*‘ilm*), by means of which the human recognises things. It protects and ennoble the rational soul (*šaraf*) [\*91: 249].

Humans’ own ‘innate’ intellect (*‘aql-i ḡarīzī*) is mirrored by the universal intellect, the first thing created by God – which Nāṣir equates with the Active Intellect. The ‘innate’ intellect’s insight is merely potential and must be actualised by means of the universal intellect; this task is undertaken by the prophets and imams as ‘manifestations’ (*maẓhar*) of the universal intellect; without their instruction (*ta’līm*), humans cannot achieve insight into the reality of things (Hunzai 2012 [\*163: 10–16]).

In Nāṣir-i Ḥusraw’s poetry, too, the intellect plays an important part – given as a divine mercy, the human intellect recognises justice and correct actions as ‘traces’ (*āṭār*) of the ‘pure’ intellect (*‘aql-i pāk*) (Hunzai 2012 [\*163: 22–24]). The latter conveys messages from the celestial world to humans (cf. Pourjavady 2012 [\*165: 136–138. 142]).

#### 3.4.5 Ethics

A determining characteristic in Nāṣir-i Ḥusraw’s philosophical–theological thought is his explanation of Islamic eschatological phenomena by interpreting their inherent meaning (*ta’wīl*). Thus, while according to tradition, *al-širāt* (literally: road, path, Pers. *rāh*) is the hair-thin and razor-sharp bridge spanning hell that must be crossed on the Day of Judgement – those who are destined for paradise will reach the other side unharmed, and those who are doomed to

hell will fall. This is the literal meaning of *ṣirāṭ*, but Nāṣir's figurative interpretation sees the term as the path of the soul. If the human, who is ranked between animals and angels, follows the path of being human (*mardumī*) with one part of being an animal (*sutūrī*) and one part of being an angel (*firīṣtagī*), he will go along the right path (*ṣirāṭ-i mustaqīm*; cf. Quran 1:6) and reach paradise. If he obeys the law (*ṣarī'a*) without understanding its inner meaning (*ta'wīl*), he becomes an animal, if, however, he acquires *ta'wīl* without obeying the *ṣarī'a*, he assumes the rank of an angel. Both these ways of life lead to hell, which must be understood as the fire surrounding the world (i.e. the ether) – while the paradise is the higher spiritual world [\*92: 104–106 Engl., 67–68 Pers.].

It is true that humans – more than any other animal – are entirely helpless at birth. They are dependent on care and require education. Even so, God granted them lordship (*tasalluṭ*) over the animals. Animals are servants and assistants of humans, who as their masters are closer to God, the master of the universe [\*91: 206–207]. Everything that exists is held in specific bondage by God and cannot escape this. However much humans are the masters of the sublunar world, they are still servants of God. The human soul is born ignorant and, while in the world, is given the tools that enable it – as the only entity within creation – to acquire knowledge. This is God's task for the human, and not carrying out this task will lead to punishment. Humans' liberation (*rahāyiš*) is found in knowledge, which is acquired with the heart and the body, the latter actualising it. Divine reward (*ṭawāb*) consists in the return of the soul, which has acquired knowledge through its obedience to God's commandment, to its origins, i.e. the world of knowledge (*'ālam-i dānā*) [\*92: 103 Engl., 66 Pers.].

Not all humans, however, are capable of achieving the same kind of insight. Nāṣir makes a distinction in this context that we also find in other Islamic philosophers, usually in connection with religious truths. The populace (*'āmm*) considers things to be universally valid and true (*ma'rūf*), which wise people understand to be an image (*maṭal*) or symbol (*ramz*), for instance that the bird Sīmurǧ lives behind the mountain Qāf and will emerge when the resurrection is nigh; that the sun retires beneath the throne of God after setting at night; or that the spiritual beings (*pariyān*) are fair of face and invisible to humans [\*91: 180].

In the hierarchy of the creatures, the place of humans is between animals and angels; like the animals, humans possess a carnal soul (*naḥs-i šahwānī*) and, like the angels, a rational soul (*naḥs-i 'āqila*) [\*92: 113 Engl., 74 Pers.]. Angels are not rewarded for their obedience and animals not punished for their disobedience; humans, however, are rewarded for their obedience and punished for their disobedience. This leads to the question of whether humans act under compulsion (*maǧbūr*, cf. also § 2.3.4.2 above on so-called 'natural' movement) or of their own free will (*muḥtār*), and to what extent they are responsible for their actions or may be punished for disobedience in the former instance.

It is precisely the understanding (self-evident at the time) that humans were the only beings possessing both a carnal and a rational component in their soul that provides Nāṣir-i Ḥusraw with the solution to this problem, which is relevant for his theodicy. God gave humans perceptive intelligence (*ḥirad-i dar-yābanda*) with which they can distinguish between good and evil, in addition awareness of shame (*šarm*) which prevents him from behaving like the animals. Following the rational soul, a human consequently acts under compulsion (*mağbūr*), as it commands obedience and good behaviour. Following the carnal soul, one can act of one's own free will (*muḥtār*), as it is independent (*bī-nīyāz*) of obedience and disobedience, good and evil, right and wrong, reward and punishment [\*92: 113–114 Engl., 74–75 Pers.]. Nāṣir's argument ends here, but it is clear that there can be no doubt of God's all-encompassing justice towards humans. It is up to humans whether they follow their rational soul and are compelled to acting correctly, or whether they are guided by their carnal soul and bear potential negative outcomes of their actions.

#### 4 Secondary Literature

Ibn Sīnā's Companions [\*1–\*22] – Continuing Ibn Sīnā's Tradition: Abū l-'Abbās al-Lawkarī [\*31–\*59] – Critical Approaches to Philosophy: Nāṣir-i Ḥusraw [\*71–\*182]

##### *Ibn Sīnā's Companions*

- 1 El Hefny, Mahmoud. *Ibn Sina's Musiklehre hauptsächlich an seinem "Nağāt" erläutert. Nebst Übersetzung und Herausgabe des Musikabschnittes des "Nağāt"*. Berlin-Wilmersdorf, 1931.
- 2 Tihirānī, 'Alī-Naqī Munzawī and Muḥammad Taqī Dānišpažūh. *Fihrist-i kitābhāna-yi ihdā'ī-yi Āqā-yi Sayyid Muḥammad Miškāt bi kitābhāna-yi dānišgāh-i Tihirān*. Tehran, 1330–1332/1951–1953.
- 3 Mahdawi [Mahdavi], Yaḥyā. *Fihrist-i nushahā-yi mušannafāt-i Ibn-i Sīnā*. Tehran, 1333 h.š./1954.
- 4 Tūqān, Qadrī Ḥāfiz. *Turāt al-'arab al-'ilmī fi l-riyāḍiyyāt wa-l-falak*. Cairo, 1382/1963.

- 5 Ḥayraddīn al-Ziriklī. *al-A'lām. Qāmūs tarāğim li-ašhar al-riğāl wa-l-nisā' min al-'Arab wa-l-musta'ribīn wa-l-mustašriqīn*. Cairo, 1954–1959, Beirut 1979 (4th ed.).
- 6 Saliba, George. "Ibn Sīnā and Abū 'Ubayd al-Jūzjānī. The problem of the Ptolemaic equant". *Journal for the History of Arabic Science* 4 (1980): 377–403. – Repr. in G. Saliba, *A History of Arabic Astronomy*. New York, 1994, 85–112.
- 7 Janssens, Jules L. *An Annotated Bibliography on Ibn Sīnā (1970–1989). Including Arabic and Persian publications and Turkish and Russian references*. Leuven, 1991.
- 8 Michot, Jean (Yahya). "Une nouvelle oeuvre du jeune Avicenne. Note

complémentaire à propos du ms.

Hüseyin Çelebi 1194 de Brousse". *Bulletin de Philosophie Medievale* 34 (1992):

138–154.

9 Janssens, Jules L. "Les Ta'liqāt d'Ibn Sīnā. Essai de structuration et de datation." In *Langages et philosophie. Hommage à Jean Jolivet*. Ed. by Alain de Libera, Abdelali Elamrani-Jamal, and Alain Galonnier. Paris, 1997, 109–122.

10 Michot, Jean (Yahya). "La réponse d'Avicenne à Bahmanyār et al-Kirmānī. Présentation, traduction critique et lexique arabe-français de la Mubāḥatha III." *Le Muséon* 110 (1997): 143–221.

11 Reisman, David C. "A new standard for Avicenna studies." *Journal of the American Oriental Society* 122/3 (2002): 562–577.

12 Reisman, David C. *The Making of the Avicennan Tradition. The Transmission, Contents, and Structure of Ibn Sīnā's al-Mubāḥatāt (The Discussions)*. Leiden, 2002.

13 Janssens, Jules L. "Bahmanyār ibn Marzubān. A faithful disciple of Ibn Sina?" In *Before and after Avicenna. Proceedings of the first conference of the Avicenna Study Group*. Ed. by David C. Reisman, Ahmed H. al-Rahim. Leiden 2003, 177–198.

14 Ragep, F. Jamil and Sally P. Ragep. "The astronomical and cosmological works of Ibn Sīnā. Some preliminary remarks." In *Sciences, techniques et instruments dans le monde iranien (x<sup>e</sup>–xix<sup>e</sup> siècle)*. Ed. by N. Pourjavady and Ž. Vesel. Tehran, 2004, 3–15.

15 Garakānī, Murtaḍa Qarā'ī. "Bahmanyār ibn Marzubān." In *Dā'irat*

*al-ma'ārif-i buzurg-i islāmī*, vol. 12. Ed. by Kāzīm Mūsawī Buḡnūrdī. Tehran, 2004, 217–219. – Engl. transl. in *Encyclopaedia Islamica*, vol. 4. Ed. by Wilferd Madelung, Farhad Daftary. Leiden, 2013, 181–183.

16 Janssens, Jules L. "Bahmanyār, and his revision of Ibn Sīnā's metaphysical project." *Medioevo. Rivista di storia della filosofia medievale* 32 (2007): 99–117.

17 Michot, Jean (Yahya). "Le riz trop cuit du Kirmānī. Présentation, édition, traduction et lexique de l'Épître d'Avicenne contestant l'accusation d'avoir pastiché le Coran." In *Mélanges offerts à Hossam Elkhadem par ses amis et élèves*. Ed. by Frank Daelemans et al. Brussels, 2007, 81–129.

18 al-Rahim, Ahmed H. "Avicenna's immediate disciples. Their lives and works." In *Avicenna and his Legacy. A Golden Age of Science and Philosophy*. Ed. by Yitzhak Tzvi Langermann. Turnhout, 2009, 1–25.

19 Ragep, F. Jamil. "The Khilāṣ kayfiyyat tarkīb al-aflāk of al-Jūzjānī. A preliminary description of its Avicennian themes." In Langermann 2009 [\*18], 301–306.

20 Niazi, Kaveh Farzad. *A Comparative Study of Quṭb al-Dīn Shīrāzī's Texts and Models on the Configuration of the Heavens*. PhD Diss., Columbia University, 2011. – Online: doi.org/10.7916/D89C74D9.

21 Kapoor, Ramesh Chander. "Did Ibn Sīnā observe the transit of Venus 1032 AD?" *Indian Journal of History of Science* 48 (2013): 405–445.

22 Gutas, Dimitri. *Avicenna and the Aristotelian Tradition. Introduction to*



*Reading Avicenna's Philosophical Works. Second, revised and enlarged edition, including an inventory of Avicenna's authentic works.* Leiden, 2014.

23 al-Rahim, Ahmed H. *The Creation of Philosophical Tradition. Biography and the Reception of Avicenna's Philosophy from the Eleventh to the Fourteenth Century A.D.* Wiesbaden, 2018.

*Continuing Ibn Sīnā's Tradition: Abū l-'Abbās al-Lawkarī*

### Works of Reference

31 Carl Brockelmann. *Geschichte der arabischen Litteratur*, 2 vols, 3 suppl. vols. Leiden, 1937–1949 (2nd ed.), 456.

### Lists and Catalogues of Manuscripts

35 Dānišpažūh, Muḥammad Taqī and 'A. N. Munzavī. *Fihrist-i Kitābhāna-yi ihdā'ī-yi Āqā-yi Sayyid Muḥammad Miškāt ba-Kitābhāna-yi markazī-yi Dānišgāh-i Tihhrān*, 19 vols. Tehran, 1330–1391/1951–2012.

36 Dānišpažūh, Muḥammad Taqī. *Fihrist-i nuṣṣahā-yi ḥaṭṭī-yi Kitābhāna-yi Dāniškada-yi Adabīyyāt*. Tehran, 1339/1960.

37 *Fihrist-i nuṣṣahā-yi ḥaṭṭī-yi Kitābhāna-yi 'Umūmī-yi Ḥaḍrat-i Āyat Allāh al-'Uzmā Naḡafī Mar'aṣī*, 47 vols. Ed. by Maḥmūd Mar'aṣī. Qum, 1975–2015.

### Introductions, Overviews

41 Griffel, Frank. *Apostasie und Toleranz im Islam. Die Entwicklung zu al-Ġazālīs Urteil gegen die Philosophie und die Reaktionen der Philosophen.* Leiden, 2000.

42 Reisman, David C. *The Making of the Avicennan Tradition. The Transmission, Contents, and Structure of Ibn Sīnā's al-Mubāḥāṭāt (The Discussions)*. Leiden, 2002.

43 Bertolacci, Amos. "The structure of metaphysical science in the Ilāhiyyāt (Divine Science) of Avicenna's Kitāb al-Šifā' (Book of the Cure)." *Documenti e Studi sulla Tradizione Filosofica Medievale* 13 (2002): 1–69.

44 Bertolacci, Amos. *The Reception of Aristotle's Metaphysics in Avicenna's Kitāb al-Šifā'*. Leiden, 2006.

45 Gutas, Dimitri. *Avicenna and the Aristotelian Tradition. Introduction to Reading Avicenna's Philosophical Works. Second, revised and enlarged edition, including an inventory of Avicenna's authentic works.* Leiden, 2014.

46 Griffel, Frank. *Al-Ghazālī's Philosophical Theology*. New York, 2009.

*Abū l-'Abbās al-Lawkarī*

51 Wittstein, Armin. "Historische Miscellen 11." *Zeitschrift für Mathematik und Physik – Historisch-literarische Abteilung* 40. (Leipzig, 1895): 1–6.

52 al-Rahim, Ahmed H. "The Twelver-Shī'ī reception of Avicenna in the Mongol period." In *Before and After Avicenna. Proceedings of the First Conference of the Avicenna Study Group*. Ed. by David C. Reisman and Ahmed H. al-Rahim. Leiden, 2003, 219–231.

53 Janssens, Jules L. "Bahmanyār ibn Marzubān. A faithful disciple of Ibn Sīnā?" In Reisman, al-Rahim (2003) [\*52], 177–197.

- 54 Marcotte, Roxanne D. "Preliminary notes on the life and works of Abū al-‘Abbās al-Lawkarī (d. ca. 517/1123)." *Anaquel de estudios árabes* 17 (Madrid, 2006): 133–157.
- 55 Marcotte, Roxanne D. "Notes lexicographiques sur la Physique de la Qaṣidah-yi asrār-i al-ḥikmah d'Abū al-‘Abbās al-Lawkarī (mort après 503/1109)." In *Proceedings of the 5th Conference of the Societas Iranologica Europaea*, vol. 2. Ed. by Antonio Panaino and Riccardo Zipoli. Milan, 2006, 75–91.
- 56 Janssens, Jules L. "Bahmanyār, and his revision of Ibn Sīnā's metaphysical project." *Medioevo. Rivista di storia della filosofia medievale* 32 (2007): 99–117.
- 57 Eichner, Heidrun. "'Dissolving the Unity of Metaphysics: From Fakhr al-Dīn al-Rāzī to Mullā Ṣadrā al-Shīrāzī." *Medioevo* 32 (2007): 139–197.
- 58 al-Rahim, Ahmed H. "Avicenna's immediate disciples. Their lives and works." In *Avicenna and his Legacy. A Golden Age of Science and Philosophy*. Ed. by Yitzhak Tzvi Langermann, Turnhout, 2009, 1–25.
- 59 Marcotte, Roxanne D. "L'eschatologie d'Abū al-‘Abbās al-Lawkarī (mort après 503/1109). Le Bayān al-ḥaqq et le Sharḥ-i qasidah-yi asrār-i al-ḥikmah." *Mélanges de l'Institut dominicain d'études orientales du Caire* 29 (2012): 1–25.
- 60 Janssens, Jules L. "Al-Lawkarī's reception of Ibn Sīnā's Ilāhiyyāt." In *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics*. Ed. by Dag Nikolaus Hasse and Amos Bertolacci, Berlin, 2012, 7–26.
- 61 al-Rahim, Ahmed H. *The Creation of Philosophical Tradition. Biography and the Reception of Avicenna's Philosophy from the Eleventh to the Fourteenth Century A.D.* Wiesbaden, 2018.
- 62 Marcotte, Roxanne D. "La noétique d'Abū al-‘Abbās al-Lawkarī." In *Noétique et théorie de la connaissance dans la philosophie arabe du IX<sup>e</sup> au XII<sup>e</sup> siècle*. Ed. by Meryem Sebtı and Daniel De Smet, Paris 2019, 311–331.
- 63 Griffel, Frank. *The Formation of Post-Classical Philosophy in Islam*. New York, 2021.
- Critical Approaches to Philosophy: Nāṣir-i Ḥusraw*
- Bio-bibliographical Studies*
- 71 Fagnan, Edmond. "Notes sur Naṣir ibn Khosrou." *Journal asiatique*, sér. 7, vol. 13 (1879): 164–168.
- 72 Browne, Edward Granville. *A Literary History of Persia* 11. London, 1906. Repr. Cambridge, 1951, 218–246.
- 73 Berthels, E. [i.e. Evgenij Eduardovič Bertel's]. "Nāṣir-i Khusraw." In *Enzyklopädie des Islām*, vol. 3. Leiden, Leipzig, 1936, 939–940.
- 74 Storey, Charles Ambrose. *Persian Literature. A Bio-bibliographical Survey*, vol. 1. London, 1953, 1138–1141.
- 75 Rypka, Jan. *History of Iranian Literature*. Dordrecht, 1968, 185–189.
- 76 Mohaghegh, Mehdi. "Nasir Khusraw and his spiritual nisbah." In *Yādnāma-yi īrānī-yi Minorsky*. Ed. by Muğtabā Mīnuwī and Īrağ Afšār. Tehran, 1969, 143–148.

- 77 Poonawala, Ismail K. *Biobibliography of Ismā'īlī Literature*. Malibu, 1977, 111–125.
- 78 Bosworth, Clifford Edmund. “Ḳubādhiyān, Ḳuwādhiyān.” In *EI<sup>2</sup>*, vol. 5. Leiden, 1986, 286.
- 79 de Blois, François. “Nāṣir-i Khusrau.” In Charles Ambrose Storey, *Persian Literature. A bio-bibliographical Survey*, v, 1: *Poetry to ca. A.D. 1100*. London, 1992, 201–212 (No. 123).
- 80 De Smet, Daniel. “Nāṣir-i Khosraw.” In *Encyclopédie philosophique universelle*, 111: *Les œuvres philosophiques. Dictionnaire*, 1: *Philosophie occidentale: 111<sup>e</sup> millénaire av. J.-C.-1889*. Paris, 1992, 720–721.
- 81 Nanji, Azim. “Nāṣir-i Khusraw.” In *EI<sup>2</sup>*, vol. 7. Leiden, 1993, 1006–1007.
- 82 Hadot, Pierre. *Qu'est-ce que la philosophie antique?* Paris, 1995.
- 83 *History of Islamic Philosophy*. Ed. by Seyyed Hossein Nasr and Oliver Leaman. London, New York, 1996, 29. 58. 145. 153. 204. 369. 611.
- 84 Daiber, Hans. *Bibliography of Islamic Philosophy*, 2 vols. Leiden, Boston, 1999, I 689; II 414–415.
- 85 Radtke, Bernd. “Nāṣer-e Ḥosrou.” In *Grosses Werklexikon der Philosophie*, 2 vols. Ed. by Franco Volpi., Stuttgart, 1999, 1065.
- 86 Hunsberger, Alice C. “Nasir Khusraw, Fatimid intellectual.” In *Intellectual Traditions in Islam*. Ed. by Farhad Daftary, London, 2000, 112–129.
- Overviews*
- 91 Ethé, Hermann. “Nāṣir bin Khusrau. Leben, Denken und Dichten.” In *Actes du sixième Congrès international des orientalistes tenu en 1883 à Leide*, II, 1, Leiden, 1885, 169–237.
- 92 Browne, Edward Granville. “Nasir-i Khusraw. Poet, traveller, and propagandist.” *Journal of the Royal Asiatic Society* (1905): 313–352.
- 93 al-Khashshāb, Yaḥyā. *Nāṣir ʿḥ Hosraw. Son voyage, sa pensée religieuse, sa philosophie et sa poésie*. Cairo, 1940.
- 94 *Yādnāma-yi Nāṣir-i Ḥusraw*. Mashhad, 1355/1976.
- 95 Daštī, ‘Alī. *Taṣwīrī az Nāṣir-i Ḥusraw*. Tehran, 1362/1983.
- 96 Hunsberger, Alice C. *Nasir Khusraw, the ruby of Badakhshan. A portrait of the Persian poet, traveller and philosopher*. London, 2000.
- 97 *Ġalīl-i Naẓarī. Nāṣir-i Ḥusraw wa andīša-yi ū*. Shiraz, 1383/2005.
- 98 *Nasir Khusraw. Yesterday, today, tomorrow*. Khujand. 2005.
- 99 Schadl, Marcus. “The shrine of Nasir Khusraw. Imprisoned deep in the valley of Yumgan.” *Muqarnas* 26 (2009): 63–93.
- Nāṣir-i Ḥusraw in the Context of the Ismā'īlīyya*
- 105 Corbin, Henry and Mohammad Mo'in. *Commentaire de la qasida ismaélitienne d'Abu'l-Haitham Jorjani attribué à Mohammad Ibn Sorkh de Nishapour (1v<sup>e</sup>/x<sup>e</sup>–v<sup>e</sup>/xi<sup>e</sup> siècles). Texte persan édité avec introduction et esquisse comparative en français*. Tehran, Paris, 1955.
- 106 Ivanow, Wladimir. *Nāṣir-i Khusraw and Ismailism*. Bombay, 1948. – Repr. Bombay, 1956 (as *Problems in Nasir-i Khusraw's Biography*).
- 107 Bertel's, Andrej Evgen'evič. *Nasir-i Chosrov i ismailizm*. Moscow, 1959. – Pers.

transl. by Yahyā Āryanpūr, *Nāṣir-i Ḥusraw wa ismāʿīliyyān*. Tehran, 1346/1967.

108 Lazard, Gilbert. *La langue des plus anciens monuments de la prose persane*. Paris, 1963.

109 Lazard, Gilbert. *Les premiers poètes persans (IX<sup>e</sup>–X<sup>e</sup> siècles)*, 2 vols. Tehran, Paris, 1964, 1: 24–25 (on Abū l-Haytām, on whose qasida Nāṣir-i Ḥusraw wrote a commentary in *Ġāmiʿ al-ḥikmatayn*); 78–84 (French transl.); 11: 52–63 (Pers. text).

110 Walker, Paul E. “The Ismaili vocabulary of creation.” *Studia Islamica* 40 (1974): 75–85.

111 Corbin, Henry. “Nasir-i Khusrau and Iranian Ismailism.” In *The Cambridge History of Iran*, vol. 4. Cambridge, 1975, 520–542. 689–690.

112 Feki, Habib. *Les idées religieuses et philosophiques de l'ismaélisme fatimide (organisation & doctrine)*. Tunis, 1978. [Faculté des lettres et sciences humaines de Tunis. 6e Série: Philosophie-littérature 13].

113 Walker, Paul E. “Eternal cosmos and the womb of history. Time in early Ismaili thought.” *International Journal of Middle Eastern Studies* 9 (1978): 355–366.

114 Daftary, Farhad. *The Ismāʿīlis. Their History and Doctrines*. Cambridge, 1990; Repr. 2004; 2nd revised edition Cambridge, 2007, 215–218 (1st ed.).

115 De Smet, Daniel. “Mizān ad-diyāna ou l'équilibre entre science et religion dans la pensée ismaélienne.” *Acta Orientalia Belgica* 8 (1993) [1994]: 247–254.

116 Madelung, Wilferd. “Abū Yaʿqūb al-Siġistānī and the seven faculties of the intellect.” In *Mediaeval Ismaʿīli History*

*and Thought*. Ed. by Farhad Daftary. Cambridge, 1996, 85–89.

117 Halm, Heinz. *The Fatimids and their Traditions of Learning*. London, 1997.

118 Daftary, Farhad. *A Short History of the Ismailis. Traditions of a Muslim Community*. Edinburgh, 1998. – Germ. transl. by Kurt Maier, *Kurze Geschichte der Ismailiten. Traditionen einer muslimischen Gemeinschaft*. Würzburg, 2003.

119 Ruthven, Malise. “Nasir-i Khusraw and the Ismaʿīlis of Gorno-Badakhshan.” *University Lectures in Islamic Studies* 2 (1998): 151–166.

120 Walker, Paul E. “The Ismāʿīlis.” In *The Cambridge Companion to Arabic Philosophy*. Ed. by Peter Adamson and Richard Taylor. Cambridge, 2005, 72–91; esp. 78.

121 Landolt, Hermann. “Kašf al-maḥjūb of Sejzi.” In *Encyclopaedia Iranica*. Ed. by Ehsan Yarshater, vol. 15. London etc., 2011, 666–668.

### *Individual Works and Topics*

135 Semenov, Aleksandr A. “A review of Book of travellers’ provisions (Kitāb Zadūʿl-musafirīn) by Nasir Khusraw.” In *Iran* 1, (1927): 224–231.

136 Meier, Fritz. “Review of *Kitāb-e Jamiʿ al-hikmatain*, *Le livre réunissant les deux sagesse, ou: Harmonie de la philosophie grecque et de la théosophie ismaélienne*. Ed. by Henry Corbin, Moh. Moʿin. Tehran, Paris, 1953.” *Oriens* 8 (1955): 191–194.

137 Corbin, Henry. “Le ‘Kitāb Jamiʿ al-Hikmatain’ de Nāṣir-e Khosraw.” In *Proceedings of the Twenty-second International Congress of Orientalists* 1951, 11. Istanbul, 1957, 241–242.

- 138 Afnan, Soheil M. *Philosophical Terminology in Arabic and Persian*. Leiden, 1964.
- 139 Ashurov, Gafar Ashurovich. *Filosofskie vzglyady Nosiri Khusrava. Na osnove analiza traktata 'Zad al-musafirin'*. Dushanbe, 1965.
- 140 Dānišpažūh, Muḥammad Taqī. "Mantiq nazd-i Nāṣir-i Ḥusraw-i Qubādiyānī." In *Yādnāma-yi Nāṣir-i Ḥusraw* [\*94: 172–179].
- 141 Ronconi, Pio Filippini. "Nukāti čand dar bāra-yi iṣṭilāḥāt-i falsafī-yi kitāb-i Gušāyiš wa rahāyiš-i Nāṣir-i Ḥusraw." In *Yādnāma-yi Nāṣir-i Ḥusraw* [\*94: 437–443].
- 142 Meier, Fritz. *Abū Saʿīd-i Abū l-Ḥayr (357–440/967–1049). Wirklichkeit und Legende*. Tehran, Liège, Leiden, 1976, 283. – On Nāṣir-i Ḥusraw's doctrine of indulgence.
- 143 Miškātuddīnī, ʿAbd al-Muḥsin. "Rābiṭa-yi mā bayn-i šarʿ wa ʿaql dar kutub-i Nāṣir-i Ḥusraw wa pāraʾī az uṣūl-i falsafī-yi ū." In *Yādnāma-yi Nāṣir-i Ḥusraw* [\*94: 533–552].
- 144 Salīm, ʿAbd al-Amīr. "Zurwān (dahr) dar ātār-i Nāṣir-i Ḥusraw." In *Yādnāma-yi Nāṣir-i Ḥusraw* [\*94: 273–292].
- 145 Zangānī, Barāt. "Tawḍīḥi dar bāra-yi miṭālḥā-yi riyāḍi ki ḥakīm Nāṣir-i Ḥusraw barā-yi tafhīm-i maṭālīb-i falsafī ba-kār burda ast." In *Yādnāma-yi Nāṣir-i Ḥusraw* [\*94: 246–252].
- 146 ʿDiyāʾ-i Nūr, Faḍl Allāh. "Andīšahā-yi falsafī-yi Nāṣir-i Ḥusraw." *Revue de la Faculté des lettres et sciences humaines* [Isfahan University] 1 (1983): 262–280.
- 147 Kassam, Zainool R. *The Problem of Knowledge in Nāṣir-i Khusraw*. M.A. Thesis, McGill University, 1984.
- 148 Meskoob, Shahrokh. "The origin and meaning of ʿaql (reason) in the view of Nasir Khusraw." *Iran Nameh* 6 (1989): 239–257 and 7 (1989): 405–429.
- 149 Hunsberger, Alice C. *Nāṣir-i Khusraw's Doctrine of the Soul. From the Universal Intellect to the Physical World in Ismāʿīlī Philosophy*. PhD Diss., Columbia University, 1992.
- 150 Meier, Fritz. "Der 'Urknall'. Eine Idee des Abū Bakr ar-Rāzī." *Oriens* 33 (1992): 1–21. – On Nāṣir-i Ḥusraw's quotations from al-Rāzī and his accusation that al-Rāzī distorted some of Īrānšahrī's doctrines.
- 151 Schimmel, Annemarie. *Make a Shield from Wisdom. Selected Verses from Nāṣir-i Khusraw's Divān*. London, 1993; 2001 (2nd ed.).
- 152 van Ess, Josef. *Theologie und Gesellschaft im 2. und 3. Jahrhundert Hidschra* v1. Berlin, New York, 1995, 457 [translation of *Ġāmiʿ al-ḥikmatayn* 223,1–224,1: Ibn al-Rēwandī's arguments against the Ḥašwiyān]. iv Berlin, New York, 1997, 247. 297. 336.
- 153 Morewedge, Parviz. "Nāṣir Khusraw's hermeneutic philosophical theology." In *Nāṣir Khusraw: Knowledge and liberation*. Ed. by Faquir M. Hunzai [\*92: 1–22].
- 154 Stroumsa, Sarah. *Freethinkers of Medieval Islam. Ibn al-Rāwandī, Abū Bakr al-Rāzī, and Their Impact on Islamic Thought*. Leiden, Boston, Cologne, 1999, 12. 77. 92. 106.
- 155 Landolt, Hermann. "Ġāmiʿ al-ḥikmatayn, 2: Šarḥ-i Nāṣir-i

Ḥusraw bar qaṣīda-yi Ġurġānī." In *Encyclopaedia of the World of Islam* IX. Ed. by G.-A. Haddad-Adel. Tehran, 2005, 328–329.

156 Landolt, Hermann. [Introduction to] *Naṣīr al-Dīn Ṭūsī: Paradise of submission. A medieval treatise on Ismaili thought*. Ed. by Seyyed Jalal Badakhchani. London, New York, 2005, 1–11.

157 Lewisohn, Leonard. "Hierocosmic intellect and universal soul in a qaṣīda by Nāṣir-i Khusraw." *Iran* 45 (2007): 193–226.

158 De Smet, Daniel. "Was Nāṣir-e Ḥusraw a great poet and only a minor philosopher? Some critical reflections on his doctrine of the soul." In *Ismaili and Fatimid Studies in Honor of Paul E. Walker*. Ed. by Bruce D. Craig. Chicago, 2010, 101–130.

159 Hunsberger, Alice C., ed. *Pearls of Persia. The Philosophical Poetry of Nāṣir-i Khusraw*. London, 2012.

160 Aminrazavi, Mehdi. "Nāṣir-i Khusraw's poetics of the moral journey and the foundations of the metaphysics of morals." In *Pearls of Persia*. Ed. by Alice C. Hunsberger 2012 [\*159: 91–101].

161 Esmaeili, Mohammad Javad. "Ontological and religious aspects of the intellect in Nāṣir-i Khusraw's poetry." In *Pearls of Persia*. Ed. by Alice C. Hunsberger 2012 [\*159: 29–38].

162 Hunsberger, Alice C. "On the steed of speech'. A philosophical poem by Nāṣir-i Khusraw." In *Pearls of Persia*. Ed. by Alice C. Hunsberger 2012 [\*159: 147–189].

163 Hunzai, Faquir Muhammad. "The position of 'aql in the prose and poetry of

Nāṣir-i Khusraw." In *Pearls of Persia*. Ed. by Alice C. Hunsberger 2012 [\*159: 3–27].

164 Lewisohn, Leonard. "Nāṣir-i Khusraw's Ode to the Universal Soul and Intellect." In *Pearls of Persia*. Ed. by Alice C. Hunsberger 2012 [\*159: 53–70].

165 Pourjavady, Nasrollah. "Hearing by way of seeing. Zabān-i ḥāl in Nāṣir-i Khusraw's poetry and the question of authorship of the Rawshanā'ī-nāma." In *Pearls of Persia*. Ed. by Alice C. Hunsberger 2012 [\*159: 133–145].

166 Baffioni, Carmela. "Nāṣir-i Khosrow, translator of the Ikhwān al-Ṣafā'?" In *Sources and Approaches across Disciplines in Near Eastern Studies. Proceedings of the 24th Congress, Union européenne des arabisants et islamisants, Leipzig 2008*. Ed. by Verena Klemm and Nuha al-Sha'ar. Leuven, Paris, Walpole, 2013, 319–331.

167 Hunzai, Faquir Muhammad. "Salient aspects of the doctrine of the Qā'im according to Nāṣir-i Khusraw." *Iṣrāq* 4 (2013): 304–325.

### Reception

181 Bertel's, Andrej Evgen'evič. "Naẓariyyāt-i barḥī az 'urafā wa šī'īyyān-i itnā 'aṣarī rāġī' ba-arziš-i mīrāt-i adabī-yi Nāṣir-i Ḥusraw." In *Yādnāma-i Nāṣir-i Ḥusraw* [\*94: 96–121].

182 Landolt, Hermann. "Early evidence for the reception of Nāṣir-i Khusraw's poetry in sufism. 'Ayn al-Qudāt's letter on the Ta'limīs." In *Fortresses of the Intellect. Ismaili and other Islamic Studies in Honour of Farhad Daftary*. Ed. by Omar Alī-de-Unzaga. London, 2011, 369–386. – Includes a translation and commentary of the qasida no. 106.

# Abū Ḥāmid al-Ġazālī

Ulrich Rudolph

1 Primary Sources – 2 Life – 3 Works – 4 Doctrine – 5 Influence – 6 Secondary Literature

## 1 Primary Sources

Bio-bibliographical Testimonies [\*1–\*14] – Reference Works by Other Authors [\*21–\*34] – Works: Partial Collections [\*41–\*46] – Individual Editions: Autobiography and Personal Testimonies [\*60–\*62] – Logic [\*68–\*71] – Soul and Intellect. Ethics. Cosmology [\*80–\*87] – Metaphysics and Physics [\*98–\*100] – Further Works by al-Ġazālī [\*105–\*113]

### *Bio-bibliographical Testimonies*

1 ‘Abd al-Ġāfir al-Fārisī (d. 529/1134). *Tarġamat al-Ġazālī* [from: *al-Siyāq li-Ta’rīḥ Naysābūr*, extant in:] Tāġ al-Dīn al-Subkī (d. 771/1370). *Ṭabaqāt al-Šāfi’iyya* [\*12: v1 204,6–214,3]. – Engl. transl. in McCarthy 2000 [\*60: 14–19]. – Regarding the abridged version [*Muntaḥab*] cf. al-Šarīfīnī [\*7].

2 Ibn ‘Asākir, ‘Alī b. al-Ḥasan (d. 571/1175). *Tabyīn kaḏīb al-muftarī fīmā ansaba al-Imām Abī l-Ḥasan al-Aš‘arī*. Damascus, 1347/1928, 291–306.

3 Ibn ‘Asākir. *Ta’rīḥ Dimašq wa-dīkr faḍlihā wa-tasmiyat man ḥallahā*. – Ed. by Muḥibb al-Dīn ‘Umar al-‘Amrawī, ‘Alī Šīrī, 88 vols. Beirut, 1415–1422/1995–2001, vol. 55, 200–204.

4 Ibn al-Ġawzī, ‘Abd al-Raḥmān b. ‘Alī (d. 597/1201). *al-Muntaẓam fī ta’rīḥ al-umam*, vols. 5–10. Hyderabad, 1358/1938–1939, vol. 9, 55. 87. 168–170.

5 Yāqūt, al-Ḥamawī al-Rūmī (d. 626/1228). *Mu’ġam al-buldān*. – Ed. by Ferdinand Wüstenfeld as *Jacut’s Geographisches Wörterbuch*, 6 vols. Leipzig, 1866–1873, vol. 3, 560–561.

6 Ibn al-Aṭīr, ‘Izz al-Dīn ‘Alī b. Muḥammad (d. 630/1233). *al-Kāmil fī l-ta’rīḥ*. – Ed. by Carl J. Tornberg, 14 vols. Leiden, Uppsala, 1851–1976, vol. 10, 145. 172. 325. 400.

7 al-Šarīfīnī, Ibrāhīm b. Muḥammad (d. 641/1243). *al-Muntaḥab min al-Siyāq li-Ta’rīḥ Naysābūr*. – Ed. by Muḥammad Kāẓim al-Maḥmūdī. Qum, 1362/1983, 83–85. – Cf. Richard N. Frye. *The Histories of Nishapur*. London, 1965, Text 3, fol. 20a–b.

8 Ibn Ḥallikān, Abū l-‘Abbās Šams al-Dīn Aḥmad b. Muḥammad (d. 681/1282). *Wafayāt al-a’yān wa-anbā’ abnā’ al-zamān*. – Ed. by Iḥsān ‘Abbās, 8 vols. Beirut, 1968–1972, vol. 4, 216–219.

9 al-Ḍahabī (Muḥammad b. Aḥmad, d. 748/1348). *Siyar a'lām al-nubalā'*. – Ed. by Šu'ayb al-Arnā'ūt et al., 25 vols. Beirut, 1985–1988 (2nd ed.), vol. 19, 322–346.

10 al-Ḍahabī. *Ta'rīḥ al-islām*. – Ed. by 'Umar 'A. Tadmūrī, 1 ff. Beirut, 1407 ff./1987 ff. vol. 501–520 AH: 115–129.

11 al-Šafadī, Šalāḥ al-Dīn Ḥalil b. Aybak (d. 764/1363). *al-Wāfi bi-l-wafayāt*. – Ed. by Hellmut Ritter, *Das biographische Lexikon des ... aṣ-Šafadī*, vol. 1. Istanbul, Leipzig, 1931; Wiesbaden 1949 (2nd ed.), 274–277.

12 al-Subkī, Tāğ al-Dīn 'Abd al-Wahhāb b. 'Alī, d. 771/1370). *Ṭabaqāt al-Šāfi'īyya*. – Ed. by Maḥmūd M. al-Ṭanāḥī and 'Abd al-Fattāḥ M. al-Ḥilw, 10 vols. Cairo, 1964–1976, vol. 6, 204–214.

13 al-Wāsiṭī (d. 776/1374). *al-Ṭabaqāt al-'aliyya fī manāqib al-Šāfi'īyya. Tarğamat al-Ġazālī*. – In *al-Faylasūf al-Ġazālī. I'adat taqwīm li-munḥanā taṭawwurihi al-rūḥī*. – Ed. by 'Abd al-Amīr al-A'sam, vol. 3. Beirut, 1981 (3rd ed.), 153–194.

14 al-Zabīdī, al-Murtaḍā Muḥammad b. Muḥammad (d. 1205/1791). *Ithāf al-sāda al-muttaqīn bi-šarḥ Iḥyā' 'ulūm al-dīn*, 10 vols. Cairo, 1311/1894; repr. Beirut c.1975, 1994, vol. 1, 6–51, esp. 7–11.

#### Reference Works by Other Authors

21 al-Kindī, Abū Yūsuf, d. c. 250/864. *Fī l-falsafa al-ūlā*. In *Œuvres philosophiques et scientifiques d'al-Kindī, 11: Métaphysique et cosmologie*. – Ed. with French transl. by Roshdi Rashed and Jean Jolivet. Leiden etc., 1998, 8–111. – Engl. transl. by Alfred L. Ivry, *Al-Kindī's*

*Metaphysics. A translation of Ya'qūb b. Ishāq al-Kindī's treatise 'On First philosophy' (fī al-falsafah al-ūlā) with introduction and commentary*. Albany, 1974.

22 al-Māturidī, Abū Maṣṣūr (d. 333/944). *Kitāb al-Tawḥīd*. – Ed. by Bekir Topaloğlu and Muhammad Aruçi, Ankara, 2003.

23 al-Fārābī, Abū Naṣr (d. 339/950–951). *Mabādī' ārā' ahl al-madīna al-fāḍila*. – Ed. by Richard Walzer, *Al-Farabi on the Perfect State. A revised text with introduction, translation, and commentary*, Oxford, 1985 (repr. 1998). – Germ. transl. by Cleophea Ferrari, *Abū Naṣr al-Fārābī. Die Prinzipien der Ansichten der Bewohner der vortrefflichen Stadt*, Stuttgart, 2009.

24 al-Fārābī. *Šarḥ al-Fārābī li-kitāb Aristūṭālīs fī l-'Ibāra*. – Ed. by Wilhelm Kutsch and Stanley Marrow. Beirut 1960, 1971 (2nd ed.). – Engl. transl. by F.W. Zimmermann, *Al-Farabi's Commentary and Short Treatise on Aristotle's De interpretatione*, Oxford, 1981, 1982 (2nd ed.), 1987 (3rd ed.), 1–219.

25 Ibn Sīnā, Abū 'Alī (d. 428/1037). *Dānišnāma-yi 'Alā'ī*. – Ed. by Muḥammad Mu'īn, Muḥammad Miškāt, 3 vols. Tehran, 1331 h.š./1952. – Repr. Hamadan 2004. – French transl. by Mohammed Achena, Henri Massé, *Avicenne. Le livre de science*, 2 vols. Paris, 1955–1958, 1986 (2nd ed.).

26 Ibn Sīnā. *al-Nağāt*. – Ed. by Muḥyi al-Dīn Šabrī al-Kurdī, Cairo, 1357/1938 (2nd ed.). – Ed. by Muḥammad Taqī Dānišpažūh, Tehran 1364/1985. – Partial Engl. transl. by Asad Q. Ahmad, *Avicenna's Deliverance. Logic*, Oxford, 2011.



- 27 Ibn Sīnā. *al-Šifāʾ, al-Mantiq, al-Madḥal*. – Ed. by Georges C. Anawati, Maḥmūd al-Ḥudayrī, Aḥmad Fuʾād al-Ahwānī, Cairo, 1371/1952. – Engl. transl. by Allan Bäck, *Al-Madkhal. Avicenna on the Isagoge of Porphyry*, Munich, 2019.
- 28 ʿUmar al-Ḥayyām, Ġiyāʾ al-Dīn Abū l-Faṭḥ (d. 517/1123–1124 or 526/1131–1132). *Risāla dar ʿilm-i kullīyyāt-i wuḡūd*. – In *Guftārī dar-bāri-yi Risālah dar ʿilm-i kullīyyāt-i wuḡūd; Farhang* 39–40. Ed. by Bihnāz Ḥāšimīpūr. Tehran, 1380/2002, 29–87, esp. 67–87. – Ed. with Engl. transl. by Swāmī Govinda Tīrtha, *The Nectar of Grace. ʿOmar Khayyām's Life and Works*, Allahabad, 1941, XLVII–XLVIII and CXVII–CXXIX. – Engl. transl. by Mehdi Aminrazavi, *The Wine of Wisdom. The Life, Poetry and Philosophy of Omar Khayyam*, Oxford, 2007, 303–311.
- 29 Ibn Ṭufayl, Abū Bakr (d. 581/1185). *Ḥayy b. Yaqṣān*. – Ed. with French transl. by Léon Gauthier, *Hayy ben Yaqdḥān, roman philosophique d'Ibn Thofāil*. Algiers, 1900, Beirut 1936 (2nd ed.). – Germ. transl. by Patric O. Schaerer, *Der Philosoph als Autodidakt. Ḥayy b. Yaqṣān. Ein philosophischer Inselroman*. Hamburg, 2004, 2019 (2nd ed.).
- 30 Ibn Rušd, Abū l-Walid (d. 595/1198). *Faṣl al-maqāl*. – Ed. by George F. Hourani, *Faṣl al-maqāl, with its appendix (Ḍamīma) and an extract from Kitāb al-Kašf ʿan manāḥij al-adilla*. Leiden, 1959, 5–40. – Germ. transl. by Frank Griffel, *Ibn Rushd. Maßgebliche Abhandlung. Faṣl al-maqāl*. Berlin, 2010, 9–51. – Germ. transl. by Patric O. Schaerer, *Averroes. Die*

*entscheidende Abhandlung*. Stuttgart, 2010, 11–52.

- 31 Ibn Rušd. *Tahāfut al-tahāfut*. – Ed. by Maurice Bouyges, Beirut 1930, 1993 (3rd ed.). – Engl. transl. by Simon van den Bergh, *Averroes' Tahāfut al-tahāfut (The Incoherence of the Incoherence)*, 2 vols. London, 1954.
- 32 Raimundus Martini (d. c. 1285). *Pugio fidei adversus Mauros et Iudaeos*. – Ed. by Ioseph de Voisin. Paris, 1651.
- 33 Ibn Ḥaldūn, ʿAbd al-Raḥmān b. Muḥammad (d. 808/1406). *al-Muqaddima*. – Ed. by M. Quatremère, 3 vols. Paris, 1958. – Engl. transl. by Franz Rosenthal, *The Muqaddimah. An Introduction to History*, 3 vols. New York, 1958.
- 34 Blaise Pascal (d. 1662). *Pensées*. – Ed. by Léon Brunschvicq. Paris, 1897. – Ed. by Pierre Lafuma. Paris, 1935.

#### Works: Partial Collections

- 41 Maḡmūʿat rasāʾil al-Imām al-Ġazālī, I. Beirut, 1406/1986. – Contains: *al-Ḥikma fī maḥlūqāt Allāh; Miʾrāḡ al-sālikīn*.
- 42 Maḡmūʿat rasāʾil al-Imām al-Ġazālī, II. Beirut, 1406/1986. – Contains: *Rawḍat al-ṭālibīn wa-ʿumdat al-sālikīn; Qawāʿid al-ʿaqāʾid fī l-tawḥīd; Ḥulāṣat al-taṣānīf fī l-taṣawwuf*.
- 43 Maḡmūʿat rasāʾil al-Imām al-Ġazālī, III. Beirut, 1406/1986. – Contains: *al-Qiṣṭas al-mustaḳīm; Minhāḡ al-ʿārīfīn; al-Risāla al-laduniyya; Fayṣal al-tafrīqa; Ayyuhā l-walad*.
- 44 Maḡmūʿat rasāʾil al-Imām al-Ġazālī, IV. Beirut, 1407/1987. – Contains: *Miškāt al-anwār; Risālat al-ṭayr; al-Risāla*

*al-wa'izīyya; Ilḡām al-ʿawāmm ʿan ʿilm al-kalām; al-Maḏnūn bihi ʿalā ḡayr ahlihi; al-Aḡwiba al-ḡazaliyya fī l-masāʾil al-uḫrawiyya.*

45 *Maḡmūʿat rasāʾil al-Imām al-Ġazālī*, v. Beirut, 1409/1988. – Contains: *Bidāyat al-hidāya; Kīmīyāʾ al-saʿāda; al-Adab fī l-dīn; al-Qawāʿid al-ʿašara; al-Kašf wa-l-tabẓīn fī ḡurūr al-ḡalq aḡmaʿīn.*

46 *Maḡmūʿat rasāʾil al-Imām al-Ġazālī*, vi. Beirut, 1409/1988. – Contains: *Sirr al-ʿalamayn wa-kašf mā fī l-dārāyn; al-Durra al-fāḫira fī kašf ʿulūm al-āḫira.*

*Individual Editions: Autobiography and Personal Testimonies*

60 *al-Munqid min al-ḡalāl*. – Ed. and French transl. by Farid Jabre. Beirut, 1959, 1969 (2nd ed.). – Engl. transl. by Richard J. McCarthy [quoted here], *Freedom and Fulfillment. An annotated translation of al-Ghazālī's al-Munqid min al-ḡalāl and other relevant works of al-Ghazālī*. Boston, 1980, 61–114. – Repr.: *Al-Ghazali. Deliverance from Error. Five key texts including his spiritual autobiography, al-Munqidh min al-dalal*. Louisville, 2000. – Germ. transl. by ʿAbd-Elšamad ʿAbd-Elḡamīd Elschazli, *al-Ghazālī. Der Erreter aus dem Irrtum*. Hamburg, 1988.

61 *Faḡdāʾil* [Pers.]. – *Makātīb-i fārsī-yi Ġazālī ba-nām-i Faḡdāʾil al-anām min rasāʾil Huḡḡat al-Islām*. – Ed. by ʿAbbās Iqbāl Āštiyānī. Tehran, 1333 h.š./1954. – Germ. transl. by Dorothea Krawulsky, 1971 [\*41].

62 *Aḡwibat al-Ġazālī ʿan asʾilat Ibn al-ʿArabī*. – Ed. by Muḡammad ʿAbduh. Beirut, 1433/2012.

*Logic*

68 *Mīʿyār al-ʿilm fī fann al-manṭiq*. – Ed. by Sulaymān Dunyā. Cairo, 1961 [quoted here]. – Ed. by Muḡyī al-Dīn Ṣabrī al-Kurdī. Cairo, 1927. – Ed. by Muṣṭafā Abū l-ʿAlāʾ. Cairo, 1973. – Beirut, 1978 [n. n.]. – Ed. by ʿAlī Bū Malḡam. Beirut, 1993.

69 *Miḡakk al-naẓar fī l-manṭiq*. – Ed. by Rafīq al-ʿAḡam. Beirut, 1994 [quoted here]. – Ed. by Muḡammad Badr al-Dīn al-Naʿsānī and Muṣṭafā al-Qabbānī. Cairo, n.d. – Beirut, 1966 [n. n.].

70 *al-Mustaṣfā min ʿilm al-uṣūl*. – Ed. by M.M. Abū l-ʿIlā. Cairo, 1971.

71 *al-Qiṣṭās al-mustaḡīm*. – Ed. by Victor Chelhot. Beirut, 1959, 1986 (2nd ed.), 1991 (3rd ed.). – French transl. by V. Chelhot, “al-Qiṣṭās al-mustaḡīm et la connaissance rationnelle chez Ġazālī.” In *Bulletin d'Études Orientales* 15 (1955–1957): 7–96. – Engl. transl. by D.P. Brewster, *Al-Ghazali. The Just Balance*. Lahore, 1978. – Engl. transl. by R.J. McCarthy, 1980 [\*60: 278–332].

*Soul and Intellect. Ethics. Cosmology*

80 *Iḡyāʾ ulūm al-dīn*, 1–v. Beirut, 1403/1982.

81 [Iḡyāʾ, Book 1:] *al-ʿilm* [\*80: 1 4–89]. – French transl. by Jean Abd-al-Wadoud Gourand, *Le livre de la science*. Beirut, 2009.

82 [Iḡyāʾ, Book 21:] *Aḡāʾib al-qalb* [\*80: III 2–48]. – Engl. transl. by Walter James Skellie, *The Religious Psychology of al-Ghazzālī. A Translation of his Book of the Iḡyāʾ on the Explanation of the Wonders of the Heart with Introduction and Notes*. PhD Diss., Hartford, 1938. – Germ. transl. by Karl Friedrich Eckmann,

*Die Wunder des Herzens. Ein Beitrag zur Religionspsychologie des Islam.* Mainz, 1960. – French transl. by Idris De Vos, *Les merveilles du cœur.* Beirut, 2010.

83 [Ihyā', Book 22:] *Ri'yādat al-naḥs* [\*80: III 48–79]. – French transl. by Idris De Vos, *L'éducation de l'âme.* Beirut, 2011.

84 [Ihyā', Book 39:] *al-Tafakkur* [\*80: IV 423–448]. – French transl. by Hassan Boutaleb, *Le livre de la méditation.* Beirut, 2012.

85 *Kīmīyā-yi sa'ādat* [Pers.]. – Ed. by Ḥusayn Ḥadiw-Ġam, I–II (Tehran, 1361 h.š./1982) [quoted here]. – Earlier Pers. edition by Aḥmad Ārām (Tehran, 1319 h.š./1940). – Ar. transl. [partially extant]: *Kīmīyā' al-sa'āda.* – Ed. by Muḥyī al-Dīn Ṣabrī al-Kurdī. In *Ġawāhir al-ġawālī min rasā'il al-Imām Ḥuġġat al-Islām al-Ġazālī.* Cairo, 1353/1934, 5–19. – Partial Germ. transl. by Hellmut Ritter, *Al Ghasālī. Das Elixier der Glückseligkeit, aus den pers. und arab. Quellen in Auswahl übertragen.* Jena, 1923. – New, amended edition of H. Ritter's partial translation, with a foreword by Annemarie Schimmel. Düsseldorf, Köln, 1959. – Numerous further editions (1981, 1984, 1989, 1993) and repr. (Munich, 1998; Braunschweig, 2004; Kreuzlingen, Munich, 2008; Wiesbaden, 2016). – Partial Engl. transl. by Claud Field, *The Alchemy of Happiness.*

Translated from Urdu. London, 1910. – New edition, revised and annotated by Elton L. Daniel. New York, London, 1991. – Engl. transl. by Jay R. Crook, *The Alchemy of Happiness*, intr. by Laleh Bakhtiar, 2 vols. Chicago, 2008 (2nd ed.).

86 *Mīzān al-'amal.* – Ed. by Sulaymān Dunyā, Cairo, 1964 [quoted here]. – Ed. by M.Ṣ. al-Kurdī et al., Cairo, 1328/1910,

repr. 1342/1923. – Ed. by M.M. Abū l-'Alā', Cairo, 1973. – Ed. by A. Šamsaddīn, Beirut, 1409/1989. – Ed. by M. Biġū, Dimašq, 2000. – French transl. by

H. Hachem, *Critère de l'action.* Paris, 1945. – Germ. transl. by 'Abd-Elšamad 'Abd-Elḥamīd Elschazli, *Das Kriterium des Handelns.* Darmstadt, 2006.

87 *Miškāt al-anwār.* – *The Niche of Lights / Miškāt al-anwār. A parallel English-Arabic text* translated, introduced, and annotated by David Buchman. Provo, 1998 [quoted here]. – [Ar.:] Ed. by Abū l-'Ilā' 'Afīfī [A.E. Afifi]. Cairo, 1383/1964 [also quoted here]. – [Ar. in:] *Maġmū'at rasā'il al-Imām al-Ġazālī* IV [\*44: 5–47]. – Engl. transl. by W.T.H. Gairdner, *Al-Ghazzālī's Mishkāt al-anwār* (*The Niche for Lights*). London, 1924; repr. Lahore 1952. – Ital. transl. by Laura Vecchia Vaglieri and Robero Rubinacci, in *Scritti Scelti di al-Ghazālī* a cura di L. Vecchia Vaglieri e R. Rubinacci. Turin, 1970, 563–614. – French transl. by Roger Deladrière, *Ghazālī. Le tabernacle des lumières (Miškāt al-Anwār).* Paris, 1981. – Germ. transl. by 'Abd-Elšamad 'Abd-Elḥamīd Elschazli, *Abū Ḥamīd Muḥammad al-Ghazālī. Die Nische der Lichter.* Hamburg, 1987.

### *Metaphysics and Physics*

98 *Maqāṣid al-falāsifa.* – Ed. by Muḥyī al-Dīn Ṣabrī al-Kurdī, 3 parts [with separate pagination] in one volume. Cairo, 1936 (2nd ed.) [quoted here]. – Ed. by Sulaymān Dunyā. *Muqaddimat Tahāfut al-falāsifa al-musammāt Maqāṣid al-falāsifa.* Cairo, n. d. [1960]). – Ed. by Aḥmad Farīd al-Mizyadī. Beirut, 2008 [also contains: *Ilġām al-'awāmm*

‘an ‘ilm al-kalām and al-Fuṣūl fī l-as‘ila wa-l-ağwiba]. – Medieval Lat. transl.: *Logica et philosophia*. Venice, 1506. – [Logic Lat.:] *Logica Algazelis. Introduction and Critical Text*. – Ed. by Charles Lohr. *Traditio* 21 (1965): 223–290. – [Metaphysics and Physics Lat.:] *Algazel’s Metaphysics. A Medieval Translation*. – Ed. by Joseph Thomas Muckle. Toronto, 1933. – Span. transl. by Manuel Alonso Alonso, *Algazel. Maqāṣid al-falāsifa o Intenciones de los filósofos*. Barcelona, 1963. – Partial edition of the Arabic text with Germ. transl. by Georg Beer, *Al-Ġazzālī’s Maqāṣid al-Falāsifat. Erster Teil: Die Logik*. PhD Diss., Leipzig, 1888.

99 MS London BL Or. 3126. – Inedited Arabic text on topics of metaphysics, cf. the description of the work below.

100 *Tahāfut al-falāsifa*. – *The Incoherence of the Philosophers/Tahāfut al-falāsifa*. A parallel English – Arabic text translated, introduced, and annotated by Michael E. Marmura. Provo, 1997. – 2nd ed. 2000 [with different pagination; quoted here]. – [Ar.:] *Tahāfut al-Falāsifat ou «Incohérence des philosophes»*. – Ed. by Maurice Bouyges. Beyrouth, 1927; repr. Frankfurt a. M. 1999 [Islamic Philosophy, 56]. – [Ar.–Germ.:] *Die Inkohärenz der Philosophen (Tahāfut al-falāsifa)*. Arabisch-Deutsch, übers., erläutert und mit einer Einl. versehen by Andreas Lammer. Freiburg, 2023.

#### Further Works by al-Ġazālī

105 *al-Arba‘īn fī uṣūl al-dīn*. – Ed. by Muḥyī al-Dīn Ṣabrī al-Kurdī. Cairo, 1344/1925. – Ed. by Muḥammad Muḥammad Ġābir. Cairo, 1964. – Partial

Engl. transl. by Aaron Spevack, *Ghazali on the Principles of Islamic Spirituality. Selections from «Forty Foundations of Religion»*. Vermont, 2011.

106 *Fayṣal al-tafrīqa bayn al-Islām wa-l-zandaqa*. – Ed. by Sulaymān Dunyā. Cairo, 1381/1961. – Ed. by Maḥmūd Biğū.

Damascus 1413/1993. – Germ. transl. by Frank Griffel, *Al-Ġazālī. Über Rechtgläubigkeit und religiöse Toleranz. Eine Übersetzung der Schrift «Das Kriterium in der Unterscheidung zwischen Islam und Gottlosigkeit» (Fayṣal at-tafrīqa bayn al-Islām wa-z-zandaqa)*. Zurich, 1998.

107 *Ġawāhir al-Qur‘ān wa-duraruḥu*. – Ed. by Muḥyī al-Dīn Ṣabrī al-Kurdī.

Cairo, 1329/1911. – Ed. by Sālim Šams al-Dīn. Beirut, 1427/2006. – Ed. by Ḥadiġa Muḥammad Kāmil, proofread by ‘Iffat al-Šarqāwī. Cairo, 1432/2011. – Engl. transl. by Muhammad Abul Quasem, *The Jewels of the Qur‘ān. Al-Ghazālī’s Theory*. Kuala Lumpur, 1977. – Ital. transl. by Massimo Campanini, *Al-Ghazālī. Le perle del Corano*. Milan, 2000. – Engl. transl. by Laleh Bakhtiar, *Jewels of the Quran*. Chicago, 2009.

108 *Ilğām al-‘awāmm ‘an ‘ilm al-kalām*. – Ed. by Muḥammad al-Mu‘taṣim bi-llāh al-Baġdādī (Beirut 1406/1985).

109 *al-Iqtisād fī l-i‘tiqād*. – Ed. by İbrahim Ağâh Çubukçu, Hüseyin Atay. Ankara, 1962. – Ed. by ‘Abdallāh Muḥammad al-Ḥalīlī. Beirut, 1971. – Engl. transl. by Aladdin M. Yaqub, *Al-Ghazālī’s Moderation in Belief*. Chicago, London, 2013.

110 *al-Lubāb min al-Iḥyā’*. – Ed. by Ša‘bān Muḥammad Ismā‘īl. Cairo, 1399/1978.

III *Al-Maqṣad al-asnā fī šarḥ ma'ānī asmā' Allāh al-ḥusnā*. – Ed. by Fadlou A. Shehadi. Beirut, 1971, 1982 (2nd ed.) [quoted here]. – Ed. by Aḥmad Qabbānī. Beirut, 2001. – Ed. by Maḥmūd al-Nawāwī. Cairo, n. d. – Engl. transl. by David B. Burrell, Nazih Daher, *Al-Ghazālī. The Ninety-nine Beautiful Names of God*. Cambridge, 1992; repr. numerous times.

II2 *Naṣīḥat al-mulūk* [Pers.]. – Ed. by Ġalāl al-Dīn Humā'ī (Tehran 1352

h.š./1973). – Ar. version [composed shortly after the Pers. original]: *al-Tibr al-masbūk fī naṣīḥat al-mulūk*. – Ed. by Muḥammad Aḥmad Damağ. Beirut, 1416/1996 (2nd ed.). – Engl. transl. by F.R.C. Bagley, *Ghazālī's Book of Counsel's for Kings (Naṣīḥat al-mulūk)*. London, 1964, 1971 (2nd ed.).

II3 *al-Qānūn al-kullī fī l-ṭa'wīl*. – Ed. by Muḥammad Zāhid al-Kawṭarī, entitled *Qānūn al-ta'wīl*. Cairo, 1359/1940.

## 2 Life

### 2.1 Between Biography and Autobiography – 2.2 Chronology of Events

#### 2.1 *Between Biography and Autobiography*

The life story of Abū Ḥāmid al-Ġazālī has always commanded a great degree of interest (cf. already Leo Africanus, i.e. al-Ḥasan b. Muḥammad al-Wazzān [d. after 1550], and his *Libellus* 1664 [\*15: 262–265], Schmölders 1842 [\*16], Gosche 1858 [\*17], and Munk 1859 [\*18: 366–383]). One reason is likely to be found in the visible crises and dramatic twists of his career, which distinguish his biography from the standard biography of many other scholars. Al-Ġazālī himself was well aware of this. In his autobiographical work, entitled *al-Munqid min al-ḍalāl* (*The Deliverance from Error*) [\*60], he describes in detail which intellectual and moral challenges he had faced in the past, and what decisions he had taken in response. To the reader of the autobiography, this conveys the impression of encountering a towering religious figure facing inner struggles and instructive tests. The *Confessions* of St Augustine enjoyed a similar reputation; consequently, Ġazālī research endeavoured from an early date to draw parallels between these two texts and their authors (Frick 1919 [\*22]). Comparisons of this kind may provide inspiration on the level of religious psychology, but they do not lead us to more precise information on the circumstances of al-Ġazālī's life. Twentieth-century research increasingly endeavoured to understand the concrete conditions and contexts in which al-Ġazālī worked, employing sources beyond the *Munqid*. This undertaking benefited from the discovery, around the middle of the century, of a collection of personal letters by al-Ġazālī addressed to various contemporaries. The letters are written in Persian, the language of everyday communication as well as

the court in his region (*Faḍā'il* [\*61], Krawulsky 1971 [\*41]). They refer to current issues and events, weaving a much tighter biographical web than the sporadic remarks found in al-Ġazālī's published works written in Arabic, the scholarly language of his time. In addition, these letters allow us to see al-Ġazālī not as a retiring religious scholar but as a man in the public eye and political actor (first suggested in Watt 1963 [\*37]; ground-breaking are Laoust 1970 [\*190] and Glassen 1981 [\*330]). This imbues his decisions with a further dimension and opens our eyes to the fact that a text such as the *Munqid* should be seen not only as a private confession but also as a precisely composed apologia directed at a broad range of readers (Laoust 1970 [\*190: 138, 141–144]).

Moreover, the intertextual references in the *Munqid* were gradually uncovered, for while al-Ġazālī focusses on his own life in the text, he keeps recurring to literary motifs and *topoi* by earlier authors (on the character of the text Poggi 1967 [\*40: 16–36]). Among these are religious scholars such as the well-known Sufi al-Ḥārīṭ al-Muḥāsibī (d. 243/857), Nāṣir-i Ḥusraw (d. c. 465/1072; cf. § 2.3 above), and possibly 'Umar al-Ḥayyām (d. 517/1123–1124 or 526/1131–1132; cf. § 4.1.1 below), as van Ess (1987 [\*44: 64–68]) was able to demonstrate with reference to Schaeder (1926 [\*24]). In addition it has been possible to show parallels with the physician and philosopher Ibn al-Hayṭam (fl. c. 390/1000; not to be confused with the mathematician of the same name; cf. Thomann 2017 [\*366: 931–932]) who composed autobiographical notes which anticipate the *Munqid* in several respects and in their turn are part of an intertextual tradition that goes back to late antiquity (Menn 2003 [\*399], Rudolph 2018 [\*438: 4–13]).

These insights led to a more nuanced scholarly approach to al-Ġazālī's biography and autobiography. Some authors still endeavour to draft an integrative portrait of his life's journey, including the self-presentation in the *Munqid*, such as Ormsby who addresses a broad readership, wishing to promote al-Ġazālī as 'a religious genius' of the rank of 'Augustine and Maimonides, Pascal and Kierkegaard' (Ormsby 2008 [\*58: ix]). The main focus of scholarly investigation, however, has been the separation of biographical developments from autobiographical literary tropes. The former has been researched in minute steps by Griffel (2009 [\*258: XI–XIII, 19–59]), the latter in equally detailed fashion by Garden (2011 [\*60]; cf. Garden 2014 [\*65: 1–11]).

## 2.2 *Chronology of Events*

Our knowledge of al-Ġazālī's biography is based on three types of sources. Besides the autobiographical passages in his own works and the personal letters mentioned above, these are above all statements in works of history (history of a city or a region, history of a school of law, collections of scholars' biographies

etc.) composed in the 6th/12th century or later. The list of historical sources mentioning him is comparatively long. It begins with ‘Abd al-Ġāfir al-Fārisī (451–529/1059–1134), a contemporary and close acquaintance of al-Ġazālī’s who studied with him in Nishapur. He later visited al-Ġazālī several times and apparently interviewed him about his life. On the basis of the notes he made on these occasions together with information from other people, ‘Abd al-Ġāfir was able to write a detailed biography which he included in his chronicle of the city of Nishapur entitled *al-Siyāq li-Ta’rīḥ Naysābūr* (*The Continuation of the History of Nishapur*; completed 518/1124). While the work as such has been lost, the section on al-Ġazālī has survived indirectly, quoted by later authors, especially a testimony in the *Tabaqāt al-Šāfi’iyya al-kubrā* (*The Great Book on the Generations of the Šāfi’ites*), the famous history of the Šāfi’ school of law by Tāġ al-Dīn al-Subkī (d. 771/1370). In addition, an abridged version of ‘Abd al-Ġāfir’s chronicle was compiled in the 7th/13th century by Ibrāhīm b. Muḥammad al-Šarīfīnī (d. 641/1243), headed *al-Muntaḥab min al-Siyāq li-Ta’rīḥ Naysābur* (*An Excerpt from the ‘Continuation of the History of Nishapur’*). This also includes the biography of al-Ġazālī, but, in keeping with the style of the work, abridged to two pages (van Ess 1987 [\*44: 63], Griffel 2009 [\*258: 21]).

‘Abd al-Ġāfir’s deliberations are of outstanding significance due to their comprehensiveness as well as the author’s chronological and personal closeness to al-Ġazālī. Even so, they must be supplemented and, in some instances, corrected by the testimonies of later historians. Among these historians are Ibn ‘Asākir (d. 571/1175), Ibn al-Ġawzī (d. 597/1201), Yāqūt (d. 626/1228), Ibn al-Aṭīr (d. 630/1233), Ibn Ḥallikān (d. 681/1282), al-Dahabī (d. 748/1347), al-Šafadī (d. 764/1363), Tāġ al-Dīn al-Subkī (d. 771/1370), who copied not only the passage from ‘Abd al-Ġāfir but other sources as well, and Murtaḍā al-Zabīdī (d. 1205/1791). Further material collated by al-Sam‘ānī (d. 562/1166) and Ibn al-Naġġār al-Baġdādī (d. 643/1245), on the other hand, appears to have been lost (first list and assessment of the sources in Krawulsky 1971 [\*41: 42–58], completed and commented by Griffel 2009 [\*258: 21–23]).

Several historians, first among them Ibn al-Ġawzī (Muntaẓam [\*4: IX168,19]), tell us that al-Ġazālī was born in 450/1058–1059. Nowhere in the historiographical sources do we find information that would suggest an alternative date. Consequently, this was taken as the definitive birth date for a long time (already by Munk 1859 [\*18: 366]). However, recently a number of objections have emerged, in relation to a letter written by al-Ġazālī to the Seljuk ruler Sanġar (d. 552/1157) in which he gives his age as ‘fifty-three years’ (*Faḍā’il* [\*6r: 3–5]). The letter was written in Nishapur at a time when al-Ġazālī had just started his second public teaching position and had to defend himself against various accusations. It is not possible to date the letter precisely, but there is

evidence to suggest that it originates in the year 500/1106–1107 (Garden 2010 [\*59: 90–91. 102]), at the very latest 501/1107–1108 (Griffel 2009 [\*258: 23–24]). If we take this period as the starting point for calculating ‘fifty-three years’ (using lunar years in accordance with Islamic chronology), then the later historians’ claim that al-Ġazālī was born in 450/1058–1059 becomes untenable. Instead, 447/1055–1056 or 448/1056–1057 must be seen as more probable year of his birth (Griffel 2009 [\*258: 24–25], Garden 2010 [\*59: 102 n. 57], Treiger 2012 [\*144: 10 n. 49]).

While there is thus some doubt concerning the year of his birth, this is not the case with regard to his birthplace. Al-Ġazālī came from Ṭabarān, one of the two major cities in the district with the much more recognisable name Ṭūs (present-day Mashhad) in Ḥurāsān, the great province in northeast Iran. Since the late 1030s, the region had been ruled by the Seljuks. Their leader Tughril Beg (r. 429–455/1038–1063) conquered Baghdad in 447/1055, establishing the largest Islamic empire of his time. He was succeeded by the sultans Alp Arslan (r. 455–465/1063–1072) and Malik-Šāh (465–485/1072–1092), under whom Seljuk rule reached its zenith. A significant part was played by their vizier Nizām al-Mulk (d. 485/1092), a prominent politician whose power base was in Isfahan, from where he guided the destinies of the realm. He founded new universities in Baghdad, Nishapur, Marv, Herat, Balḥ, Isfahan, Basra, Mosul, and elsewhere, all called al-Madrasa al-Nizāmiyya. These were among the leading education institutions of his time and would play a prominent part in al-Ġazālī’s life (Yavari 2018 [\*335: 90–94; cf. the overview map on p. ii there]).

Al-Ġazālī’s education began in Ṭūs. His first teacher was Aḥmad (or ‘Abd al-Malik) al-Rāḍakānī who introduced him to Islamic law (*fiqh*) from the age of thirteen onwards (‘Abd al-Ġāfir in Subkī [\*12: VI 204,9], Šarīfīnī [\*7: 83]). A few years later, we meet al-Ġazālī in Nishapur. He may have been in contact with the Sufi scholar Abū ‘Alī al-Fāramaḍī (Griffel 2009 [\*258: 52]) here, but his main reason for moving to the city was to study at the Madrasa al-Nizāmiyya, which had become a centre of scholarship since Abū l-Ma‘ālī al-Ġuwaynī (d. 478/1085), the most eminent Islamic theologian of the generation before al-Ġazālī, taught here (Thiele 2016 [\*365: 234–237]). Abū l-Ma‘ālī al-Ġuwaynī gathered a remarkable number of pupils around him who would later embark on a successful career as scholars. Among them were al-Kiyā’ al-Harrāsī (d. 504/1110) and Abū l-Qāsim al-Anṣārī (d. 512/1118), both respected theologians (Griffel 2009 [\*258: 29, 57], Thiele 2016 [\*365: 237], Shihadeh 2016 [\*174: 400–401]), as well as ‘Abd al-Ġāfir al-Fārisī whom we have already encountered as the chronicler of Nishapur and al-Ġazālī’s biographer. Teaching at the madrasa focussed on the so-called ‘Islamic’ subjects (besides Quranic exegesis primarily Islamic law and theology). In all probability, al-Ġuwaynī also introduced his pupils to



philosophy, as he was known as one of the first Aš'arī theologians to study the philosophical tradition intensively. The focus was probably on the philosophical arguments for the eternal existence of the world, which al-Ġuwaynī discussed and criticised in his writings in detail (Rudolph 1997 [\*237], Griffel 2009 [\*258: 29–30]; but cf. also Madelung 2006 [\*359]). Al-Ġazālī (cf. chap. 1 of his *Tahāfut*), al-Kiyā' al-Harrāsī, and Abū l-Qāsim al-Anṣārī (Frank 1992 [\*229: 66]) would later follow in their teacher's footsteps, each in his own way.

After al-Ġuwaynī's death in 478/1085, al-Ġazālī left the Nizāmiyya in Nishapur, joining Nizām al-Mulk's retinue (*mu'askar*). This probably led to him travelling through the Seljuk empire with the vizier's retinue, but his most important base during these years would have been Isfahan. Here he received the call to become a professor at the Nizāmiyya in Baghdad in 484/1091. His appointment at such a young age is likely to have caused a stir, not least because two other scholars appear to have been dismissed at the same time (Glassen 1981 [\*330: 131]). In any case it meant that al-Ġazālī was now occupying the highest academic position in the Islamic world, which led to numerous teaching commitments, but also social and political ones. The political conditions in Baghdad, however, soon proved to be particularly difficult. In the autumn of 485/1092, Nizām al-Mulk, al-Ġazālī's sponsor and mentor of long standing, was murdered, apparently by a member of the Ismā'īlī Assassins. In the subsequent months the Seljuk empire lost a considerable part of its political elite in quick succession. In the same autumn Sultan Malik-Šāh died of a fever; early 486/1093 saw the death of Tāġ al-Mulk, who had followed Nizām al-Mulk as vizier, presumably at the instigation of Nizām al-Mulk's supporters; later in the same year Malik-Šāh's minor son Maḥmūd, who had just been appointed sultan, succumbed to illness; and finally, on 14 Muḥarram 487/9 February 1094, the caliph al-Muqtadī died one day after appointing another minor son of Malik-Šāh's, named Barkiyārūq, sultan. (Concerning these events and their interpretation cf. Laoust 1970 [\*190: 56–61], Glassen 1981 [\*330: 142–157], Hillenbrand 1995 [\*332], Griffel 2009 [\*258: 36–40].) Al-Ġazālī cannot have been left untouched by these events, not least as he was involved in them by virtue of his office. Still, they do not seem to have compromised his position in Baghdad, as he was one of the three scholars present at the enthronement celebration on the occasion of the next caliph, al-Mustazhir, being introduced into his office in Muḥarram 487/February 1094 (Ibn al-Ġawzī [\*4: 1x 82], Laoust 1970 [\*190: 62], Glassen 1981 [\*330: 158]). He was thus clearly still a member of the academic elite, his position at the Nizāmiyya unchallenged. All the more surprising, then, that al-Ġazālī left this position in the following year. He handed in his notice as a professor in Dū l-Qa'da 488/November 1095, appointed his brother

Aḥmad – who was also a scholar of renown – his academic successor, made arrangements for his family to return to Ṭūs, and left the capital on his own, allegedly with the intention of going on pilgrimage to Mecca (Glassen 1981 [\*330: 168–173], Griffel 2009 [\*258: 40–42]).

The reasons that might have led to this dramatic step were already discussed during al-Ġazālī's lifetime, and have been debated repeatedly ever since. Inner motives ('a psychological crisis') were considered as well as external circumstances such as a possible political conflict with the new sultan Barkiyārūq (MacDonald 1899 [\*19: 80, 98]) or possibly fear of an attack by the Ismā'īlī Assassins (Jabre 1954 [\*31: 92–94]). In the context of this decision, al-Ġazālī himself, however, only ever speaks of his 'repentance' (*tawba*) and his desire to live in 'isolation' (*'uzla*) henceforth (Griffel 2009 [\*258: 42–43]), indicating personal convictions (cf. § 4.1). In any case, the decision of 488/1095 did not lead to a complete rupture with his previous life as a researcher and a teacher. Rather, al-Ġazālī's main concern appears to have been to retire from his political ties and his position as a public scholar (van Ess 1987 [\*44: 60–63], Griffel 2009 [\*258: 44. 50–51]). This is certainly indicated by a vow he made shortly afterwards at Abraham's tomb in Hebron. It bound him 'furthermore, not to go to any ruler, not to take any ruler's money, not to engage in [public] disputes (*munāẓarāt*), and to renounce all zealotry', and was of such significance to him that he quoted it in a personal letter even years later (*Faḍā'il* [\*6r: 5]).

In fact, al-Ġazālī did not travel directly to Mecca, as he had announced on leaving Baghdad. Instead, he travelled to Damascus, stayed for about half a year and began presenting to a small circle of pupils the work that would occupy him from this time onwards: a comprehensive guideline, laid out in forty chapters, for the religious life of Muslims, which he would later publish under the title *Iḥyā' 'ulūm al-dīn* (*The Renewal of the Religious Sciences*). In Jerusalem, too, where al-Ġazālī stayed from summer to autumn 489/1096, he worked on the *Iḥyā'*. Afterwards he travelled to Hebron in order to take the aforementioned vow at Abraham's tomb, and from there finally to Mecca, where he completed the pilgrimage. In early 490/1097 we meet al-Ġazālī in Damascus once again, and a few months later he returned to Baghdad (on all this see Griffel 2009 [\*258: 43–48]). Here, too, he read from his new work, the *Iḥyā'*, and once again he gathered numerous listeners, among them the young Andalusian Abū Bakr b. al-'Arabī (d. 543/1148), who later contributed significantly to the dissemination of his writings in the Maghreb (Griffel 2009 [\*258: 62–71]). In the autumn of 490/1097, al-Ġazālī returned to his family in Ṭūs, but here, too, his lifestyle and understanding of himself as a religious innovator and teacher, remained unchanged. In his hometown, he founded a small college (*zāwiya*) for select

pupils and audiences as well as a Sufi convent (*ḥānqāh*) where like-minded persons lived together in obedience to fixed rules Griffel 2009 [\*258: 49–50]).

This renunciation of political life was challenged in 499/1106, when al-Ġazālī was asked to accept a public teaching position at the Nizāmiyya in Nishapur, where he himself had studied decades earlier. The originator of this plan was Faḥr al-Mulk, vizier to the Seljuk ruler Sanğar (r. in Ḥurāsān 490–552/1097–1157; from 511/1118 onwards sultan of the entire empire) and son of Nizām al-Mulk, whose family had had personal links with al-Ġazālī for a long time. He consequently agreed to the call, taking up a teaching position at a ‘public’ university once again in the summer of 499/1106, eleven years after his dramatic exit from the Nizāmiyya in Baghdad. Many contemporaries criticised the decision. In response, al-Ġazālī composed *al-Munqid min al-ḍalāl* (*The Deliverer from Error*), the autobiographical text mentioned previously, in order to elucidate the motivations for his divergent decisions of 488/1095 (*against* a public teaching position) and 499/1106 (*in favour of* a public teaching position). Even so, the position became more fraught, as several legal scholars from his region accused him of disseminating false doctrine and of having insulted Abū Ḥanifa (d. 150/767), the oldest authority on Islamic law (*Faḍā’il* [\*6r: 3]; on this see Garden 2010 [\*59: 91–96], Kokew 2023 [\*448: 25–26]). While al-Ġazālī was able to refute the accusations during a meeting with Sultan Sanğar, and the fact that he declined a further call to the Nizāmiyya in Baghdad in 504/1110 would have strengthened his position, the last years of his life were fraught with difficulty, as implied by his letters, most of which were written during this period. All the more remarkable, then, that he continued to write with undiminished energy. At the beginning of Ġumāda II 505 / December 1111, he completed his last scholarly work *Ilğām al-‘awāmm ‘an ‘ilm al-kalām* (*Keeping the Common People from the Science of Theology*) (Bouyges 1959 [\*33: 80–81]). A few days later, on 14 Ġumādā II 505 / 18. December 1111, al-Ġazālī died in his Sufi convent in Ṭūs (on the events from 499/1106 onwards in detail Griffel 2009 [\*258: 53–59]; cf. also van Ess 1987 [\*44: 59–63]).

### 3 Works

3.1 Autobiography – 3.2 The Classification and Assessment of the Sciences – 3.3 Incorporating Philosophy: Logic (and its Application to the Doctrine of God) – 3.4 Adopting Philosophy: Soul and Intellect. Ethics. Cosmology – 3.5 Critical Approaches to Philosophy: Metaphysics and Physics

The below synopses of works focus on those of al-Ġazālī's texts in which his investigation of philosophy is expressed particularly clearly. Other parts of his extensive oeuvre have not been considered. The same applies to works whose authorship must be regarded as uncertain. This concerns writings such as *Ma'āriḡ al-quds fi madāriḡ ma'rifat al-naḡs* (*The ascents to the holy district* [or: to Jerusalem] *regarding the steps of the knowledge of the soul*) or *al-Ma'ārif al-'aqliyya* (*Intellectual Insights*) (cf. Griffel 2009 [\*258: 403–404 with references], Treiger 2012 [\*144: 15]), but also the entire complex of the so-called *maḡnūn* texts (put briefly, the presumably esoteric works for initiated readers) that have played an important part in the discussion during recent years

(al-Akita 2008 [\*256], 2009 [\*257], Madelung 2015 [\*68: 29–33]). Their attribution and historical classification continue to be highly contested, as there is significant evidence against their authenticity (Griffel 2021 [\*446: Part 3, Chapter 2]). Considering the current state of research, it does not seem appropriate to base a philosophical portrait of al-Ġazālī on the *maḡnūn* texts, not least because his attitude to philosophy is much more clearly displayed in the well-known and confirmed books such as *Tahāfut*, *Iḥyā'*, *Miškāt*, or *Munqid*. Furthermore, these were the texts studied in detail by later authors, whereas the later influence of the *maḡnūn* corpus is in any case negligible.

### 3.1 *Autobiography*

*al-Munqid min al-ḡalāl*  
*The Deliverance from Error*

Autobiographical work in which al-Ġazālī justifies his own journey, at the same time presenting general observations of the spiritual (especially religious) trends of his time as well as the challenges and dangers faced by an intellectual. – Al-Ġazālī was prompted to write the text after the decision he took in Dū l-qa'da 499/July 1106, of ending his years of seclusion and exclusively private instruction to few pupils, and once again accepting a public teaching position (at the Madrasa Niẓāmiyya in Nishapur). This decision contradicted his decision of eleven years previously (Dū l-qa'da 488/November 1095), when he resigned his position as professor (at the Madrasa Niẓāmiyya in Baghdad), and was met with criticism not only by his opponents but also by his followers (Griffel 2009 [\*258: 55]). Al-Ġazālī composed the *Munqid* in order to explain his course of action. The work is in the form of an intellectual autobiography and elucidates the most important stations of al-Ġazālī's intellectual and spiritual development, including the decisions of resigning the

teaching position in Baghdad and later accepting a teaching position in Nishapur after all. In addition, he reflects the spiritual trends of his time and the options open to a religious intellectual faced with these trends, imbuing the text with a paradigmatic and paraenetic note beyond the personal overview of his life. This is affirmed by the individual trends mentioned and discussed in the *Munqid* being listed in a similar way by other authors of the same period (concerning the noticeable parallels in the works of 'Umar al-Ḥayyām, cf. van Ess 1987 [\*44]).

[Introduction]

1. The book's objective is to explain the following decisions or stations in al-Ġazālī's life: (1) the path to independent insight beyond received opinion and following authority (*taqlīd*); (2) the study of dialectical theology (*kalām*); (3) investigation of the doctrine of the Bāṭiniyya, i.e. the Ismā'īlīs; (4) studying philosophy (*falsafa*); (5) studying Sufism; (6) insight into the core of truth (*lubāb al-ḥaqq*); (7) the decision to resign from the teaching position in Baghdad, and (8) the decision to accept a teaching position in Nishapur. – 2: Ever since his youth it has been al-Ġazālī's endeavour

to overcome the blind faith in authority and to recognise the essence of things (*ḥaqāʾiq al-umūr*). This kind of insight must take the form of certainty (*yaqīn*) of which there cannot be any doubt.

[Main part]

i: The struggle for certainty – 1: The insight that none of the convictions al-Ġazālī has adhered to date fulfil the criteria of certainty – 2: The insight that certainty cannot be achieved by means of sensory perception – 3: Doubt whether primary rational evidence can be the foundation of certainty (question of how the thinking consciousness is anchored; the illusion of sleep awakening doubt of the reliability of waking) – 4: A phase of complete scepticism from which al-Ġazālī suffered during two months as with an illness – 5: Trust in the rational evidence returns thanks to a light sent by God (*nūr*). Statements made by the Prophet confirm the significance of this light as well as the need to be prepared for receiving the light.

ii. The study of dialectical theology (*kalām*) – 1: If knowledge of the essence of things is possible, it must be the result of theology, or the doctrine of the Bāṭiniyya, or philosophy, or Sufism – 2: Theology is not capable of this, as its representatives focus on the defence against heresy and do not, or only insufficiently, achieve rational knowledge of things.

iii. The exploration of philosophy – 1: Al-Ġazālī is the first of the Islamic scholars (*ʿulamāʾ al-islām*) to have examined philosophy in any depth. This took place during his teaching assignment in Baghdad, where he studied the books of the philosophers for two years, and elicited their errors for one year – 2: Three groups of philosophers: (1) The 'Dahrites' (*dahriyyūn*) presume an eternal material world without a creator; (2) natural philosophers (*tabiʿiyyūn*) teach the existence of God but deny the afterlife and the immortality of the soul; (3) theologians/metaphysicians (*ilāhiyyūn*) such as Socrates, Plato, Aristotle, al-Fārābī, and Ibn Sinā (who followed Aristotle's doctrine) contradict (1) and

(2) but themselves embrace a mixture of truth, heresy (*bidʿa*) and unbelief (*kufṛ*) – 3: Subjects and branches of philosophy: (1) Mathematics and logic as exact sciences that are neutral as regards religion, and must be studied also by believers (despite certain risks that may be linked to them); (2) physics as a partly problematic and metaphysics as a highly problematic science; the elucidation of their errors, including the three theories that lead to unbelief, undertaken in *Tahāfut al-falāsifa*; (3) politics and ethics as acceptable but ultimately expendable sciences; their claims and insights originated with prophets or Sufis – 4: Dangers that may result from the indiscriminate rejection of philosophy – 5: Dangers that may result from the indiscriminate acceptance of philosophy.

iv: The investigation of the doctrine of the Bāṭiniyya (Ismāʿīlīs) – 1: Investigating the Bāṭinī doctrine was inescapable, due to its great success, although some of their (apparent) arguments were made known and comprehensible to a wider public only thanks to al-Ġazālī's precise presentation (as he was accused by critics) – 2: Their faith in the alleged infallibility of the imam is untenable and unfounded; our infallible teacher is the Prophet Muhammad – 2: Their argument that all questions that were not decided in the Quran or *ḥadīth* could only be answered by the imam, is untenable. The prophets have exhorted us to make our own decisions in these instances, even though they hold a risk of error – 4: The Bāṭinīs' arguments against individual decision-making and for aligning with an infallible imam; al-Ġazālī's replies (with reference to his own works such as *al-Qisṭās al-mustaqīm*) – 5: The Bāṭinīs were never able to provide reasons for their doctrine, not even those who had adopted the insufficient philosophy of Pythagoras that may be found in the books of the 'Pure Brethren' (Iḥwān al-Ṣafāʾ).

v: Studying Sufism and the decision to abandon the teaching position in Baghdad – 1: Theoretical study of older Sufi texts (al-Makkī etc.) – 2: Realisation that the path to bliss (*saʿāda*) does not lead through theory

but only through Sufi practice, i.e. asceticism, 'tasting' (*dawq*) that which one has realised, abandoning worldly things, etc. – 3: His own position as a status-seeking public teacher contradicts this practice, forcing al-Ġazālī to rethink his life. For six months (488–489/second half of 1095) he wavers between the decision of continuing or abandoning his teaching position – 4: Thanks to God's help he is able to resign his position, and leaves Baghdad in secret. Contemporaries are irritated and misunderstand his motives – 5: He now leads a reclusive life, first in Damascus (two years), Jerusalem, Hebron, Mecca, and Medina, and then for many years in his homeland of Ḥurāsān – 6: Sufism is the ideal way of life. List of certain characteristics of this life: purity, absorption (*fanā*) in God, revelations (*mukāṣṣafāt*), closeness to God (often misunderstood as union), 'tasting' the truth (with reference to the text *ʿAḡāʾib al-qalb*), insight into the reality and particularity of prophecy.

VI: The essence (*ḥāqīqa*) of prophecy and its necessity for humans – 1: Stages of the human's experience of the world: sensory perception, discriminatory capacity (*tamyīz*), intelligence/intellect (*ʿaql*), prophecy (i.e. seeing the hidden and the future); doubts of prophecy are often based on the fact that most humans do not reach this stage – 2: Proof of the contingency and the existence

of prophecy; further qualities of prophecy can be recognised only by 'tasting' – 3: Proof of the prophethood of a certain person. The belief in a prophet is founded on the comprehensive knowledge of his person (through observation and hearsay), not only on individual miracles.

VII: Reasons for returning to a teaching position – 1: Analogy between body and heart (mind, soul) as regards illness and cure. Prophets as the physicians of the 'heart' – 2: Why many people weaken in their belief in the Prophet and his message. Justification and false arguments by representatives of science (*ʿilm*), Sufism (where conceit and libertinism play a part), the Bāṭiniyya, and of philosophy (including criticism of Ibn Sīnā's drinking wine) – 3: The return to a teaching position was part of the commitment to faith, which is dwindling everywhere, and to countering these false arguments. Other factors were the ruler's command as well as discussions with friends who advised al-Ġazālī to abandon his reclusive life. His motivation for engaging in teaching is now completely different from the first teaching position in Baghdad – 4: Cure for those whose faith has weakened: Bāṭinīs (reference to *al-Qisṭās al-mustaḳīm*), libertine Sufis (reference to *Kīmīyā-yi saʿādāt*), philosophers and other scientists. The particular challenges to which scholars are exposed.

### 3.2 The Classification and Assessment of the Sciences

*al-ʿIlm*

*Knowledge*

The first of forty 'books' (*kutub*) of al-Ġazālī's greatest work, the systematic *Iḥyāʾ ʿulūm al-dīn* (*The Renewal of the Religious Sciences*). For more details on the *Iḥyāʾ*, see the synopsis below (at 3.4. Soul and intellect. Ethics. Cosmology). – The content of the book on *Knowledge* is divided into seven chapters.

1: The excellence of knowledge, teaching, and learning – 1: It is confirmed by tradition as well as rational arguments – Knowledge is aspired to for its own sake and is the basis

of bliss (*saʿāda*) in this world as well as the afterlife – Teaching and learning as the paths to knowledge – This world as a seed plot for the afterlife – 2: Human activities with a focus on this world are of three kinds: (1) fundamental activities: agriculture, weaving, building, politics; (2) activities serving those named in (1), such as e.g. smithing serves agriculture; (3) activities supplementing (1), such as e.g. milling and baking bread supplement agriculture – 3: Politics as the highest of these activities, whose aim is to lead humans to salvation in this life and the afterlife – Four ranks of political leadership in descending

order: (1) prophets; (2) caliphs and kings; (3) scholars; (4) preachers – 4: After prophecy, imparting knowledge and the concomitant education of the character is the highest of human activities.

II: Praiseworthy and blameworthy sciences – A: Knowledge as an individual duty (*farḍ 'ayn*) – This regards knowledge of the correct behaviour (*'ilm al-mu'āmala*), not knowledge of the disclosure (*'ilm al-mukāṣafa*) – Every believer must know only the Five Pillars and the central commandments and prohibitions of Islam – B. Knowledge as a collective duty (*farḍ kifāya*) – Division into religious (*ṣar'īyya*) and non-religious (*ḡayr ṣar'īyya*) sciences – 1: Non-religious sciences are divided into (1) praiseworthy sciences: medicine, mathematics, agriculture, weaving, politics, cupping, and tailoring; (2) blameworthy sciences: magic and telesmatic arts, illusion and the art of deception; (3) permitted sciences: poetics, historiography etc. – 2: Religious sciences are always praiseworthy in themselves, but occasionally contain dubious aspects. They are divided into (1) principles (*uṣūl*): Quran, *ḥadīth*, consensus, and traditions of the Prophet's companions; (2) ramifications (*furū'*); these are either (a) useful in this world: jurisprudence (*fiqh*), or (b) useful for the afterlife: the science of the states of the heart, i.e. the subject of the *Ihyā'*; (3) prolegomena (*muqaddimāt*): lexicography and syntax; (4) addenda (*mutammimāt*), with reference to (a) the Quran: recitation, exegesis, principles of law (*uṣūl al-fiqh*), or to (b) the remainder of religious tradition: the transmitters' biographies, genealogy, etc. – 3: Explanation on the classification of jurisprudence (*fiqh*): its benefits are in this world, as its subject is correct practice (linking it to politics) and not the inner attitude of the believers – Of significance for the afterlife are the sciences of disclosure (*mukāṣafa*) and of correct demeanour (*mu'āmala*) – 4: Theology (*kalām*) is not an integral part of the religious sciences. In the early Islamic period (*fī l-'aṣr al-awwal*) it was superfluous, because all important statements and arguments were known from the Quran. It

was only the emergence of heresies that made it necessary in the service of apologetics – 5: Philosophy (*falsafa*) is not a unified and independent science but consists of four separate parts: (1) geometry and arithmetic, which are permitted; (2) logic, concerned with proof and definitions, which should really be part of theology; (3) metaphysics (*ilāhiyyāt*), i.e. study of God, which is also part of theology; philosophical metaphysics is not an independent science but a heretical doctrine (like the doctrine of the Mu'tazila); (4) physics, which in part contradicts religious truth, and in part – as the examination of bodies – coincides with medicine – 6: Theology has the sole purpose of protecting believers by means of dispute from the dangers of heterodoxy (hence its tendency to quarrelsomeness!). It thus resembles the military escort that protects the caravan of pilgrims against the danger of attacks on its way to Mecca. – God's essence, attributes, and actions are recognised through the science of disclosure (*'ilm al-mukāṣafa*) and not through theology (*kalām*). The latter is a veil (*ḥijāb*) and an obstacle, as God's guidance (*hidāya*) can be achieved only through personal effort (*muḡāhada*) – 7: While theology and jurisprudence ought to be regarded critically, their representatives enjoy great prestige among the community. Some of them are genuinely committed to seeking God, but many are merely striving for glory. The objective of the Prophet's companions was the afterlife, not theology and law. – 8: One can move closer to God in three ways: (1) pure knowledge, i.e. the science of the revelation, (2) pure practice, e.g. a ruler's just actions, (3) a combination of both. – Numerous instances of early teachers of law (al-Ṣāfi'ī et al.) who excelled in their particular devotion to God, asceticism, and the afterlife.

III: Criteria for praiseworthy and blameworthy sciences – 1: Blameworthy is (1) that which harms others, e.g. magic, (2) that which mainly harms the performer, e.g. astrology, and (3) that which is without benefit, such as learning obscure details or attempting to discover the divine secrets (*al-asrār al-ilāhiyya*).

Philosophers and theologians have attempted this in vain, and only prophets and saints are able to succeed. Consequently we should obey the religious law, and our intellect limit itself to proving the credibility of the prophets – 2: Five terms for knowledge that were considered praiseworthy among the pious ancients (*al-salaf al-ṣāliḥ*) but are interpreted and applied incorrectly today: (1) *fiqh*: originally an insight with a link to the afterlife, now the knowledge of specific particulars of this world; (2) *ʿilm*: originally the knowledge of God, now debating skills; (3) *tawḥīd*: originally the knowledge of the oneness of God as the source of all things, now familiarity with *kalām* and its methods; (4) *dīkr* or *taḍkīr*: originally pure remembrance of God, now distorted with stories, dances, etc. (5) *ḥikma*: originally divinely inspired wisdom, now an everyday word denoting the physician's art, poetry, etc. – 3. Sciences are either (1) entirely blameworthy (e.g. magic), or (2) entirely praiseworthy (e.g. the knowledge of God and the afterlife), or (3) partly praiseworthy, and as a consequence not an individual but a collective duty. – In the case of (3), there is always a minimum (*iqtiṣār*) of knowledge, a balanced centre (*iqtiṣād*), and maximal immersion (*istiṣāʾ*), the last of which cannot be achieved in life; the path to knowledge leads through self-purification, studying the Quran etc.; theology only defends the correct faith tenets; its minimum is summarised in *Qawāʿid al-ʿuqūʿid* (= Book II of the *Iḥyāʾ*), its balanced centre in *al-Iqtisād fī l-ʿitiqād* (= al-Ġazālī's most voluminous *kalām* treatise).

iv: On disputes and controversies – 1: The increasing emergence of disputes and controversies in legal matters has political-historical causes – 2: In order to carry out a good dispute, its participants must fulfil eight preconditions: (1) personal integrity and carrying out individual duties; (2) carrying out collective duties in addition to the dispute; (3) independent judgment; (4) investigation of a current issue; (5) private and not public discussion; (6) solidarity in the search for truth; (7) admitting criticism and changing

opinions; (8) familiarity with the subject – 3: Disadvantages and dangers of disputes: envy, pride, meanness, slander, self-aggrandisement (*tazkiyat al-nafs*), spitefulness, resentment, hypocrisy, disregard for truth, flattery, and further vices developing out of these – Different types of scholars.

v: On the correct demeanour of teachers and learners – Ten duties of the learner – Eight duties of the teacher.

vi: Criteria to distinguish good scholars (who look to the afterlife) and bad scholars. Characteristics of bad scholars – Characteristics of good scholars, among them certainty (*yaqīn*) – Deliberations on certainty.

vii: On the intellect/faculty of thought (*ʿaql*) – 1: Its high rank – Source of knowledge – Means to happiness in this life and the afterlife – According to a *ḥadīth*, it is the first created entity that can be explained only by means of the science of disclosure (*ʿilm al-mukāṣafa*) – 2: Its definition and division – Four meanings of the word *ʿaql*: (1) the faculty of thought innate (*ḡarīza*) to humans; it resembles a light within the heart and a mirror; Quran and religious law are to the *ʿaql* as the sun to the sense of vision; (2) the knowledge of axioms and basic terms such as 'possible' or 'impossible'; (3) insights gained from experience; (4) knowledge of the consequences (in the afterlife) of things/actions – (1) and (2) are provided by nature (*bi-l-ṭabʿ*), (3) and (4) are acquired (*bi-l-iktisāb*) – Fear of God is a fruit of knowledge – Faith (*īmān*) is part of our natural disposition – The truth of the revelation. – 3. Different intellectual gifts – Humans resemble one another in respect of (2) and differ in respect of (1), (3), and (4) – Prophets possess the special gift of inspiration (*ilhām*); reference to the light verse (Quran 24:35); the different grades of the revelation (*waḥy*) are studied by the science of the revelation – Some humans recognise of themselves, others through instruction, still others not at all – Some Sufis criticise the intellect, because they (without justification) associate it with dispute and quarrels (among theologians). In fact, the intellect is



the means through which religious law can be understood – Some claim that the law is grasped by means of certainty and the light of faith, but not through the intellect. However, we understand the intellect to be the same

thing they call certainty and faith, i.e. a hidden quality that distinguishes humans from animals and is able to recognise the essence of things (*ḥaqāʾiq al-umūr*).

### 3.3 *Incorporating Philosophy: Logic (and its Application to the Doctrine of God)*

*Miʿyār al-ʿilm*

*The Criterion of Knowledge*

Detailed description of Aristotelian logic. The text deals with topics drawn from various parts of the *Organon* including the *Isagoge*, but is primarily an introduction into syllogistics of particular importance for its target audience – above all theologians and law scholars. – The text was probably composed in 488/1095 immediately after al-Ġazālī had completed the *Tahāfut* (Bouyges 1959 [\*33: 25–26]). Evidence of this is, on the one hand, that al-Ġazālī himself refers to the creation of the *Miʿyār* in the *Tahāfut* [\*100: 10,1], and on the other that the introduction to the *Miʿyār* states the explanation of the technical terms used in the *Tahāfut* as one of the objectives of the book (*Miʿyār* [\*68: 60,7–9]). – The language and presentation of the *Miʿyār* are mainly philosophical, although the various kinds of conclusions are elucidated using examples not only from philosophical tradition but also from theology and jurisprudence. Al-Ġazālī's sources include numerous works by Ibn Sīnā (*Nağāt*, *Išārāt*, *Dānišnāma*, *Ḥudūd* etc.) and al-Fārābī (*Kitāb al-Qiyās al-ṣağūr*, *Maqūlāt*), of which he includes verbatim excerpts as well as using them as models for various subjects (Janssens 2002 [\*107], 2010 [\*110: 220–226]).

Introduction: The objective of the book is to provide (1) an introduction into the methods of rational knowledge, i.e. logic, and (2) an explanation of the technical terms used in the *Tahāfut*.

1: The premises of the syllogism – A: Linguistic expressions (*alfāz*), indicating meaning – 1: Congruence (*muṭābaqa*), inclusion (*taḍammun*), implication (*iltizām*) – 2: Particularity and universality – 3: Four forms of existence: external reality, spirit, linguistic expression,

writing – 4: Simple and compound words – 5: Simple words: noun (*ism*), verb (*fiʿl* / *kalima*), particle (*ḥarf*). – 6: Equivocal (*muštarak*), univocal (*mutawāṭiʿ*), synonym (*mutarādif*), heteronym (*mutazāyil* / *mutabāyin*). – 7: Metaphorical (*mustaʿār*), figurative (*manqūl*), equivocal – B: The simple meanings/intentions (*maʿānī*) – 1: That which is perceived by the senses and known through rational conclusions – 2: Terms of general, specific, or equal extension – 3: Individual and universal terms – 4: Essential (*dātī*), concomitant (*lāzim*), accidental (*ʾaraḍī*) – 5: Proprium, accident (essential and non-essential), genus, species, difference – 6: Essence, quiddity (*māhiyya*) – Concluding remark: The five predicables and the ten categories – C: Statements – 1: Subject and predicate. Categorical (*ḥamlī*), conjunctive conditional (*ṣarṭī muttaṣil*) and disjunctive conditional (*ṣarṭī munfaṣil*) statements – 2: Affirmation and negation – 3: Individual, general indefinite, and general definite statements – 4: Necessary, possible, and impossible – 5: Contradiction – 6: Conversion.

11: The syllogism – A: The form of the syllogism – Introduction: Definition and division of the syllogism – 1: Categorical syllogism; three figures, fourteen valid modes – 2: The conjunctive conditional syllogism – 3: The disjunctive conditional syllogism – 4: Reductio ad impossibile (*ḥalf*) – 5: Induction – 6: The paradigm (*tamṭil*), which is called analogy (*qiyās*) in jurisprudence and reduction of the visible to the invisible in theology (*radd al-ġāʾib ʿalā l-šāhid*) – 7: On composite and imperfect conclusions – B: The substance of the syllogism – Introduction: Verifiable verdicts (*taṣḍīq*) as the basis of the syllogism; demonstrative, dialectic, rhetorical, sophistic, and poetic syllogism – 1: Certain (*yaqīn*) premises

and their application in science – 2: In jurisprudence, recognised (*maṣhūr*), accepted (*maqbul*) and assumed (*maẓnūna*) premises are also admissible – 3: Inadmissible premises based on imagination, figment, and error – C: Fallacies – 1: Their origin – 2: Their relation with the imagination; kinds of doubt – D: The art of proof – 1: Conclusion by analogy using a cause (*qiyās al-‘illa*) and using an indication (*qiyās al-dalāla*) – 2: Certain knowledge – 3: The four scientific questions (according to Aristotle) – 4: The meaning of ‘essential’ (*dātī*) and ‘primary’ (*awwalī*) – 5: Principles (*mabādī*), subjects (*mawḍū‘āt*), and questions (*mas‘āl*) as the elements of proof – 6: Circular arguments (*al-qiyās al-dawrī*) – 7: True proof (*al-burhān al-ḥaqīqī*) – 8: The eight causes (according to Aristotle).

III: Definition – A: The rules of definition – 1: Definition and description – 2: The subject and form of the definition – 3: Elements of definition – 4: Kinds of definition – 5: Definitions are not the result of proof, but of composition (*tarkīb*) – 6: Causes of errors in definitions – 7: Rules for achieving correct definitions – B: Individual definitions – Boundaries of definition – Fourteen definitions from the field of metaphysics (creator, intellect, soul, ...), fifty-five from the field of physics (form, matter, ...), and six from the field of mathematics (end, infinite, ...).

IV: Divisions (*aqsām*) and ways (*aḥkām*) of being. – Introductory remarks – A: The ten categories as fundamental divisions of being – 1: Substance – 2: Quantity – B: The ways of being – 1: Cause and effect – 2: Potential and effective – 3: Eternal and temporal, or earlier and later – 4: Universal and particular – 5: One and many – 6: Possible and necessary – Concluding remark: This text is to be understood as *The Criterion of Knowledge* (*Mi‘yār al-‘ilm*), and soon there will be a text on *The Scales of Action* (*Mizān al-‘amal*).

*Miḥakk al-naẓar*  
*The Touchstone of Inquiry*

Brief introduction into Aristotelian logic – The work is close to *Mi‘yār al-‘ilm* and was likely written around the same time, i.e. in 488/1095,

as the concluding remarks indicate (*Miḥakk* [\*69: 162,5–6; cf. Bouyges 1959 [\*33: 27–28]). However, the *Miḥakk* is much more concise and clearly aligned with the addressees of the two texts: Islamic scholars and law scholars. Thus al-Ġazālī illustrates every kind of conclusion with examples from jurisprudence and replaces several philosophical technical terms with terms with which religious scholars would be more familiar (cf. the list in the introduction to *al-‘Ağam* [\*69: 26–28]). Moreover, he mentions in the section discussing the disjunctive conditional conclusion that ‘the theologians call it [i.e. this conclusion] *al-sabr wa-l-taqṣīm*, the logicians *al-‘aṣṭi al-munfaṣil*, and we [i.e. the law scholars] *al-ta‘ānud*’ (*Miḥakk* [\*69: 97,24–25]).

Preface – Introduction: Conceptual cognition (*ma‘rifa*) is founded on definitions, propositional knowledge (*‘ilm*) on syllogisms.

I. The syllogism – A: Conditions (*sawābiq*) – 1: Linguistic expressions – 2: Simple significations – 3: Compound significations in the different forms of the statement – B: Description of the syllogism – 1: Order (*naẓm*) [i.e. form]: categorical, conjunctive conditional, and disjunctive conditional (*ta‘ānud*) – 2: Premises [i.e. subject matter]: the necessity of certain premises; seven kinds of premises and their respective truth value – C: Additions (*lawāḥiq*) – 1: Problematic and incomplete conclusions; their reduction to a correct syllogism – 2: Induction – 3: Necessity of conclusion in the context of proof; refutation of objections against the possibility of cognition through syllogisms – 4: Conclusion by analogy using a cause and using an indication – 5: Reasons for committing errors – 6: Rules for legal conclusions (*aqyisa fiḥḥiya*).

II: Definition – A: Rules (*qawānīn*) – 1: The four questions (according to Aristotle) – 2: True definitions, i.e. definitions of essence – 3: The question of the essence or quiddity (*māhiyya*) – 4: Definitions are not the result of proof – 5: Reasons for committing errors – 6: Defining individual terms by means of literal explanation and description – B: Investigations (*imtiḥānāt*) concerning eight definitions: ‘definition’, ‘knowledge’, ‘accident’, ‘temporal’, ‘contrast’, ‘life’, ‘movement’,

'necessary' – Concluding remark: That which the *Mihakk* presents concisely is described in more detail in the *Mi'yār*.

*al-Qistās al-mustaqīm*  
*The Just Balance*

Text on religious philosophy with the primary aim of justifying the application of philosophical logic to the religious sciences. – The text is in the form of a dialogue with a member of the Ismā'īliyya, who commanded great political influence at the time and whom al-Ġazālī attacked in several works (Bouyges 1959 [\*33: 57; cf. 30–33, 45–46]). The question of the admissible sources of knowledge, which is the main focus of the *Qistās*, played a major part here. While the Ismā'īlīs followed the authority of an imam they considered infallible, al-Ġazālī argues that knowledge must be based on rational conclusions which follow certain rules to be discussed in the context of philosophical logic. The five main kinds of syllogism (here called the five 'scales') could, however, also be deduced from the Quran which contains every kind of conclusion, albeit in incomplete form, at least once.

The argumentation of the *Qistās* is rhetorical throughout, which al-Ġazālī justifies by saying that he had to take into account the limited knowledge of his interlocutor (*Qistās* [\*7r: 68,9–13 and 72,6–9]). At the same time the logical system he formulates corresponds entirely to the rules of Aristotelian syllogistics, in keeping with his reference that further details on the subject could be found in *Mi'yār al-'ilm* and *Mihakk al-naẓar* (*Qistās* [\*7r: 72,6–9 and 75ult.]).

1: Knowledge must be based neither on personal opinion (*ra'y*) nor on conclusions by analogy (*qiyās*) nor on instruction (*ta'līm*) that has not been verified, but only on the 'five scales' (*al-mawāzīn al-ḥamsa*) [i.e. the five valid logical conclusions], the Quran has taught us – 2: The 'great scale of balance' (*al-mizān al-akbar min mawāzīn al-ta'ādul*), i.e. the first figure of the categorical syllogism, is deduced from sura 2:258 – Explanations on the application of this figure – 3: The 'middle

scale' (*al-mizān al-awsaṭ*) of balance', i.e. the second figure of the categorical syllogism, is deduced from sura 6:76 – Explanations on the application of this figure – 4: The 'small scale' (*al-mizān al-aṣḡar*) of balance', i.e. the third figure of the categorical syllogism, is deduced from sura 6:91 – Explanations on the application of this figure – 5: The 'scale of concomitance/implication' (*mizān al-talāzum*), i.e. the conjunctive conditional syllogism, is deduced from sura 17:42 – Explanations on the application of this form of conclusion – 6: The 'scale of confrontation' (*mizān al-ta'ānud*), i.e. the disjunctive conditional syllogism, is deduced from sura 34:24 – Explanations on the application of this form of conclusion – Justification of the denotations and examples used – 7: False rules of acquiring knowledge, which are inspired by Satan, and their application by the Ismā'īlīs – 8: Criticism of the blind trust in authority the Ismā'īlīs display towards their imam – 9: Different forms of acquiring knowledge among different classes of humans (with reference to sura 57:25): (a) the elite (*al-ḥawāṣṣ*) possesses comprehension and understands the 'scales' God has sent us; (b) the common people (*al-'awāmm*) require instruction that avoids details and controversial issues and must rest on the Quran; (c) a middle group of dialecticians (*aḥl al-ḡadal*), who do not possess true understanding, love controversies on disputed issues and must be restrained either by means of better arguments (*bi-l-muḡādala allatī hiya aḥsan*) or by means of political force (*ba's al-sultān*) – 10: Problematic examples (from the field of theology) of personal opinion (*ra'y*) and conclusion by analogy (*qiyās*) – Concluding remark: justification of the fact that in this text intellectual principles (*al-ma'qūl*) were presented using religious tradition (*al-manqūl*).

*al-Mustaṣfā min 'ilm al-uṣūl*  
*(The Purified Extract of the Science of the Principles [of Law])*

The subject matter of this work is not philosophy but the science of the 'principles of law' (*uṣūl al-fiqh*), in which context the *Mustaṣfā*

played a prominent part, as may be traced through numerous commentaries and later amended editions, by Ibn Rušd among others (regarding his epitome entitled *Muḥtaṣar al-Mustaṣfā* cf. Bou Akl 2015 [\* 420]). The reason why the work is included in the present context is its introduction, which is entirely dedicated to Aristotelian logic. Al-Ġazālī returns to the description already given in *Miḥakk al-naẓar*, essentially repeating it, albeit in a different arrangement and with a few modifications. This documents that even towards the end of his life he adhered to his programme of introducing Aristotelian logic into jurisprudence, as handwritten notes as well as Ibn Ḥallikān's evidence tell us that the *Mustaṣfā* was completed on 6 Muḥarram 503, i.e. 5 August 1109 (Bouyges 1959 [\* 33: 73–74]; Treiger 2012 [\* 144: 14]).

Exordium: The sciences are based either on rational reflection only or on transmitted information only, or on both, as in the case of jurisprudence – Preface: Definition of the 'science of the principles of law' – Its position in the system of sciences – Its subjects and its structure – Among its preconditions is the knowledge of the rules of thought, i.e. logic.

Introduction: Definitions and proof as the basis of all sciences; reference to *Miḥakk al-naẓar* and *Mi'yār al-'ilm*, where these issues are presented in more detail – 1: Definition – A: Rules – 1: The four questions – 2: True definitions, i.e. definitions of essence – 3: The question of the essence, or quiddity – 4: Definitions are not the result of proof – 5: Reasons for committing errors – 6: Defining individual concepts by means of lexical explanation and description – B: Investigation of three definitions: 'definition', 'knowledge', 'necessary' – 11: Proof – A: Preconditions – Introductory remarks – 1: Linguistic expressions – 2: Simple significations – 3: Compound significations in the different forms of statement – B: Description of proof – 1: Form (*ṣūra*): categorical, conjunctive conditional or disjunctive conditional (*ta'ānūd*) – 2: Subject matter (*mādda*): the need for certain premises; seven types of premises and their respective truth values – C: Additions – 1: Problematic and incomplete

conclusions; their reduction to a correct syllogism – 2: Induction – 3: The necessity of conclusion in the context of proof; refutation of objections against the possibility of cognition through syllogisms – 4: Proof using a cause (*burhān 'illa*) and using an indication (*burhān dalāla*) – Those who wish to learn more about logic should pick up *Miḥakk al-naẓar* and *Mi'yār al-'ilm*.

[Followed by the main part of the work, presenting and discussing in detail the principles of law.]

*al-Maqṣad al-asnā fī ṣarḥ [ma'ānī] asmā'*

*Allāh al-ḥusnā*

*The Most Sublime Objective Regarding the Explanation [of the Meaning] of the Beautiful Names of God*

Treatise on the concept of God – Like *Miškāt al-anwār*, this work is likely to have been written after the *Iḥyā'* but before al-Ġazālī's return to the Madrasa (499/1106) (Bouyges 1959 [\* 33: 46–47], Hourani 1984 [\* 43: 298], Frank 1992 [\* 229: 10 n. 2]). Treiger (2012 [\* 144: 12]) suggests the year 495/1101–1102 as the probable date of composition.

The starting point for the discussion is the Quran in which numerous qualities or names are attributed to God. These statements, which have been collected by Islamic tradition in the list of 'Ninety-nine Beautiful Names of God', led to an intense theological debate on the divine attributes. This touched on metaphysical questions, such as of the ontological status of the attributes, as well as grammatical definitions such as the relation between 'name', 'named', and 'naming'; on the debate in general Allard 1965 [\* 350], Gimaret 1988 [\* 353]. Al-Ġazālī refers to this discussion, presenting several opinions on the subject. His own contribution does not, however, consist in taking the side of a specific theological position but rather in an in-depth discussion of the problem, in which philosophical deliberations play a crucial part. This concerns two aspects of the topic above all: (1) the logical-semantic content of propositions about God. In this instance, al-Ġazālī's

analysis goes beyond earlier investigations, which were mainly looking to Arabic grammar, in that he employs the terms and instruments of Aristotelian logic (Gätje 1974 [\*103], Kukkonen 2010 [\*111], 2011 [\*112]); (2) the metaphysical implications of individual names of God such as *al-Ḥāliq* (the Creator), *al-Bārī* (the Originator), *al-Muṣawwir* (the Shaper), or *al-Hakam* (the absolute Wise); their internal differentiation encourages al-Ġazālī to develop certain ideas on the emergence and formation of the world which are in some respects close to Ibn Sīnā's concepts (Frank 1992 [\*229: 236–245]).

Introduction: Cause, purpose, and structure of the work; complexity of the subject matter – 1: Theoretical foundations of the investigation – 1: Three erroneous theological positions on the relation between a name (*ism*) of God; that which is named (*musammā*); and naming (*tasmīya*) – The need for a fundamental investigation of the problem, which must be based on normal language – Three kinds of existence: (1) in concrete individual entities (*fī l-a'yān*), (2) in the intellect (*fī l-adhān*) and (3) in language (*fī l-lisān*) – Name (*ism*) as a meaningful linguistic sign. Identity does not exist between a name and that which it names or the act of naming itself, neither in the form of (a) full identity, as in the case of synonyms, nor (b) of inclusive partial identity, as exists between species and genus, nor (c) of accidental identity, as between different characteristics of the same item. – Throughout the investigation, the name should be replaced with the term (*mafhūm*) for the name. It may be identical with what is named in the case of definitions of essence such as *dāt* (essence) or *mawḡūd* (being), although it must be distinguished from it in the case of further qualifications that describe qualities or relations – 2: All names of God denote something different, though their meanings are sometimes close to one another – 3: In the case

of equivocal names (*ism muṣṭarak*) only one of the possible meanings is applied to God – 4: Three levels on which God's names may be known: (1) as words (*alfāz*), (2) with their respective meanings (*ma'ānī*), or (3) in their true realities (*ḥaqā'iq*), the last of which is possible only by means of disclosure (*mukāṣafa*) – The latter generates the desire of approaching truth by means of possessing similar qualities. This leads to becoming similar to (*ṣabāḥ*) the angels, but not to God – The supreme (*niḥāya*) knowledge of God consists in knowing that we cannot achieve insight into His essence at all, and into His qualities only imperfectly – One may, however, say, 'I know only God,' because all being goes back to His eternal might. In so doing one touches on mysteries that must not be profaned (*ibtadāla*) in books – 11: The investigation – 1: Detailed explanation on the Ninety-nine Beautiful Names of God, from *Allāh* (God) to *al-Ṣabūr* (the Patient) – Afterword (*ḥātima*) in explanation: the exhortation that we should shape ourselves in accordance with God's traits (*taḥallaqū bi-aḥlāq Allāh*) means only that we can acquire qualities of the same name. It does not mean similarity (*mumāṭala*) to God, nor a transfer (*intiḳāl*) of His attributes onto us, nor a union (*ittiḥād*) or inherence (*ḥulūl*) – 2: Inquiry into the Sunnī tradition which ascribes only seven attributes of essence to God – Answer: There are numerous qualifications of God beyond these, which may be divided into ten classes – 3: Mu'tazilites and philosophers incorrectly derive all of God's attributes from His essence; this approach was refuted in the *Tahāfut* – 111: Additional considerations – 1: Besides the Ninety-nine Beautiful Names, further names of God have been transmitted – 2: The special position of the Ninety-nine Beautiful Names – 3: It is permissible to ascribe further traits to God, unless they have been ruled out by religious tradition.

### 3.4 Adopting Philosophy: Soul and Intellect. Ethics. Cosmology

*Iḥyā' 'ulūm al-dīn*

*The Renewal* [lit. *Revival*] *of the Religious Sciences*

A fundamental religious work frequently quoted to this day, written after al-Ġazālī left Baghdad in Dū l-Qa'da 488 / November 1095. Its objective is to unify knowledge and faith, practice of worship, ethics, and mystical experiences in a synthesis, presenting the result as a comprehensive guideline for the life of Muslims.

The text consists of four long parts each of which is divided into ten books. The first part (Books 1–10) is entitled 'Duties [towards God]' (*al-'ibādāt*), and discusses – after introductory chapters on knowledge (Book 1) and the profession of faith (Book 2) – all the questions that concern the relationship between humans and God in the context of worship and Islamic law (prayer, further religious duties, additional observances) – The second part (Books 11–20), entitled 'Customs' (*al-'ādāt*), analyses relationships between humans, explaining the correct manner of interaction for the different areas of social coexistence (marriage, social life, political life, food and drink, etc.) – The third part (Books 21–30) investigates the vices 'that lead us into doom' (*al-muḥlikāt*), such as vanity, mendaciousness, cupidity, etc. They must be uncovered by scrupulous self-examination, and fought against. At the same time, al-Ġazālī points out that the forces of the soul that are the bases of vice (greed and wrath) cannot be cast off entirely, but only controlled and kept balanced. – The fourth part (Books 31–40) discusses the things 'that lead to salvation' (*al-munǧiāt*), by mapping the believer's path to God. This path includes the stations repentance, patience and thankfulness, hope and fear, poverty and renunciation, trust in God, love of God, honesty and pure intentions, introspection, deliberation or contemplation, as well as, finally, death and the afterlife (on the development and structure of the work see Kokew 2023 [\*448: 14–21]).

The argumentation of the work is multi-layered throughout, linking purely rational forms of discussion (definition, distinction, verification) with moralising elements as well as numerous quotations from religious tradition. In this way, it emphasises the convergence of reason (*'aql*) and tradition (*naql*), envisioning a religious panorama fed by different, and previously mostly discrete, disciplines and teaching traditions: above all Sufism, but also philosophy, theology, jurisprudence etc. The individual believer is always the central concern, as regards orientation towards the afterlife and the consequences this has for life in this world. The main theme is thus anthropology and ethics based in religion. In keeping with this, al-Ġazālī emphasises in several passages that the *Iḥyā'* conveys only 'the knowledge of the correct behaviour' (*'ilm al-mu'āmalā*). An in-depth theoretical discussion of God, His attributes, and His works in the world, however, is not its intention, as it would be a task for the science or 'knowledge of disclosure' (*'ilm al-mukāšafa*), which is not the subject of this work (e.g. *Iḥyā'* [\*80: I 4,1–2; IV 428,7–8]).

As far as philosophy is concerned, this approach means that it can have only an ancillary function in the *Iḥyā'*. While al-Ġazālī repeatedly recurs to philosophical works for inspiration and as sources (Janssens 1988 [\*223], 2003 [\*54], 2011 [\*260]), in the majority of cases he adopts merely individual concepts and phrases which are not located on the structural level of the treatise and consequently cannot be documented within the remit of a work description. Therefore, only three of the *Iḥyā'*'s books will be described in detail; a fourth one has already been presented above (at 3.2. Classification and Assessment of the Sciences). They all occupy a special position within the overall work, as their subjects (knowledge/insight, the constitution of the soul, the education of the soul, thought) are part of the classical catalogue of philosophy, a fact reflected impressively in al-Ġazālī's deliberations.

The *Ihyā'* was first printed as early as 1269/1853 in Būlāq (Cairo), and has since circulated in numerous printed versions. A critical edition, however, is still lacking, with the result that the precise wording of the text as well as the internal structure of the individual books are not always established with certainty. In the following descriptions, the arrangement into main chapters, with roman numerals, follows the sub-titles in the current Arabic editions; the more precise division of the chapters, with Arabic numerals, have been added here.

Book 21 of the *Ihyā'*  
*ʿAḡāʾib al-qalb*  
*The Marvels of the Heart*

Introduction: The heart gives us the ability to recognise God and move closer to Him. To know the heart is to know oneself, which paves the way to knowledge of God.

I: The meaning of *qalb*, *rūḥ*, *nafs* and *ʿaql*. – 1: *Qalb* (heart) denotes two things: (1) the physical organ 'heart' which animals possess, too, and which falls under the purview of medicine, and (2) a spiritual reality which defines the essence of a human (*ḥaqīqat al-insān*) and is the seat of his knowledge and insight. (1) has a function subservient to (2); however, their precise relation cannot be described here as it is discussed in the sciences of the disclosure (*ʿulūm al-mukāṣṣafa*), which are not the subject of this book; in addition, it would be necessary to uncover the mystery of the spirit (*rūḥ*), which not even the Prophet did. – 2: *Rūḥ* (spirit) also denotes two things: (1) the subtle pneuma which guides our body and falls under the purview of medicine, and (2) a spiritual reality which corresponds to *qalb* in its second meaning. – 3: *Nafs* (soul) has several meanings, two of which are relevant here: (1) the bearer of wrath and desire within us; this is the sense in which the Sufis use the word, and this is meant when the Quran tells us that 'surely the soul of man incites to evil' (*inna l-nafs la-ammāra bi-l-sū*, at 12:53); (2) the human being as such (*al-insān*

*bi-l-ḥaqīqa*); in this sense it corresponds to the second meaning of *qalb* and *rūḥ*, and this is what is meant when the Quran speaks of the 'soul at peace' (*al-nafs al-muṭmaʾinna*, at 89:27). – 4: *ʿAql* (intellect, reason, or thought) has several meanings (as described in Book 1 of the *Ihyā'*), two of which are relevant here: (1) the understanding of the essences of things (*ḥaqāʾiq al-umūr*), and (2) the faculty of cognition, corresponding to the second meanings of *qalb*, *rūḥ*, and *nafs*. – 5. In meaning (1) the four terms thus each denote something different (the physical heart, the material pneuma, the desiring soul, knowledge), and in meaning (2), each denotes the same (the faculty of cognition, or the human as such). As this semantic variance has confused many scholars, it has been explained here.

11: The armies of the heart – 1: Two levels of armies (*ḡunūd*): external ones accessible to the vision of the eyes (*abṣār*), and internal ones accessible only to spiritual perception (*al-baṣāʾir*) – 2: The body as a vehicle (*markab*), knowledge as nutrition (*zād*) of the heart – 3: Three categories of internal army to each of which an external one is assigned: (1) desire for something and wrath against something, which combine to volition, as yet unguided by reason (with the associated external forces hands, legs, etc.); (2) the power or capacity (*qudra*) to carry out actions using the external organs: limbs, muscles, nerves; (3) perception (*idrāk*), which employs (a) the five external senses vision, hearing, etc., using the external organs: eyes, ears, etc., and (b) the five internal senses imagination (*taḥayyul*), memory (*hiḏḡ*), thought (*tafakkur*), recollection (*taḏakkur*), and common sense (*ḥiss muṣṭarak*); the latter do not have external organs but are located in the cavities of the brain (*taḡāwif al-dimāḡ*).

111: The hierarchy of powers – 1: The highest power of the heart comprises knowledge (*ʿilm*), wisdom (*ḥikma*) and thought (*tafakkur*); these form the party of God (*ḥizb Allāh*) in opposition to desire and wrath, which might join the party of Satan (*ḥizb al-ṣayṭān*). – In order to prevent this, thought must guide the other powers – 2: Three analogies to illustrate

the hierarchy of the powers: the soul as the king, the body as a city or kingdom, the intellect as a horseman and guide.

iv: The human heart as a specific case – 1: Animals, too, have desire, wrath, internal and external senses – Humans are distinguished by (1) knowledge of the things of this world and the afterlife and (2) a will guided by reason – 2: Both of these develop gradually while the human being is growing up, although there are great differences even among adults in this respect, regarding the volume of knowledge, type and speed of acquisition, etc. – The reason for this is not that God's mercy is lacking or unequal, but the difference in the disposition and purity of humans – 3: The highest knowledge and the perfection of the human being is knowledge of God, His attributes, and works – 4: The position of humans is between angels and animals. If humans aspire to knowledge, they resemble the angels; if they follow their desires, they resemble the animals – Examples of both – Traditions on the significance of the heart.

v: General qualities of the heart – 1: There are four tendencies in every human, namely to (1) predatoriness (*sabu'īyya*), (2) brutishness (*bahīmīyya*), (3) devilishness (*šaitānīyya*) and (4) divinity (*rabbānīyya*) – Tendency (1) is based on wrath, symbolized by the dog, (2) on cupidity, symbolized by the pig, (3) on tricks and deceit, (4) on the aspiration to knowledge and domination – 2: The character of a human results from the dominant tendency – This is frequently (1) and (2), which open the door to (3), but humans ought to be determined solely by (4) – 3: The heart as a polished, or dull, mirror of the influences stemming from these tendencies.

vi: The heart and the acts of knowledge/ insights – 1: The heart as the seat (*maḥall*) of knowledge and as the mirror in which things (i.e. the objects of our knowledge) are reflected – 2: Five causes that can prevent a reflection in the mirror or knowledge in the heart: (1) The heart is generally incapable, e.g. in the case of small children. (2) It is soiled and consequently dull, e.g. in the case of sinners.

(3) It is set up incorrectly with regard to the object. (4) It is separated from the object by a veil. (5) The direction in which the object could be seen is not known – The last-named occurs if one has no previous knowledge, as every new insight is based on two existing insights (*yaḥṣul ... 'an 'ilmayn sābiqayn*), that is, as its premises – 3: If these obstacles are not present, every heart can gain knowledge, as God has entrusted this gift to us into our possession (*amāna*) (cf. sura 33:72) – Purification through acts of obedience and rites are required in order that we may receive illumination through faith – 4: Three levels of believers: (1) Simple believers who follow others by imitation (*taqlīd*). Analogy: One believes Zayd to be in the house on the basis of the statements made by others. (2) Theologians who draw conclusions from evidence. Analogy: One believes Zayd to be in the house because one thinks one has heard his voice. (3) Those who know (*'arīfūn*) who rely on the light of certainty (*nūr al-yaqīn*). Analogy: One knows Zayd to be in the house because one has seen him there; however, there are different degrees of seeing and knowing.

vii: The heart and the sciences – 1: Differences between (A) rational and (B) religious sciences – (A) are divided into (1) necessary knowledge e.g. axioms, and (2) acquired knowledge, (2) in turn into (a) sciences of this world and (b) sciences of the afterlife – Parallel between seeing and recognising with the eye of the intellect – (B) rest on the uncritical acceptance (*taqlīd*) of prophetic tradition – 2: Rational and religious sciences are interdependent. Someone who uses nothing but *taqlīd* is ignorant, while someone who uses nothing but the intellect is deluded – Rational insight as nourishment, religious knowledge as remedy for humans – Someone who sees a contradiction (*munāqaḍa*) between the two, is blind in the inner eye – However, humans usually lack the capacity to dedicate themselves with equal intensity to the sciences of this life and those of the afterlife.

viii: Inspiration versus learning – 1: Acquired knowledge is founded either on



(1) learning (*ta'allum*) and drawing conclusions (*istidlāl*) or on (2) inspiration (*ilhām*), which is divided into (a) true inspiration (*ilhām wa-naft*) to Sufis and saints and (b) revelation (*wahy*) to the prophets – It is not the knowledge itself that differs (*naḥs al-'ilm*) but only the way in which it is revealed – 2: Description of the search for knowledge among the Sufis – 3: Followers of rational speculation (*al-nuẓẓār wa-dawū l-i'tibār*) do not rule out the possibility of Sufi knowledge, but they believe that it is methodically precarious and susceptible to errors.

IX: Illustration of the difference between the two – 1: Rational knowledge resembles a pond whose water is fed by several tributaries, namely sensory perceptions, etc.; inspired knowledge is like a pond fed by an underground source – 2: The world exists on four levels (*darağāt*): (1) in God's perfect plan of creation on the 'preserved tablet' (*al-lawḥ al-maḥfūẓ*), (2) in physical reality, (3) in the imagination, and (4) in thought. – Knowledge is generated either by the immediate revelation of (1) via inspiration, or by the gradual insight into (2) via rational reflection, as the heart has two gateways (*bābān*), one that opens onto the 'preserved tablet', the world of divine dominion (*malakūt*) and the angels, the other one to the sensory world of rule (*mulk*) and appearance (*ṣahāda*) – 3: Philosophers and scholars (*al-hukamā' wa-l-'ulamā'*) wish to recognise things and knowledge for themselves, while Sufis aspire to inner purification in order to be granted inspiration – parable in which Byzantines compete with Chinese to create a brilliant image: the Byzantines make a painting, the Chinese a reflecting surface, which shows the same image more brightly.

X: The validity of Sufi knowledge via inspiration – Instances from the Quran and the *ḥadīth*, testimonials and maxims.

XI: The whisperings of the devil, and fighting them.

XII: The paths the devil takes to the heart, namely vices, temptations, etc., and protection against them.

XIII: The degree to which these whisperings must be attributed to the humans themselves.

XIV: Is it possible to prevent these whisperings by means of remembrance (*dīkr*) of God entirely?

XV: The states of the heart change quickly.

Book 22 of the *Iḥyā'*:

*Riḡādat al-naḥs*

*The Education of the Soul*

The book's complete title is *Riḡādat al-naḥs wa-taḥdīb al-aḥlāq wa-mu'ālağat amrāđ al-naḥs* (*The Education of the Soul, the Refinement of the Character, and the Treatment of the Ailments of the Soul*)

Introduction: The good character as an attribute of the Prophet and of those 'entirely devoted to the truth' (*al-ṣiddiqūn*) and as 'one half of religion' (*ṣaṭr al-dīn*) – The necessity of studying and of fighting vices – Structure of the book.

I: The excellence of a good character, and criticism of the bad one – Quranic verses, *ḥadīth*, and Sufi traditions on the subject.

II: The essence (*ḥaqīqa*) of good and bad character – 1: Older attempts at definition grasped the individual fruits of good character rather than its essence – 2: Distinction between outer (physical) constitution (*ḥalq*) and inner moral constitution (*ḥulq*). The latter is a disposition based in the soul (*ḥay'āfi l-naḥs rāsīḥa*), out of which good or bad actions emerge. Character is thus neither the action nor the capacity to act nor the knowledge of the action, but a disposition of the soul that inclines to good or bad – 3: Just as the outer beauty of a human is based on several aspects, so there are several bases for inner beauty: (1) knowledge (*'ilm*), (2) wrath (*ğadab*), (3) desire (*ṣahwa*), and (4) justice (*'adl*) – (1) leads to wisdom (*ḥikma*), the highest of the virtues, while (2) and (3) serve to acquire wisdom, (4) orders the various forces in accordance with wisdom – 4: Virtue as a mean and balance (*i'tidāl*) between extremes, e.g. courage between foolhardiness and cowardice – 5: Four cardinal virtues (*ummaḥāt al-aḥlāq*): (1) wisdom, (2) courage (*ṣağā'a*), (3) temperance (*'iffa*), and (4) justice (*'adl*) – The equilibrium of these four principles (*uṣūl*) generates all other praiseworthy qualities as

ramifications (*furūʿ*), among these (1) wisdom generates good guidance and cogitation, (2) courage generates noble-mindedness and fearlessness, (3) temperance generates magnanimity and embarrassment – 6: The Prophet as the ideal embodiment of the virtues – Faith without doubt is the strength of certainty (*quwwat al-yaqīn*) and the fruit of thought (*tamarat al-ʿaql*).

III: Changing character through education – 1: Some deny the possibility of educating one's character with the argument that our inner disposition is as completely fixed as our outer constitution – However, there are variable as well as invariable elements in both cases – Four types of humans for whom the prospects of education are decreasing: (1) the ignorant, (2) the ignorant and erring (*dāll*), (3) the ignorant, erring, and sinful, (4) the ignorant, erring, sinful, and wicked (*šarīr*) – 2: Another objection says that wrath and cupidity can never be cast off entirely. The objective of education is not in fact to cast them off but to dominate them and find the right measure. In order to achieve this, the pupil must, however, be told, as an educational strategy, that anger and cupidity are to be rejected altogether.

IV: How does one achieve a good character? – 1: The balance of wisdom, wrath, and cupidity can come about in two ways: (1) from birth, in certain humans, e.g. the prophets; (2) through education and practice of the soul – 2: The virtues prescribed by religious law can be acquired only through regular observance of the rites and duties and the concomitant orientation towards God – 3: Every capacity we wish to acquire, whether penmanship or jurisprudence, generosity, tolerance etc., requires practice and habituation, and we can look to persons who possess it already as our models.

V: The path to purification – 1: Analogy between curing the body and purifying the soul, both of which aim at balancing the forces – 2: Each extreme within the body as well as the soul must be balanced by its opposite – 3: Examples of mistakes and weaknesses (ignorance, vanity, greed, etc.) and means of correcting them.

VI: Signs of the ailments and the cure of the heart – 1: The tasks of the heart are knowledge, love for God and veneration of God, which requires an orientation towards the afterlife. Deviation from this goal and orientation towards this world are ailments – 2: Treating one weakness (e.g. stinginess) must not result in its opposite (e.g. extravagance) but must bring about an equilibrium. This is the 'straight path' (Quran 1:6) which is, however, difficult to follow.

VII: How can one recognise the weaknesses (*ʿuyūb*) of one's own soul? – Four ways to knowledge: (1) consulting a master (*šayḥ*), which is the best but rarely used way; (2) consulting a friend, which may, however, lead to him flattering us or us not being able to bear his criticism; (3) learning from that which our enemies say about us; (4) observing what people like or dislike in other people, and drawing conclusions.

VIII: Instances and testimonies regarding the subject – 1: Quran, *ḥadīth*, Sufi traditions and axioms – 2: Regarding the orientation towards God, there are four types of humans: (1) those 'entirely devoted to the truth' (*al-ṣiddiqūn*) who look only to God; (2) those who look only to this world, who are doomed to eternal punishment; (3) those who look more to the afterlife, though not exclusively, and who can expect a brief period of punishment in hell; (4) those who look more to this world, though not exclusively, and who can expect a longer period of punishment in hell – 3: Individual ways to free oneself from worldly things, and difficulties in doing so.

IX: Signs of a good character – Faith as the fruit of a good character, hypocrisy as the fruit of a bad one – Instances from the Quran, *ḥadīth*, and Sufi tradition.

X: On the education of children – Parents' responsibility – Detailed advice on education.

XI: Preconditions for aspiring to the afterlife and progress on the path of practice – 1: Reasons for aspiration and lack of aspiration – 2: Four obstacles preventing us from seeking truth: (1) wealth, (2) pursuit of glory, (3) blind imitation (*taqlīd*), and (4) sin – Means to fight these – 3: Four kinds

of asceticism that support our aspiration: (1) reclusiveness (*ḥabwa*), (2) silence (*ṣamt*), (3) hunger (*ǧūʿ*), and (4) nocturnal vigil (*sahar*) – 4: Stations and distractions on the path of educating the soul.

Book 39 of the *Iḥyāʾ*  
*al-Taḥakkur*  
*Reflection*

Introduction: The great significance of reflection – *Ḥadīṭ*: One hour spent in reflection is better than a year of veneration

i: The excellence of reflection (*taḥakkur*) – Religious traditions and axioms on the subject.

ii: The essence of thought (*fikr*) – 1: Thinking means bringing two insights into the heart in order to gain a third one out of them (*iḥdār maʿrifatayn fi l-qalb li-yustaṭmara minhumā maʿrifa ṭālīṭa*). Exemplifying this definition with a syllogism, by means of which the precedence of the afterlife over this world is established – 2: Linguistic expressions for reflection/insight/cognition, some of which are synonyms (*taḥakkur*, *taʾammul*, *tadabbur*), while some denote the act of thinking under different aspects (*taḍakkur*, *iʿtibār*, *naẓar*). Thus, *taḍakkara* (to think of something) means that one recalls knowledge already possessed, while *taḥakkara* (to reflect) means that new knowledge is acquired – 3: New insights are gained from knowledge that is already familiar. Most humans, however, lack this capacity. If an insight is gained, this occurs either (1) through a divine light in the heart, which is generated by natural disposition (*fiṭra*), as in the case of the Prophet, or (2) by means of study and practice, which is the usual case – It is possible for humans to acquire knowledge and not know how it was acquired.

iii: The fruits of reflection – 1: Whoever acquires knowledge (e.g. concerning the primacy of the afterlife) changes the state (*ḥāl*) of his heart and the actions (*aʿmāl*) of his limbs. This is true of innumerable insights and their fruits – 2: The presentation is limited to the ways of thinking (*maǧāri al-fikr*) relevant

to the religious sciences (*ʿulūm dīniyya*) and the stations (*maqāmāt*) on the path to God.

iv: The ways of reflection – 1: Reflecting on religions means reflecting on (1) that which God loves about us and which brings us closer to him, (2) that which God dislikes about us and which moves us away from him, (3) God's essence, attributes, and names, and (4) God's works in the creation and his rule over heaven and earth. (1) and (2) are knowledge of the correct behaviour (*ʿilm al-muʾāmalā*), which is the subject of this book, (3) and (4) are knowledge of the disclosure (*ʿilm al-mukāṣafa*), which is not discussed here – 2: Detailed deliberations on (1) and (2), i.e. on our virtues and vices/sins – 3: Brief deliberations concerning (3), which is accessible only to those 'entirely devoted to truth' (*al-siddiqūn*), and to those only partially; they look upon God as the human soul looks at the sun, i.e. they see the light but cannot gaze upon it for any length of time, as their vision would grow dull. All others are confused by (3) in any case, as they look upon God as bats look at the sun, i.e. without being able to see Him at all.

v: Reflection on creation – Detailed deliberations concerning (4) with reference to numerous Quranic verses.

*Kīmīyā-yi saʿādat*  
*The Alchemy of Happiness*

Detailed, in parts free synopsis of the topics of the *Iḥyāʾ*, probably composed shortly before al-Ġazālī's return to teaching in 500/1106 (Bouyges 1959 [\*33: 60], Treiger 2012 [\*144: 13]). – Al-Ġazālī excerpted and summarised the *Iḥyāʾ* several times (Garden 2014 [\*65: 9–10]), but none of these adaptations enjoyed such popularity and success with readers as *Kīmīyā-yi saʿādat*. One reason for this was probably that the text was written in Persian, giving it greater resonance in court circles as well as among a broader readership. A further reason was its clear structure, using precise terminology while being linguistically most attractive. This is particularly true of the introductory passages which present four perspectives on cognition not discussed in

this systematic fashion in the *Ihyā'* (regarding further differences between the two works cf. Garden 2014 [\*65: 130–133]). – As a result of its popularity, the text was translated into several languages (such as Arabic, Turkish, and Urdu). Moreover, partial translations into English and German ensured it a solid position with European readers from the early 20th century onwards. – The below description follows the edition of the Persian original produced by Ḥusayn Ḥadīw Ġam, which supersedes the older Persian editions and reproduces the text in its entirety.

Preface – First introduction: On self-knowledge – Second introduction: On the knowledge of God – Third introduction: On the knowledge of this world – Fourth introduction: On the knowledge of the afterlife – I: On serving God (*ʿibādāt*) – 1: The doctrine (*iʿtiqād*) of the followers of the Sunna – 2: The search for knowledge – 3: Ritual purity – 4: Prayer – 5: Alms – 6: Fasting – 7: The pilgrimage (to Mecca) – 8: Reading the Quran – 9: Remembrance of God (*dhikr-i Ḥaqq*) – 10: The order of the Quranic recitations – II: Correct behaviour (*muʿāmalāt*). – 1: Rules for Eating – 2: Marriage – 3: Acquisitions and trade – 4: Distinguishing between that which is permitted (*ḥalāl*) and prohibited (*ḥarām*) – 5: Friendship – 6: Reclusive life – 7: Travel – 8: Music and devotion – 9: Commanding that which is good and prohibiting that which is bad – 10: Protecting one's subjects and the art of government – III: The things that lead to doom (*muhlikāt*) – 1: Educating the soul to overcome the vices – 2: The cure for the desires of the stomach and the genitals – 3: The cure for slander and the ills of the tongue – 4: The cure for wrath, hatred, and envy – 5: The cure for the love of worldly things – 6: The cure for love of money and of stinginess – 7: The cure for sanctimoniousness and hypocrisy when carrying out one's duties [towards God] – 9: The cure for arrogance and vanity – 10: The cure for delusion and negligence – IV: The things that lead to salvation (*munğiyāt*) – 1: Repentance – 2: Patience and thankfulness – 3: Fear and hope – 4: Poverty and asceticism – 5: Honesty and pure intentions – 6: Introspection

and self-monitoring – 7: Reflection and repentance – 8: Trust in God and profession of the one God – 9: Love and longing for God – 10: Death and the afterlife.

*Mizān al-ʿamal*  
*The Scales of Action*

Treatise on ethics that combines philosophical deliberation with concerns of Sufism. Al-Ġazālī integrates numerous motifs from older writings on ethics into his own system and argumentation. His most important source was probably a treatise by al-Rāğib al-Iṣfahānī (d. 452/1060) known under the title *al-Ḍarʿa ilā makārim al-ṣarīʿa* (*The Means [of Acquiring] the Noble Qualities of the [Religious] Law*) (Madelung 1974 [\*161], Sherif 1975 [\*163], Daiber 1991 [\*165], Mohamed 2011 [\*172], 2015 [\*173]). There are also recognisable references to Ibn Sīnā's writings on ethics (Janssens 2008 [\*171]) as well as, to a lesser degree, to Miskawayh's *Tahḍīb al-aḥlāq* (*The Refinement of Character*) (Mohamed 2015 [\*173: 188]).

The origin of the *Mizān* is generally dated to the year 488/1095, based on substantial evidence suggesting that the text was composed immediately after *Mi'yār al-ʿilm* (*The Criterion of Knowledge*) and before *Ihyā' ʿulūm al-dīn* (*The Renewal of the Religious Sciences*) (Bouyges 1959 [\*33: 28–29]; Hourani 1984 [\*43: 292–295]; Garden 2015 [\*67: 208]). Some scholars, however, suggest a much earlier or later origin, arguing in each case that statements from the *Mizān* agree most convincingly with other texts from the respective period (cf. the overview of these theories in Garden 2015 [\*67: 208–209 n.3]).

Introduction: The objective of the book is to determine the correct actions that, together with true knowledge (*ʿilm*) lead to happiness (*saʿāda*) – 1: Folly (*ḥamāqa*) and lack of belief (*īmān*) in the afterlife make humans negligent in their aspiration to the afterlife – 2: Despite differing ideas of the delights of the afterlife (among the common people, philosophers, and Sufis), there are good reasons for all humans to aspire to eternal bliss. It is only

their heedlessness that prevents them from doing so – 3: Simple believers, philosophers, and Sufis agree that knowledge and actions lead to bliss. This is in accordance with the spiritual nature of the soul – 4: The capacities of the soul: emotion (including desire and wrath), perception (external and internal senses), thought as a theoretical capacity (with the different grades of intellect) and a practical capacity – 5: The hierarchy of the forces of the soul; humans between angels and animals; to the insightful (*ḡawū l-baṣā'ir*), the wondrous arrangement of the human capacities is sign indicating God – 6: The correct actions cleanse the soul, enabling it to become a mirror for true knowledge – 7: For the Sufis, the path to knowledge leads exclusively through self-purification (*taḥīr maḥḍ*) and the opening of the soul that results from it. The 'theoreticians' (*al-nuṣṣār*), on the other hand, believe this to be problematic, as it may lead to uncontrollable states, such as mental illnesses or visions. As a result, they encourage active striving for true knowledge (*al-'ulūm al-ḥaqīqīyya*) with the aid of the 'criterion of knowledge' (*mi'yār al-'ilm*). Example of the Chinese and the Byzantines – 8: For most humans, the former and simpler path of the Sufis is suitable. Only someone who is young, in possession of a keen intellect, and who has found a knowledgeable teacher, should attempt to follow the second path. Such people, too, can renounce the world and devote themselves entirely to God (*al-taḡarrud li-llāh*) after acquiring demonstrative knowledge (*al-'ulūm al-burhānīyya*) – 9: Theoretical knowledge may be focussed on that which is contingent and particular (e.g. language) or eternal (e.g. God); in the latter case, it leads to the perfection of the soul. Practical knowledge is divided into ethics, economics, and politics. Among these three, ethics is prominent, as it educates the capacities of our soul, namely reason, desire, and irascibility – 10: The hierarchy of the forces of the soul corresponds to the hierarchy in a commonwealth; the need to maintain order and balance between the forces – 11: Degrees of overcoming one's

own passions; the danger of insincerity and deception; distinguishing between true and false by means of the 'criterion of knowledge' (*mi'yār al-'ilm*); guidance of knowledge by a divine light (*nūr ilāhī*) – 12: Ethical disposition (*ḥulq*) can be changed, but only with difficulty in those people who are (a) heedless (*ḡāfil*) or ignorant (*ḡāhil*), (b) in addition erring (*dāll*), (c) also sinful (*fāsiq*), or (d) in addition to everything else are evil (*ṣārīr*) – 13: The path to purifying and perfecting the soul leads through good actions and the resultant inclination (*hay'a*) to perform good actions – 14: Dianoetic and ethical virtues are acquired through (a) one's own continual efforts or (b) God's bounty (*ḡūd*), the latter in the case of prophets and saints (*awlīyā*) – 15: Kinds of purification of the soul in analogy with the cure of the body; the ideal of equilibrium (*i'tidāl*) and middle point between extremes – 16: Four cardinal virtues (*ummaḥāt al-aḥlāq*): wisdom (*ḥikma*) as the virtue of thought, courage (*ṣaḡḡā*) as the virtue of righteous wrath, temperance (*'iffa*) as the virtue of desire, and justice (*'adāla*) as the sum of the virtues (*ḡumlat al-faḍā'il*) – 17: Wisdom – 18: Courage – 19: Temperance – 20: Three reasons for aspiring to good or goods (*ḥayrāt*): (a) the prospect of reward or punishment; this applies to the general population and to children, (b) praise and criticism from people one respects; this applies to rulers and nobles, clever people and adolescents, or (c) striving for perfection of the soul; this applies to saints, and wise as well as truly knowledgeable persons (*muḥaqqiqū l-'uqalā*); contrary reasons are the various kinds of inadequacy and negligence – 21: Five kinds of goods: (a) of the afterlife, (b) of the soul, (c) of the body, (d) in society, e.g. wealth and power, and (e) given by God, e.g. guidance. They entail and support one another – 22: Different arrangements of the five goods and the types of happiness linked to them; true bliss (*sa'āda ḥaqīqīyya*) exists only in the afterlife – 23: The right balance regarding eating, sexual desire, and wrath – 24: Three kinds of actions of humans: fundamental, subservient, and supplementary; meaning and kinds

of political leadership; the meaning of instruction; the high rank of knowledge (*ʿilm*) and the intellect (*ʿaql*) – 25: The intellect as the seat of knowledge and wisdom; different kinds of acquiring knowledge – 26: The grades of the intellect; the rational sciences (*ʿulūm ʿaqliyya*) as a means to comprehending the religious sciences (*ʿulūm šarʿiyya*) – 27: Ten duties of the learner – Eight duties of the instructor – 28: The correct way to manage money – 29: Ways of preventing grief (*ḡamm*) in this life – 30: Preparing for death; ways of preventing the fear of death – 31: The characteristics of those who are on the path to God – 32: The contents of this book do not correspond to one particular doctrine (*maḏhab*). Many people allow only one doctrine, while others distinguish between (a) transmitted doctrine (Muʿtazilī, Ašʿarī, etc.) followed by imitation, (b) doctrine acquired through instruction, and (c) individual convictions one shares with truly like-minded persons only – Plea in favour of finding the truth (*al-ḥaqq*) by admitting doubt (*šukūk*) and by means of individual contemplation (*naẓar*).

*Miškāt al-anwār*  
*The Niche of Lights*

Short but influential text of religious philosophy, presumably composed between al-Ġazālī's work on the *Iḥyāʾ* and his return to the madrasa, probably shortly before 500/1106–1107 (Bouyges 1959 [\*33: 46–47], Hourani 1984 [\*43: 298], Treiger 2012 [\*144: 13]). An important piece of evidence in favour of this date is that the *Miškāt* is quoted in al-Ġazālī's Persian work *Kīmīyā-yi saʿādat* (*The Alchemy of Happiness*). This as well as a text by ʿAyn al-Qudāt al-Hamadānī (d. 525/1132), gives the title of the work as *Miškāt al-anwār wa-miṣfāt al-asrār* (*The Niche of Lights and the Filter of Mysteries*) (Landolt 1991 [\*228: 24]). The work enjoyed wide reception not only among Islamic authors such as ʿAyn al-Qudāt, Ibn Ṭufayl, Ibn Rušd and Faḥr al-Dīn al-Rāzī (Landolt 1991 [\*228: 64–72], Janssens 2016 [\*431]), but also in the form of two extant

medieval translations into Hebrew as well as a Latin version entitled *Finestra luminarium* (Steinschneider 1893/1956 [\*381: 345–346]).

The starting point of the text is (1) the Quranic verse known as the 'light verse' (24:35): 'God is the Light of the heavens and the earth; the likeness of His Light is as a niche wherein is a lamp, the lamp in a glass, the glass as it were a glittering star, kindled from a Blessed Tree, an olive that is neither of the East nor of the West whose oil wellnigh would shine, even if no fire touched it; Light upon Light; God guides to His Light whom He will. And God strikes similitudes for men, and God has knowledge of everything'; (2) a famous, but controversial in Islamic tradition, prophetic *ḥadīth* stating that 'God has seventy veils made of light and darkness. Were He to lift them, the sublimity of His face would burn everything that beheld Him [or: that He beheld]'. The aim of the deliberations is not, however, a philological or theological exegesis of these two texts, but a philosophical examination ranging from the semantics of the word 'light' through reflections on the symbolism of light and on illumination to a classification of the different degrees of the knowledge of God. Apparently al-Ġazālī took inspiration from Epistle 42 of the encyclopaedia of the Iḥwān al-Ṣafāʾ (cf. *PIW* I § 9.4.2), as demonstrated by Landolt (1991 [\*228: 22, 29–31]).

Introduction: The goal of the book is to present the mysteries of the divine lights on the basis of Quran 24:35 and the prophetic *ḥadīth* quoted above.

1. Differing understanding of the term 'light' among (a) the populace (*al-ʿawāmm*), (b) the elite (*al-ḥawāṣṣ*), and (c) the elite's elite (*ḥawāṣṣ al-ḥawāṣṣ*) – Origin of the understanding prevalent among the populace is the light as visibility (*ẓuhūr*) and making visible in the physical sense – Light as the faculty of sight, or the light of one's eyes; limitations of the faculty of sight – Light as the faculty of thought, called intellect (*ʿaql*), spirit (*rūḥ*), or soul (*nafs*); seven reasons why the term 'light' applies to the faculty of thought more than to sight – Delusory imaginations (*ḥayālāt*)

are unmasked by means of correct use of the intellect (with reference to the *Mi'yār* and *Mihakk*) – Immediate, i.e. necessary rational knowledge (*'ulūm ḍarūriyya*), and derived rational insights (*naẓariyyāt*) – The Quran as the highest wisdom and light – The visible 'world of appearance' (*'ālam al-šahāda*) is only a shell of the spiritual world, i.e. the 'world of divine dominion' (*'ālam al-malakūt*), or the world of light – The spirit of the prophets (and the scholars) as a lamp (*sirāğ*) – The celestial lights as fire (*nār*) – The hierarchy of the celestial lights – God as the highest and only true light (*al-nūr al-ḥaqq*), compared to which all others are called 'light' merely metaphorically – God as the true existent (*al-mawǧūd al-ḥaqq*) – The knowing ones (*al-'arifūn*) ascend from the metaphorical to the real, becoming aware in the process that, seen by itself, everything is as nothing and only becomes existent through God – Ascent as scientific insight (*'urfān 'ilmī*) or as tasting (*dawq*); the latter holds the danger of the self-identifying with God – Concluding remark: Visible and spiritual light in creation; God as the only true light and true being; ascent to God – Supplement/assistance: As there is visible light everywhere, so is God (perceivable) in all that exists; two kinds of achieving insight: gazing (*mušāhada*) and concluding (*istidlāl*); God's eternal presence within everything.

II. 1: Distinction between the 'world of appearance' and the 'world of divine dominion' – The ascent to the latter, also called 'religion' (*dīn*), is possible because there is correspondence (*munāsaba*) between the two worlds: things of the spiritual world have correspondences in this world in the form of images and symbols (*miṭāl*) perceivable by the senses – The hierarchically ordered spiritual substances (angels) are symbolised by the stars, moon, and sun, while God himself is above such representation (with reference to the Quranic verses 6:75–79 [Abraham's knowledge of God]) – Interpretation of symbols by means of dreams and prophecy – Quranic symbols, like the feather, preserved tablet,

parchment unrolled, and hand of God, as an expression for divine mercy – Humans are created in the image of the All-Merciful (*'alā šūrat al-Raḥmān*) – The necessity of understanding Quranic statements according to their outward as well as their inner meaning; criticism of the Bāṭinīs/Ismā'īlīs (inner meaning only) and the Hašwīs (outward meaning only) – Criticism of libertarian Sufis (Ibāḥīs), who ignore the outer form of the commandments – Prophets receive images when waking, too – 2: The degrees of capacity of the human soul: the faculty of perception; imagination (*ḥayāl*); rational spirit (*rūḥ 'aqlī*) possessing necessary knowledge (*ma'arīf ḍarūriyya*); thinking spirit (*rūḥ fikrī*) drawing conclusions from these; holy prophetic spirit (*rūḥ qudsī nabawī*) possessed by prophets and saints. Their 'tasting' (*dawq*) is higher than knowledge (*'ilm*), just as knowledge is higher than faith (*īmān*) by imitation (*taqlīd*) – 3: Exegesis of sura 24:35: The niche symbolises the faculty of perception, the glass the imagination, the lamp the rational spirit, the olive tree the thinking spirit, and the oil the holy prophetic spirit – Darkness symbolises ignorance, unbelief, passion, etc.

III. God is revealed in and of Himself (*mutağallīn fi dātihī li-dātihī*); the veils mentioned in the prophetic *ḥadīṭ* (see above) apply only to the humans who are veiled in various ways – A: Those who are veiled by pure darkness, i.e. the atheists (*mulḥida*) are (1) those who claim that the origin of the world is found in nature (*tabī'a*), and (2) those who do not enquire after the origin of the world because they are under the spell of (a) desire, (b) wrath and conflict, (c) wealth, or (d) ambition and glory – B: Those veiled by light as well as darkness are (1) those whose darkness is the result of sensory perception, i.e. (a) idolaters, (b) some of the distant Turks who are entirely devoted to beauty, (c) fire worshippers, (d) star worshippers, (e) sun worshippers, and (f) Iranian dualists; (2) those whose darkness is the result of ideas, i.e. (a) corporealists (*muğassīma*), (b) Karrāmīs, and (c) those who ascribe to God the direction 'on high'; (3) those

whose darkness is the result of wrong conclusions (*muqāyasāt ‘aqliyya fāsida*), i.e. (a) those who equate God's attribute with human qualities, (b) those who assume similarity between the two, and (c) those who reject anthropomorphism in theory, but practise it all the same – C: Those veiled by pure light only are (1) those who understand God's attributes correctly but believe God to be in direct relation to His creatures, describing Him as their ‘mover’ (*muḥarrrik*) or ‘guide’ (*mudabbir*); (2) those who presume the existence of several (spheres

of) heavens between God and this world and describe Him as the mover of the outermost sphere of heaven; (c) those who describe God as the one whom the mover of the outermost sphere obeys. Furthermore, there are (d) ‘those who have arrived’ (*al-wāṣilūn*), who have cast off all veils. They know that ‘He who is obeyed’ (*al-muṭā‘*), too, is connected with the movements of the cosmos. As a result, they describe God as the one who is separate from all being (*mawjūd*), and as the one who is truly One (*al-wāḥid al-ḥaqq*).

### 3.5 Critical Approaches to Philosophy: Metaphysics and Physics

#### *Maqāṣid al-falāsifa*

#### *The Intentions of the Philosophers*

Synopsis of Ibn Sinā's most important doctrines on logic, metaphysics, and physics – Secondary sources traditionally render the title of the work as *The Intentions of the Philosophers*. Recently, Shihadeh (2011 [\*416: 90–92]) has argued instead that *The Teachings of the Philosophers* would be a more appropriate translation.

When composing the *Maqāṣid*, al-Ġazālī appears to have used Ibn Sinā's Persian *Dānišnāma-yi ‘Alā’ī* (*Philosophy for ‘Alā’ al-Dawla*) as his model. Janssens (1986 [\*352: 168–177]) was able to establish numerous instances of dependence, calling the *Maqāṣid* a ‘traduction interprétative’ of the *Dānišnāma* because of this. Bernard (1991 [\*47: 230–240]), on the other hand, argued that al-Ġazālī made substantive changes to the original and that his approach should more correctly be seen as ‘appropriation’. We now know that the *Maqāṣid* also contain parallels with other writings of Ibn Sinā (Janssens 2003 [\*54: 38]). A more detailed analysis of the contents has furthermore shown that the text occasionally discusses topics that are not found in the *Dānišnāma*, especially in the lengthy middle section on metaphysics. Here the arrangement of the subject matter as well as certain questions suggest that the *Maqāṣid* were composed from a theological rather

than a philosophical point of view (Eichner 2009 [\*360: 11–22]). This gives the text a special character, explaining why it would later achieve separate influence in the Jewish and Christian as well as the Islamic contexts (for details see Griffel 2021 [\*446: Part 3, chap. 2]).

The preface to the text poses a particular problem; it is included in the majority of the textual witnesses although not all (on the details of manuscript transmission cf. Shihadeh 2011 [\*416: 77–89]). It tells us that the work is meant as a neutral introduction to philosophy and was composed in order for its readers to be better able to understand the refutation of the philosophers in the *Tahāfut al-falāsifa* (*Maqāṣid* [\*98: 12–3]). A comparable remark is also found in the book's conclusion (*Maqāṣid* [\*98: 111 76,18–77,2]). Consequently, scholars assumed for a long time that the *Maqāṣid* and *Tahāfut* were written immediately after each other, which would mean that the *Maqāṣid* was composed just before 488/1095 (Bouyges 1959 [\*33: 23–24] and many others). This assumption has now been abandoned as the subjects discussed in the two texts are too divergent to suggest a shared origin. The date of origin of the *Maqāṣid* is thus once again uncertain and the subject of debate in current research. Janssens (2003 [\*54: 48]) and Treiger (2012 [\*144: 11]) argue in favour of an early date, Griffel (2006 [\*251: 10]) suggests a late one (but cf. Griffel 2017 [\*271: 193–194], 2021 [\*446: Part 3, chap. 2]), while other authors



refrain from giving an opinion (Shihadeh 2011 [\*416: 78–79]).

The presentation of the text follows the arrangement in al-Kurdī's edition.

Preface – 1: Logic – Introduction: Benefits, subject matter, and division of logic – 1: Linguistic expressions (*alfāz*) and their subdivisions – 2: The simple universals (*al-ma'ānī al-kullīyya*): the five predicables – 3: Propositions or verdicts (*qaḍāyā*) and their subdivisions – 4: Conclusions (*qiyāsāt*), their figures and modes – Conditional syllogisms – The subject matter of the syllogism – Types of premises – Causes of wrong conclusions – 5: The demonstration (*al-burhān*) – Aims of the demonstration – Demonstration of 'Why' (*limā*) and of 'That' (*anna*) – The subjects, characteristics, questions, and principles of the sciences – Premises applied in proof.

11: Metaphysics – First introduction: Division of the sciences, i.e. philosophy – Second introduction: The subjects of the theoretical sciences – 1: Existence, its divisions and purpose – Substance and accident – Universal and particular – One and Many – Prior and posterior – Effect and Cause – Finite and infinite – Potential and actual – Necessary and possible – 2: The essence (*dāt*) of the necessary-existent (i.e. God) – 3: His qualities (*ṣifāt*) – 4: His works (*af'āl*) – 5: The emergence of things from the first principle.

III. Physics – 1: That which applies to all bodies; motion and rest – 2: Simple bodies; place (*makān*) – 3: Mixture and compound bodies – 4: The souls of plants, animals, and humans – 5: The effect of the active intellect on the souls – Miracles (*mu'jizāt*) and miraculous powers (*karāmāt*); the forces of the soul; the faculty of thought (*quwwa naẓariyya*); the faculty of imagination (*quwwa mutaḥayyila*); prophecy – Conclusion.

*MS London BL Or. 3126*

A London MS (MS London BL Or. 3126) contains an Arabic text whose title page and first pages are missing. With great expertise, the author presents various topics of metaphysics and mentions at the end that he discussed

certain questions in more detail in his book *Tahāfut al-falāsifa*. As a result, research originally assumed this to be an alternate version of al-Ġazālī's *Maqāṣid al-falāsifa*. It has since been established that the London MS contains an independent text, focused exclusively on metaphysics and discussing different questions than the *Maqāṣid*. At the same time, the evidence available so far suggests that the text was indeed written by al-Ġazālī (cf. Griffel 2006 [\*251: 1–21]; cf. also Akiti 2009 [\*257], who agrees with the attribution, as well as Griffel 2009 [\*258: 97–98]). The work may thus be taken as evidence that al-Ġazālī composed more than one work recapitulating the central theories of the philosophers. – The text is divided into seven treatises (*maqālāt*), the description of which follows the information in Griffel (2006 [\*251: 34–37]).

Introduction (incomplete in the manuscript)– 1: Principles and premises – Subject matter and benefits of metaphysics; thing and being; necessary, possible, and impossible; necessary existence; substances and universals; physical substances; prime matter; matter and form; precedence of form – 2: Categories – List and explanation of the ten categories – 3: Concomitants (*lawāḥiq*) of the categories – Nine categories as accidents (*a'rāq*); details on 'quantity' (unity, number, dual, multiplicity) and 'quality' (e.g. knowledge), and their relation to each other – 4: Accidents and kinds (*aṣnāf*) of being – Necessary, possible; one, many; prior, posterior; eternal, temporal; perfect, imperfect; potential, actual; universal, particular; cause, effect; their relation to each other; the finiteness of causes – 5: The necessarily-existent One – His existence and His qualities – 6: The necessarily-existent One – His effects, incl. cosmology – 7: Teachings and consequences (*lawāḥiq*) to be gained from this book – The origin of the elements; providence; the order and hierarchy of beings; the intellect as the 'king who is obeyed naturally' (*malik muṭā' bi-l-ṭab'*); prophetic dream and prophecy; sovereignty and happiness; spiritual delights; the degrees of people who know; the mysteries of signs – Conclusion.

*Tahāfut al-falāsifa*  
*The Incoherence of the Philosophers*

Extensive critical discussion of central theories of philosophy, especially Ibn Sīnā's, and at the same time one of the major works of philosophy in the Islamic world. – After the Preface and the Introduction, the book is divided into twenty chapters, some of them very detailed, which discuss sixteen issues of metaphysics and four of physics. All the sections end in a criticism of 'the philosophers', but the gravity of the errors al-Ġazālī criticises is not always the same. On the contrary, he distinguishes between (1) three theories of the philosophers that lead to unbelief (chap. 1, 13, 20), (2) nine theories of the philosophers that are heresies (chap. 2, 3, 6–8, 15–17, 19), and (3) eight instances in which the philosophers champion acceptable doctrine, but base it on flawed, incoherent arguments that contradict their own principles (chap. 4, 5, 9–12, 14, 18).

The foundation of the entire argument is thus methodological criticism. By his own account (*Tahāfut* [\*100: 7,16–8,4]), al-Ġazālī's objective is not to establish true doctrine but to reveal that 'the philosophers' err in the issues he discusses. They do this because in metaphysics as well in physics they diverge from the rules they themselves established in logic, regarding the certainty of premises and the validity of conclusions, which leads them to results that are untenable as to substance and inconsistent as to the argumentation. The *Tahāfut* thus challenges the dogmatism of philosophy and is part of the tradition of sceptical texts. In addition, however, it offers a series of innovative ideas on the issues discussed (despite al-Ġazālī's assurances that it is not his intention to make any positive statements). These show the author to be an original thinker whose deliberations certainly contain impulses for a critical development of the traditional, primarily Aristotelian-Neoplatonic, philosophy of his time; this is particularly true of chapters 1 and 17.

This explains the unusual title of the book *Tahāfut al-falāsifa*. Since the standard edition published by Bouyges in 1927, it has been

translated as *Incohérence des philosophes*, or with corresponding expressions in other European languages [\*100: regarding Bouyges' reasons cf. the preface to his edition, p. x–xi]. More recently, there have been objections to this translation. Burrell, for instance, suggests translating the title as *The Destruction of Philosophy* (in his preface to Said 2013 [\*194: XIII]), while Treiger, having investigated every instance of al-Ġazālī using the word *tahāfut*, concludes that *The Precipitance of the Philosophers* is the correct translation (Treiger 2012 [\*144: 108–112]; Garden 2014 [\*65: 6] agrees). In the background of this discussion is a problem to which Bouyges already referred: the Arabic term *tahāfut* is used neither by al-Ġazālī nor by other contemporary or later authors, who must have been familiar with his book, in an unambiguous fashion. Its semantic field is wide-ranging, comprising meanings such as 'inconsistency', 'disintegration', and 'collapse', but also that someone stumbles 'head over heels' or 'runs headlong to his doom' (instances in Bouyges and Treiger op. cit; cf. also Marmura in the preface to his 1997/2000 bilingual edition of the text [\*100: XXVI]). The translation as *The Precipitance of the Philosophers* can thus be justified. It is doubtful, however, whether it really best covers the range of associations the Arabic title was clearly intended to evoke. Ultimately, it seems to have been al-Ġazālī's goal to show that the philosophers contradict themselves as well as each other, hence his use of the reciprocal form VI of the Arabic root. As a result, he holds, their system of theories collapsed like a house of cards. There are thus also reasons to retain the translation 'incoherence': not only has it long been established in research literature, but also it denotes the fundamental problem of philosophy – the self-contradictions – that the author intended to reveal in the *Tahāfut*.

According to the colophon of one manuscript, the text was completed on 11 Muḥarram 488 / 21 January 1095 (Bouyges 1959 [\*33: 23–24]), which agrees with al-Ġazālī's autobiography, where he tells us that during his time in Baghdad (484–488/1091–1095) he

spent two years studying philosophy and a third year refuting it (*Munqid* [\*60: 18,13–15; Engl. transl. 70]). The volume, stringency, and wealth of ideas in the *Tahāfut*, however, have given rise to doubts concerning its composition during a single year. Griffel (2009 [\*258: 97]), for instance, argues in favour of assuming a time of origin of several years, which seems plausible but has not been possible to substantiate in the sources.

The below description of the text follows the arrangement Marmura provided in his Arabic-English edition [\*100], but adds additional subdivisions in numerous places.

Preface: the errors of philosophy must be uncovered, as the reputation of some of its exponents (such as Socrates, Hippocrates, Plato, and Aristotle) have lured many people to imitate (*taqlīd*) their doctrines blindly – First introduction: focus on Aristotelianism in the form conveyed (*naql*) by al-Fārābī and Ibn Sīnā – Second introduction: three forms of dissenting with the philosophers: (1) in purely linguistic form (*lafẓī*), which does not give rise to problems; (2) the wording of religious tradition contradicts a confirmed philosophical (here: astronomical) insight, requiring metaphorical interpretation of the tradition; (3) the philosophers contradict a principle (*aṣl*) of religion and must consequently be refuted – Third introduction: the aim of the treatise is not to provide proof of truth, but rather to reveal the incoherence of the philosophers and their proximity with other heterodox doctrines, like those of the Muʿtazila; in the case of the philosophers the opposition (*taʿarruḍ*) to religion is particularly entrenched and persistent – Fourth introduction: the philosophers are wrong to claim that mathematical knowledge is required in order to understand metaphysics. Their insistence on logic, on the other hand, is justified, although they do not meet their own theoretical demands in the practice of argument – Table of contents; limiting the scope to topics of metaphysics and physics, while logic, which is necessary for understanding them, will be demonstrated in *Mīyār al-ʿilm*.

#### [Part I: Metaphysics]

Chap. 1: Refutation of the theory that the world had no beginning – 1: The philosophers' first argument, with reference to 'change': the world cannot have a beginning, as its emergence within time would be possible only if God, as the initiator of creation, had undergone a change. This also applies if God's will is assumed as the starting point of the act of creation – Four replies that claim, among other things, that this is based on an incorrect understanding of 'will' – 2: The philosophers' second argument, with reference to 'time': God cannot precede the world in time, as another, eternal time would have had to exist before the time concurrent with the world. There is only one time without beginning, and with it motion without beginning, and one moving entity without a beginning, i.e. the world – Three replies: (1) Time came to be only with the origin of the world. (2) Statements such as 'God was and the world was not' do not accord objective existence to time which would be linked to God's existence by the word 'was', but denote a temporal relation between the statement and us. (3) The philosophers' fundamental problem is the weakness of human imagination, which cannot imagine a beginning of the world without a 'before' – 3: The philosophers' third argument, with reference to 'possibility' or 'potentiality': as there always was the potential of the world's coming into being, that which is possible (i.e. the world) must always have existed – Reply: in this case, it would never have been (only) possible – 4: The philosophers' fourth argument (still regarding 'potentiality'): the potential of existence always presupposes a carrier to which it can be allocated, namely matter – Three replies, documenting that 'possible', 'impossible', and 'necessary' are purely rational judgements (*qaḍāyā ʿaqlīyya*) which relate to universals of reason rather than to concrete existing particulars.

Chap. 2: Refutation of the theory of the infinity of the world, time, and motion – Six arguments by the philosophers stating that the passing of the world is impossible to imagine,

with reference to 'change', 'time', 'possibility', the substrate of possibility, the continued existence of the sun (Galen), and the impossibility of causing non-existence, which is neither thing nor action – Six replies with reference to the arguments already submitted in chap. 1, to the logical inconsistency in Galen's 'sun argument', and to God's will as the cause of existence and non-existence.

Chap. 3: The philosophers' claim that God made (*fā'il*) and produced (*ṣāni'*) the world, which is consequently His work (*ṣan'*, *fī'l*), is meant metaphorically rather than literally – The philosophers' theories: there is someone who made the world, He is God and the world is His work – Reply: these claims are deluded (*talbīs*), as they contradict the principles embraced by the philosophers in three ways: (1) He who makes something (*fā'il*) must have the will to do so (which the philosophers deny the First Cause). (2) Making or producing something (*fī'l*) means to bring it into existence out of nothing, i.e. it presupposes coming into being within time, which the philosophers deny in the case of the world. (3) As the philosophers believe that only one thing could be generated by the First Cause, the world with its multiplicity cannot be the creation of that Cause; detailed presentation and refutation of Ibn Sīnā's cosmology.

Chap. 4: The philosophers are unable to prove the existence of the creator (*ṣāni'*) of the world – The doctrine of the philosophers, according to which there is a world of eternal duration, generated by one cause, is an illogical compromise between the true doctrine (a world that originated within time and was created by God) and the doctrine of the eternalists (*'dahriyya'*, that is, an uncaused world of eternal duration, without a cause) – The philosophers' arguments against an eternal world without a cause are not tenable according to their own principles – Their argument that everything must go back to a First Cause in order to avoid an infinite series of causes is also not tenable, as they do presume infinite series in other cases, e.g. of moments in time, or of souls.

Chap. 5: The philosophers are unable to prove that God is One and that there cannot be two necessarily existing ones – 1: The philosophers' first argument: if there were two necessarily-existing ones, they would form a species which would apply to both, which would result in contradiction – Reply: the difficulty is the result of the philosophers' imprecise use of the term 'necessarily existing'. If it is defined (correctly) as something existing 'without a cause', the term can indeed be applied to more than one entity – 2: The philosophers' second argument: two necessarily-existing ones would have to be different from one another and consequently display some form of composition or multiplicity, which is impossible in the case of God. – Reply: the philosophers, too, have different names for the First Cause, like the First, Principle, Necessarily Existing, Substance, pure Good, etc., and they would have to explain how they understand the relation between unity and multiplicity in the context of God.

Chap. 6: The philosophers deny the existence of the divine attributes – The philosophers claim, as do the Mu'tazilis, that God's qualities coincide with His essence. Attributes added to His essence (*ṣifāt zā'ida 'alā dātihī*) could not exist, as this would imply multiplicity in God. They provide two arguments: (1) The attributes are dependent on the essence and generated by it, God's essence would thus be their effective cause – Reply: the attributes are not generated by the essence, but are immanent within it (*qā'im bi-l-dāt*); the essence is thus at most their receiving cause (*'illa qābiliyya*) – (2) In this case they would be His accidents, which would also imply a mutual dependence and composition within God – Reply: this is not the case. Rather, the way in which the philosophers, e.g. Ibn Sīnā, explain divine qualities like knowledge results in the assumption of multiplicity in God.

Chap. 7: Refutation of the theory that God cannot share the genus of anything but differ with respect to species – The philosophers' argument: whatever the First Cause shares

with others concerns only concomitants such as existence, causality, and substantiality, but not the quiddity (*māhiyya*) – Two replies: (1) In the form of a critical enquiry (*muṭālaba*): the philosophers' proof of the existence of God only proves the existence of something that has no cause and is consequently necessarily-existing. It does not prove the additional claims that there can be only one necessarily-existing one, and that it does not possess quiddity – (2) In the form of a refutation (*ilzām*): the philosophers themselves teach that the First Cause is an intellect; consequently it does share a generic reality (*ḥaqīqa ġinsiyya*) with the other (celestial) intellects.

Chap. 8: Refutation of the theory that the First One is pure existence without quiddity or reality, and that its necessary existence corresponds to the quiddity in others – Two replies: (1) This, too, is a wrong conclusion drawn from the imprecise term 'necessary existence', which only states that something has no cause, but not that it has no quiddity or reality – (2) Existence without quiddity and thus without reality is not intelligible, and cannot be comprehended by us at all.

Chap. 9: The philosophers are unable to prove that God is not a body – Argument: only if one recognises that a body is by definition temporal and caused can one rule out that God is a body. However, as the philosophers consider an eternal body (= the world) to be possible, they cannot rule out God's corporeality – Several objections by the philosophers, and al-Ġazālī's replies.

Chap. 10: The philosophers are unable to prove that the world has a creator (*ṣāniʿ*) and a cause (*ʿilla*) – Argument: only if one presupposes that all bodies originate within time is it compulsory to presume a creator of the world. However, as the philosophers presume an eternal world, they might as well follow the *Dahrīyya*, who assume an eternal world without a creator – Several objections by the philosophers, and al-Ġazālī's replies.

Chap. 11: The philosophers are unable to prove that God knows something else other

than Himself, and knows of genera and species in a universal fashion – As the philosophers presume an eternal world, they must explain why God should know about things at all – Two arguments by Ibn Sīnā: (1) Being pure intellect, God knows all the intelligibles – Reply: this is not proof, but begging the question – (2) As God is the agent (*fāʿil*) for things, He must know them – Replies: (a) This does not apply in the case of a cause that works of its essence and not of its volition – (b) Even if this were the case, the necessarily-existing One would know only the first intellect as – according to Ibn Sīnā – it is the only entity he has generated (directly).

Chap. 12: The philosophers are unable to prove that God knows Himself – Argument: one who knows oneself knows what one has generated. As the philosophers are unable to prove God's knowledge of other entities, they cannot rule out that He does lack knowledge of Himself and just works unconsciously, like fire or the sun – Several objections by the philosophers, and al-Ġazālī's replies.

Chap. 13: Refutation of the theory that God does not know the particulars in their chronological sequence, i.e. as that which was, is, and will be – Presentation of the philosophers' doctrine: those philosophers, such as Ibn Sīnā, who attribute to God knowledge of other entities besides Himself claim that He has knowledge of the particulars in a universal fashion (*ʿilm<sup>an</sup> kullīyy<sup>an</sup>*). Changing knowledge that follows chronological developments, as in Ibn Sīnā's example of knowing an eclipse, must be ruled out in the case of God, as His knowledge is intellectual and not based on sensory perception. Even so, He has knowledge of all things (the sun, humans, etc.) with all their attributes and accidents, as He created them – Replies: (1) If this were the case, God would have only general knowledge that humans may or may not believe, but He would not know whether a particular person is a believer now – (2) It is wrong to assume that a chronological sequence of objects of knowledge implies a change in God's eternal knowledge, and not merely a change in

relation between Him and the objects. God can always have known what will happen, and can now create the knowledge within us that, e.g., Zayd will come tomorrow – Several objections and replies – (3) The philosophers above all ought not to rule out that God's eternal knowledge changes, as they consider it to be possible that something eternal, namely the world, can change – Several objections by the philosophers, and al-Ġazālī's replies.

Chap. 14: The philosophers are unable to prove that the sky is a living being that venerates God through its circular movement – The theory is conceivable and may even be rationally provable. The philosophers' arguments, however, are not compelling (*qaṭʿan*) but have only the status of opinion (*ẓann*) – Several considerations from the philosophers about the cause of heavenly motion, each of which al-Ġazālī rejects as not being conclusive proof.

Chap. 15: Refutation of the theory that heavenly motion strives for a purpose (*jarad*) – The philosophers' doctrine: heavenly motion is an expression of obedience towards God and of an aspiration to draw nearer (*taqarrub*) to Him. Both these are active in the hierarchy of creatures (various classes of angels, humans), whose shared objective is order and becoming more similar to God – Reply: the association of order and perfection with precisely this kind of movement is not mandatory. The alleged approximation to God could also be achieved by means of other movements or indeed rest, as God is unchanging.

Chap. 16: Refutation of the theory that the celestial souls have knowledge of all the particulars in the world and are denoted by the phrase 'preserved tablet' (Quran 85:22) – The philosophers' doctrine: the celestial souls give rise to circular movements deliberately, generating chains of causes that yield events in the sublunar world. Consequently, the celestial souls know all causes and all particular effects in the world, and are able to impart knowledge of them to humans in their sleep, in the form of veridical dreams, and to prophets while they are awake, as revelation – Reply: the prophets (and the sleeping) could have

received their knowledge just as well from God or from an angel. Furthermore, several premises in the philosophers' doctrine are doubtful or false, for instance the deliberate movement of the sky, particular volition and knowledge of the souls, and knowledge of the future.

[Part II: Physics]

Introduction: 1: Division of the sciences of nature into eight fundamental disciplines (corresponding to Aristotle's *Physics*, *On the Heavens*, etc.) and seven branches, namely medicine, astrology, physiognomy, dream interpretation, telematic art, magic, and alchemy – 2: From the point of view of religion, only four of the philosophers' statements regarding physics are problematic, namely the topics of chapters 17–20. – 3: The statement that causal connections are necessary (chap. 17) has led the philosophers to denying numerous miracles. They recognise three kinds of miracles only: (1) the adoption of images from the 'preserved tablet' by prophets and in dreams, via the imagination; (2) intuition (*ḥads*), i.e. immediate comprehension, in the case of holy souls, via theoretical ability; (3) influencing one's own as well as foreign bodies, via practical ability. Besides these, however, numerous kinds of miracles are documented, whose existence must not be denied.

Chap. 17: [On causality and miracles] – The connection (*iqtirān*) between two entities or two events that neither are identical nor imply one another, such as drinking and slaking one's thirst or coming in contact with fire and burning etc., is never necessary (*darūri*), but subject to God's predetermination (*taqdir*) – Three stages (*maqām*) of the discussion with the philosophers – 1: First stage: some philosophers claim that the effective causes of processes happening to things are part of the nature of things, and that these consequently always have the same effect, e.g. it is in the nature of fire always to burn – Reply: we observe merely that cotton burns on (*'inda*) coming on contact with fire, but we cannot know whether it burns because (*bi*) of the contact. In addition, the philosophers themselves

frequently assume higher causes for processes in the sublunar world, such as the Active Intellect, and that one often recognises the true causes of a process only gradually; example of the blind man who becomes sighted, and gradually understands the preconditions of seeing – 2: Second stage: some philosophers recognise the causal effect of higher principles but regard these as necessary and always constant. The fact that the same higher principle can have different effects in the world, as with the sun which tans the face of the washers but bleaches their clothes, is explained by them through the different dispositions of things in the world – Two possible ways (*maslakān*) of responding: (1) We assume that every individual thing or event in the world is created by God immediately (occasionalism). In order for us to have certain knowledge of things or events, which the philosophers deny under these conditions, God creates the knowledge of each event in us – (2) We assume that the things in the world possess causal effective forces whose effects cannot be calculated due to the multitude of contributing forces and dispositions, obstacles and interactions. While in this instance there is causality within the world, the totality of processes is so complex that we will never be able to understand them fully, and can never rule out any process, however unusual (including all kinds of miracles), as impossible – 3: Third stage: inquiry of the philosophers, as to where the boundary of what is possible or impossible for God would be in this assumption – Answer: impossible for God are only transgressions against relations of identity and of implication, as well as transformation of genera. Everything else is possible, for instance creating movement for a dead body, a reference to the punishment of the grave.

Chap. 18: The philosophers are unable to prove that the human soul is a subsistent spiritual substance that occupies no space and is neither a body nor connected to a body – 1: Description of the various capacities of the soul according to the doctrine of the philosophers – 2: Recognition of the

description and agreement with the doctrine according to which the human soul is a subsistent spiritual substance. One must not, however, claim that this doctrine was rationally proved by the philosophers and requires no affirmation from the revelation – 3: Ten arguments by the philosophers supporting the substantiality and spirituality of the soul together with objections and replies.

Chap. 19: Refutation of the theory that the human souls, once they enter existence, cannot no longer die – The philosophers put forward two arguments: (1) The soul must die as a result of the body's death, of its opposite emerging, or of an outside force, all of which are impossible – Reply: the impossibility is not proven in any of these cases; furthermore, there may be further reasons for its passing – (2) The potential for dying requires a material substrate. As the soul is pure substance without a substrate, it cannot die – Reply: this corresponds to one of their arguments in chap. 1 and was already refuted there.

Chap. 20: Refutation of the theory that there is no resurrection of the flesh, no fires of hell, and no sensual delights of paradise, as the respective statements are only allegories (*amṭila*) for the spiritual reward and the spiritual punishment addressed to the common people (*al-ʿawāmm*) – Doctrine of the philosophers: as the spiritual (knowledge, purity) ranks above the physical, there will be only spiritual delights in the afterlife; the promise of physical pleasures must be understood symbolically – Al-Gazālī's comment: we share the anticipation of spiritual delights but believe the rejection of physical pleasures to be wrong, as these pleasures are documented in the Quran and are rationally possible – Two arguments by the philosophers against the possibility of physical resurrection: (1) Every possible way in which the human soul could return into the body (return into the old body, entering a new body, 'soul' as a mere vital function of the re-created body) is problematic and ultimately to be ruled out – Reply: no argument against it is compelling. The soul can continue to exist and enter into a new

body – (2) The creation of a new body using existing matter would involve a lengthy process rather than being a simple creative act in the manner of the divine ‘Let there be!’ (*kun*) – Reply: this is correct, but it should have been proved by now that God can act in complex and variable ways; cf. the conclusions in chap. 1 (creation within time is possible) and chap. 17 (God can act unexpectedly, whether immediately and without a secondary cause, or by generating causes in a different way to

which we are not accustomed [*iḥdāt asbāb ‘alā manhaǧ āḥar ǧayr mu’tād*]).

Conclusive question: are the philosophers unbelievers? – Reply: unbelief is present only in the three instances (chapters 1, 13, 20) in which their doctrine contradicts the revelation – The philosophers’ views on the divine attributes and on causality resemble the doctrine of the Mu’tazilis, and they share other errors with other heretics.

## 4 Doctrine

4.1 Al-Ġazālī’s Attitude to Philosophy – 4.2 Agreement with Philosophy: Incorporating Logic (and its Application to the Doctrine of God) – 4.3 Adopting Philosophy: Methodological Preconditions. Soul and Intellect. Ethics. Cosmology – 4.4 Critical Approaches to Philosophy: Metaphysics and Physics

### 4.1 *Al-Ġazālī’s Attitude to Philosophy*

Al-Ġazālī did not regard himself as a philosopher; rather he was striving for a fundamental renewal of religious thought and life. Hence the title of arguably his best-known work, *Iḥyā’ ‘ulūm al-dīn* (*The Renewal* [lit. *Revival*] *of the Religious Sciences*) and his aspiration to become ‘the renewer’ (*al-muǧaddid*) of Islam at the beginning of the 6th/12th century (Ormsby 1991 [\*48: 134]). Al-Ġazālī intended to synthesise different intellectual trends, first and foremost Sufism, to which he felt fundamentally committed, but also philosophy (which he understood as the Aristotelian-Neoplatonic tradition, and in particular Ibn Sīnā’s teachings), Aš‘arī theology, and legal science. This approach required him to investigate the different traditions critically, and to decide whether they were sufficiently compliant with the truth to contribute to his synthesising project.

In the case of philosophy this investigation had a most remarkable outcome as it led to the composition of the *Tahāfut al-falāsifa* (*The Incoherence of the Philosophers*) [\*100]. In this famous text, al-Ġazālī attacks central tenets of metaphysics and of physics, earning him a reputation as arch-critic of philosophy not only among his contemporaries but also in modern research. What is more, modern research stated from an early date that his attack against Ibn Sīnā had ‘dealt a blow to philosophy from which it would never again recover in the Orient’ (Munk 1859 [\*18: 382]). The conclusion drawn from this would leave



profound historiographical traces. It was assumed that al-Ġazālī's criticism led to a decline in philosophical studies in the 6th/12th century, ceasing altogether around 1200 (cf. PIW 1, Introduction). This theory was repeated frequently from the mid-19th century onwards, and still echoes in some publications to this day, albeit with certain reservations (cautiously Ormsby 2008 [\*58: 65]; explicitly Gutas 2018 [\*437]). As further research has in the meantime shown, though, it is hardly a tenable thesis – at least not in this form – as it ignores two weighty factors. On the one hand this concerns the influence al-Ġazālī exerted on later thinkers, as his writings by no means put an end to philosophical discussion in the Islamic world, instead challenging and transforming it (cf. § 3.5 below). On the other hand, his own thought was, for all the criticism expressed in the *Tahāfut*, profoundly and lastingly informed by philosophical concepts, questions, and methods. This influence has been established regarding several of al-Ġazālī's works in recent decades. These include not only his texts on logic (such as *Mi'yār al-'ilm* and *Mihakk al-naẓar*) and ethics (above all *Mizān al-'amal*), whose focus is on philosophical topics in any case, but also treatises that extend far into the field of religious thought. One instance of these is *al-Maqṣad al-asnā fī šarḥ [ma'ānī] asmā' Allāh al-ḥusnā* (*The Most Sublime Goal of the Explanation of [the Meaning of] 'God's Beautiful Names'*) [\*11], whose engagement with Ibn Sīnā has been demonstrated impressively (ground-breaking is Frank 1992 [\*229]; continued by Griffel 2009 [\*258: 236–246]; additional parallels with Ibn Sīnā's texts in Janssens 2014 [\*263]). A further instance of even greater substantive weight is the *Ihyā'*. Here too, we find numerous passages that refer to philosophical concepts, displaying a close textual relation with Ibn Sīnā's works (Janssens 2003 [\*54: 45–49], Ormsby 2008 [\*58: 121], Janssens 2011 [\*260], Treiger 2012 [\*144: 17–80], Garden 2014 [\*65: 67–75]). The upshot of these observations is ambivalent: al-Ġazālī criticises the philosophers harshly in one major work (the *Tahāfut*), but in another (the *Ihyā'*) uses their ideas and arguments for his own purposes. This alone is enough to show that his attitude to philosophy was a complex one and cannot be reduced to straightforward antagonism.

Al-Ġazālī is famous for having given divergent answers to many questions in his various works. One instance is the dogma of the resurrection of the flesh, which he declares to be the indispensable core of the faith in *Tahāfut* [\*100: Chap. 20], only to modify the statement later in *Ġawāhir al-Qur'ān* (*The Jewels of the Quran*) (Tamer 2015 [\*308: 75–76; cf. 71 n. 86]). Another is his answer to the question of whether we are able to recognise what is good and what is bad by means of our intellect only, i.e. without recourse to the revelation. In *Mizān al-'amal* (*The Scales of Action*), a treatise on ethics, he clearly answers in the affirmative, while his major work of law entitled *al-Mustaṣfā min 'ilm al-uṣūl*

(*The Purified Extract of the Science of the Principles [of Law]*) answers in the negative (Rudolph 2019 [\*310: 81–82]). These kinds of divergences have earned al-Ġazālī the accusation of being an inconsistent thinker, an accusation levelled from an early date and most explicitly by Ibn Rušd, arguably his most prominent opponent. In a famous passage in *Faṣl al-maqāl* (*The Decisive Treatise*), he accuses al-Ġazālī of being ‘a turncoat’ and of not embracing a uniform doctrine: ‘With the Aš‘arī theologians he is a theologian, with the Sufis a Sufi, and with the philosophers a philosopher, and consequently this saying applies to him: “If I meet a Southern Arab, I am from the south; if I meet a Northern Arab, I am from the north”’ (Ibn Rušd, *Faṣl* [\*30: chap. 18, 2–4 on p. 28]). Yet the strategy of addressing different audiences in different ways was entirely customary among Islamic scholars of the time. Ibn Rušd, who criticises al-Ġazālī so harshly for it, uses it himself in another passage where he recommends that the exegesis of the Quranic verse 20:5 on the ‘throne’ of God should be adapted to the respective audience (*Faṣl* [\*30: chap. 16, 3–15 on p. 24–25]). For this stance he can refer back, for instance, to al-Fārābī, who had already embraced the theory that there are different paths to knowledge for different humans, depending on their cognitive faculties: in philosophy via demonstrative syllogisms, in theology via dialectical conclusions, and in the instruction of the broader public (*al-awāmm*) via conclusions adopted from rhetoric and poetics (cf. PIW 1 § 8.4.1 and 2). Adapting one’s teaching for one’s readership was in fact not an unusual indulgence on al-Ġazālī’s part, but a widespread practice. Still, the assumption persists that al-Ġazālī used this strategy more deliberately and more excessively than other authors of his time.

Research has long sought the key to explaining the perceived mutability of al-Ġazālī’s teachings. The hypotheses suggested vary considerably, but may be traced to four fundamental assumptions. Besides the conjecture mentioned above that (1) al-Ġazālī adapted his position to his respective audiences, these are that: (2) His attitude to philosophy changed considerably over the course of his life, with the result that his later works reflect a different attitude from his earlier texts (thus most recently Madelung 2015 [\*68]). (3) Al-Ġazālī’s reaction to philosophical concepts changed depending on the topic, as his approach to philosophy was selective, and involved discriminating between useful and pernicious ideas. (4) There was a kind of ‘master plan’ at the back of his divergent opinions on philosophical questions, deliberately deploying affirmative and critical remarks in aid of a superior strategic objective – this is the gist of al-Akīti’s interpretation (2008 [\*256], 2009 [\*257]). All four hypotheses are worth considering and contribute to a better understanding of al-Ġazālī’s attitude to philosophy (cf. also the brief project report and chronology of works in Treiger 2012 [\*144: 1–4. 10–14]). There can be no doubt that al-Ġazālī

evaluated different areas of philosophy differently. It also seems established that his approach was a strategic one, and that some of his dogmas underwent a degree of transformation over the course of his life (similar observations can be made in the case of Ibn Sīnā and Ibn Rušd). Moreover, al-Ġazālī stated himself that he communicated differently with different audiences. The most succinct statement on the subject is found at the end of the *Mizān*, where he distinguishes three levels of discourse: (a) simple school dogmas based not on reflection but on blind imitation (*taqlīd*), (b) dogmas based on instruction, and (c) personal convictions a thinker should share only with his peers (*Mizān* [\*86: 406,5–408,16]). He presents similar gradations of understanding or faith in *Miškāt al-anwār* (*The Niche of Lights*) as well, and also in various books of the *Ihyā'* (cf. § 4.3 below, the section on ethics).

Nevertheless, the constants in al-Ġazālī's attitude to philosophy should not be overlooked. These become apparent when we consider his assessment of philosophy in general, beyond individual technical points. Astonishing continuities emerge, from the early *Maqāṣid al-falāsifa* (*The Intentions of the Philosophers*) through the *Ihyā'*, which may be allocated to his middle period, to the late *Munqid* (composed 499–500/1106–1107). They can be summarised in two maxims, which may with some justification be called the gist of al-Ġazālī's position on philosophy. The first principle is that philosophy cannot achieve a universally valid, systematic understanding of all being. This judgment is directed against authors such as al-Fārābī and Ibn Sīnā, who had claimed that they comprehended things not only in a certain, particular representation, but 'recognised how they truly are' (e.g. al-Fārābī, *Mabādī* [\*23: 278–279]; Ibn Sīnā: *Šifā'*, *Manṭiq*, *Madḥal* [\*27: 12,3–4]). Of course, al-Ġazālī was intrigued by the systematic idea and the ambition to describe all of reality (Ormsby 2008 [\*58: 50]). He even admitted that philosophy possessed superior epistemology and methodology, as Aristotelian logic, including the way in which it established proof, was in his view the 'measure of knowledge' (this being the title of one of his works: *Mi'yār al-'ilm*). It alone, he held, could guide our thought and guarantee the scientific standard of a discipline. Unfortunately, in his view 'the philosophers' (i.e. above all Ibn Sīnā and al-Fārābī) could not meet their own methodological standards, as they did not observe the rules of demonstration that they themselves had laid down (e.g. *Tahāfut* [\*100: 101,8. 151,21–152,3]). Instead, they based their investigations on mere conjecture and inadmissible premises. Their conclusions were thus doubtful and attained no knowledge about the reality of things. Put differently, philosophy is not the coherent system of science its representatives and champions so enthusiastically take it to be.

This conviction is displayed in the *Kitāb al-ʿIlm* (*The Book of Knowledge*), the first book of the *Iḥyāʾ*. It contains numerous observations on the methods and subject matters of knowledge, among them the most detailed classification of the sciences extant in al-Ġazālī's oeuvre (detailed synopses in Treiger 2011 [\*295: 6–10], Rudolph 2019 [\*310: 69–71. 88–89]; cf. also the description of the work at § 3.3.2 above). Towards the end of his discussion, al-Ġazālī explains why he does not mention philosophy even once in this classification. Philosophy, he says, is not a science 'of itself' (*bi-ra'sihā*; *ʿIlm*, chap. 11.5 = *Iḥyāʾ* [\*80: I 22,13]), i.e. it does not provide a separate path to the knowledge of things. Instead, it consists of four distinct disciplines that do not form a systematic unity but should be classified differently. These are (1) mathematics, according to al-Ġazālī a permitted discipline that might, however, lead to blameworthy conclusions; (2) logic which, being the theory of definitions and of proof, is really part of theology; (3) metaphysics, another subject of theology, especially as philosophical metaphysics (such as the dogmatism of the Muʿtazila) constitutes only one of several heretical doctrines; (4) physics which, despite some errors, contributes to our understanding of bodies; however, the same subject is investigated by medicine, which is praiseworthy in all its aspects and, as opposed to physics, indispensable (*ʿIlm*, chap. 11.5 = *Iḥyāʾ* [\*80: I 22,13–24]).

Al-Ġazālī considers it his responsibility to deconstruct philosophy, as it does not meet its own aspiration to provide a universally applicable, systematic understanding of all being. Even so, he would not wish to dispense with philosophy altogether, as he is aware that philosophical discourse contains methodological and conceptual elements not offered with comparable precision and quality in any other science. In order to preserve these, al-Ġazālī adds a second maxim to the principle of deconstruction. This is that it is most certainly permitted to use the achievements of philosophy, once they have been divested of their comprehensive systematic aspiration. Indeed, one ought to do this, for whoever rejects it outright will prove himself an ignoramus who, in al-Ġazālī's eyes, lacks understanding of the subtleties and the advantages of rational analysis (*Munqid* [\*60: 25–27; Engl. transl. 78–80]). The result of this principle of selective adoption is that al-Ġazālī distinguishes between acceptable and not acceptable parts within the philosophical curriculum transmitted since late antiquity and renewed by Ibn Sīnā. There are already hints of this in the *Maqāṣid*, which probably belongs to his early period. It includes a passage which classifies the four subsections of (theoretical) philosophy in order of plausibility. Mathematics, according to this classification, is demonstrative and incontrovertible throughout, logic correct for the most part (*aktaruhā ʿalā manhağ al-ṣawāb*), physics a mixture of correct and incorrect statements

(*al-ḥaqq fihā mašūb bi-l-bāṭil*), while metaphysics is rarely correct (*wa-ṣawāb nādir fihā*) and usually contradicts the truth (*Maqāṣid* [\*98: 9,17–10,2]). This classification is carried over into the *Munqid* and nuanced further. The result is a detailed evaluation of the philosophical sciences that may be regarded as al-Ġazālī's most meaningful statement on the subject. Philosophy should be divided into three segments of differing relevance and persuasive force. One area consists of mathematics and logic, which he explicitly recognises to be demonstrative sciences. It is for this reason that al-Ġazālī advises all scholars, including theologians and jurists, to take an interest in the rules of Aristotelian logic and study them thoroughly. The second area comprises politics and ethics which, in his view, are also worthwhile. Not, however, in the sense of a main demonstrative science, but because their conclusions agree with the teachings of the prophets and the religious authorities, in spite of some deviations. Consequently, philosophy becomes problematic only once one turns to its third part, consisting of physics and metaphysics, which al-Ġazālī describes as the source of numerous errors. To physics, this applies with certain constraints, as in this subject the philosophers would be able to achieve tenable results if they were only willing to recognise God's will rather than nature as the highest causal and explanatory authority. In metaphysics, however, the situation becomes very dangerous, as false premises and arguments are applied everywhere, leading to fallacies that lead on to further errors (*Munqid* [\*60: 20–25; Engl. transl. 72–77]).

Al-Ġazālī wants to separate 'truth' from 'error', or the 'pure gold' from the 'counterfeit coin' found in philosophical teachings (*Munqid* [\*60: 25,14–23; Engl. transl. 79]). At the same time his words document that, depending on the context, he assumes and applies different conceptions of philosophy. In describing logic and mathematics as demonstrative sciences, he follows al-Fārābī's and Ibn Sīnā's concept of philosophy. Both took themselves to be in possession of true premises and able to prove their theories syllogistically; and they applied this conviction to philosophy as a whole, not only certain parts. Calling physics and metaphysics sources of error recalls the statements of Islamic theologians (*mutakallimūn*). They denied vehemently that philosophy could achieve universally valid results, regarding it as nothing more than a heterodox doctrine spread by heretics. Finally, in placing politics and ethics in a line with the prophets and religious authorities, al-Ġazālī brings to bear a third, harmonising view similar to that championed by al-Kindī and his followers. In their view, philosophers as well as prophets possessed true knowledge, with the latter having the advantage of being granted all knowledge at once, while philosophers must acquire knowledge with great effort and over a long period (Rudolph 2016 [\*72: 34–38. 40–41]).

Al-Ġazālī's position was thus less revolutionary than has often been assumed. While his approach to philosophy does undoubtedly bear innovative traits, it also has recourse to various older models. This is true even of that aspect that might at first glance appear most distinctive: the unreserved embrace of logic coupled with a rejection of metaphysics. In fact, Abū Sulaymān al-Siġistānī (d. c. 374/985) (cf. PIW 1 § 5.3) had already taken a similar stance. He was a member of al-Fārābī's circle in Baghdad, but was also influenced by al-Kindī's school and the Kindian tradition. Al-Siġistānī pursued intensive studies on the field of logic, which earned him the honorific 'the logician' (*al-Manṭiqī*). Besides, he was interested in philosophical ethics, as we see in his voluminous correspondence with al-Tawḥīdī. Metaphysical speculation, however, he rejected, as in his view it exceeds our cognitive faculties. Human intellect, he believed, could comprehend truth only if God granted us 'the garment of grace' (*libās al-raḥma*). Philosophical metaphysics is thus fruitless, as its results are uncertain and lack divine guidance. Only religion could convey true knowledge in these matters, as it has access to the revelation and to the intelligible world (Endress 1976 [\*130: 122–123], Rudolph 2016 [\*72: 39. 43–45]; cf. PIW 1 § 5.3.6). Comparable statements are found in al-Ġazālī's works. What is new is the detail in which he justifies them, and the depth with which he goes into the study of philosophy. As has been shown, the insights he gained in this way enabled him to occupy a carefully discriminating position regarding philosophy. It is displayed as (1) an affirmative incorporation, as in the case of logic; (2) a partial adoption, as in ethics and politics, and also in parts of physics (e.g. the doctrine of the soul); (3) explicit rejection, once again regarding parts of physics but above all metaphysics (e.g. regarding the theory of the eternal duration of the world). All three attitudes will be investigated in the following, although only selected examples can be discussed. It will not be possible to generate an overall image of al-Ġazālī's intellectual worldview, but it should become clear where his ideas and those of the philosophers touch, and to what degree this contact provided impulses for the subsequent development of philosophy.

#### 4.2 *Agreement with Philosophy: Incorporating Logic (and its Application to the Doctrine of God)*

The methods that enable us to acquire knowledge were a matter of interest to al-Ġazālī throughout his life. In the *Munqid*, this question even provides the starting point for the whole discussion, which opens with the description of a sceptical 'crisis' that – al-Ġazālī tells us – rocked him during his teaching activity in Baghdad. Overcoming it would become the foundation of all further important decisions in his life (*Munqid* [\*60: 10,10–14,1; Engl. transl. 62–66]; selected translation and commentary Rudolph 2018 [\*438: 5–10]; on the question of

which form of scepticism affected him Bargerón 2008 [\*135]). The doubts and the existential search for certainty (*yaqīn*), which al-Ġazālī here describes in detail, must not be interpreted as being autographical in every respect. It is probable that the text also draws on the well-known narrative of intellectual upheaval and self-discovery that we meet in the lives of various authors from antiquity (Galen) to the modern age (Descartes) (Menn 2003 [\*399]; Rudolph 2018 [\*438: 11–24]). Besides, overcoming the crisis al-Ġazālī describes in the *Munqid* appears at first glance to be a personal matter, which does not lend itself to being transferred onto objective epistemological categories. After all, the account of the sceptical interlude ends with the statement that he was able to overcome his doubts ‘by means of a light’ (*bi-nūr<sup>in</sup>*) sent by God into his breast, and which was the key to most insights (*Munqid* [\*60: 13,24–14,1; Engl. transl. 66]; cf. Rudolph 2018 [\*438: 9–10]). Scholarship has frequently interpreted this statement as a reference to al-Ġazālī’s turning to Sufism. This interpretation should not be rejected outright, as Sufism plays an important part throughout the *Munqid* (Ormsby 1991 [\*48], Bargerón 2003 [\*132]). This explanation is not sufficient, though. The light metaphor could have been based on several models, not only from Sufism but also Quranic exegesis (Treiger 2012 [\*144: 20–21]; cf. Lazarus-Yafeh 1975 [\*42: 284–294]). Also, al-Ġazālī does not simply repeat it in this passage but reinterprets it, presenting it as evidence of a fundamental conviction that pervades his entire oeuvre, namely that all processes in the world depend on God, as it is God who arranged the world through His act of creation, and He is thus the only guarantor of its continued existence. This conviction emerges most clearly in the field of physics, where al-Ġazālī emphasises that studies and explanations of natural philosophy are perfectly admissible as long as God is recognised as the highest, and at all times sovereign, authority. The same goes for epistemology. Here, al-Ġazālī attaches particular importance to the statement that all steps taken by humans towards knowledge (such as sensory and intellectual perceptions) may be regarded as reliable (that is, not illusory) as their truth and their reliability are guaranteed by God (Kukkonen 2010 [\*61: 604]; regarding parallels in Descartes cf. Rudolph 2018 [\*438: 21–22]).

The fact that a divine light puts an end to al-Ġazālī’s crisis should thus not be interpreted as the result of a momentary epiphany; rather, it expresses a fundamental attitude on his part. It is illuminating to see how he describes God’s intervention at this point in the *Munqid*, and which reasons he provides for regaining faith in his own cognitive faculties. He says the divine light led to his soul ‘its health and equilibrium and once again I accepted the rational necessities of thought (*al-ḍarūriyyāt al-‘aqliyya*) and relied on them with safety and with certainty’ [*Munqid* [\*60: 13,22–23; Engl. transl. 66, modified]). The

cure of scepticism is effected by accepting the 'rational necessities of thought'. These are the foundations of our knowledge: al-Ġazālī thus places the primary certainties of the intellect (i.e. the axioms) at the starting point of knowledge, deliberately locating himself within the Peripatetic tradition that derived its concept of knowledge from Aristotle's *Posterior Analytics*. Only that which is based on undisputed premises and can be proved by correct conclusions may be considered certain knowledge or science (*'ilm*). Before him, al-Fārābī (cf. PIW 1 § 8.4.1–2) and Ibn Sīnā (cf. § 1.4.1 and 4 above) had taught this, having studied the *Organon* in great depth to this end, and using their studies as the foundation for their claim to representing a demonstrative science. It thus seemed a logical development for al-Ġazālī to adopt this postulate, declaring in his turn Aristotelian logic to be the standard of reflection and scientific knowledge.

As his works on questions of methodology show, al-Ġazālī took this postulate very seriously. His earliest texts on this range of topics still concentrate on forms of argument traditionally cultivated in Islamic legal science. Among these are his first work *al-Manḥūl fī 'ilm al-uṣūl* (*What Has Been Sifted in the Science of the Principles [of Law]*) which he composed before 478/1085 under the direction of al-Ġuwaynī (Bouyges 1959 [\*33: 8–9]; Treiger 2012 [\*144: 11]); *Asās al-qiyās* (*Foundation of Analogical Argument*) (cf. Becheri 2009 [\*109]); and a book entitled *Šifā' al-ḡalīl* (*Cure of the Thirsty*), probably composed at the beginning of his teaching activity in Baghdad around 484/1091 (translation and analysis in Hallaq 1990 [\*105: 336–358]). Only a few years later, however, al-Ġazālī focussed entirely on philosophical logic, as documented by the *Maqāṣid* [\*98: Part 1]. Even more significant, because of the greater impact on his readers, were three other texts from his pen that were explicitly intended to be introductions to Aristotelian logic. One of these works bears the title *Mi'yār al-'ilm* (*The Criterion of Knowledge*) and was presumably composed in 488/1095, immediately after the completion of the *Tahāfut* (Bouyges 1959 [\*33: 25–26]). It contains detailed chapters on the Aristotelian categories and the formation of definitions. Its thematic focus, however, is on syllogistics (premises of syllogisms, the form and subject matter of syllogisms, demonstrations), which are presented in detail and using philosophical technical terms. A second text on this subject, *Miḥakk al-naẓar* (*The Touchstone of Inquiry*), was probably composed around the same time and is closely related to the *Mi'yār*. The presentation is rather more concise (a brief introduction to the syllogism and the definition), and the examples al-Ġazālī uses to illustrate the different types of conclusions, as well as the fact that he overall avoids using philosophical terminology, show that the *Miḥakk* is deliberately addressed to Islamic theologians and jurists. The same is true of a third text he composed as an introduction



to logic: the lengthy introduction to his most famous work of jurisprudence entitled *al-Mustaṣfā min ‘ilm al-uṣūl* (*The Purified Extract of the Science of the Principles [of Law]*). This introduction contains nothing substantially new, but mainly repeats what the *Miḥakk* had already explained. It does, however, show the continuing significance the *Organon* continued to hold for al-Ġazālī even a short time before his death (the *Mustaṣfā* was completed in Muḥarram 503 / August 1109, cf. Bouyges 1959 [\*33: 73–74]; Treiger 2012 [\*144: 14]).

The adoption of Aristotelian logic is thus a constant in the works of al-Ġazālī. Moreover, it is in line with his intention of initiating a renewal of religious thought directed against the dominance of philosophy – above all Ibn Sīnā’s – in the Islamic world, while not countering philosophy with simple fideism but rather with an equivalent, if not superior, religious science. In this context, it was important for al-Ġazālī to incorporate Aristotelian logic into his programme, for it was considered *the* scientific method *par excellence*, during his lifetime and long thereafter. Whoever wished to pursue science in the true, demonstrative sense consequently had to be familiar with the *Organon* and especially the *Posterior Analytics*. Al-Fārābī, Ibn Sīnā, and others had pursued this project, and al-Ġazālī called on his colleagues in the religious disciplines to emulate them (Rudolph 2020 [\*275: 16–17]). The purpose of the *Miṣyār*, *Miḥakk*, and the introduction to the *Mustaṣfā* was thus to disseminate the knowledge of philosophical logic among theologians and jurists. This explains why these three texts do not discuss details, e.g. points of disagreement between al-Fārābī and Ibn Sīnā, but limit themselves to presenting the most important elements of the instruction in logic in clear terms and with didactic skill (Street 2004 [\*106: 555–559]).

An innovation of al-Ġazālī in this context is his justification of the application of logic within the religious disciplines. He offers two explanations, both of which seem to aim at breaking the close ties between logic and philosophical authorities such as Aristotle and Ibn Sīnā. The first is found in the *Kitāb al-Tafakkur* (*Book of Reflection*), the penultimate chapter of the *Iḥyā’*, where al-Ġazālī elucidates what thought is, and on which subjects it should focus. Not only philosophers but in fact all humans, as soon as they reflect and strive for new insights, proceed syllogistically. Al-Ġazālī tells us that the meaning of ‘thought’ (*ma’nā al-fikr*) is to combine two instances of knowledge (*ma’rifatayn*) in the heart, in order to produce a third instance of knowledge (*ma’rifatālita*) (*Tafakkur*, chap. 11.1 = *Iḥyā’* [\*80: IV 425,26]; regarding a comparable statement in chap. VI of *Aḡā’ib al-qalb* cf. Frank 1994 [\*232: 25–26] as well as the synopsis of the work at § 3.3.4 above). We come across the second explanation of the significance of logic in the religious disciplines in a book entitled

*al-Qisṭās al-mustaqīm* (*The Just Balance*). Here, al-Ġazālī goes so far as to claim that God Himself taught humans the main rules of syllogistic in the revelation. He cites several verses from the Quran as evidence, claiming that each of these contains one of the five basic forms of the syllogism (first, second, third form of the categorical conclusion, hypothetical conclusion, disjunctive conclusion) either implicitly or explicitly (cf. the synopsis in Brunschvig 1971 [\*101: 201–203], Kleinknecht 1972 [\*102], Rudolph 2005 [\*108: 86–88]). The arguments he offers here are admittedly vague and not particularly compelling. But it does at least become clear that al-Ġazālī composed the text in order to distance himself from other religious thinkers and groups. His most obvious target are the Ismāʿīlīs, whom he attacked in other contexts as well. They were of the opinion that religious knowledge could be achieved only by someone who entrusted himself to the charisma and leadership of an infallible imam (Mitha 2001 [\*356]). The *Qisṭās* counters this with a plea for rationality, also in matters of religion. God taught humans to think and to apply syllogisms, and it is now up to us to apply this capacity if we wish to grow closer to the divine (Gobillot 2014 [\*114]).

This then is al-Ġazālī's agenda. But he puts it into practice with somewhat less consistency than one might expect after these statements of intent. In fact, al-Ġazālī, who championed the application of Aristotelian logic with such insistence, did not always comply with this aspiration in his own writings (Street 2004 [\*106: 559]; Shihadeh 2005 [\*401: 148]). This is particularly true when it comes to the discipline of Islamic law. As we have seen, he emphasises that all scholars should be familiar with the rules of Aristotelian syllogistic. He also gives several examples to show that argument by analogy (*qiyās*), traditionally used as the chief argument by Islamic jurists, can be transformed into a categorical syllogism. But in practice, i.e. when reaching a legal verdict, al-Ġazālī recommends retaining the *qiyās* and not replacing it with a syllogism. One reason for this may have been that – unlike the syllogism – analogy establishes a concrete connection with the original case (*aṣl*) or the sources of Islamic law (Quran and *ḥadīth*), rendering the verdict more transparent for all concerned (El-Rouayheb 2016 [\*113: 413–414]; Rudolph 2019 [\*310: 77–79]).

Moreover, legal premises were classified not as certain but only as 'probable' (*ẓannī*). While this did not altogether rule out their use in syllogisms, it had already led earlier thinkers to advise against doing so. The grammarian Ibn Ġinnī (d. 392/1002) emphasised that jurisprudence was based on 'signs' (*a'lām*) and 'symbols' (*amārāt*), not on incontrovertible facts like the sensory data on which theology rests. Consequently jurists, he said, could not develop logically compelling and necessary arguments of the kind that theologians

produce. Their domain was, rather, argument by analogy, which left room for interpretation and led to no objective truth claims (Germann, Rivera Calero 2021 [\*367: 54–55]).

We find a similar distinction between jurisprudence and theology in al-Ġazālī's work. He likewise accords a higher epistemic status to *kalām*, linked with the assessment that it is suitable for the application of Aristotelian logic. This does not mean that al-Ġazālī consistently used syllogistic argumentation within this field. In his main work of theology, *al-Iqtisād fī l-ʿitqād* (*The Moderation in Belief*), for instance, three different demonstrations are applied: the categorical syllogism, in keeping with his theoretical aspiration, but also the *reductio ad absurdum* and the disjunctive conclusion, which the theologians preferred, calling it *al-sabr wa-l-taqṣīm*, i.e. exploring possibilities and establishing disjunctions (Rudolph 2005 [\*108: 88–91]; cf. Shihadeh 2005 [\*401: 145–146]). Even so, there can be no doubt that al-Ġazālī believed Aristotelian logic to be indispensable in the context of theology. Unlike jurists, one must remember, theologians debate fundamental issues that must be resolved demonstratively and with a claim to certainty. This requires universally valid premises and conclusions such as are provided by the philosophical theory of demonstration, whereas statements about particulars and their deployment in analogy must be regarded as insufficient (El-Rouayheb 2016 [\*113: 411–413]).

Furthermore al-Ġazālī allocated yet another task to Aristotelian logic in theology in his work *al-Maqṣad al-asnā fī šarḥ [maʿānī] asmāʾ Allāh al-ḥusnā* (*The Most Sublime Objective Regarding the Explanation [of the Meaning] of the Beautiful Names of God*). In this instance, it does not concern demonstrative theory, but semantics, which within the *Organon* is discussed especially in *On Interpretation*. The subject to which it is to be applied is the dogma of the divine names and attributes. It was a core topic of Islamic theology for the simple reason that the Quran ascribes numerous attributes to God which have traditionally been collected in the list of 99 'Beautiful Names' (Gimaret 1988 [\*353]). They describe God under three aspects, as they denote his essence (e.g. *Allāh*: God), the qualities inherent in his essence (e.g. *al-ʿalīm*: the Omniscient), and his relations (e.g. *al-ḥālīq*: the Creator). At the same time the list raises a number of problems. Among these are the questions of God's oneness, given the multitude of names, the ontological status of the individual attributes, and their relations to one another and to God's essence (Gätje 1974 [\*103: 154–157]).

Older Islamic theology had always discussed these problems from a grammatical perspective. It inquired above all into the relation between the name (*ism*), the act of naming (*tasmīya*), and the named (*musammā*). Views differed, as some thinkers identified the name with the act of naming (especially the Muʿtazila), others with the named (al-Aṣʿarī and several traditionalists), while

others still occupied a mediating position which defined the relation between the name and the named, depending on its semantic content, as either identical, different, or neither (later Aš'arīs). Al-Ġazālī summarises these three positions as the beginning of the *Maqṣad* and criticises them in turn (Gätje 1974 [\*103: 157–159, 171–173]; Kukkonen 2011 [\*112: 659–660, 662–664]). In his view, the older theologians could never reach a convincing result because they regarded the divine names in isolation from normal language and discussed only their relation with 'the named'. As a result, they ignored, firstly, that there is a fundamental relation between linguistic signs and things, and secondly that a further level was located between the two, that of concepts (Gätje 1974 [\*103: 167–168, 175–176]; Kukkonen 2011 [\*112: 661–662]). In order to avoid these mistakes, al-Ġazālī puts the discussion on new footing, looking to *On Interpretation* and its exegetical tradition. This leads him to distinguish three forms of being: (1) reality among concrete individuals (*fī l-a'yān*), (2) existence in the mind (*fī l-aḍḥān*), and (3) existence in language (*fī l-lisān*) (*Maqṣad* [\*111: 18,7–19,2; Engl. transl. 6–7]; cf. al-Fārābī, *Šarḥ al-ʿIbāra* [\*24: 24,2–4; Engl. transl. 10]). The last of these, he says, has only an indirect connection with real existence, as linguistic expressions (*alfāẓ*) primarily indicate concepts (*mafhūm*) or the meaning (*ma'nā*) of that which they denote, and only indirectly the concrete things themselves (*Maqṣad* [\*111: 19,2–7; Engl. transl. 7]; Gätje 1974 [\*103: 161–168]; Kukkonen 2010 [\*111: 59–60], 2011 [\*112: 661]). This also applies to the names of God, where the level of the intelligibles again has priority. Being intelligibles, they have always existed in divine knowledge, as God has known forever that He is 'the Creator' (*al-ḥāliq*), already before real creatures existed and before humans called Him by that name (*Maqṣad* [\*111: 31,8–32,10; Engl. transl. 19–20]). The eternal attributes, al-Ġazālī continues, reside in God's essence. Consequently, they all refer to the same divine substance, which is why one could say in analogy with identity relations in the world ('The snow is cold and white') that they are accidentally identical (*Maqṣad* [\*111: 29,1–30,16; Engl. transl. 16–18]). This, too, is a concept of Aristotelian logic (*On Interpretation* 1 1; *Topics* 1.7; cf. *Met.* Δ 6, 7 and 9), although al-Ġazālī employs it in a way that reflects Platonist interpretation and alludes to points germane to metaphysics. In his view, in fact, the names denote God's perfections; i.e. they represent ideal realities inherent in God's essence that may serve as an example for creatures. Humans are thus called upon to contemplate the names of God, to aspire to them and, inasmuch as possible, imitate them. In this way they can grow closer to the truth, even though God's essence and the perfection of His 'Beautiful Names' can never be entirely comprehended by us (*Maqṣad* [\*111: 42,16–43,8, 54,7–12, 56,9–19; Engl. transl. 30–31, 42, 44]; regarding the entire subject Kukkonen 2011 [\*112: 666–678] and la Martire 2019 [\*115]; cf. Gätje 1974

[\*103: 181–182] and Kukkonen 2010 [\*111: 70–71]); on growing closer to God by imitating the names cf. Casewit 2020 [\*177]).

### 4.3 *Adopting Philosophy: Methodological Preconditions. Soul and Intellect. Ethics. Cosmology*

4.3.1 Methodological Preconditions – 4.3.2 Soul and Intellect – 4.3.3 Ethics – 4.3.4 Cosmology

#### 4.3.1 Methodological Preconditions

The incorporation of logic sketched above took place within a fixed conceptual framework. Al-Ġazālī was prepared to accept Aristotle's *Organon* in its entirety and to recognise it as the formal 'yardstick of knowledge'. Consequently, no further explanations were needed when he picked out individual elements such as syllogistics or semantics and applied them in a variety of contexts. The situation is different when it comes to ideas drawn from the philosophical disciplines that attracted al-Ġazālī's criticism (physics and metaphysics) or that he, at best, regarded as teachings that were also imparted by the prophets and through religious tradition (ethics and politics). In these instances, a separate methodological justification was required if he wished to adopt philosophical ideas, despite his general reservations.

Al-Ġazālī was aware of this, not least because after his return to teaching in 500/1006–1007 he was publicly accused of having wrongly adopted and disseminated ideas drawn from philosophy. In order to refute these accusations, he composed several personal letters as well as the *Munqid*, which develop a number of defensive strategies. Two of them are purely apologetic: al-Ġazālī says that he never really championed the tenets in question, or alternatively that they did not originate in philosophy but in the traditions of wise men and religious authorities, which would make their application permissible. The third argument, however, justifies the adoption of philosophical ideas with a more confrontational tone, emphasising the benefits of philosophy. Some of its teachings, it states, are 'intrinsically reasonable' (*ma'qūlan fi nafsīhi*) and confirmed by demonstrations (*barāhīn*), with the result that one cannot reasonably reject them. A true scholar is thus called upon to find 'the gold within the mud' of philosophy, which requires a skill comparable to the expertise of money-changers, who can distinguish true coins from counterfeit ones. Or for that matter snake-charmers, who are able to keep venomous animals under control and use certain, carefully-measured secretions of venom for therapeutic purposes (cf. Treiger 2012 [\*144: 96–101] with reference to the *Munqid* [\*60: 25–27; Engl. transl. 78–81]).

Philosophy thus contains valuable truths, even if it cannot lay claim to being a reliable and comprehensive science. Yet this verdict does not apply only to philosophy. Even while focusing on al-Ġazālī's criticism of philosophy, we should note that he attacked other established sciences as well. Theology (*kalām*) comes in for harsh criticism, not only in the *Munqid* but also in the introductory text of the *Ihyā'*, the *Kitāb al-'Ilm* (*The Book of Knowledge*). As he admits there, theology does serve a clearly defined purpose, as it defends Muslim doctrines against heretics and unbelievers. This, however, is not done at the level of knowledge (*'ilm*) and understanding (*ma'rifa*) but rather of mere opinion (*i'tiqād*, i.e.  $\delta\acute{o}\xi\alpha$ ). Those who aspire to understanding should consequently look to a different source, for 'the knowledge of God, His qualities and works ... does not result from theology; rather it [theology] is a veil (*hiğāb*) and an obstacle (*māni'*) against it' (*'Ilm*, chap. 11.6 = *Ihyā'* [\*80: 1 23,2–4]; on the subject Gianotti 2001 [\*131: 610–613], Treiger 2012 [\*144: 29–31], Rudolph 2020 [\*275: 13–14]; on al-Ġazālī's further remarks on *kalām* cf. Frank 1994 [\*232: 7–27], Marmura 2002 [\*243: 91–101], Treiger 2011 [\*295: 17–22]).

Nor does jurisprudence escape unscathed in *Kitāb al-'Ilm*. While it, too, serves the Muslim community and can even claim to be an important branch (*far'*) out of the fundamental sources (*uṣūl*) of Islam such as Quran and *ḥadīth*, this does not change its limited relevance. Jurisprudence, in al-Ġazālī's eyes, is a 'science of this world' (*'ilm al-dunyā*). Its exclusive objective is correct practice among believers in this life. No jurist has any insight into the inner attitude of a human, which is what is relevant for the next life (*'Ilm*, chap. 11.3 = *Ihyā'* [\*80: 1 17,15–18,21]; cf. Gianotti 2011 [\*131: 607–610]; on the context Rudolph 2019 [\*310: 68–73]).

Knowledge about God, his works in this world, and our return to him is acquired in a different way. It is achieved within a new discipline which al-Ġazālī calls 'the science of the path to the afterlife' (*'ilm ṭarīq al-āḥira*) or 'the science of the conditions of the heart' (*'ilm aḥwāl al-qalb*) (for the following, see in detail Gianotti 2011 [\*131: 597–607]; Treiger 2011 [\*295: 7–8. 13–14. 28–31], 2012 [\*144: 35–47]). It is divided into two parts, the 'science of the disclosure' (*'ilm al-mukāṣafa*) and the 'science of correct conduct' (*'ilm al-mu'āmalā*). It is probably no coincidence that this dichotomy reflects the classic Aristotelian distinction between theoretical and practical sciences (Giladi 1989 [\*224]). The science of correct conduct may be further subdivided, as it covers both the actions of our body and the activities of the heart. The former include 'services [to God]' (*al-'ibādāt*) and 'customs [in human relations]' (*al-'ādāt*), while the latter encompass the vices 'that lead to ruin' (*al-muḥlikāt*) and the things 'that lead to salvation' (*al-munğīāt*). These four areas are discussed in great detail in the *Ihyā'*, leading us to the conclusion that al-Ġazālī's magnum

opus as well as the several shorter versions he produced – such as *Kīmīyā-yi sa'ādat* (*The Alchemy of Happiness*) – are dedicated to the science of correct conduct. The 'science of disclosure' (*'ilm al-mukāšafa*), on the other hand, is nowhere explained systematically. Instead, al-Ġazālī emphasises that it must not be laid down in books, and above all should be kept away from the unworthy (*al-maḍnūn bihā 'alā ġayr ahlihā*). Even so, he repeatedly alludes to *'ilm al-mukāšafa*, in several passages in the *Iḥyā'*, in *Kīmīyā*, *Maqṣad*, and *Ġawāhir al-Qur'ān* as well as in *Miškāt al-anwār* (*The Niche of Lights*) and *Kitāb al-Arba'in* (*The Book of the Forty*) (Treiger 2011 [\*295: 25–27], 2012 [\*144: 39]; cf. Gianotti 2011 [\*131: 604–605]; for a different interpretation of the *maḍnūn* complex cf. al-Akīti 2009 [\*257] as well as his unpublished dissertation of 2008 [\*256]). While these allusions do not give us the full picture, they do allow careful readers to identify the topics to be discussed in the science of unveiling. These are God's essence and His attributes, the cosmos as a link between God and humans (cosmic intellects, intelligible and sensory world, the perfect order of creation as the reflection of divine wisdom), prophecy, the doctrine of the soul, the destiny of humans in the afterlife, and the principles of Quranic exegesis (Treiger 2012 [\*144: 40–41]). In many of these topics, philosophical concepts play a central part. The same is true of the science of correct behaviour, presented in detail in the *Iḥyā'*. In both cases, philosophy has the task of providing theoretical concepts and logical arguments which al-Ġazālī combines with content of disparate origins. In this way, he works with great determination to produce a new synthesis. It is intended to combine rational proof with the truth of the Revelation and the insights of the Sufis, and will consequently be epistemically superior to philosophy which, al-Ġazālī is convinced, relies exclusively on human reason (cf. Ormsby 2008 [\*58: 50]).

#### 4.3.2 Soul and Intellect

Al-Ġazālī adopts the concept of 'soul' in his *Iḥyā'* almost unchanged from Ibn Sīnā's philosophy, positioning himself in opposition to the traditional anthropology of Islamic theologians which was much more firmly linked to human physicality. Mu'tazilī as well as Aš'arī theologians defined a human as a visible 'whole' (*ġumla*) or as a 'figure' (*ṣaḥṣ*) or 'structure' (*bīnya*) consisting of atoms and accidents (regarding Aš'arī anthropology Shihadeh 2012 [\*143: 437–443], on its roots in the Mu'tazila, especially Abū l-Hudayl, cf. van Ess 1991–1997 [\*354: III 245–246]). In opposition to this tradition, in the *Iḥyā'*, and especially in the books on *Knowledge* and *The Wonders of the Heart*, al-Ġazālī develops a psychology that follows Ibn Sīnā's ideas in many respects. Every human possesses an individual and indestructible soul, which al-Ġazālī, following Sufi usage, usually calls 'heart' (Ar. *qalb*; Pers. *dil*), although this does not refer to

the physical heart but to an immaterial substance also called 'spirit' (Ar. *rūḥ*; Pers. *ḡān*) or 'soul' (*naḥs*), as al-Ġazālī emphasises (cf. chap. 1 of the description of *ʿAḡāʾib al-qalb* at § 4.3.4 above). It is the substance of humans (*ḡawḥar al-ādami*) i.e. their true essence (*ḥaqīqat al-insān*). At the same time, it is the seat of our knowledge (*maḥall al-ʿilm*), including the understanding of God (*maḥall maʿrifat Allāh*). The heart is thus none other than the human intellect (*ʿaql*), i.e. that part of the soul that is capable of recognising the essential natures of things (*ḥaqāʾiq al-umūr*) (*ʿAḡāʾib*, chap. 1, end = *Iḥyāʾ* [\*80: III 3,16–18. 4,20–26]; on the subject Frank 1994 [\*232: 24–25] and Treiger 2012 [\*144: 17], both of whom also adduce instances from other works; cf. Janssens 2011 [\*260: 616–620]). In *Miškāt al-anwār* al-Ġazālī calls the 'heart' our 'inner eye' (*ʿayn bāṭina*) that possesses insight (*baṣīra*), while our outer eye (*ʿayn ḡāhira*) has only physical vision (*baṣar*) (*Miškāt*, Part I [\*87: 10,17–11,3 ed. Buchman; 49,12–16 ed. Afīfī]; cf. *ʿAḡāʾib*, chap. 11.1 = *Iḥyāʾ* [\*80: III 5,13–16]). In the *Iḥyāʾ*, he explains in several passages that it is a divine spark or a divine decree (*amr ilāhī*) and consequently not part of this material world but of the intelligible sphere, which he calls 'the world of [divine] command' (*ʿālam al-amr*) or 'the world of [divine] authority'. The comparison with the eye is probably owed to Sufi inspiration (cf. Lazarus-Yafeh 1975 [\*42: 295–307], who also investigates the late antique roots of this metaphor), while talk of divine command undoubtedly comes from the Quran (e.g. 17:85). Even so, these statements may also be linked to philosophical models. Treiger (2012 [\*144: 17–18]) even suggests a concrete source: Ibn Sīnā's final work *Risāla fī l-Kalām ʿalā l-naḥs al-nāṭiqā* (*Epistle on the Doctrine of the Rational Soul*) with which al-Ġazālī is known to have been familiar. There Ibn Sīnā calls the rational soul 'a spirit of [divine] decree' (*rūḥ amrī*), a 'divine mystery' (*sirr ilāhī*), a 'holy soul' (*naḥs qudsiyya*), and a 'true heart' (*qalb ḥaqīqī*).

According to al-Ġazālī, the human intellect is thus a divine spark. It does, however, require development in order to fully form its faculties. This point is found in several of al-Ġazālī's works, most explicitly in an overview of the seventh chapter of *al-ʿIlm*, where we read that it is possible to distinguish four stages of human intellectual development: (1) an innate disposition (*ḡarīza*) that allows the 'heart' to think and to acquire insight; (2) the knowledge of axioms and of a priori terms such as 'possible' and 'impossible'; (3) insights as the result of experiences (*ʿulūm al-taḡārib*), which probably refers to syllogistic conclusions as according to al-Ġazālī they rely on (1) and (2); and finally (4) the ability to recognise 'the consequences [in the afterlife] of things' (*ʿawāqib al-umūr*) and of our actions (*ʿIlm*, chap. VII.2 of the description of the work = *Iḥyāʾ* [\*80: I 85,6–86,6]; partial Engl. transl. of the text with analysis Treiger 2012 [\*144: 22–25]; cf. the parallel in *Miškāt* (chap. 11.2 [\*87: 36,1–38,20 ed. by



Buchman; 76,11–79,7 ed. ‘Afīfī], where the penultimate stage is called ‘reflecting spirit’ [*rūḥ fīkrī*] and the highest ‘holy prophetic spirit’ [*rūḥ qudsī nabawī*]). Once again, the parallels with Ibn Sīnā are clear. What al-Ġazālī offers here is fundamentally the same theory of intellect conceived by Ibn Sīnā, following al-Kindī and al-Fārābī. The latter already distinguished between (1) the ‘potential or material intellect’; (2) the ‘dispositional intellect’ which possesses the primary intelligibles, (3) the ‘actual intellect’ which also knows the secondary intelligibles, and (4) the ‘holy intellect’ (*al-‘aql al-qudsī*) that is reserved to prophets and allows them access to the Revelation (Treiger 2012 [\*144: 25–26. 76–77]). It is remarkable that al-Ġazālī does not simply adopt Ibn Sīnā’s exposition but adapts it to his purposes. He does this in part on the conceptual level, and in part by employing linguistic expressions drawn from the religious tradition. Al-Ġazālī’s conceptual adaptation consists in not incorporating all the stages of the intellect Ibn Sīnā distinguishes. The ‘acquired intellect’, i.e. the complete realisation of human knowledge (which he may have regarded as competition for the ‘holy intellect’), as well as the ‘Active intellect’, i.e. the cosmological source for our thinking (an idea he rejected in any case) are missing from his presentation. He implements a linguistic adaptation by using various terms with different connotations when characterising the intellects (cf. the synoptic description in Treiger 2012 [\*144: 27–28]). This includes expressions that refer back to certain older authors such as the Sufi al-Muḥāsibī or the theologian al-Bāqillānī. Another feature is his calling the primary intelligibles ‘necessary knowledge’ (*‘ilm ḍarūrī*) and the secondary intelligibles ‘acquired knowledge’ (*‘ilm muktasab*), corresponding to a denomination widely used within Islamic theology (on the subject cf. Frank 1994 [\*232: 10 with n. 6]).

The same considerations apply to two further concepts that play a part in in al-Ġazālī’s psychology. One of these is linked to the Arabic word *fiṭra*, which occurs in the Quran as well as the prophetic tradition and is usually translated as ‘natural disposition’ or ‘innate nature’. A famous *ḥadīṭ* states that all humans are born Muslim and become Jewish, Christian, or Zoroastrian only through their parents. As a result, religious scholars tended to interpret humans’ *fiṭra* as their innate affiliation with Islam (van Ess 1975 [\*351: 101–114], 1991–1997 [\*354: II 278 and IV 361–362]). Al-Ġazālī did not agree. While he quotes the *ḥadīṭ* in the *Munqid*, he takes its point to be that the children of Christians are brought up in Christianity, the children of Jews in Judaism, and the children of Muslims in Islam. One must liberate oneself from this faith in authority and blind imitation (*taqlīd*) of parents and teachers in order to find one’s true innate nature (*Munqid* [\*60: 10–11; Engl. transl. 63]). For al-Ġazālī, *fiṭra* thus refers not to religious affiliation but an initial mental disposition of humans. What precisely this means, however, is open to interpretation. Sometimes, he

describes it rather vaguely as an individual disposition that has no initial content but can take on impressions. Elsewhere he provides a fuller explanation, for instance when he calls the *fiṭra* a set of primary judgments located in our intellect (e.g. the axioms) or in our imagination (e.g. our fear of wild animals). The latter corresponds to Ibn Sīnā's concept of *fiṭra*, which means that we can assume a reception process of philosophical ideas in this instance, too. Yet, al-Ġazālī once again seems to go a step further than Ibn Sīnā, as he repeatedly toys with the idea that innate knowledge of the existence of God might be one of the primary judgments of *fiṭra* (on all of which in depth Griffel 2011 [\*141: passim, esp. 27–32]; cf. Kukkonen 2012 [\*142: 544] and Treiger 2012 [\*144: 31]).

Another concept worth mentioning in this context is that of the mirror (*mir'āt*). It has a long history in philosophical epistemology and was employed by, among others, al-Kindī, al-Fārābī and Ibn Sīnā as a metaphor for the intellect and its assimilation of the intelligibles. Al-Ġazālī adopts this idea and enhances its significance (Kukkonen 2012 [\*142: 549–551], Treiger 2012 [\*144: 31–33]; cf. Marmura 2002 [\*243: 96] and Janssens 2008 [\*136]). Since God is the origin and guarantor of all knowledge, our soul has the task of reflecting the divine light. In order to perform this task, it must be like a 'polished mirror', as this is the only way in which it can perceive the forms (*ṣuwar*) or essences (*ḥaqā'iq*) of its objects of knowledge. This means that the purification of the soul is the central act of the search for knowledge, and – as in the philosophical tradition, but more strongly – a bridge between epistemology and ethics.

All this shows that al-Ġazālī's psychology and noetics were firmly aligned with Ibn Sīnā's, in spite of linguistic and conceptual modifications. This is true of all the writings he dedicated to the 'science of the path to the afterlife' or the 'science of the conditions of the heart', the focus of which is his magnum opus, the *Ihyā'*. Beyond this series of texts, however, we also find different ideas of the soul, with more emphasis on the body. This applies to his works on *kalām* in particular, above all *al-Iqtisād fī l-i'tiqād*, but also the *Tahāfut*. In the *Iqtisād*, al-Ġazālī follows the classic ontology of the Islamic theologians, who know only of (physical) atoms and (non-physical) accidents in the created world. This would rule out the existence of an immaterial created substance. Consequently, it is not surprising that the *Iqtisād* teaches, as is customary in *kalām*, only the resurrection of the body and not that of the soul. The *Tahāfut* emphasises the resurrection of the body even more firmly, pointing out that rejecting this teaching is no small matter, but one of the few grave errors that constitute the act of unbelief (cf. chap. 20 as well as the conclusion of the *Tahāfut*; on this see Griffel 2009 [\*258: 101–103]).

On the basis of these passages, some scholars have claimed that al-Ġazālī in fact embraced the materialistic anthropology of the Aš'arī school and not the

philosophical doctrine of the soul (Marmura 1989 [\*225]; but cf. Marmura 2002 [\*243: 93 n. 14]). But this thesis has also met with vehement opposition, as it is incompatible with statements in the *Iḥyāʾ* and in other texts on the ‘science of the path to the afterlife’. Present-day scholarship consequently assumes that al-Ġazālī championed the concept of an immaterial soul, even conjecturing that he believed in the idea of a spiritual resurrection, which is less certain but by no means improbable (Treiger 2012 [\*144: 92–93]; cf. also the reference to *Ġawāhir al-Qurʾān* at § 3.4.1 above). The question of why his *kalām* writings fail to argue for a spiritual concept of the soul, however, remains unanswered. As with so much in the study al-Ġazālī, a range of interpretations have been proposed. One suggests that the *kalām* works are not representative of al-Ġazālī’s beliefs and that their purpose was merely to defend the faith (*ʾiṭiqād*) of the common people (*ʾawāmm*) with logical and dialectical means. On this reading, they provide no insight into the ‘higher theology’ that was his true concern (Treiger 2012 [\*144: 95]). Another solution makes use of semantic analysis. It recommends a thorough investigation of the relevant statements in the *Iqtisād* and the *Tahāfut*, checking for allusions that could be aligned with the theories of the *Iḥyāʾ*. Frank (1994 [\*232: 55–67]) has done this in a ground-breaking study and drawn attention to ambiguities in al-Ġazālī’s terminology. His results have since been refined by Shihadeh (2016 [\*148]), who was able to show that while some contradictions between the texts may be resolved analytically, others elude satisfactory harmonisation. All this is of profound interest. It proves just how carefully al-Ġazālī’s expressions must be considered, while at the same time showing that his language is not always consistent. This means that semantic analysis can take us only so far, allowing for the possibility that he offered different readers different concepts of the soul and its destiny in the afterlife.

#### 4.3.3 Ethics

Philosophy traditionally linked ethics with psychology, and this is no different in al-Ġazālī’s case, as we can see from his main work on ethics *Mizān al-ʾamal* (*The Scales of Action*) as well as in other writings on the subject. Among these are first and foremost *Aġāʾib al-qalb* (*The Marvels of the Heart*) and *Riyāḍat al-nafs* (*The Education of the Soul*), both mentioned above and both central books of the *Iḥyāʾ*, as well as the later *Kīmīyā-yi saʿādat* (*The Alchemy of Happiness*) in which the main teachings of the *Iḥyāʾ* are summarised in Persian.

Al-Ġazālī’s ethical discussions are clearly aligned with philosophical tradition, with Platonic concepts taking centre stage (e.g. the tripartite nature of the soul) and being supplemented by Aristotelian ones (e.g. virtue as the middle between two extremes). His sources, however, were not Arabic translations

of the works of Plato or Aristotle, but texts composed shortly before his own time. One example is the *Tahḍīb al-aḥlāq* (*The Refinement of Character*) by Miskawayh (d. 421/1030), a widely circulating treatise (cf. PIW 1 § 5.4) with which al-Ġazālī was familiar (Mohamed 2015 [\*173: 188–191]). In addition, there are several texts by Ibn Sīnā, who even in ethics influenced him more than did Miskawayh. Worth mentioning are above all Ibn Sīnā's *Aḥwāl al-naḥs* (*States of the Soul*) and a text that was only discovered at the beginning of this century by Karlıḡa (2002 [\*169]) and has since been called 'new treatise on ethics by Ibn Sīnā' (on al-Ġazālī's reception of this text cf. Janssens 2008 [\*171]).

In formulating his ethics, al-Ġazālī also drew on Sufi models. Among these were texts by al-Muḥāsibī (d. 243/857), which he used more than once, and the well-known *Qūt al-qulūb* (*The Nourishment of the Heart*) by Abū Ṭalīb al-Makkī (d. 386/996) (van Ess 1987 [\*44: 64–65], Ormsby 1991 [\*48: 140], Treiger 2012 [\*144: 19–20], Vasalou 2017 [\*175: 712–713]). Another author whom al-Ġazālī quoted extensively, presumably because he in his turn combined philosophical with Sufi elements, was al-Rāḡib al-Iṣfahānī, a contemporary and competitor of Ibn Sīnā's (on the complex issue of their relationship cf. Wisnovsky 2003 [\*358: 242–243]). He was the author of the book *al-Ḍarī'a ilā makārim al-šarī'a* (*The Means of [Acquiring] the Noble Qualities of the [Religious] Law*), which links philosophical reflection with borrowings from Sunni theology and Sufism (Daiber 1991 [\*165], Mohamed 1995 [\*166], 1998 [\*168], 2006 [\*170]) and appears to have greatly impressed al-Ġazālī. It has been established that more than half of his *Mizān* consists of passages in which he either quotes the *Ḍarī'a* word for word or in an amended form (individual instances in Janssens 2008 [\*171]; cf. Madelung 1974 [\*161], Sherif 1975 [\*163], Mohamed 2011 [\*172], 2015 [\*173]).

The decision to combine philosophical and Sufi traditions is closely linked to al-Ġazālī's fundamental approach to ethics. As he explains in the *Munqid*, he considers ethics to be one of the 'neutral' subdivisions of philosophy, i.e. those fields which need neither be accepted for their demonstrative arguments nor rejected for their errors. This is because in questions of ethics, the 'philosophers' agree with the prophets and the divine sages (*al-muta'allihūn*), i.e. the Sufis. Furthermore, he claims that the former did not develop their ethical ideas independently but adopted them from religious authorities of the past (Treiger 2012 [\*144: 99–101]). This, according to al-Ġazālī, explains the remarkable proximity of philosophical and Sufi ethics, and gives him the freedom to make use of both traditions and integrate them into his own approach. One striking example is the psychology found in his ethical texts. He distinguishes between three parts, or three faculties, of the soul: thought (*quwwat al-tafakkur*), irascibility (*quwwat al-ḡaḍab*), and desire (*quwwat al-šahwa*). This

goes back to the well-known Platonic teaching that was widely disseminated in both late antiquity and the early Islamic period (cf. PIW 1 § 5.4 on Miskawayh). However, this is linked to a further distinction made in the *Mizān* (chap. 5 [\*86: 209–216]) as well as in *ʿAğāʾib* (chap. IV.4 = *Ihyāʾ* [\*80: III 9,17–25]) and *Kīmīyā* (First Introduction, beginning [\*85: 13–15]), according to which humans are characterised by occupying a middle position between the angels and the animals. This concept has its origins in religious contexts. In the Islamic tradition it is documented as early as the beginning of the 2nd/7th century in the works of Ḥasan al-Baṣrī (d. 110/728; cf. van Ess 1991–1997 [\*351: II 41–50]), and later found in al-Rāḡib al-Iṣfahānī, who is likely to have been al-Ġazālī's immediate source (Mohamed 1998 [\*168: 6–7. 32]). Similar statements are found moreover in other religious traditions, including Christianity, with St Augustine (cf. Goetz 2016 [\*363: 410–418]) and Blaise Pascal (*Pensées* [\*34: no. 358 Brunschvig / 678 Lafuma]) providing prominent examples. Al-Ġazālī carefully weaves together the two classifications. He allocates the faculty of thought to the angels, and the passions to the animals; or more precisely desire to the pigs, wrath to predators like dogs, wolves, and lions. (The most extensive treatment is *Kīmīyā*, First Introduction, Section 7 [\*85: 22–24]; regarding possible models in Galen cf. Janssens 2011 [\*260: 623–624]). To this is added the tendency to devilishness (Pers. *dīw*; Ar. *ṣayṭān*) that might also take possession of a human. It makes use of the desirous and the wrathful parts of the soul while pursuing its own objectives, among which are dishonesty, fraud, deceit, and seduction (*ʿAğāʾib*, chap. V.1 = *Ihyāʾ* [\*80: III 10,21–11,14]; *Kīmīyā*, First Introduction and Section 7 [\*85: 14,4–12. 22,7–23,14]).

According to al-Ġazālī, the goal of humans is happiness (*saʿāda*). In order to achieve it, they must acquire knowledge (*ʿilm*), conduct themselves correctly (*ʿamal*) and fight their passions (*Mizān*, Introduction [\*86: 179]; *ʿAğāʾib*, chap. III.1 = *Ihyāʾ* [\*80: III 6,24–30]; cf. *Kīmīyā*, First Introduction, Section 4 [\*85: 18,7–12]). He does not, however, mean that desire and wrath must be suppressed altogether. On the contrary, they are both powers on which our soul relies when fulfilling its tasks, just as a polity requires not only a wise ruler (representing the capacity of thought) but also a tax collector who desires money, and police that can use force (*Kīmīyā*, First Introduction, Section 5 [\*85: 19–20]). Al-Ġazālī thus does not favour an ethics of annihilation (*fanāʾ*) and extinction of all passions. Instead, we must learn to govern our passions, to use them and control them through our intellect. This is why a section in the *Ihyāʾ* that deals with these aspects in particular detail bears the programmatic title *Rīyāḍat al-naḥs*, i.e. *The Education of the Soul* (*Rīyāḍa* passim, esp. chap. III = *Ihyāʾ* [\*80: III 55,21–58,2]; on similar statements in the *Mizān* cf. Garden 2015 [\*67: 211–213]). In the same vein, al-Ġazālī also incorporates the Aristotelian

μεσότης doctrine, which numerous Islamic authors before him adopted as well, among them Ibn Sīnā, Miskawayh, and al-Rāḡib al-Iṣfahānī. Following them, al-Ġazālī now also defines virtue as ‘equilibrium’ (*i’tidāl*) and as the ‘middle’ between two extremes, corresponding to the Aristotelian ideal of μετριοπάθεια, the restraint and moderation of the passions (*Mizān*, chap. 15 and 23 [\*86: 258–264, 310–327]; *Riyāḍa*, chap. 11.3–4 = *Iḥyā’* [\*80: III 53,27–54,18]; cf. Kukkonen 2010 [\*61: 605–606], Garden 2015 [\*67: 218]). Out of this grows the next development, namely the doctrine of the four cardinal virtues (*ummahāt al-faḍā’il* or *al-aḥlāq*). According to this, each faculty of the soul corresponds to a virtue, thought to wisdom (*ḥikma*), desire to temperance (*‘iffa*), and wrath to courage (*šağā’a*). Once all three have achieved perfection, justice (*‘adāla* or *‘adl*), the ‘sum of the virtues’ (*ḡumlat al-faḍā’il*), will materialise (*Mizān*, chap. 16–19 [\*86: 264–287]; *Riyāḍa*, chap. 11.5 = *Iḥyā’* [\*80: III 54,19–23]). According to al-Ġazālī, the equilibrium of these principles (*uṣūl*) also leads to the emergence of further praiseworthy ramifications (*furū’*) within us, qualities such as embarrassment, noble-mindedness, or magnanimity (*Riyāḍa*, chap. 11.5 = *Iḥyā’* [\*80: III 54,24–55,7]; on magnanimity cf. Vasalou 2017 [\*175], 2019 [\*176]).

All of this is rather unsurprising, as it is part of the commonly available Platonic-Aristotelian ethics as taught by many philosophers in late antiquity and the early Islamic period. Adopting this tradition of ethics and integrating it into his own ‘science of correct behaviour’ (*‘ilm al-mu‘āmalā*) or ‘science of the path to the afterlife’ (*‘ilm ṭarīq al-āḥira*) clearly harboured no difficulty for al-Ġazālī. At some points he does add new emphases, as with the comparison of the human soul to a mirror discussed above. While this, too, has a long tradition going back to Plato (*Alcibiades* 1), al-Ġazālī accords greater importance to it than earlier authors, re-interpreting it in the context of his doctrine. This is clearest in a parable given in the *Mizān* and the *‘Ağā’ib*. It tells the story of a king who commissions two groups of artists to each paint one wall in the same hall as splendidly as possible. One group consists of Byzantine Greeks (*rūmī*), the other comes from China; the two walls face each other but are separated by a thick curtain while the two groups work. The Greeks ask for paints in order to carry out their task, while the Chinese only request cleaning and polishing implements. When both works have been completed, the curtain is raised, and an astounding image presented to the king. On the ‘Greek’ wall is a beautiful painting, with an even more beautiful one on the ‘Chinese’ wall: the luminous reflection of the first wall (*Mizān*, chap. 7 [\*86: 221–226]; *‘Ağā’ib*, chap. IX.3 = *Iḥyā’* [\*80: III 22,5–15]; cf. also the synopsis in Janssens 2011 [\*260: 627–628]).

The parable conveys a number of insights that may be transferred onto the human soul. The dramatic conclusion to the tale stresses the importance and

power of purification. Yet the parable teaches us that this is linked to certain preconditions, as cleaning and polishing can have an effect only in coordination with creative intellectual activity. It is evident that these two approaches refer to philosophy and Sufism, as al-Ġazālī explicitly confirms (*ʿĠāʾib* in the *Ihyāʾ* [\*80: 111 22,5–6 and 22,13–15]; on the following Janssens 2008 [\*136: 211–213], Griffel 2009 [\*258: 263–264], Treiger 2012 [\*144: 66–68], Garden 2015 [\*67: 219–220]). The method used by the Greeks corresponds to the path of ‘philosophers and scholars’ (*al-ḥukamāʾ wa-l-ʿulamāʾ*) wishing to comprehend all that exists, up to and including God, by means of a discursive approach. The approach of the Chinese, on the other hand, recalls the Sufis and friends of God (*awliyāʾ Allāh*), who purify themselves in order to prepare their hearts to receive illumination. Taken together, according to al-Ġazālī, the two are effective; but each path on its own is fraught with problems. Someone who relies exclusively on purification (*taḥḥūr maḥḍ*) will overlook the logical preconditions of insight and runs the risk of surrendering to illusions and uncontrollable conditions, like mental illnesses and delusory visions (see the criticism of the Sufis in *Mizān*, chap. 7 [\*86: 224]; *ʿĠāʾib*, chap. VIII.3 = *Ihyāʾ* [\*80: 20,5–17]; *Kimīyā*, First Introduction, Section 15 [\*85: 38,16–39,11]; cf. Garden 2015 [\*67: 214–216]). Conversely, someone who wishes to acquire all knowledge actively overlooks that the rational soul has a receptive side, and that the basis of insight is ‘a light (*nūr*) which God cast into my breast’ (*Munqid* [\*60: 13,24–14,1; Engl. transl. 66]; cf. § 3.4.2 above with further sources; also Kukkonen 2012 [\*102: 549–554]). The ideal solution, according to al-Ġazālī, is thus to combine both approaches. This is what he himself does when, after describing the Sufi and the philosophical methods, he proposes a third way in the *Mizān*. It consists of two sequential stages. First one must study and internalise ‘the sciences of demonstration’ (*al-ʿulūm al-burhāniyya*) insofar as is possible. Then one must seek seclusion, turn towards God, and be open to those insights that cannot be achieved by studying the sciences (*Mizān*, chap. 7–8 [\*86: 221–230]). The account mentions no specific group of knowledge seekers, and at first glance has no connection with social reality. There is much, however, favouring the interpretation that this was precisely al-Ġazālī’s intended course when he wrote the *Mizān* in 488/1095, shortly before his departure from Baghdad (Garden 2015 [\*67: 220. 224–228]).

Perfect ethics thus combines philosophical and Sufi elements. At the same time al-Ġazālī emphasises the close connection between knowledge (*ʿilm*) and action (*ʿamal*) that had already been taught in Platonic tradition, while again making innovations of his own (Kukkonen 2010 [\*61: 51–52. 55]). For him good practice is not only a consequence of correct theory but also its prerequisite. This is translatable into a concrete instruction for action, to the

effect that our heart must become a mirror (Pers. *āyina*) that is pure (*ṣāfi*) and freed from all sensory impressions (*az maḥsūsāt fāriğ*). Only in this state are we able to receive the original images of all beings that God deposited in the 'preserved tablet' (*lawḥ-i mahfūz*) – which is, in its turn, a mirror (*Kīmīyā* [\*85: 28,20–29,1]). This re-evaluation of practice might at first seem to be a simplification and popularisation of ethics. In actual fact, however, al-Ġazālī does the opposite, as thanks to intertwined philosophical and Sufi elements his ethical ideas have become so complex that they are likely to have been comprehensible to only few people. This is particularly true of the 'third' method to which he alludes in the *Mizān*. It is the most challenging of all, as it combines the training one must complete in Sufism with philosophical education. This is no general instruction for all believers, but rather a programme appropriate only to 'the elite of elites' (*ḥawāṣṣ al-ḥawāṣṣ*) (Garden 2015 [\*67: 219]; on the concept of 'the elite of elites' cf. al-Ġazālī's *Miškāt*, Part I, beginning [\*87: 3,2 ed. Buchman; 41,5 ed. by 'Afifi]).

If this interpretation is correct, al-Ġazālī would also have needed an instruction for the common masses (*al-ʿawāmm*). After all, he could not propose a subtle revivification (*ihyāʾ*) of the religious sciences only for the educated elite, but had to offer forms of knowledge and ways of life to the simple believers, in order to secure their path to the afterlife (*ṭarīq al-āḥira*). This may be why, in parallel with his *Ihyāʾ* project, he adhered to the classical religious disciplines, above all jurisprudence (*fiqh*) and theology (*kalām*). While neither of these met his personal expectations, as shown by his criticism of them in the book on knowledge (*ʿIlm*, chap. 11, 3–4 and 6–7 = *Ihyāʾ* [\*80: I 17,15–22,13, 22,24–24,5]), they offered welcome direction to many simple believers, which made their continuation and cultivation indispensable. Al-Ġazālī contributed to this even after retiring from public life in 488/1095. In the following year he composed *al-Risāla al-quḍsiyya* (*The Jerusalem Epistle*), a brief catechism (cf. Griffel 2009 [\*258: 45, 191]), supplementing it soon afterwards with a set of theological arguments (Gramlich 1980 [\*218]). Both texts would later be combined into Book 2 of the *Ihyāʾ*, in which he summarises his views on *kalām* under the title *Qawāʿid al-ʿaqāʿid* (*The Pillars of Religious Doctrine*). He also continued his activities on the field of Islamic law; indeed, his most important work on this subject was not composed until the last phase of his life. This is the well-known *al-Mustaṣfā min ʿilm al-uṣūl* (*The Purified Extract of the Science of the Principles [of Law]*), which contains an introduction on the subject of Aristotelian logic and is known to have been completed as late as 503/1109.

Jurisprudence thus served to show simple believers the way to leading their lives correctly. It explained to them all the general rules and detailed commandments found in the Revelation, i.e. in the Quran and the Prophet



Muhammad's tradition (*ḥadīth*), that applied to all fields of life (Kukkonen 2010 [\*61: 605–606]). This does not mean that al-Ġazālī refrained from referring to the holy scriptures in his ethics. In the *Mizān*, *Iḥyā'*, and *Kīmīyā* he frequently quotes the Quran, presenting Muhammad as the uncontested model for all Muslims (e.g. *Ri'yāḍa*, chap. 11.6 = *Iḥyā'* [\*80: 55,8]). What was crucial, however, was how the Quran and the prophetic tradition were interpreted. This was where the ways of the wider populace (*al-'awāmm*) and the educated people (*al-ḥawāṣṣ*) parted, as al-Ġazālī distinguished between several levels of exegesis. One consists in concentrating on the external meaning (*ẓāhir*) of the holy scriptures, i.e. it is limited to a detailed analysis of the wording. This was the method of the traditional religious disciplines, from grammar through Quranic exegesis (*tafsīr*) to theology and jurisprudence. As al-Ġazālī snidely comments, the exponents of this method were never happier than when discussing individual words and minute regulations, for instance regarding divorce law (Tamer 2015 [\*308: 50. 55. 79]). The second level of hermeneutics accepts the literal sense of the Revelation but also its inner meaning (*bāṭin*). The Quran, these interpreters admit, contains numerous statements about God and the 'world of divine dominion' (*'ālam al-malakūt*) that cannot be expressed directly here, in the 'world of appearance' (*'ālam al-ṣahāda*), but only by means of images and symbols (*amṭila*). In order to comprehend it, allegorical exegesis (*ta'wīl*) is required, which can be carried out by very few persons and must comply with high standards. For whoever wishes to comprehend the meaning of the Revelation and live accordingly must achieve distance from the material world and discipline and educate (*ri'yāḍa*) the soul, like a Sufi (Tamer 2015 [\*308: 55–57] with references to the text *Ġawāhir al-Qur'ān*). According to al-Ġazālī, such a person must also be familiar with the rules of rationality, so as to be able to distinguish between the possible and impossible, and know that statements already confirmed by demonstration (*burhān*) may not be challenged by allegorical exegesis (Griffel 2015 [\*306: 110–111. 117] with references to the text *al-Qānūn al-kullī fī l-ta'wīl* [*The Universal Rule Concerning Exegesis*]; cf. Tamer 2015 [\*308: 76]).

In the field of ethics, al-Ġazālī thus separates rules for educated people and rules for simple believers. The adapting of teachings for different audiences, already hinted at in other areas of his thought, is here obvious and becomes key to his approach. In keeping with this, his ethical writings repeatedly present classifications of knowledge and of faith. The best-known is found at the end of the *Mizān* and has been mentioned above. It distinguishes between (a) simple dogmas based on blind imitation (*taqlīd*), (b) doctrines based on instruction, and (c) personal convictions a thinker should share only with peers (*Mizān*, chap. 32 [\*86: 406,5–408,16]). We find further divisions besides,

which display a similar gradation. They separate (a) simple believers, (b) theologians, and (c) those who possess knowledge (*ʿarīfūn*) (*ʿAğāʾib*, chap. VI.4 = *Iḥyāʾ* [\*80: III 15,18–16,16]); (a) simple believers, (b) the righteous (*ṣāliḥūn*), (c) the God-fearing (*muttaqīn*), and (d) those devoted entirely to truth (*ṣid-dīqūn*) (*ʿIlm*, chap. II.3 = *Iḥyāʾ* [\*80: I 18,25–19,5]); or four classes of humans who pursue different goals, as their respective moral compass is oriented towards (a) only God, (b) only this life, (c) mostly the afterlife, or (d) mostly this life (*Riyāḍa*, chap. VIII.2 = *Iḥyāʾ* [\*80: III 67,12–22]).

A final sign of his tactic of addressing different audiences are the differences between al-Ġazālī's works on jurisprudence and on Sufi-philosophical ethics. One noticeable example concerns the question whether our intellect is able to distinguish of itself what is good and what is bad. The *Mizān* explicitly answers this question in the affirmative, saying that thanks to our intellect (*ʿaql*) we are able to make the necessary distinctions, namely between true and false in propositions or convictions (*al-ḥaqq wa-l-bāṭil fī l-iʿtiqādāt*), truth-telling and mendacity in speech (*al-ṣidq wa-l-kiḍb fī l-maqāl*), and good and bad in actions (*al-ḡamīl wa-l-qabīḥ fī l-aḡāl*) (*Mizān* [\*86: 233,7–10]). In the *Mustaṣfā*, by contrast, al-Ġazālī champions a different position, expressed in a section which discusses the question of whether we are capable of determining something as commanded, prohibited, or permitted *before* receiving the Revelation (*Mustaṣfā* [\*70: 69–80]; transl. in Reinhart 1995 [\*167: 87–105]). This was a point of controversy among the different schools of theology (Muʿtazilī versus Ašʿarī) as well as jurisprudence (Ḥanafī versus Šāfiʿī), as reflected in al-Ġazālī's verdict. As a theologian he was a member of the Ašʿariyya, as a jurist of the Šāfiʿiyya. His answer is that it is impossible to make moral judgments without knowledge of the revelation. This is because our intellect or reason (*ʿaql*) '... can [of itself] determine neither that it is good (*yuhassinu*) nor that it is bad (*yugabbihu*) nor declare that it is necessary (*yūğibu*) to thank a benefactor; before the advent of the revelation there is no way to judge actions (*lā ḥukma li-l-aḡāl*)' (*Mustaṣfā* [\*70: 69,10–11]; on the issue Reinhart 1995 [\*167: 171], Said 2013 [\*194: 83], Rudolph 2019 [\*310: 81–82]; Opwis 2010 shows that the intellect/intelligence does play a central part in al-Ġazālī's innovative theory of the 'intentions of religious law' [*maqāṣid al-šarʿa*] [\*408: 67–69]).

The discrepancy between *Mizān* and *Mustaṣfā* is striking. In the former, al-Ġazālī embraces a rational ethics, in the latter an opinion that regards all decisions as dependent on the wording of the revelation. While this is at first glance disconcerting, we must not forget that he orients his teaching to the audience, as numerous authors had done well before him, and as was also customary in the philosophical circles of his time. We have already mentioned (at § 3.4.1 above) that al-Fārābī and Ibn Rušd proceeded in a similar fashion.

Another example is Ibn Ṭufayl (d. 581/1185) and his philosophical novel *Ḥayy b. Yaqẓān* (PIW 2-2 § 2). He vividly describes how three protagonists (Ḥayy b. Yaqẓān, Salāmān, and Absāl) think about their conduct of life, illustrating precisely the three cognitive options al-Ġazālī has in mind: the combined philosophical-Sufi path (Ḥayy), limiting oneself to Sufism (Absāl), and looking to the wording of the revelation and religious law (Salāmān and the community of believers following him). The intention is by no means to devalue or reject the last-named method. On the contrary. At the end of the novel, Ḥayy too reaches the insight that it is an ideal solution for the majority of the people (*al-ʿawāmm*) who are unable to follow his intellectual speculations. The different ways are not seen as a problem, but are meant to ensure that all humans have access to the right conduct of life and happiness (*saʿāda*). It is likely that this was al-Ġazālī's objective, too, when he placed the legal ethics of the *Mustaṣfā* beside the rational ethics of *Mizān*, *Ihyāʾ*, *Kīmīyā*, and other works on the 'science of the path to the afterlife'.

#### 4.3.4 Cosmology

Conceptions of soul and intellect also play an important part in cosmology. This was already true in ancient philosophy, but still more for al-Fārābī and Ibn Sīnā. The latter had an especially broad resonance, not only among Islamic thinkers but also with Jewish authors and in Latin scholasticism (on this subject Davidson 1992 [\*355: 127–219]). It is thus unsurprising that al-Ġazālī also adopted these authors' cosmological conceptions, focussing on them in several passages in his oeuvre – above all the *Ihyāʾ*, but also in the *Maqṣad* as well as *Miškāt al-anwār* (*The Niche of Lights*).

The first question he addressed concerned the structure of the cosmos. The influential model of al-Fārābī and Ibn Sīnā rested on the assumption that the (first) intellect emerges eternally from the thought of the first cause, 'thought thinking itself' (νόησις νόησεως). As the activity of this intellect is directed at several objects, it in turn generates a (second) intellect, a celestial sphere, and its soul. This process repeats itself until a series of ten intellects and nine spheres, together with souls for these spheres, have come into being. It ends with the Active Intellect, the lowest cosmic intelligence, which resides in the lunar sphere, from where it exerts influence upon our world and facilitates our thought processes (regarding al-Fārābī cf. PIW 1 § 8.4.4, regarding Ibn Sīnā see § 1.4.5 above). This model found wide recognition and appears to have fascinated al-Ġazālī as well (Davidson 1992 [\*355: 130–144; cf. 150–153]). Certainly, his remarks indicate that he assumed a hierarchically structured universe guided by cosmic intellects and souls. When it comes to details, however, he

diverges from al-Fārābī and Ibn Sīnā. Initially this manifests as a series of small modifications to the model. For instance, al-Ġazālī always identifies the celestial intellects and souls with the angels (e.g. *Miškāt* [\*87: 12,2–5. 27,15–18. 51,1–3 Buchman; 50,15–51,2. 67,15–18. 91,1–3 ‘Afifi]), something Ibn Sīnā had done only rarely and metaphorically (Davidson 1992 [\*355: 134]). Elsewhere, he reduces the significance of the Active Intellect by transferring certain functions attributed to it by the philosophers onto God Himself. This is exemplified by his epistemology which, as we have already seen, assumes immediate contact between the human intellect and the divine light and regards God – rather than the Active Intellect – as the guarantor of our knowledge.

In addition, there are two major corrections made by al-Ġazālī to this cosmological model. One of them concerns the number of levels we should assume in the universe: he rejects the claim that there are just ten intellects and nine celestial spheres. While he does not state this with equal clarity everywhere, the *Miškāt* ([\*87: 14,9–15. 51,1–3 Buchman; 53,12–18. 91,1–3 ‘Afifi]; cf. Davidson 1992 [\*355: 135]) tells us explicitly that the celestial intellects and souls are a multitude (*katra*) and not countable. Later commentators regarded this as a characteristic innovation of al-Ġazālī’s cosmology. The figure of ten is in any case rendered obsolete in his conception, as he inserts an additional level between the highest intellect, i.e. the mover of the outermost sphere, and God. It is allocated to the first creature, called *al-muṭā‘* (‘he who shall be obeyed’) and equated with ‘God’s throne’ (*al-‘arṣ*) and the ‘preserved tablet’ (*al-lawḥ al-mahfūz*) mentioned in the Quran. It is situated between the immobile divine being and all other beings which have been generated and are subject to motion, and is believed to have played a key part in their coming into being (*Miškāt* [\*87: 51,13–20 Buchman; 91,13–92,4 ‘Afifi]; on the subject cf. Landolt 1991 [\*228: 41–52], Griffel 2009 [\*258: 252–259]).

Al-Ġazālī’s second substantial correction concerns the coming into being of the levels. According to al-Fārābī and Ibn Sīnā, they are emanations rooted in eternal thought processes, meaning that the universe exists eternally and necessarily. Al-Ġazālī denies this emphatically. In his view, our world is instead the result of a creative act executed by God deliberately and within time. This applies above all to the creation of the first creature, i.e. ‘he who shall be obeyed’. Al-Ġazālī’s statements regarding the entities following this first creature are less strict, and it is possible that he allowed emanation processes in their case (this is a possibility considered by Davidson 1992 [\*355: 135–136] and Griffel 2009 [\*258: 286]; against it Frank 1992 [\*229: 83]). But even if this were the case, it changes nothing in the primordial significance of the first creative act. It is believed not only to have generated the first creature but also the range of

parameters that – like Platonic ideas – prefigure creation and remain relevant to its further development. This was possible because the creator's process covered three levels, as al-Ġazālī deduced from a detailed analysis of the names of God *al-ḥāliq* (the Creator), *al-bārī* (the Originator), and *al-muṣawwir* (the Giver of Forms) (*Maqṣad* [\*III: 79,18–84,20; Engl. transl. 68–72]): (1) One consisted in his determining the first creature. This is the level of determining (*taqdīr*) and of judgment (*ḥukm*). It is linked to God's wisdom (*ḥikma*), knowledge (*ʿilm*), and will (*irāda*), but also His guidance (*tadbīr*) and His command (*amr*). (2) The second level concerns creation itself, i.e. the 'bringing-into-existence' (*iḡād*) of the first creature. Here, God carries out what He has decided (*qaḍā*), manifesting His generosity (*ḡūd*) and authority (*istilā*). (3) The third level, finally, widens the perspective to include all of creation. Indeed, in the first creature, the *muṭā*, 'throne', or 'preserved tablet', God implements all forms later to be realised in the particular entities and events. This is where God's (pre)destination (*qadar*) unfolds, as well as His justice (*ʿadl*), because the order (*niẓām*) resulting from His creative act will be perfect (Frank 1992 [\*229: 18–21]; cf. Griffel 2009 [\*258: 280]).

All these modifications of al-Fārābī's and Ibn Sīnā's cosmological model are directed against the conception of an autonomous, self-regulating universe, and intended to uphold the idea that God is a sovereign creator who lies beyond our reckoning. From this arises the question whether the cosmos possesses its own causality at all, or whether the processes we observe in the universe merely reflect God's ineluctable plans and decisions. This was the second great issue that al-Ġazālī had to face when investigating the cosmology of the philosophers.

Yet again, his statements here are ambiguous and in need of interpretation. In *kalām* works such as the *Iqtīṣād*, he appears to embrace the classical occasionalism of the Aṣʿariyya (regarding this doctrine cf. Perler, Rudolph 2000 [\*240: 51–62]), while texts such as the *Iḥyā* express ideas that indicate his recognition of causality within the world, and thus Ibn Sīnā's position. Here we return to the issue of whether, on the whole, al-Ġazālī intended to develop a consistent position or deliberately distinguished between innocuous teachings for common believers (*ʿawāmm*) and more advanced ideas for (philosophically) educated persons (*ḥawāṣṣ*). In the context of the debate over causality, the latter interpretation was proposed very early on. In this instance it was Gairdner who championed the theory, advocating in an influential essay that one should distinguish between an exoteric (occasionalist) and an esoteric (admitting secondary causality) doctrine (Gairdner 1914 [\*21]). More recent scholarship has not followed his suggestion, assuming instead that al-Ġazālī

embraced a single doctrine on the issue of the effective forces in the universe, even though his statements on the subject display argumentative and terminological variants. The controversy continues to this day. Secondary texts have reached a volume and analytical density unusual even in Ḡazālī research. It is not possible to cite here all the arguments and counter-arguments exchanged so far. To give an impression of the current state of debate, however, the most important positions and theoretical options will be summarised below.

One striking theory was proposed by Richard M. Frank. In his ground-breaking monograph of 1992 [\*229] and other publications on the subject, he makes the case for close proximity between al-Ḡazālī and Ibn Sīnā. This, he argues, may be demonstrated in three points at the core of al-Ḡazālī's cosmological convictions. First, the created universe is a closed system of secondary causes guided by the first creature (i.e. *al-muṭāʿ*). Second, God cannot intervene in the actions of cosmic and sublunar secondary causes. And third, it is impossible that God intended to create a universe different to the one that exists (Frank 1994 [\*232: 4]). – Marmura expresses an entirely different position. In earlier articles, he already argued that for al-Ḡazālī creatures exercise no causal efficacy of their own (Marmura 1965 [\*100], 1981 [\*219], 1989 [\*225]). He continues to adhere to this reading in his later discussion of Frank's works (1995 [\*234], 2002 [\*243], 2004 [\*245]; cf. 1994 [\*233]). While Marmura concedes that the language al-Ḡazālī employs occasionally leans towards causality, this does not change his fundamental attitude and his theological doctrine. It corresponds entirely, Marmura holds, to the classical occasionalism of the Ašʿariyya, as al-Ḡazālī always maintained that God was entirely free in His actions and caused all processes in this world immediately and as sole cause, including prophetic miracles and human actions. – McGinnis (2006 [\*253]) responded with a middle position. In his opinion, al-Ḡazālī endeavours to find a compromise between al-Ašʿarī and Ibn Sīnā, admitting secondary causes and causal processes in the universe, which are effective forces besides God, which however must always be actualised by an act of will on the part of God (or an angel). – Griffel also looks for an intermediary position. Having once again gone through the secondary sources and the Arabic primary sources in detail (Griffel 2009 [\*258: 147–274]), he arrives at the result that al-Ḡazālī was indeed aiming for a synthesis of the older doctrines. At the heart of his synthesis was not, however, the idea of formulating a compromise between the theories of al-Ašʿarī and Ibn Sīnā, but rather of recognising *both* as alternative solutions to the same problem. For both occasionalism and the teachings of the philosophers met al-Ḡazālī's conditions for a causal theory, namely to explain the phenomena in question; acknowledge God's omnipotence; avoid ascribing necessity to

causal processes independent of God; allow the possibility of miracles, etc. Consequently, he decided to accept them both and taught the ‘compossibility’ of two different causal theories (Griffel 2009 [\*258: 275–286]). One text playing a major part in Griffel’s argumentation, alongside numerous references to the *Ihyāʾ*, the *Maqṣad* and other texts, is the famous seventeenth chapter of the *Tahāfut*. This text has received more examination and commentary than any other passage in al-Ġazālī’s writings. Chapter 17 deals with cosmology only in passing. It focuses on the fundamental question of whether there is causal interaction within the created world. It is of core importance for all subdivisions of physics as well as metaphysics, and will consequently be discussed in more depth in the next chapter, which is dedicated to al-Ġazālī’s criticism of these two disciplines of philosophy.

From here we have a natural transition to further topics in which he relied more strongly on philosophy: there are other fields besides psychology and noetics, cosmology and ethics in which he proceeded in a similar methodological fashion and undertook comparable modifications. One example is politics, which he regarded as a field where the philosophers’ statements harmonised with those of the theologians (*Munqid* [\*60: 24; Engl. transl. 77]; on al-Ġazālī’s views on matters of political theory cf. Laoust 1970 [\*190: 189–364], Glassen 1981 [\*330], Crone 1987 [\*191], Lange 2011 [\*294], Said 2013 [\*194], Moussa 2016 [\*195], Yavari 2018 [\*335: 93–94, 109–110]). Another is his famous remark on the ‘best of all possible worlds’, which ingeniously combines philosophical and theological elements. Referring to the overall order of the universe (at the general level, not that of particulars), this is how he put it in the *Ihyāʾ*: ‘As a possibility (*fī l-imkān*) there is nothing that is better, more complete, and more perfect [than this order]. If there were such a thing ... it would be miserliness incompatible with [God’s] goodness, and an injustice incompatible with [His] justice (*ʿadl*)’ (*Ihyāʾ* [\*80: IV 258, 38–40]; on the subject Ormsby 1984 [\*391: 39–74], Frank 1992 [\*229: 60–66], 1994 [\*231: 20–21], Griffel 2009 [\*258: 225–231], Ogden 2016 [\*270]). This was a daring theory for a scholar who was officially a member of the Ašʿarī school, and caused furore even during al-Ġazālī’s lifetime. Later it would become the subject of a fierce debate that carried on over centuries and inspired numerous controversial opinions (Ormsby 1984 [\*391: 92–265]; extensive source material is found in Zabīdī, *Ithāf* [\*14: IX 434–460]). Instances of this kind, while of course interesting in themselves, ultimately only confirm a strategy that should have become clear by now. Consequently we will not go into these any further here but – having gone through the ‘incorporation’ and the ‘adoption’ of philosophy – finally turn to al-Ġazālī’s third approach, namely his ‘criticism’ of philosophy, in particular his attacks on metaphysics and physics.

#### 4.4 *Critical Approaches to Philosophy: Metaphysics and Physics*

4.4.1 Principles – 4.4.2 The Arguments against the Theory of the Eternity of the World –  
4.4.3 Al-Ġazālī's Exploration of Causality

##### 4.4.1 Principles

Al-Ġazālī's criticism of physics and metaphysics is of particular interest both as to its content and its methodology, as his remarks on the subject are innovative and of unexpected philosophical relevance. It is noticeable that he does not just criticise the two disciplines, but also presents and elucidates them in separate works. Synopses of this kind prove that al-Ġazālī studied the philosophers' physics and metaphysics just as thoroughly as their logic. To some degree, these studies even supplemented each other, as it was his knowledge of logic that enabled him to critically examine the metaphysical and physical doctrines of Ibn Sīnā and other authors.

The best-known synopsis is a book entitled *Maqāṣid al-falāsifa* (*The Intentions of the Philosophers*) (regarding the alternative translation *The Teachings of the Philosophers* cf. Shihadeh 2011 [\*416: 90–92]). It concisely presents the most important philosophical teachings on logic, metaphysics, and physics, following Ibn Sīnā's *Dānišnāma-yi 'Alā'ī* (*The Philosophy for 'Alā' al-Dawla*) sometimes closely, at other times more freely. The foreword and brief epilogue to the *Maqāṣid* explain that the book was written as an introduction to philosophy, because someone who wished to understand the refutation of the philosophers in the *Tahāfut al-falāsifa* would first have to study and understand their teachings. On the basis of this information, scholars long assumed that al-Ġazālī wrote these books one after the other and designed the *Maqāṣid* as preparatory reading for the *Tahāfut*. This assessment has had to be revised, as closer inspection reveals the *Maqāṣid* to be an independent work with its own emphasis. This also removes the presumed chronological link with the *Tahāfut*, giving rise to divergent recent theories regarding the *Maqāṣid*'s date of origin (for detailed information see the work description at § 3.3.5 above). Al-Ġazālī apparently composed further introductions to philosophy, for instance a text extant in manuscript form (MS British Library Or. 3126), whose title page and first pages are lost. For a long time, it was regarded as a divergent variant of the *Maqāṣid*, but was recently revealed to be an independent text which, while presumably also penned by al-Ġazālī (Griffel 2006 [\*252], 2009 [\*258: 97–98]), summarises different theories than the *Maqāṣid* (focussing exclusively on metaphysics, following – among others – Ibn Sīnā's *Šifā'* and *Išārāt*).

The true scrutiny of philosophy is undertaken in the *Tahāfut*. Al-Ġazālī makes it clear from the outset that numerous opinions embraced by the



philosophers (and described by him in books such as the *Maqāṣid*) are founded on methodological errors and therefore untenable. His intention, by his own account, is not to prove the true doctrine. He merely wishes to reveal errors made by the philosophers regarding all the issues discussed in the *Tahāfut* [\*100: 7,18–8,4]. This is the result, he explains, of their diverging in metaphysics as well as physics from the rules they themselves established in logic (regarding the different kinds of criticism he levels at the philosophers, see the work description at § 3.3.5 above).

In order to establish the incoherence of which he accuses the philosophers, al-Ġazālī had two possible options. He could either show that they based their claims on false premises, which would be the result of incorrect conceptualisation (*taṣawwur*) or assent (*taṣdīq*). Or he might be able to prove that their arguments (*qiyās*) were invalid because they did not adhere to the rules laid out in the *Organon*. The latter was rather improbable as the philosophers were regarded as masters of Aristotelian syllogistics, as al-Ġazālī himself concedes in various writings (*Mi'yār*, *Munqid*). It would thus not have been plausible to focus his criticism on this aspect in the *Tahāfut*. Even so, he does critique the philosophers' syllogistics, as in the second chapter, which discusses the eternal duration of the world *a parte post*. Here, al-Ġazālī claims that Galen based the doctrine of the endlessness of the world on an inadmissible argument. To elucidate he first describes the argument, then determines that it should be in the form of a (hypothetical) conjunctive conditional syllogism (*qiyās šarṭī muttaṣil*). In conclusion, he explains why Galen's discussion did not satisfy the rules governing this argument form (*Tahāfut* [\*100: 48,12–49,4]).

The true target of his criticism, however, are the premises applied in metaphysics and physics. They may appear evident to the philosophers, but in al-Ġazālī's opinion, this is precisely what they are not. On the contrary, they are characterised by a series of problems that can be subsumed under three points. (1) Firstly, the philosophers must admit that when establishing their premises, they do without the category of 'reliable traditions' (*al-mutawātīrāt*), i.e. the secure knowledge of the revelation (on the typology of the premises Rudolph 2020 [\*275: 21–21]). This may be understandable in a science that intends to proceed on a purely rational footing, but in metaphysical investigations, it soon meets its limits. It is vain, al-Ġazālī points out, to try and speculate on the essence and attributes of God in a purely rational fashion. Consequently 'one should adopt the principles of these things from the prophets, and give credence to them in this way, as the intellect does not declare [these principles] to be impossible' (*iḍ al-ʿaql lā yuḥiluhā*) (*Tahāfut* [\*100: 77,4–5; cf. 152,1–3. 156,20–157,7]). (2). The second problem is that the philosophers misunderstand or misinterpret some of the terms and concepts they use. This applies

especially to the concept of God, expressed by Ibn Sīnā in the famous formula ‘the Necessary Existent’ (*wāğib al-wuğūd*). When understood correctly, this merely states, according to al-Ġazālī, that there is no cause for God’s existence (*lā ‘illa li-wuğūdihi*) (*Tahāfut* [\*100: 81,15–16 and passim.]). However, the philosophers are not satisfied with this explanation of its meaning, and expand the concept in an inadmissible fashion. One consequence of this is the incorrect proposition that God possesses neither quiddity (*māhiyya*) nor essence (*ḥaqīqa*) (*Tahāfut* [\*100: 114,19–115,2. 116,1–117,17]). Another is the statement that there is only one God. While this is true, it cannot be concluded from the term ‘the Necessary Existent’ in accordance with the rules of logic (*Tahāfut* [\*100: 84,1–85,14]). (3) Finally, according to al-Ġazālī the philosophers err by admitting premises based on the estimative faculty (*wahmiyyāt*) and imagination (*ḥayālāt* or *taḥyīlāt*). While these may occasionally be true, they often lead us astray. This is particularly true of metaphysics, which routinely exceeds the realm of our imagination. As a result, al-Ġazālī reiterates throughout that the philosophers’ errors concerning God, the divine attributes, the cosmos, time, and eternity, were all based on false imaginations (*Tahāfut* [\*100: 23,5–15. 31,19–20. 101,8. 151,21–152,3]).

Based on these critical instruments, twenty philosophical core theories are investigated in the *Tahāfut*. Al-Ġazālī appears quite partisan, intent on buttressing his own (theological) position and placing it in a most favourable light. This does not, however, take away from the quality of his arguments, which are frequently innovative, revealing a number of dogmatic accretions in the philosophical system of his time. Summarising it entirely and in detail would go beyond our present remit (but see the overview in the work description at § 3.3.5 above). Two examples have been selected for a somewhat more careful analysis, in order to show the text’s character more vividly. These are al-Ġazālī’s arguments against the eternal duration of the world (chap. 1) and his investigation of causality (chap. 17). They each mark a fundamental problem of metaphysics and physics, of central importance not only to al-Ġazālī but discussed by many other authors, and indeed pursued with great attention by modern scholarship as well.

4.4.2      The Arguments against the Theory of the Eternity of the World  
Al-Ġazālī’s remarks on the theory of the eternity of the world can be divided into three strands. The first is focussed on the problem of change (*tağayyur*), the second on the concept of time (*zamān*), the third investigates the topic from the point of view of possibility (*imkān*).

(1) The problem of change plays a decisive part in the philosophers’ argumentation, as al-Ġazālī establishes. To them it was certain that the world must

have existed forever, as the assumption that it was created within time would presume a change occurring in God. The world would have had to have been created at a certain point in time, which raises the question of why it was not created earlier (*qablu*). Was the creator not capable (*‘ağz*) of it earlier? Or was the will (*irāda*) to create not present in Him, meaning that this will came into being at some point (*Tahāfut* [\*100: 13,18–14,18])? And even if God always possessed the will to create, are not all options for the creation of the world in time equal (*mutasāwiya*) to Him? How and according to what criteria could the creator have decided at what point to create the world (*Tahāfut* [\*100: 21,2–20])?

Al-Ġazālī begins his response by pointing out that the philosophers are incapable of submitting a proof for these claims in accordance with the rules of logic (*burhān ‘alā šarṭ al-manṭiq*). Instead, they invoke mere considerations of probability and inadmissible analogies (*tamṭīl*) between God’s eternal will and the temporal intentions (*quṣūd*) and decisions (*‘azm*) of humans (*Tahāfut* [\*100: 17,6–15]). Alongside this methodological criticism, his reply includes a number of arguments pertinent to the issue, structured dialectically and arguing in part *against* the philosophers’ theory, in part *for* his own conviction (detailed summary in Walther 2018 [\*274: 294–298]; cf. also Behler 1965 [\*214: 149–162], whose remarks refer to the Latin translation of the text). The focus of his argument is on God’s will. According to al-Ġazālī it is plausible that God’s eternal and immutable will caused the world to come into being within time. God might have willed for eternity for the world to come into existence at a certain moment (*Tahāfut* [\*100: 15,1–6]). Nor is it problematic that He should have selected this particular moment and no other, as the characteristic of will is precisely the ability to distinguish one thing from another similar one (*wa-l-irādatu šifat<sup>un</sup> min ša’nihi tamyīzu l-šay’i ‘an miṭlihi*) (*Tahāfut* [\*100: 22,2–3]). Other decisions made by God provide evidence for al-Ġazālī, for instance the determination of the two poles (*quṭb*) of the ninth and tenth celestial spheres. These poles might have been located at any point in their respective spheres. The fact that they are located at specific points can thus only be an expression of the divine will (*Tahāfut* [\*100: 25,6–26,17]).

(2) The second line of argument, which deals with the concept of time, is also introduced by a review of the philosophical evidence. As al-Ġazālī explains, the philosophers claim that God precedes the world in essence, not in time (*mutaqaddim bi-l-dāt lā bi-l-zamān*). Were He to precede it in time, too, there would have to be two times: the time of the world we know, which would begin with creation, and another time without beginning that existed together with God before the act of creation. This is untenable though, as time, the ‘measure of movement’ (*qadr al-ḥaraka*), would be continuously subsistent, so means

that the moving thing being measured, namely the world, would also have to have existed forever (*Tahāfut* [\*100: 30,15–31,11]).

Al-Ġazālī counters this by saying that the world as well as time are created. God precedes them both, and cannot be tied to either the one or the other. If we say something like ‘He [God] was, but there was no world; afterwards He was, and there was a world together with Him (*kāna wa-lā ‘ālam tumma kāna wa-ma’ahu ‘ālam*)’, this is only seemingly a time-determined statement. From a logical point of view, this sentence merely states the existence of God and (in the first clause) the non-existence or (in the second clause) existence of the world. The reason why we conjecture a third item (namely the moment of existence) (*taqdīr šay’in tālīt’in*) is that the imagination automatically supposes chronological relations, as it is too feeble to imagine the pure existence of something (*Tahāfut* [\*100: 31,13–20]). In support of the last point, al-Ġazālī adds a further consideration, beginning once again with a possible objection of the philosophers who claim that every existential proposition is necessarily time-bound. This would also apply to the sentence ‘He was, but [there was] no world’. For suppose we wish to describe a future state that will come into being on the day of the resurrection, i.e. after the end of this world. We would have to use a phrase different from the first proposition: ‘God will be, but there will be no world’ (*yakūnu Allāh wa-lā ‘ālam*) (*Tahāfut* [\*100: 32,2–12]). According to al-Ġazālī, this assumption is also flawed, because the philosophers do not think the argument they proposed through to its conclusion. For if we assume that the world were to be created a second time after its future end, the state of non-existence between its two existences, of which we now say ‘God will be, but [there will be] no world’, would later, in retrospect, have to be described as ‘God was, but [there was] no world’. The temporal frame of reference of the two statements does not refer to God’s existence. It merely refers to the observer’s or speaker’s perspective, and is consequently nothing more than a ‘necessary relation with reference to us’ (*nisba lāzima bi-l-iḍāfa ilaynā*).

This takes al-Ġazālī back to the fundamental problem, namely the weakness of the human imagination. We are simply incapable of imagining a beginning without a ‘before’ (*qablu*). This ‘before’ we then hypostatise into a ‘real existent thing’ (*šay’ muḥaqqaq mawǧūd*) we call ‘time’ (*al-zamān*). According to al-Ġazālī we are subject to a similar error when it comes to space, as we are unable to imagine the space above us without imagining another ‘above’ (*fawqu*). However, in the case of space (occupied by the cosmos) we know with certainty that it is limited. The philosophers have proved it, and always taught it (as Aristotle does in *On the Heavens*). Consequently, they must be prepared to accept that the world might have a time limit, i.e. is not without a

beginning (*Tahāfut* [\*100: 32,14–33,18]; further details presented by al-Ġazālī in the context of the second argument are mentioned in Moad 2015 [\*266] and Walther 2018 [\*274: 302–303]; cf. also Behler 1965 [\*214: 162–171]).

(3) The third line of argument, which concentrates on the concept of possibility, begins with the philosophers' claim that 'the existence of the world *before* its [actual] existence is possible' (*wuġūd al-ʿālam mumkin qabla wuġūdihi*). This 'possibility' (*imkān*) has no beginning, as the existence of the world was never impossible. One can draw the conclusion that 'the possible' (*al-mumkin*), in this case the world, has always existed as well (*Tahāfut* [\*100: 39,15–40,5]). Al-Ġazālī's initial answer to this theory is brief and admits that the existence of the world has indeed been possible since eternity. This fact, however, does not argue in favour of a world without a beginning, but on the contrary in favour of its beginning at a certain point in time. After all, if the world had always existed, it would never have been merely possible, so the statement that 'the existence of the world *before* its [actual] existence is possible' would be false (*Tahāfut* [\*100: 40,7–15]).

The philosophers, in faithfully Aristotelian fashion, react to this statement by pointing to prime matter. The 'possibility of existence' (*imkān al-wuġūd*), they argue, is not an independent term but a referring description (*wasf iḍāfi*). It thus requires a substrate (*maḥall*), which could only be prime matter, and this has to have existed since eternity, because 'the first matter in no way came into existence' (*fa-lam takun al-mādda al-ūlā ḥādīṭat<sup>am</sup> bi-ḥāl<sup>im</sup>*). Otherwise, it would in its turn require a substrate in which it would come into existence, and so on in an infinite regress, which is absurd (*Tahāfut* [\*100: 40,18–41,22]). This objection prompts al-Ġazālī to present his own position in more detail. His core claim is that the 'possibility' referred to by the philosophers does not require a material substrate but 'goes back to a judgment of our reason' (*al-imkān ... yarġiʿu ilā qaḍāʾ al-ʿaql*). Three points, in his view, argue in favour of this: (1) If 'possibility' referred to something material, this would also apply to 'impossibility', and that would be absurd. (2) Our reason considers blackness (*sawād*) and whiteness (*bayāḍ*) to be possible in principle, without the need for a concrete black or white thing to exist. (3) The philosophers themselves claim that purely spiritual substances exist, the souls of humans (*nufūs al-ādamiyyīn*), which require no material substrate (*Tahāfut* [\*100: 42,2–22]). The philosophers might, al-Ġazālī says, object that it is not possibility as such that is a judgment of understanding, but only our 'knowledge of possibility' (*al-ʿilm bi-l-imkān*) (*Tahāfut* [\*100: 43,2–8]). However, this objection can be refuted as follows: 'possibility' (not our knowledge of possibility) is a judgment of understanding, just like 'impossibility', 'colour' (*lawniyya*), 'animality' (*ḥayawāniyya*),

and all other universal judgments (*qaḍāyā kullīyya*). As the philosophers themselves teach, the universal concepts do not exist within concrete entities but in our understanding (*al-kullīyyāt mawǧūda fī l-aḍhān lā fī l-a'yān*). What does exist within concrete entities are only particulars (*ǧuz'īyyāt*), e.g. 'this concrete black' or 'this concrete white' [or 'this being-possible']. These particulars are comprehended by our senses (*maḥsūsāt*) and it is from them that our intellect abstracts universal concepts such as 'coloured' by means of thought (*Tahāfut* [\*100: 44,8–18]; further details in Walther 2018 [\*274: 303–308] and Behler 1965 [\*214: 171–178]; on the argument of the 'possible worlds' which al-Ġazālī also develops in the context of this discussion cf. Kukkonen 2000 [\*239]).

Thus ends the first chapter of the *Tahāfut*. As we have seen, it contains a multi-layered and multi-faceted treatment of the debate over the eternity of the world. Some points are in themselves not new, such as the argument that infers the temporal limitation and generation of the world from its spatial limitation. In slightly different form, this had already been presented by al-Kindī (d. c. 250/864), who was in turn drawing on John Philoponus (cf. PIW 1 § 4.5.3). Another is the argument that the specific order of the celestial spheres could not have arisen automatically, but is instead testament to the effect of the divine will. This is found in a similar form in Abū l-Ma'ālī al-Ġuwaynī (d. 478/1085), under whom al-Ġazālī studied at the Madrasa al-Niẓāmiyya in Nishapur (cf. Rudolph 1997 [\*237: 345]). The claim that many errors are due to our imagination being limited and conveying false ideas to our intellect is not new, either, but is documented in the writings of earlier Islamic theologians. A good example is Abū Maṣṣūr al-Māturīdī (d. 333/944), who employs it in his *Kitāb al-Tawḥīd* (*The Book of the Oneness [of God]*) in a similar fashion to al-Ġazālī, as an argument against the philosophical dogma of the eternal duration of the world (Māturīdī, *Tawḥīd* [\*22: 51–56]). Despite these parallels, the first chapter of the *Tahāfut* is a unique text, thanks not only to the complexity of the presentation but also to the precision with which al-Ġazālī weighs up the different arguments against one another. His criticism of the philosophers itself involves philosophical commitments: he argues in favour of a *nominalist* and against a realist understanding of the universals; in favour of a *subjective* and against an objective understanding of time; and in favour of an image of God whose specific characteristic is the freedom and independence of the *divine will*. The last of these is directed not only against the idea of a 'first cause', but also against the idea that the processes in the world could ensue eternally and necessarily. To refute this was clearly one of al-Ġazālī's major goals in the *Tahāfut*, as confirmed by his treatment of causality, which he presents in chapter 17.

#### 4.4.3 Al-Ġazālī's Exploration of Causality

Of all the texts penned by al-Ġazālī, the seventeenth chapter of the *Tahāfut* has received the greatest attention in modern scholarship. Since Julian Obermann's (1915/1918 [\*210], 1921 [\*23]) two ground-breaking studies on the subject, a whole series of interpretations have been offered. This is particularly true of recent decades, during which a remarkable number of publications on the subject have appeared (Goodman 1978 [\*216], Alon 1980 [\*217], Marmura 1981 [\*219], Riker 1996 [\*235], Perler, Rudolph 2000 [\*240: 68–105], Lizzini 2002 [\*242], Moad 2004 [\*246], 2005 [\*250], McGinnis 2006 [\*253], Griffel 2009 [\*258: 147–173]; cf. Rudolph 2016 [\*364: 358–359]). Several of these contributions include detailed descriptions of the contents of the chapter. Consequently, it should suffice to follow the main line of argument here. It develops in several steps, which al-Ġazālī called 'stages' (*maqāmāt*) with reference to Sufi terminology, hinting that the way to knowledge takes place as an 'ascent', or a gradual approach to truth.

Before explaining the first stage, al-Ġazālī presents an exposition of the topic. It begins with the famous sentences: 'In our opinion, the connection (*al-iqtirān*) between that which is customarily (*fī l-āda*) considered a cause (*sabab*) and that which is considered an effect (*musabbab*) is not a necessary (*ḍarūrī*) one. On the contrary, one can never say of two things which are not identical to one another and do not imply one another that the existence or non-existence of the one follows of necessity from the existence or non-existence of the other'. This applies for instance to satiation and eating, burning and contact with fire, and even death and beheading. In each case, the connection does not come about because it is of itself necessary and indissoluble (*li-kawnihi ḍarūriyyan fī nafsīhi ḡayra qābil li-l-farq*), but because God creates both events together (*ʿalā l-tasāwuq*), in accordance with His preceding determination (*taqdīr*). If He so wished, He could create satiety without nourishment, the combustion of cotton without it being in contact with fire, and death without an event such as decapitation – although the philosophers deny this (*Tahāfut* [\*100: 166,1–167,2]). Al-Ġazālī's remarks hint strongly at an occasionalist position. Consequently, many past scholars were of the opinion that he settled on occasionalism as the correct answer to the question of causality at the very beginning of the seventeenth chapter. As more recent investigations have shown, however, this is not the case. Al-Ġazālī's opening is not already the presentation of a theory of causation, but an exposition of the principles in accordance with which such a theory should be devised. At this point, he is merely concerned with clarifying the conditions a causation theory must fulfil in order to be recognised as valid. Central here is the proposition that the processes in this world are not 'necessary and indissoluble'

of themselves. On the contrary, they are separable and separately contingent, as all events and all connections between two observable events derive from a determination made by God, who creates things in a certain sequence but could create them differently (Perler and Rudolph 2000 [\*240: 74–77], Griffel 2009 [\*258: 149–150]). A tenable doctrine must not assume necessity in causal processes. Rather, it must leave room for unexpected events, a point that will subsequently be formulated in more concrete terms to the effect that it must allow the possibility of miracles (*muʿjizāt*). The aim of the seventeenth chapter is to develop such a theory through engagement with contemporary the philosophical account of causation; this purpose will guide the whole discussion through its several stages.

The first grade (*maqām*) begins, as is customary in the *Tahāfut*, with presenting the opponents' position. They presume that all observable events may be explained by worldly causes. The responsibility lies with the 'natures' inherent in things, which possess fixed qualities and generate predictable effects. Or, to use al-Ġazālī's example: 'The opponent claims that the only agent of burning is fire (*fā'il al-iḥtirāq huwa l-nār faqat*) which acts according to its nature (*bi-l-ṭab'*) and not by choice (*lā bi-l-iḥtiyār*)' (Tahāfut [\*100: 167,4–5]). In al-Ġazālī's view, this is altogether untenable. He adduces two arguments that are going to play a significant part in the course of the discussion. One of them is of sceptical character, as al-Ġazālī doubts that we are allowed to draw conclusions regarding causal connection. To stay with his example: 'Observation (*mušāhada*) [only] shows that combustion occurs upon (*inda*) contact [with fire]; it does not show that it occurs by means of (*bi*) it, and that there is no [other] cause besides it [the contact]'. The second argument points out that 'the philosophers' themselves often appeal to 'higher' causes. After all, their doctrine rests on the assumption that there are cosmic spheres and intellects, among them the 'giver of forms' (*wāhib al-ṣuwar*), i.e. the Active Intellect in the lunar sphere. What, then, would prevent them from assuming that 'behind that which we can observe' (*warā'a mā šāhadnā*), i.e. 'beneath the principles of being' (*fī l-mabādī' li-l-wuḡūd*), there are 'reasons and causes' (*ilal wa-asbāb*) for the contingent events in this world (Tahāfut [\*100: 167,4–168,18]; on the subject Perler and Rudolph 2000[\*240: 77–82], Griffel 2009 [\*258: 150–153])?

At the second grade of knowledge presented by al-Ġazālī, such hints and reservations are no longer necessary, for here the philosophers concede that 'these temporal events emerge from the principles of such events' (*hādihi l-ḥawādiṭ taḥḍu min mabādī' al-ḥawādiṭ*). The individual things in this world contribute to causal processes only in that they display different dispositions that react differently to the impact of the higher principles (for instance air lets rays of light pass through, whereas rock is opaque). This opinion, according



to al-Ġazālī, marks considerable progress. It also contains a grave problem, though, as its adherents continue to maintain that ‘things emerge from those principles of necessity and by compulsion of nature, not by deliberation and free choice’ (*bi-l-luzūm wa-l-ṭabʿ lā ʿalā sabīl al-tarāwī wa-l-iḥtiyār*). As a result, the same effects would *have to* occur in all cases in which the same dispositions are present. Furthermore, God would still not have authority over His creation and no freedom of choice (*wa-laysa tamma iḥtiyār*). Consequently, the philosophers deny the Quranic account according to which Abraham was thrown into the fire by his enemies without suffering harm (Quran 21:68–69; cf. 37:97–98). They argue that in this case, either heat must have been taken away from the fire, which would thus have ceased to be fire, or Abraham’s body transformed into a stone, and would no longer have been human, both of which are absurd from their point of view (*Tahāfut* [\*100: 168,19–169,12]; on the issue Perler and Rudolph 2000 [\*240: 82–84], Griffel 2009 [\*258: 153]).

Al-Ġazālī cannot accept this either, if he wishes to adhere to the conditions for a true causal theory formulated at the beginning. It implies that there are necessary causal links between events within creation, and rules out the possibility of miracles presupposed in the Quran and undeniable for a religious scholar. Al-Ġazālī reacts by offering two options that would explain the causal structure of the world in line with his criteria: (1) The first way (*al-maslak al-awwal*) is straightforward occasionalism, which satisfies the conditions listed at the beginning of chapter 17. As it accords causal capacity to God only, it can guarantee that He disposes freely over worldly events, including miracles, which is why there is never an intrinsic and necessary link between two such events (*Tahāfut* [\*100: 169,14–171,11]; on God’s control over our cognition, which also comes up here, cf. Marmura 1965 [\*100: 202–204], 1981 [\*219: 105–106], Perler and Rudolph 2000 [\*240: 85–87], Griffel 2009 [\*258: 153–156]). (2) The second way (*al-maslak al-tānī*), on the other hand, seems to be a further development of philosophical doctrine. If the philosophers assume that the events in this world are caused by higher principles, as they have already conceded, they would really only have to admit that the workings of these principles are multifarious, and cannot be comprehended by us in all their aspects. It may be, for instance, that God or His angels intervene in creation at a certain point in order to change one single quality in one creature, e.g. to cool the fire that would otherwise have burned Abraham. It may also be that the many effects of the principles, and the many dispositions for receiving those effects, lead to innumerable interactions that cannot be grasped by our reason. In this case, world-immanent causality would still be acknowledged. Still, we could not speak of *necessary* connections between two events, because we never comprehend the complexity of the causal interactions. Consequently the ‘second

way' too leads to the result that 'in God's power (*fī maqdūrāt Allāh*) there are astonishing and wondrous things (*ġarā'ib wa-ʿaġġā'ib*), not all of which we have seen with our own eyes' (*Tahāfut* [\*100: 172,2; cf. 174,7–8]; on the second way in general *Tahāfut* [\*100: 171,12–174,8]; on further details cf. Perler and Rudolph 2000 [\*240: 88–96], Griffel 2009 [\*258: 156–157]).

Interestingly, having described these two options, al-Ġazālī does not decide between them. Instead, he leaves the second stage (*maqām*), to which both these solutions were assigned, and turns to the third and highest stage. Its focus is the question of whether there can be limits to God's works. Al-Ġazālī appears to presume by now that God's power does not need to respect 'necessary connections' (whether we adopt the first or second way), so the only remaining question is whether His power is subject to any limits at all. It is indeed, as he explains using several examples: God cannot override the principle of non-contradiction or the relations of identity and implication (linking back to the opening sentence of chapter 17). Moreover, not even God is able to exchange or transform the genera (*qalb al-aġnās*), which probably refers to the highest classes, i.e. the categories. This makes clear that while al-Ġazālī's holds a voluntarist concept of God, he does not wish to accord Him absolute power. Certain laws of logic and physics retain their validity in metaphysics as well, which corresponds, after all, to philosophical as well as theological tradition in Islam (*Tahāfut* [\*100: 174,10–177,5]; on the issue Perler and Rudolph 2000 [\*240: 96–103], Griffel 2009 [\*258: 157–160], El-Rouayheb 2016 [\*113: 415]).

Here, rather surprisingly, the treatment of causality ends. While al-Ġazālī has led his readers through numerous questions and perspectives on the topic, he has left them in the dark regarding his own final position. In principle, this reticence is in line with the project of the *Tahāfut*. As early as the introduction to the work we read that the author was not intending to champion and establish his own theories but limit his role to asking questions and providing opposition (*Tahāfut* [\*100: 7,17–8,4]). All the same, al-Ġazālī's personal opinion is made quite clear in many other parts of the work, such as chapter 1 in which he, as we have seen, denied the eternal duration of the world and asserted its temporal generation. One may thus justifiably ask what his position on the problem of causality may have been. Scholarship has done just this repeatedly, but for a long time without consensus (cf. the brief research report in § 3.4.3, Cosmology, above).

More recent studies concentrate on the question of the relation between the two ways (*maslakān*) sketched in the context of the second *maqām*. This cannot be answered definitively, but it has led to a reduction in the range of theories currently supported by secondary literature. It is either assumed that al-Ġazālī intended a synthesis between the two ways, argued above all

by McGinnis (2006 [\*253]) and, with some reservations, Perler and Rudolph (2000 [\*240: 103–104]) and Walther (2018 [\*274: 333]), or that al-Ġazālī recognised both ways as alternative solutions. This leads to the theory of compositionality represented primarily by Griffel (2009 [\*258: 275–286]). A third option would be to give the two ways different weight. Al-Ġazālī might, after all, have accepted both ways in principle, while preferring the second. This would appear to be suggested by his remark that by embracing the second *maslak* (the complex theory of causality), one might avoid much of the vituperation (*tašnīʾāt*) the representatives of the first *maslak* (i.e. the occasionalist theory) must endure (*Tahāfut* [\*110: 171,12]). However, on the basis of the textual material currently available to us, it is impossible to determine which of these three options is the correct one. We must admit in this instance, as in others, that al-Ġazālī's view eludes conclusive evaluation and classification. Still, this does not change the fact that his consideration of the subject of causality was ingenious and opened new horizons in comparison to what had come before.

## 5 Influence

Al-Ġazālī's writings exerted huge fascination for later readers. Their influence on Islamic intellectual history is probably surpassed only by that of Ibn Sīnā's works. The message conveyed, however, was less clear in the case of al-Ġazālī than in that of Ibn Sīnā, not to say more diffuse. This was due not only to the fact that his texts were open to a variety of interpretations but also to the diversity of topics and disciplines addressed in his oeuvre (philosophy, law, theology, Sufism, Quranic exegesis, paraenetics, polemic, mirrors for princes, etc.).

Al-Ġazālī undeniably exerted a lasting influence on the development of Islamic theology (*kalām*). His call to include the study of Aristotelian logic in the theological education was taken seriously and put into practice at numerous colleges (*madrasa*). This considerably transformed the methodological and conceptual conditions under which *kalām* was taught. Later observers like the famous historian Ibn Ḥaldūn (d. 808/1406) thus spoke of theology *before* and theology *after* al-Ġazālī (Ibn Ḥaldūn, *Muqaddima* [\*33: III 52. 113–116; Engl. transl. III 52. 143–146]), a distinction adopted by modern scholarship as well (cf. Gardet, Anawati 1948/1970/1981 [\*383: 67–72], who used the terms *via antiqua* and *via moderna* for this development).

In the history of Islamic law, al-Ġazālī's influence is likewise easily traceable. Tāġ al-Dīn al-Subkī (d. 771/1370), the famous chronicler of the Šāfiʿī school of law (*madhhab*), held him in great esteem, connecting him to numerous pupils and crediting him with great influence on the development of his *madhhab*

(Laoust 1972 [\*387]). The study of logic played a certain part here, too, but its significance was lower than in theology. While al-Ġazālī had advised the legal scholars to acquire knowledge of the rules of logic, he simultaneously recommended that they should adhere to their traditional methods in practice (El-Rouayheb 2016 [\*113: 413–414]; Rudolph 2019 [\*310: 77–79]; cf. § 3.4.2 above). Another contribution to the ‘science of the principles of law’ (*‘ilm uṣūl al-fiqh*) thus became still more important: al-Ġazālī was one of the first scholars who argued in favour of recognising benefit (*maṣlaḥa*) as a legitimate criterion in finding the law. On this basis, a hermeneutic concept developed that became known as ‘the intention of the religious law’ (*maqāṣid al-ṣarī’a*) and would play an important part in the debate over legal norms (Opwis 2007 [\*404: 66–68, 76–79], 2010 [\*408: 65–88]).

As for the field of philosophy, it is difficult to characterise al-Ġazālī’s impact with any precision. Clearly it was as varied as his own remarks on the subject, with the result that disagreement regarding his attitude to philosophy already emerged during his lifetime. Some contemporaries perceived him as a critic of philosophy. After all, his *Tahāfut* was well known and read by many scholars, and caused a certain furore. Other contemporaries criticised al-Ġazālī for having given too much ground to the philosophers. This accusation was voiced in several regions of the Islamic world, first of all in Nishapur when al-Ġazālī once more assumed a public teaching position in the city from 499/1106 onwards. Soon afterwards, resistance began to stir in Spain, where copies of the *Iḥyā’* were publicly burnt in 502/1109 and 538/1143 (Griffel 2009 [\*258: 54–56], Garden 2010 [\*59], 2014 [\*65: 149–168]; cf. Serrano-Ruana 2006 [\*403], Casassas Canals, Serrano-Ruana 2020 [\*444] and Kokew 2023 [448: 27–33]). However, opposition of this kind would not harm al-Ġazālī in the long run. In Nishapur, he was able to refute the criticism by himself, and in Spain the intellectual climate dramatically changed in his favour when the Almoravids were succeeded by the Almohads around the middle of the 6th/12th century (regarding Ibn Tūmart, the founding figure of the Almohads, and his relationship with al-Ġazālī, cf. Griffel 2009 [\*258: 77–81]). Now, all obstacles to the reception of al-Ġazālī’s writings had been removed, and there is considerable evidence of his having been one of the most widely read authors of the 6th/12th century in the East as well as the West of the Islamic world (Shihadeh 2005 [\*401], Griffel 2009 [\*258: 61–95], 2021 [\*446: Part 3, Chapter 2 and 3]).

None of this changed the fundamental verdict that al-Ġazālī’s statements allow different interpretations. This can be shown using the example of three scholars who were active towards the end of the century and developed different attitudes towards him. Abū Bakr b. Ṭufayl (d. 581/1185), the Andalusian philosopher, physician, and author of the novel *Ḥayy b. Yaqzān* (*Alive, Son of*

*Awake*) (cf. PIW 2-2 § 2), considered al-Ġazālī to be an author closely connected with Ibn Sīnā and his philosophy. He even thought that the two agreed in the essential points of their doctrines, as long as one interpreted their works correctly. Consequently, Ibn Ṭufayl was able to say of himself that the path to truth became clear to him when he followed the words of Ibn Sīnā *and* al-Ġazālī (Ibn Ṭufayl, *Ḥayy* [\*29: 18,5–9]). Ibn Rušd (d. 595/1198), also from Andalusia and a friend of Ibn Ṭufayl, was of an entirely different opinion. He regarded al-Ġazālī as a militant opponent of philosophy whose criticism had to be refuted. He composed his *Tahāfut al-tahāfut* (*The Incoherence of Incoherence*) in this vein, a vehement refutation of the *Tahāfut al-falāsifa*, in which he went through each of al-Ġazālī's arguments, endeavouring to disprove them all (Ibn Rušd, *Tahāfut al-tahāfut* [\*37]). Faḥr al-Dīn al-Rāzī (d. 606/1210), the most prominent scholar in the East of the Islamic world, displayed yet a third attitude. His aspiration was to achieve a synthesis between *kalām* and philosophy (Shihadeh 2017 [\*436: 298–299]), seemingly another harmonising approach. Unlike Ibn Ṭufayl, however, al-Rāzī believed that Ibn Sīnā and al-Ġazālī were not complementary thinkers but antipodes whose respective positions deserved to be examined critically. Consequently, his project should not be described as a compromise but rather as an independent path between 'Avicennism' and 'Ġazālism' (for al-Rāzī's own views, see chap. 6 below).

In the following centuries, reception of al-Ġazālī's works continued to be multifarious and heterogeneous. Some scholars looked to the legal opinion (*fatwā*) he had pronounced at the end of the *Tahāfut*, according to which three propositions of the philosophers (the world has no beginning; God knows the particulars in a general fashion only; there is only spiritual resurrection) must be classed as 'unbelief' (*kufr*) (*Tahāfut* [\*100: 226–227]; on the issue Griffel 2009 [\*258: 101–103]). Others ignored this verdict and did not let it distract them from their metaphysical speculations. The concept that the world has no beginning within time, above all, was repeatedly embraced by scholars, albeit on widely varying grounds (examples from the 5th/12th century in Lammer 2017 [\*434] and from the 9th/15th in Rudolph 2017 [\*435]; cf. also Hoover 2016 [\*429: 639] regarding Ibn Taymiyya [d. 728/1328], whose position in this matter was, interestingly, similar to Ibn Rušd's). In any case, al-Ġazālī's opinions remained relevant within intellectual discourse. This tendency even increased when the Ottoman sultan Mehmed II, having conquered Constantinople, began to formulate his educational and religious policies. In the course of this process, he had two respected scholars, Hocazāde Muşliḥ al-Dīn Muştafā (d. 893/1488) and 'Alā' al-Dīn al-Ṭūsī (d. 877/1472) 'judge between al-Ġazālī and the philosophers' (*muḥākama bayn al-Ġazālī wa-l-ḥukamā*). In practice this meant a kind of public contest, with each scholar composing extensive commentary

on al-Ġazālī's *Tahāfut*. Ḥoğazāde's answer to the challenge convinced the appointed committee and was rewarded with a considerable sum of money. In addition, his text would later be the subject of two sets of glosses (*ḥāšīya*) – one by Kamālpašazāde (d. 941/1534), the other by Muḥyī al-Dīn Muḥammad b. 'Alī Karabāğī (d. 942/1535) – meaning that within only a few decades, four Ottoman authors had commented on the topics of the *Tahāfut* (cf. Özervarlı 2015 [\*426]). They all have in common that they more or less ignored Ibn Rušd's *Tahāfut al-tahāfut*. They aimed at a general comparison between al-Ġazālī's critical statements on philosophy and the philosophical theses themselves (with a certain focus on Ibn Sīnā). Al-Ġazālī was thus the point of reference, but the participants did not follow him uncritically, reaching their own solutions to many questions. In some respects, the differences between them were so considerable that each author can be assigned a separate position within the contested area between philosophy and criticism of philosophy. The *Tahāfut* debate instigated by Sultan Mehmed thus shows that intellectual debates could be carried out openly in the 9th/15th and 10th/16th centuries and were not predetermined by specific dogmatic decisions (for examples from the four texts cf. Karadaş 2011 [\*413], van Lit 2011 [\*414], Shihadeh 2011 [\*415], Özervarlı 2015 [\*426: 389–397]).

Moreover, the *Tahāfut* was not the only text by al-Ġazālī that was studied in the Ottoman context. His mirror for princes entitled *Naṣīḥat al-mulūk* (*Guidebook for Kings*) [\*112] received attention in political discourse (Yılmaz 2018 [\*439: 58. 64. 70], 2019 [\*443: 514–515. 521]), and the *Mustaṣfā* in the science of the principles of law (Bedir 2019 [\*440: 427. 435]), while *Iḥyā'* and *Kīmīyā* were consulted when Sufism or questions of ethics were debated (Yılmaz 2018 [\*439: 57. 68], Kafadar and Karamustafa 2019 [\*441: 441. 454–455]). Moreover, several of al-Ġazālī's works were translated into Ottoman Turkish, among them the *Iḥyā'*, of which several partial translations and amended versions circulated from the 10th/16th century onwards (Özervarlı 2016 [\*432: 254–256]). The book enjoyed a certain popularity, although its reliability in questions of doctrine remained a live issue among Ottoman scholars. This was also true for other parts of the Islamic world. In Morocco the text was removed from the curriculum of the madrasas in the 12th/18th century, whereas in Yemen it found numerous readers from the 9th/15th century onwards (Kokew 2023 [\*448: 57–59]). The approval it met here culminated in a monumental work. In his later years Murtaḍā al-Zabīdī (d. 1205/1791), who came originally from India but had studied and lived in Yemen for a long time, composed a comprehensive commentary on the book, giving it the title *Iṭḥāf al-sāda al-muttaqīn* (*Gift to the God-fearing Sayyids* [i.e. the descendants of the Prophet]) [\*14; cf. in detail Reichmuth 2009 [\*407: 269–334]). Thus, an impressive monument

to the *Ihyā'* and its author was erected, before the Ḡazālī reception took new turns in the 19th and above all the 20th century (current examples are Garden 2016 [\*428] and Kokew 2023 [\*448: 91–149]).

Besides the influence al-Ḡazālī's works exerted on Islamic intellectual history, three further lines of reception are worth mentioning. One of them leads us to Christian scholars active in the Islamic World, especially within the context of the Syriac Church. Their most important representative was Bar Hebraeus (d. 685/1286), who presented a comprehensive body of theological and philosophical thought (cf. § 7.2.3 below). He quoted not only ancient and Christian authors but also several prominent Islamic scholars, among them al-Ḡazālī, with whose *Maqāṣid*, *Ihyā'*, *Kīmīyā*, and *Munqid* he was familiar, as well as some texts of legal scholarship (Takahashi 2015 [\*427]).

The second line of reception goes through the Jewish tradition and includes a long list of thinkers active within as well as beyond the Islamic World. They have their beginning in Spain in the 6th/12th century, where Yehuda Ha-Levi (d. 535/1141), Abraham Ibn Da'ud (d. 575/1180 or 576/1181), and Mošeh ben Maimon (d. 600/1204) read al-Ḡazālī's works (among them *Maqāṣid*, *Tahāfut*, *Ihyā'*, and *Miškāt*) in Arabic, making use of them in diverse ways (for details on the three authors see PIW 2-2 § 5.9–11). From the 7th/13th century onwards, some of al-Ḡazālī's works were translated into Hebrew, which significantly promoted their dissemination outside of the Islamic world. The greatest attention was accorded to the *Maqāṣid*, which was translated several times and enjoyed a reputation as an ideal introduction to the philosophy of Ibn Sīnā, with the result that more than seventy-five Hebrew manuscripts of this text are extant (Harvey 2001 [\*397]). Other works, too, were translated from Arabic, for instance the *Miškāt* (in detail Girdner 2015 [\*421]), *Mizān al-'amal* and *Mi'yār al-'ilm*. In the case of the *Tahāfut*, it was not until the end of the 14th/beginning of the 15th century that an independent Hebrew version was produced, but its substance had become known earlier through the Hebrew translation of Ibn Rušd's *Tahāfut al-tahāfut*. Access to al-Ḡazālī's work was thus multi-faceted, with various ideas about him circulating among Jewish scholars. Some knew him only as the author of the *Maqāṣid*, believing him to be a follower of and expert in philosophy. Others perceived him via the *Tahāfut* and regarded him as a religious scholar who criticised Aristotelian philosophy with great acumen and success (on all this cf. Harvey 2015 [\*422]).

The third line of reception, which leads to the Latin Middle Ages, followed a similar route. Here, too, the *Maqāṣid* was at the forefront, having been translated in Toledo as early as the 12th century. Christian readers again appreciated this work as a lucid introduction to philosophy, affirming al-Ḡazālī's reputation as a faithful follower of Ibn Sīnā, all the more since the several Latin manuscripts (with one exception) lacked the prologue and concluding

remark (d'Alverny 1986 [\*393: 127–131], Janssens 2011 [\*412], Shihadeh 2011 [\*416: 79–80]). The Dominican Raimundus Martini (d. c. 1285) was the first to gain a wider insight into al-Ġazālī's oeuvre. He spent time in Tunis on two occasions, learned Arabic intensively, and read numerous texts that had not been translated into Latin in the original. This included books by Abū Bakr al-Rāzī, Ibn Sīnā, Ibn Rušd, and Faḥr al-Dīn al-Rāzī, as well as al-Ġazālī: *Tahāfut*, *Miškāt al-anwār*, and *al-Maqṣad al-asnā*, but above all the *Munqid*, of which Raimundus made extensive use in his text *Pugio fidei* (*The Dagger of Faith*) (Cortabarría Beita 1985 [\*392], d'Alverny 1986 [\*393: 131–137], Janssens 2015 [\*424]; detailed information on the author, his text and historical context may be found in the unpublished dissertation by Travelletti 2010 [\*409] and in Rudolph 2022 [\*447]). Later, the *Tahāfut* would become accessible to readers in Latin, albeit once again through Ibn Rušd's *Tahāfut al-tahāfut*. The latter was translated from Arabic in 1328, with a second translation, this one from Hebrew, following at the turn of the 16th century. In this way the Late Middle Ages received a certain impression, at least, that al-Ġazālī was not only an expert in but also a confirmed critic of philosophy (d'Alverny 1986 [\*393: 137–140]).

It is a matter of debate whether the reception of al-Ġazālī's works went still further into the European modern age. We do know that the occasionalist doctrine proposed in, among other works, the *Tahāfut* became important in 17th-century France where it was embraced by several thinkers, among them Malebranche. However, it is uncertain by which channels it arrived there, as there are several possible authors as well as texts that might have been responsible for its transmission from the Islamic context to Europe (Perler and Rudolph 2000 [\*240: 127–244]). In addition, there have been repeated attempts in recent scholarship to establish concrete links between al-Ġazālī and individual thinkers of the European modern age. Most frequently these pointed to Descartes (Misch 1962 [\*385: 1047], Hana 1973 [\*388], Zakzouk 1992 [\*395], 2005 [\*402], Moad 2009 [\*406], Rudolph 2018 [\*438]; cf. already Lewes 1857 [\*380: 304–311]). A certain plausibility is undeniable in view of the astonishing parallels between his *Meditationes de prima philosophia* and his *Discours de la méthode* and al-Ġazālī's *Munqid*, which might even be the result of a process of reception (Griffel 2011 [\*411: 40–41], Rudolph 2018 [\*438: 19–20]). On the other hand, both authors are part of a long tradition of comparable autobiographical reflections, which stretched from antiquity into the early modern age (Menn 2003 [\*399]).

Other early modern authors compared to al-Ġazālī have included Blaise Pascal (Hossain 1984 [\*390], 1991 [\*394: 186–194]), David Hume (Yazıcı 2010 [\*410]), and Immanuel Kant (Abdullah 2000 [\*396]). In these instances, however, the main focus was less on establishing possible historical connections



and more on agreement in substance; the theoretical parallels suggested are in any case not always convincing. Even so, comparative examinations of this kind may be useful. They open interpretive horizons that are usually barely considered in historical-philological research and may help us to read al-Ġazālī's works against the grain. That is, neither as unreserved criticism of philosophy nor as admiring reception, but rather as an approach along the lines of a critical philosophy in which doctrinal elements from the Aristotelian-Neoplatonic tradition play a part. While this was certainly not al-Ġazālī's guiding motive in composing the *Tahāfut*, it does represent a further potential approach to this text. This perspective may provide impulses for future research and for current discussions of al-Ġazālī and his significance within Islamic intellectual history.

## 6 Secondary Literature

Reference Works and Dictionaries [\*1–\*8] – Overviews. Life and Works [\*15–\*72] – Terminology [\*90–\*93] – Logic [\*100–\*115] – Soul and Intellect. Epistemology [\*130–\*148] – Ethics [\*160–\*177] – Politics [\*190–\*195] – Metaphysics, Physics, and Cosmology [\*210–\*275] – Further Subjects (incl. Quranic Hermeneutics and Sufism) [\*290–\*310] – Historical Context [\*330–\*335] – Intellectual Contexts [\*350–\*367] – Influence [\*380–\*448]

### *Reference Works and Dictionaries*

- 1 EI<sup>2</sup> = *The Encyclopaedia of Islam*. New edition. Ed. by Clifford Edmund Bosworth et al., 11 vols, 6 suppl. vols and index. Leiden, London, 1960–2009.
- 2 GAS = Sezgin, Fuat. *Geschichte des arabischen Schrifttums*, 17 vols. Leiden, Frankfurt a.M., 1967–2015.
- 3 EIr = *Encyclopaedia Iranica*. Ed. by Ehsan Yarshater, vols 1 ff. London, 1982 ff.
- 4 GAP = *Grundriss der arabischen Philologie*, vol. 2: *Literaturwissenschaft*. Ed. by Helmut Gätje. Wiesbaden, 1987; vol. 3: *Supplement*. Ed. by Wolf Dietrich Fischer. Wiesbaden, 1992.
- 5 Daiber, Hans. *Bibliography of Islamic Philosophy*, 2 vols. Leiden, Boston, Cologne, 1999. – Supplement (2007).

6 *Encyclopaedia of Islam*, THREE [EI Three]. Ed. by Marc Gaborieau et al., 1 ff. Leiden, 2007 ff.

7 Schmidtke, Sabine, ed. *The Oxford Handbook of Islamic Theology*. Oxford, 2016.

8 El-Rouayheb, Khaled and Sabine Schmidtke, eds. *The Oxford Handbook of Islamic Philosophy*. Oxford, 2017.

### *Overviews. Life and Works*

- 15 Leo Africanus [= al-Ḥasan b. Muḥammad al-Wazzān]. *Libellus de viris quibusdam illustribus apud Arabes*. In *Bibliothecarius quadripartitus*. Ed. by Johann Heinrich Hottinger. Zürich, 1664, 246–294.

- 16 Schmölders, August. *Essai sur les écoles philosophiques chez les Arabes et notamment sur la doctrine d'Algazzali*. Paris, 1842.
- 17 Gosche, Richard. "Über Ghazzālīs Leben und Werke." In *Abhandlungen der Königlich Akademie der Wissenschaften zu Berlin, Phil.-Hist. Abteilung*. Berlin, 1858, 239–311.
- 18 Munk, Salomon. *Mélanges de philosophie juive et arabe*. Paris, 1859, 366–383.
- 19 MacDonald, Duncan B. "The life of al-Ghazzālī, with especial reference to his religious experiences and opinions." *Journal of the American Oriental Society* 20 (1899): 71–132.
- 20 Carra de Vaux, B. *Gazali*. Paris, 1902.
- 21 Gairdner, W.H.T. "Al-Ghazālī's Mishkāṭ al-anwār and the Ghazālī problem." *Der Islam* 5 (1914): 121–153.
- 22 Frick, Heinrich. *Ghazālīs Selbstbiographie. Ein Vergleich mit Augustins Konfessionen*. Gießen, 1919.
- 23 Obermann, Julian. *Der philosophische und religiöse Subjektivismus Ghazālī's. Ein Beitrag zum Problem der Religion*. Wien, Leipzig, 1921.
- 24 Schaeder, Hans Heinrich. "Rezension zu: Al-Ghasali, Das Elixir der Glückseligkeit, übers. von H. Ritter." *Orientalistische Literaturzeitung* 29 (1926): 53–55.
- 25 Asin Palacios, M. *La espiritualidad de Algazel y su sentido cristiano*, 4 vols. Madrid, Granada, 1934–1941.
- 26 Wensinck, A.J. *La pensée de al-Ghazzali*. Paris, 1940.
- 27 Smith, Margaret. *Al-Ghazālī the Mystic*. A study of the life and personality of Abū Ḥāmid Muḥammad al-Ṭūsī al-Ghazālī, together with an account of his mystical teaching and an estimate of his place in the history in Islamic mysticism. London, 1944.
- 28 Watt, W. Montgomery. "A forgery in Al-Ghazālī's Mishkāṭ?" *Journal of the Royal Asiatic Society* (1949): 5–22.
- 29 Watt, W. Montgomery. "The authenticity of the works attributed to al-Ghazālī." *Journal of the Royal Asiatic Society* (1952): 24–45.
- 30 Watt, W. Montgomery. *The Faith and Practice of al-Ghazālī*. London, 1953.
- 31 Jabre, Farid. "La biographie et l'œuvre de Ghazālī reconsiderées à la lumière des Ṭabaqāt de Sobki." *Mélanges de l'Institut Dominicain d'Études Orientales* 1 (1954): 73–102.
- 32 Abd-el-Jalil, J.-M. "Autour de la sincérité d'al-Ġazzālī." *Mélanges Louis Massignon* 1. Damascus, 1956, 57–72.
- 33 Bouyges, Maurice. *Essai de chronologie des œuvres de Al-Ghazālī (Algazel)*. Ed. by Michel Allard. Beirut, 1959.
- 34 Hourani, George. "The chronology of Ghazālī's writings." *Journal of the American Oriental Society* 79 (1959): 225–233.
- 35 Badawī, 'Abd al-Raḥmān. *Mu'allafāt al-Ġazzālī*. Cairo, 1961; al-Kuwait, 1977 (2nd ed.).
- 36 Watt, W. Montgomery. "The study of al-Ghazālī." *Oriens* 13/14 (1961): 121–132.
- 37 Watt, W. Montgomery. *Muslim Intellectual*. Edinburgh, 1963.
- 38 Watt, W. Montgomery. "Al-Ghazālī, Abū Muḥammad b. Muḥammad al-Ṭūsī." In EI<sup>2</sup> [\*1: II 1038b–1041b].
- 39 van Ess, Josef. "Neuere Literatur zu Ġazzālī." *Oriens* 20 (1967) 299–308.

- 40 Poggi, Vincenzo M. *Un classico della spiritualità musulmana. Saggio monografico sul «Munqid» di al-Ġazzālī*. Rome, 1967.
- 41 Krawulsky, Dorothea. *Reden und Briefe des Abū Ḥāmid al-Ġazzālī*, übersetzt und erläutert. Freiburg i.B., 1971.
- 42 Lazarus-Yafeh, Hava. *Studies in al-Ghazzālī*. Jerusalem, 1975.
- 43 Hourani, George. "A revised chronology of Ġhazālī's writings." *Journal of the American Society* 104 (1984): 289–302.
- 44 van Ess, Josef. "Quelques remarques sur le Munqid min aḡ-ḡalāl." In Sinaceur (ed.) 1987 [\*46: 57–68].
- 45 Makdisi, Georges. "Al-Ghazālī, disciple de Šāfi'ī en droit et en théologie." In Sinaceur (ed.) 1987 [\*46: 45–55].
- 46 Sinaceur, A.M., ed. *Ghazālī, la raison et le miracle*. Table ronde UNESCO, 9–10 décembre 1985. Paris, 1987.
- 47 Bernand, Marie. "Al-Ghazālī, artisan de la fusion des systèmes de pensée." *Journal Asiatique* 278 (1991): 223–251.
- 48 Ormsby, Eric L. "The taste of truth. The structure of experience in al-Ghazālī's al-Munqidh min al-ḡalāl." In *Islamic studies presented to Charles J. Adams*. Ed. by Wael B. Hallaq and Donald P. Little. Leiden etc., 1991, 133–152.
- 49 Frank, Richard M. "Al-Ghazālī on taqlīd. Scholars, theologians, and philosophers." *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften* 7 (1991/92): 207–252. – Repr. in Frank 2005 [\*247: no. x].
- 50 Janssens, Jules. "Le ma'ārij al-quds fi madārij ma'rifat al-nafs. Un élément-clé pour le dossier Ghazzālī – Ibn Sīnā." *Archives d'histoire doctrinale et littéraire du moyen âge* 60 (1993): 27–55. – Repr. in Janssens 2006 [\*252: no. viii].
- 51 Campanini, Massimo. "Al-Ghazzālī." In *History of Islamic Philosophy* I. Ed. by Seyyed Hossein Nasr and Oliver Leaman. London etc., 1996, 258–274.
- 52 Böwering, Gerhard. "Ġazālī, Abū Ḥāmed Moḥammad." In Elr [\*3: x 358–363].
- 53 Ormsby, Eric. "Abu Hamid al-Ghazali vu par Louis Massignon." In *Louis Massignon et Iran*. Ed. by Eve Pieruniek and Yann Richard. Paris, 2000, 51–59.
- 54 Janssens, Jules. "Al-Ghazzālī, and his use of Avicennian texts." In *Problems in Arabic Philosophy*. Ed. by Miklós Maróth. Piliscsaba, 2003, 37–49. – Repr. in Janssens 2006 [\*252: no. xi].
- 55 Marmura, Michael E. "Al-Ghazālī." In *The Cambridge Companion to Arabic Philosophy*. Ed. by Peter Adamson and Richard C. Taylor. Cambridge, 2005, 137–154.
- 56 Moosa, Ebrahim. *Ghazali and the Poetics of Imagination*. Chapel Hill, 2005.
- 57 Griffel, Frank. "Al-Ghazālī or al-Ghazzālī? On a lively debate among Ayyūbid and Mamlūk historians in Damascus." In *Islamic Thought in the Middle Ages. Studies in transmission and translation in honour of Hans Daiber*. Ed. by Anna Ayşe Akasoy and Wim Raven. Leiden, 2008, 101–112.
- 58 Ormsby, Eric. *Ghazali. The Revival of Islam*. Oxford, 2008.
- 59 Garden, Kenneth. "Al-Māzārī Al-Dhakī. Al-Ghazālī's Maghribi

adversary in Nishapur." *Journal of Islamic Studies* 21 (2010): 89–107.

60 Garden, Kenneth. "Coming down from the mountaintop. Al-Ghazālī's autobiographical writings in context." *Muslim World* 101 (2011): 581–596.

61 Kukkonen, Taneli. "al-Ġazālī, Abū Ḥāmid Muḥammad." In *Encyclopedia of Medieval Philosophy. Philosophy between 500 and 1500*, 2 vols [continuous pagination]. Ed. by Henrik Lagerlund. Dordrecht, 2011; 2020 (2nd ed.), 601–607.

62 Langermann, Y. Tzvi. "The 'Hebrew Ajwiba' ascribed to al-Ghazālī. Corpus, conspectus, and context." *The Muslim World* 101 (2011): 680–697.

63 al-Akiti, M. Afifi. "Index to divisions of al-Ghazālī's often-cited published works." *The Muslim World* 102 (2012): 70–200.

64 al-Daghistani, Raid. *Muḥammad al-Ġazālī. Erkenntnislehre und Lebensweg*. Freiburg i. Br., 2014.

65 Garden, Kenneth. *The First Islamic Reviver. Abū Ḥāmid al-Ghazālī and his Revival of the Religious Sciences*. Oxford, 2014.

66 Griffel, Frank. "Al-Ghazali." In *Stanford Encyclopedia of Philosophy*, <http://plato.stanford.edu/entries/al-ghazali/> (First published Tue Aug 14, 2007; substantive revision Mon Sept 22, 2014).

67 Garden, Kenneth. "Revisiting al-Ghazālī's crisis through his Scale for action (Mizān al-'amal)." In Tamer (ed.) 2015 [\*69: 207–228].

68 Madelung, Wilferd. "Al-Ghazālī's changing attitude to philosophy." In Tamer (ed.) 2015 [\*69: 23–34].

69 Tamer, Georges, ed. *Islam and Rationality. The Impact of al-Ghazālī. Papers collected on his 900th anniversary* 1. Leiden, 2015.

70 Griffel, Frank, ed. *Islam and Rationality. The Impact of al-Ghazālī. Papers collected on his 900th anniversary* 11. Leiden, 2016.

71 Griffel, Frank. "Is there an autograph of al-Ghazālī in MS Yale, Landberg 318?" In Griffel (ed.) 2016 [\*70: 168–185].

72 Rudolph, Ulrich. "Al-Ghazālī's concept of philosophy." In Griffel (ed.) 2016 [\*70: 32–53].

### Terminology

90 Jabre, Farid. *La notion de certitude selon Ghazali. Dans ses origines psychologiques et historiques*. Paris, 1958.

91 Jabre, Farid. *La notion de ma'rifa chez Ghazālī*. Beirut, 1958.

92 Jabre, Farid. *Essai sur le lexique de Ghazali. Contribution à l'étude de la terminologie de Ghazali dans ses principaux ouvrages à l'exception du Tahāfut*. Beirut 1970, 1985 (2nd ed.).

93 al-ʿAḡam, Rafīq. *Mawsūʿat muṣṭalahāt al-Imām al-Ġazālī*. Beirut, 2000. – Alternative title: *Encyclopedia of al-Ghazālī's Terminology*.

### Logic

100 Marmura, Michael E. "Ghazālī and demonstrative science." *Journal of the History of Philosophy* 3 (1965): 183–204. – Repr. in Marmura 2005 [\*249: 231–260].

101 Brunschvig, Robert. "Pour ou contre la logique grecque chez les théologiens-juristes de l'Islam. Ibn Ḥazm, al-Ghazālī, Ibn Taimiyya." *Oriente*

*e occidente nel medioevo. Filosofia e scienze. Atti dei convegni di l'Accademia Nazionale dei Lincei* 13. Rome, 1971, 185–209.

102 Kleinknecht, Angelika. “Al-Qiṣṣ al-mustaḳīm. Eine Ableitung der Logik aus dem Koran.” In *Islamic Philosophy and the Classical Tradition*. Ed. by S.M. Stern, A. Hourani, V. Brown. London, 1972, 159–187.

103 Gätje, Helmut. “Logisch-semasiologische Theorien bei al-Ġazzālī.” *Oriens* 21 (1974): 151–182.

104 Marmura, Michael E. “Ghazali’s attitude to the secular sciences and logic.” In *Essays on Islamic Philosophy and Science*. Ed. by George F. Hourani. Albany, 1975, 100–111.

105 Hallaq, Wael B. “Logic, formal arguments and formalization of arguments in Sunnī jurisprudence.” *Arabica* 37 (1990): 315–358.

106 Street, Tony. “Arabic logic.” In *Handbook of the History of Logic*, vol. 1: *Greek, Indian and Arabic logic*. Ed. by D.M. Gabbay and J. Woods. Amsterdam, 2004, 523–596.

107 Janssens, Jules. “Al-Ghazzālī’s Mi’yār al-‘ilm fī fann al-manṭiq. Sources avicenniennes et farabiennes.” *Archives d’histoire doctrinale et littéraire du moyen âge* 69 (2002): 39–66. – Repr. in Janssens 2006 [\*252: no. IX].

108 Rudolph, Ulrich. “Die Neubewertung der Logik durch al-Ġazzālī.” In *Logik und Theologie. Das Organon im arabischen und im lateinischen Mittelalter*. Ed. by Dominik Perler and U. Rudolph. Leiden, 2005, 73–97.

109 Becheri, Larabi. *Raisonnement juridique par analogie (qiyās) chez al-Ġazzālī. Étude et traduction de Asās al-qiyās*. Dissertation, Université Aix-en-Provence/Marseille, 2009.

110 Janssens, Jules. “Al-Ghazālī. The introduction of Peripatetic syllogistic in Islamic law (and kalām).” *Mélanges de l’Institut Dominicain d’Études Orientales* 28 (2010): 219–233.

111 Kukkonen, Taneli. “Al-Ghazālī on the signification of names.” *Vivarium* 48 (2010): 55–74.

112 Kukkonen, Taneli. “Al-Ghazālī on accidental identity and the attributes.” *Muslim World* 101 (2011): 658–679.

113 El-Rouayheb, Khaled. “Theology and logic.” In Schmidtke (ed.) 2016 [\*7: 408–431].

114 Gobillot, Geneviève. “Les formes logiques dans le Coran selon al-Ghazālī. D’un inventaire des formes logiques à une réflexion sur la logique d’ensemble du Coran.” *Mélanges de l’Institut Dominicain d’Études Orientales* 30 (2014): 13–26.

115 La Martire, Corrado. “Il ‘nome’ nel Maḡṣad di al-Ghazālī. Note di grammatica araba e logica aristotelica sulla tradizione dei commenti al Peri Hermeneias.” *Studi Magrebini* 17 (2019): 112–129.

### *Soul and Intellect. Epistemology*

130 Endress, Gerhard. “The limits to reason. Some aspects of Islamic philosophy in the Būyid period.” *Akten des VII. Kongresses für Arabistik und Islamwissenschaft. Göttingen, 15. bis*

22. August 1974. Ed. by Albert Dietrich. Göttingen, 1976, 120–125.
- 131 Gianotti, Timothy J. *Al-Ghazali's Unspeakable Doctrine of the Soul. Unveiling the Esoteric Psychology and Eschatology of the Ihya'*. Leiden, 2001.
- 132 Bargerion, Carol L. "Sufism's role in al-Ghazālī's first crisis of knowledge." *Medieval Encounters* 9 (2003): 32–78.
- 133 Griffel, Frank. "Al-Ġazālī's concept of prophecy. The introduction of Avicennan psychology into Aṣ'arite theology." *Arabic Sciences and Philosophy* 14 (2004): 101–144.
- 134 Ormsby, Eric. "Dream, the poor man's prophecy. Al-Ghazālī on dreams." In *Dreaming across Boundaries. The Interpretation of Dreams in Islamic Lands*. Ed. by Louise Marlow. Cambridge (Mass.), 2008, 142–152.
- 135 Bargerion, Carol L. "On Ghazālīan epistemology. A theory." *Journal of Islamic Studies* 4 (2008): 51–68.
- 136 Janssens, Jules. "L'âme-miroir. Al-Ġazālī entre philosophie et mysticisme." In *Miroir et savoir. La transmission d'un thème platonicien, des Alexandrins à la philosophie arabo-musulmane*. Ed. by Daniel De Smet, Miriam Sebtī, Godefroy de Callatāy. Leuven, 2008, 203–217.
- 137 Özel, Aytekin. "Al-Ghazālī's method of doubt and its epistemological and logical criticism." *Journal of Islamic Philosophy* 4 (2008): 69–76.
- 138 Noor Shakirah bt. Mat Akhir. "Al-Ghazali on the soul and its dynamic fundamentals." *Hamdard Islamicus* 31 (2008): 45–48.
- 139 Noor Shakirah [bt.] Mat Akhir. "The ethics of soul and its relation to knowledge in al-Ghazali's thought." *The Islamic Quarterly* 52 (2008): 285–321.
- 140 Kukkonen, Taneli. "Al-Ghazālī's skepticism revisited." In *Rethinking the History of Skepticism. The Missing Medieval Background*. Ed. by Henrik Lagerlund. Leiden, 2010, 29–59.
- 141 Griffel, Frank. "Al-Ghazālī's use of 'Original human disposition' (fiṭra) and its background in the teachings of al-Fārābī and Avicenna." *The Muslim World* 102 (2012): 1–32.
- 142 Kukkonen, Taneli. "Receptive to reality. Al-Ghazālī on the structure of the soul." *The Muslim World* 102 (2012): 541–561.
- 143 Shihadeh, Ayman. "Classical Ash'arī anthropology. Body, life and spirit." *The Muslim World* 102 (2012): 433–477.
- 144 Treiger, Alexander. *Inspired Knowledge in Islamic Thought. Al-Ghazālī's Theory of Mystical Cognition and its Avicennian Foundation*. London, New York, 2012.
- 145 Kukkonen, Taneli. "Al-Ghazālī on the emotions." In Tamer (ed.) 2015 [\*69: 138–164].
- 146 López-Farjeat, Luis Xavier. "Al-Ghazālī on knowledge ('ilm) and certainty (yaqīn) in al-Munqidh min al-ḍalāl and in al-Qisṭas al-mustaqīm." In Tamer (ed.) 2015 [\*69: 229–252].
- 147 Kukkonen, Taneli. "Al-Ghazālī on error." In Griffel (ed.) 2016 [\*70: 3–31].
- 148 Shihadeh, Ayman. "Al-Ghazālī and kalām. The conundrum of his body-soul

dualism." In Griffel (ed.) 2016 [\*70: 113–141].

### *Ethics*

160 Marmura, Michael E. "Ghazālī on ethical premises." *The Philosophical Forum* 1 (1968–1969): 393–403. – Repr. in Marmura 2005 [\*249: 261–265].

161 Madelung, Wilferd. "Ar-Rāḡib al-Iṣfahānī und die Ethik al-Ġazālīs." In *Islamkundliche Abhandlungen Fritz Meier zum sechzigsten Geburtstag*. Ed. by Richard Gramlich. Wiesbaden, 1974, 152–163.

162 Abul Quasem, Muhammad. *The Ethics of al-Ghazālī. A Composite Ethics in Islam*. Selangor [Malaysia], 1975 (Ph.D. Diss., University of Edinburgh).

163 Sherif, Mohamed. *Ghazali's Theory of Virtue*. Albany, 1975.

164 Hourani, George F. "Ghazālī on the ethics of action." *Journal of the American Oriental Society* 96 (1976): 69–88.

165 Daiber, Hans. "Griechische Ethik in islamischem Gewande. Das Beispiel von Rāḡib al-Iṣfahānī." In *Historia Philosophiae Medii Aevi. Studien zur Geschichte des Mittelalters* 1. Ed. by Burkhard Mojsisch and Olaf Pluta. Amsterdam, 1991, 181–192.

166 Mohamed, Yasien. "The ethical philosophy of al-Rāḡib al-Iṣfahānī." *Journal of Islamic Studies* 6 (1995): 51–75.

167 Reinhart, Kevin. *Before Revelation. The Boundaries of Muslim Moral Thought*. New York, 1995.

168 Mohamed, Yasien. "Knowledge and purification of the soul. An annotated translation with introduction of Iṣfahānī's Kitāb al-Dharī'a ilā makārim

al-sharī'a (58–76; 89–92)." *Journal of Islamic Studies* 9 (1998): 1–34.

169 Karlıḡa, Bekir. "Un nouveau traité d'éthique d'Ibn Sīnā inconnu jusqu'à nos jours." In *Avicenna and his Heritage*. Ed. by Jules Janssens, Daniel De Smet. Leuven, 2002, 21–35.

170 Mohamed, Yasien. *The Path to Virtue. The Ethical Philosophy of al-Rāḡib al-Iṣfahānī*. Kuala Lumpur, 2006.

171 Janssens, Jules. "Al-Ghazālī's Mīzān al-'amal. An ethical summa based on Ibn Sīnā and al-Rāḡib al-Iṣfahānī." In *Islamic Thought in the Middle Ages*. Studies in text, transmission and translation in honour of Hans Daiber. Ed. by Anna Akasoy, Wim Raven. Leiden, 2008, 123–137.

172 Mohamed, Yasien. "The ethics of education. Al-Iṣfahānī's al-Dharī'a as a source of inspiration for al-Ghazālī's Mīzān al-'amal." *The Muslim World* 101 (2011): 633–657.

173 Mohamed, Yasien. "The duties of the teacher. Al-Iṣfahānī's Dharī'a as a source of inspiration for al-Ghazālī's Mīzān al-'amal." In Tamer (ed.) 2015 [\*69: 186–206].

174 Shihadeh, Ayman. "Theories of ethical value in kalām. A new interpretation." In Schmidtke (ed.) 2016 [\*7: 384–407].

175 Vasalou, Sophia. "An ancient virtue and its heirs. The reception of greatness of the soul in the Arabic tradition." *Journal of Religious Ethics* 45 (2017): 688–731.

176 Vasalou, Sophia. *Virtues of Greatness in the Arabic Tradition*. Oxford, 2019.

177 Casewit, Yousef. "Al-Ghazālī's virtue ethical theory of the divine names. The theological underpinnings of the doctrine of takhalluq in al-Maḥṣad al-asnā." *Journal of Islamic Ethics* 4 (2020): 155–200.

### Politics

190 Laoust, Henri. *La politique de al-Ġazālī*. Paris, 1970.

191 Crone, Patricia. "Did al-Ghazālī write a mirror for princes? On the authorship of Naṣīḥat al-mulūk." *Jerusalem Studies in Arabic and Islam* 10 (1987): 167–192. – Repr. in P. Crone, *From Kavād to al-Ghazālī. Religion, Law and Political Thought in the Near East, c. 600–c.1100*. Aldershot, 2005 (no. XII).

192 Hillenbrand, Carole. "Islamic orthodoxy or Realpolitik? Al-Ghazālī's views on government." *Iran* 36 (1988): 81–94.

193 Hillenbrand, Carole. "A little known mirror for princes by al-Ghazālī". In *Words, Texts, and Concepts Cruising the Mediterranean Sea. Studies on the sources, contents, and influences of Islamic civilization and Arabic philosophy and science. Dedicated to Gerhard Endress on his sixty-fifth birthday*. Ed. by Rüdiger Arnzen and J. Thielmann. Leuven, 2004, 592–601.

194 Said, Yazeed. *Ghazālī's Politics in Context*. London, 2013.

195 Moussa, Mohammed. *Politics in the Islamic Tradition. The Thought of Muhammad al-Ghazali*. London, New York, 2016.

### Metaphysics, Physics, and Cosmology

210 Obermann, Julian. "Das Problem der Kausalität bei den Arabern." *Wiener Zeitschrift für die Kunde des Morgenlandes* 29 (1915): 323–350 and 30 (1918): 37–90.

211 MacDonald, D.B. "The Meanings of the philosophers' by al-Ghazzālī." *Isis* 25 (1936): 9–15.

212 Abū Ridāh, Muḥammad 'Abd-al-hādī. *Al-Ghazālī und seine Widerlegung der griechischen Philosophie (Tahāfut al-Falāsifah)*. Madrid, 1952.

213 Shehadi, Fadlou. *Ghazālī's Unique Unknowable God*. Leiden, 1964.

214 Behler, Ernst. *Die Ewigkeit der Welt. Problemgeschichtliche Untersuchungen zu den Kontroversen um Weltanfang und Weltunendlichkeit im Mittelalter*. Erster Teil: *Die Problemstellung in der arabischen und jüdischen Philosophie des Mittelalters*. Munich etc., 1965.

215 Goodman, Lenn E. "Ghazālī's argument from creation." *International Journal of Middle Eastern Studies* 2 (1971): 67–85 and 168–188.

216 Goodman, Lenn E. "Did al-Ghazālī deny causality?" *Studia Islamica* 47 (1978): 83–120.

217 Alon, Ilai. "Al-Ghazāl on causality." *Journal of the American Oriental Society* 100 (1980): 397–405.

218 Gramlich, Richard. "Muḥammad al-Ġazzālī's kleine islamische Fundamentaldogmatik." *Saeculum* 31 (1980): 380–398.

219 Marmura, Michael E. "Al-Ghazālī's second causal theory in the 17th discussion of his Tahāfut." In *Islamic Philosophy*



- and Mysticism*. Ed. by Parviz Morewedge. Delmar, N.Y., 1981: 85–112.
- 220 Vanderjagt, A.J. “Knowledge of God in Ghazālī and Anselm.” In *Sprache und Erkenntnis im Mittelalter. Akten des VI. Internationalen Kongresses für mittelalterliche Philosophie der Société internationale pour l’étude de la philosophie médiévale* 29. August–3. September 1977 in Bonn. Ed. by Jan P. Beckmann et al. under the direction of Wolfgang Kluxen. Berlin, New York, 1981, 852–861.
- 221 Frank, Richard M. “Al-Ghazālī’s use of Avicenna’s philosophy.” *Revue des Études Islamiques* 55–57 (1987–1989): 271–285. – Repr. in Frank 2005 [\*247: no. XI].
- 222 Abrahamov, Binyamin. “Al-Ghazālī’s theory of causality.” *Studia Islamica* 67 (1988): 75–98.
- 223 Janssens, Jules. “Filosofische elementen in de mystieke leer van al-Ghazzālī.” *Tijdschrift voor Filosofie* 50 (1988): 334–342.
- 224 Giladi, Avner. “On the origin of two key-terms in al-Ġazzālī’s *Ihyā’ ‘ulūm al-dīn*.” *Arabica* 36 (1989): 81–92.
- 225 Marmura, Michael. E. “Al-Ghazālī on bodily resurrection and causality in *Tahāfut* and the *Iqtīṣād*.” *Aligarh Journal of Islamic Thought* 2 (1989): 46–75. – Repr. in Marmura 2005 [\*249: 273–299].
- 226 Ormsby, Eric. “Creation in time in Islamic thought with special reference to al-Ghazālī.” In *God and Creation. An ecumenical symposium*. Ed. by David B. Burrell and Bernard McGinn. Notre Dame, 1990, 246–264.
- 227 Abrahamov, Binyamin. “Ibn Sīnā’s influence on al-Ghazālī’s non-philosophical works.” *Abr-Nahrayn* 29 (1991): 1–17.
- 228 Landolt, Hermann. “Ghazālī and ‘Religionswissenschaft’.” Some notes on the *Mishkāt al-anwār*.” *Asiatische Studien* 45 (1991): 19–72.
- 229 Frank, Richard M. *Creation and the Cosmic System. Al-Gazālī & Avicenna*. Heidelberg, 1992.
- 230 Abrahamov, Binyamin. “Al-Ghazālī’s supreme way to know God.” *Studia Islamica* 77 (1993): 141–168.
- 231 Nakamura, Kojiro. “Was Ghazālī an Ash‘arite?” *Memoirs of the Research Department of the Toyo Bunko (The Oriental Library)* 51 (1993): 1–24.
- 232 Frank, Richard M. *Al-Ghazālī and the Ash‘arite School*. Durham, London, 1994.
- 233 Marmura, Michael. E. “Ghazālī’s chapter on divine power in the *Iqtīṣād*.” *Arabic Sciences and Philosophy* 4 (1994): 279–315. – Repr. in Marmura 2005 [\*249: 301–334].
- 234 Marmura, Michael. E. “Ghazālīan causes and intermediaries.” *Journal of the American Oriental Society* 115 (1995): 89–100.
- 235 Riker, Steven. “Al-Ghazali on necessary causality in *The Incoherence of the philosophers*.” *The Monist* 79 (1996): 315–324.
- 236 Frank, Richard M. “Currents and countercurrents.” In *Islam. Essays on scripture, thought and society*. Ed. by Peter G. Riddell and Tony Street. Leiden, 1997, 113–134. – Repr. in Frank 2005 [\*247: no. VIII].
- 237 Rudolph, Ulrich. “La preuve de l’existence de Dieu chez Avicenne

- et dans la théologie musulmane." In *Langage et philosophie. Hommage à Jean Jolivet*. Ed. by Alain de Libera, Abdelali Elamrani-Jamal, and Alain Galonnier. Paris, 1997, 339–346.
- 238 Griffel, Frank. *Apostasie und Toleranz im Islam. Die Entwicklung zu al-Ġazālī's Urteil gegen die Philosophie und die Reaktionen der Philosophen*. Leiden, 2000.
- 239 Kukkonen, Taneli. "Possible worlds in the Tahāfut al-falāsifa. Al-Ghazālī on creation and contingency." *Journal of the History of Philosophy* 38 (2000): 479–502.
- 240 Perler, Dominik and Ulrich Rudolph. *Occasionalismus. Theorien der Kausalität im arabisch-islamischen und im europäischen Denken*. Göttingen, 2000.
- 241 Janssens, Jules. "Al-Ghazālī's Tahāfut. Is it really a rejection of Ibn Sīnā's philosophy?" *Journal of Islamic Studies* 12 (2001): 1–17. – Repr. in Janssens 2006 [\*252: no. x].
- 242 Lizzini, Olga. "Occasionalismo e causalità filosofica. La discussione della causalità in al-Ġazālī." *Quaestio* 2 (2002): 155–183.
- 243 Marmura, Michael E. "Ghazali and Ash'arism revisited." *Arabic Sciences and Philosophy* 12 (2002): 91–110.
- 244 Abrahamov, Binyamin. *Divine Love in Islamic Mysticism. The Teachings of al-Ghazālī and al-Dabbāgh*. London, New York, 2003.
- 245 Marmura, Michael E. "Ghazali's al-Iqtisad fi al-ʿItiqad. Its relation to Tahāfut al-Falasifa and to Qawāʿid al-Aqaʿid." *Aligarh Journal of Islamic Philosophy* 10 (2004): 1–12.
- 246 Moad, Edward Omar. *Prolegomena to an Occasionalist Metaphysics*. Ph.D. Diss., University of Missouri/Columbia, 2004.
- 247 Frank, Richard M. *Philosophy, Theology and Mysticism in Medieval Islam. Texts and studies on the development and history of Kalām* Vol. 1. Ed. by Dimitri Gutas. Aldershot, 2005.
- 248 Griffel, Frank. "Taqlīd of the philosophers. Al-Ghazālī's initial accusation in the Tahāfut." In *Ideas, Images, and Methods of Portrayal. Insights into Arabic Literature and Islam*. Ed. by Sebastian Günther. Leiden, 2005, 273–296.
- 249 Marmura, Michael E. *Probing in Islamic Philosophy. Studies in the Philosophies of Ibn Sīnā, al-Ghazālī and Other Major Muslim Thinkers*. Binghamton, 2005.
- 250 Moad, Edward Omar. "Al-Ghazālī's occasionalism and the natures of the creatures." *International Journal for Philosophy of Religion* 58 (2005): 95–101.
- 251 Griffel, Frank. "Ms London, British Library Or. 3126. An unknown work by al-Ghazālī on metaphysics and philosophical theology." *Journal of Islamic Studies* 17 (2006): 1–42.
- 252 Janssens, Jules. *Ibn Sīnā and his Influence on the Arabic and Latin World*. Aldershot, 2006.
- 253 McGinnis, Jon. "Occasionalism, natural causation and science in al-Ghazālī." In *Arabic Theology, Arabic Philosophy. From the Many to the One. Essays in Celebration of Richard M. Frank*. Ed. by James E. Montgomery. Leuven, 2006, 441–463.

- 254 Hennig, Boris. "Ghazali on immaterial substances." In *Substance and Attribute in Islamic Philosophy. Western and Islamic Tradition in Dialogue*. Ed. by C. Kanzian and M. Legenhausen. Heusenstamm, 2007, 55–66.
- 255 Treiger, Alexander. "Monism and monotheism in Al-Ghazālī's *Mishkāṭ al-anwār*." *Journal of Qur'anic Studies* 9 (2007): 1–27.
- 256 al-Akiti, M. Afifi. *The Maḍnūn of al-Ghazālī. A critical edition of the unpublished Major Maḍnūn with discussion of his restricted, philosophical corpus*. Ph.D. Thesis, University of Oxford, 2008.
- 257 al-Akiti, M. Afifi. "The good, the bad, and the ugly of falsafa. Al-Ghazālī's *Maḍnūn*, *Tahāfut*, and *Maqāṣid*, with particular attention to their falsafī treatments of God's knowledge of temporal events." In *Avicenna and his Legacy. A Golden age of Science and Philosophy*. Ed. by Y. Tzvi Langermann. Turnhout, 2009, 51–100.
- 258 Griffel, Frank. *Al-Ghazālī's Philosophical Theology*. Oxford, New York, 2009.
- 259 Gianotti, Timothy J. "Beyond both law and theology: An introduction to al-Ghazālī's «Science of the way of the afterlife» in «Reviving religious knowledge» (Iḥyā' 'Ulūm al-Dīn)." *The Muslim World* 101 (2011): 597–613.
- 260 Janssens, Jules. "Al-Ghazālī between philosophy (falsafa) and sufism (taṣawwuf). His complex attitude in the *Marvels of the heart* (ʿAjāʾib al-qalb) of the Iḥyā' 'ulūm al-dīn." *The Muslim World* 101 (2011): 614–632.
- 261 Dallh, Minlib. "The quest for the Divine: al-Ghazālī and Saint Bruno of Cologne." *The Muslim World* 102 (2012): 60–69.
- 262 Garmi, Yosra. "Al-Ghazālī et les falāsifa. Lecture du *Tahāfut al-falāsifa* xx. Le problème de la résurrection des corps dans l'au-delà." *Mélanges de l'Institut Dominicain d'Études Orientales* 30 (2014): 57–74.
- 263 Janssens, Jules. "Éléments avicenniens dans le livre al-Maḥṣad d'al-Ghazālī." *Mélanges de l'Institut Dominicain d'Études Orientales* 30 (2014): 91–103.
- 264 Daiber, Hans. "God versus causality. Al-Ghazālī's solution and its historical background." In Tamer (ed.) 2015 [\*69: 1–22].
- 265 Moad, Edward Omar. "Between divine simplicity and eternity of the world. Ghazali on the necessity of the Necessary existent in the Incoherence of the philosophers." *Philosophy and Theology* 72 (2015): 55–73.
- 266 Moad, Edward Omar. "Al-Ghazālī's position on the 'second proof' of the philosophers for the eternity of the world, in the first discussion of the Incoherence of the philosophers." *Sophia* 54 (2015): 429–441.
- 267 Akasoy, Anna Ayşe. "Al-Ghazālī's veil section. Comparative religion before Religionswissenschaft?" In Griffel (ed.) 2016 [\*70: 142–167].
- 268 El Shamsy, Ahmed. "Al-Ghazālī's teleology and the Galenic tradition. Reading the wisdom in God's creations (al-Ḥikma fī makhlūqāt Allāh)." In Griffel (ed.) 2016 [\*70: 90–112].
- 269 Griffel, Frank. "Theology engages with Avicennan philosophy. Al-Ghazālī's *Tahāfut al-falāsifa* and Ibn al-Malāḥimī's

Tuḥfat al-mutakallimīn fī l-radd ‘alā l-falāsifa.” In Schmidtke (ed.) 2016 [\*7: 435–455].

270 Ogden, Stephen R. “Problems in al-Ghazālī’s perfect world. Objections and counter-objections to his best possible world thesis.” In Griffel (ed.) 2016 [\*70: 54–89].

271 Griffel, Frank. “Al-Ghazālī’s (d. 1111) Incoherence of the philosophers.” In El-Rouayheb, Schmidtke (eds.) 2017 [\*8: 191–209].

272 Andani, Khalil. “The merits of the Bāṭiniyya. Al-Ghazālī’s appropriation of Isma‘īli cosmology.” *Oxford Journal of Islamic Studies* 29 (2018): 181–229.

273 Rudolph, Ulrich. “Abū Ḥamid al-Ghazālī. Die Inkohärenz der Philosophen.” In *Religionsphilosophie und Religionskritik. Ein Handbuch*. Ed. by Michael Kühnlein. Berlin, 2018, 84–94.

274 Walther, Markus. *Zeit- und Ewigkeitsvorstellungen zwischen Philosophie, Theologie und Mystik. Eine vergleichende Fallstudie zu Christentum und Islam anhand der Texte von Meister Eckhart und al-Ġazālī*. Würzburg, 2018.

275 Rudolph, Ulrich. “Post-Ghazālīan theology. What were the lessons to be learned from al-Ghazālī.” In Shihadeh, Thiele (eds.) 2020 [\*445: 12–35].

*Further Subjects (incl. Quranic Hermeneutics and Sufism)*

290 Goldziher, Ignaz. *Die Streitschrift des Gazālī gegen die Batinijja-Sekte*. Leiden, 1916.

291 Whittingham, Martin. *Al-Ghazālī and the Qur’ān. One Book, Many Meanings*. London, New York, 2007.

292 Günther, Sebastian. “The principles of instruction are the grounds of our knowledge. Al-Fārābī’s philosophical and al-Ghazālī’s spiritual approaches to learning.” In *Trajectories of Education in the Arab World. Legacies and Challenges*. London, New York, 2010, 15–35.

293 Wohlman, Avital. *Al-Ghazali, Averroës and the Interpretation of the Qur’ān. Common Sense and Philosophy in Islam*. Transl. by David Burrell. London, New York, 2010. – French original: *Contrepoint entre le sens commun et la philosophie en Islam. Ghazali et Averroës*. Paris, 2008.

294 Lange, Christian. “Sitting by the ruler’s throne. Al-Ghazali on justice and mercy in this world and the next.” In *Narrar y suscitar. Violencia, compasión y crueldad en la literatura árabo-islámica*. Ed. by Delfina Serrano. Madrid, 2011, 131–148.

295 Treiger, Alexander. “Al-Ghazālī’s classifications of the sciences and descriptions of the highest theoretical science.” *Dîvâ. Disiplinlerarası Çalışmalar Dergisi, cilt 16 sayı 30* 1 (2011): 1–32.

296 Treiger, Alexander. “Al-Ghazālī’s ‘Mirror Christology’ and its possible East-Syriac sources.” *The Muslim World* 101 (2011): 573–580.

297 Borrmans, Maurice. “Le Credo d’al-Ghazālī. Ce qu’il dit du Kalām et des Mu’tazila dans son Kitāb Qawā’id al-l’ṭiqād de l’Iḥyā’.” *Mélanges de l’Institut Dominicain d’Études Orientales* 30 (2014): 35–45.

298 Gouraud, Jean Abd al-Wadoud. “Foi et raison chez al-Ghazālī.” *Mélanges de l’Institut Dominicain d’Études Orientales* 30 (2014): 47–56.

- 299 Hogga, Mustapha. "Corps, pouvoir et élan mystique chez Ghazālī." *Mélanges de l'Institut Dominicain d'Études Orientales* 30 (2014): 105–116.
- 300 Kebe, Ndiouga. "Le souci d'orthodoxie dans le soufisme d'al-Ghazālī. Réflexion sur la critique ghazalienne de la thèse de l'union mystique et du phénomène d'anomisme dans le milieu soufi." *Mélanges de l'Institut Dominicain d'Études Orientales* 30 (2014): 117–127.
- 301 Peta, Ines. "Al-Radd al-Jamīl. L'épineuse question de la paternité ghazālienne: une nouvelle hypothèse." *Mélanges de l'Institut Dominicain d'Études Orientales* 30 (2014): 129–138.
- 302 Pisani, Emmanuel. "Hors de l'islam point de salut? Juifs, chrétiens et hétérodoxes dans l'eschatologie d'al-Ghazālī." *Mélanges de l'Institut Dominicain d'Études Orientales* 30 (2014): 139–184.
- 303 Abrahamov, Binyamin. "Al-Ghazālī and the Rationalization of Sufism." In Tamer (ed.) 2015 [\*69: 35–48].
- 304 Younès, Michel. "Al-Ghazālī, un Mutakallim." *Mélanges de l'Institut Dominicain d'Études Orientales* 30 (2014): 27–33.
- 305 Giladi, Avner. "Sex, marriage and the family in al-Ghazālī's thought. Some preliminary notes." In Tamer (ed.) 2015 [\*69: 165–185].
- 306 Griffel, Frank. "The Universal rule for allegorically interpreting revelation (al-Qānūn al-kullī fī t-ta'wīl)." In Tamer (ed.) 2015 [\*69: 89–120].
- 307 Ormsby, Eric. "The Comedy of reason. Strategies of humour in al-Ghazālī." In Tamer (ed.) 2015 [\*69: 121–137].
- 308 Tamer, Georges. "Revelation, sciences and symbolism. Al-Ghazālī's Jawāhir al-Qur'ān." In Tamer (ed.) 2015 [\*69: 49–88].
- 309 Khalafallah, Haifaa G. *The al-Ghazali Enigma and why Shari'a is not Islamic Law*. Sheffield, Bristol (CT), 2017.
- 310 Rudolph, Ulrich. "Al-Ghazālī on philosophy and jurisprudence." In *Philosophy and Jurisprudence*. Ed. by Peter Adamson. Berlin, 2019, 67–91.
- Historical Context*
- 330 Glassen, Erika. *Der mittlere Weg. Studien zur Religionspolitik und Religiosität der späteren Abbasidenzeit*. Wiesbaden, 1981.
- 331 Hogga, Mustapha. *Orthodoxie, subversion et réforme en islam. Ġazālī et les Seljuqides*. Paris, 1993.
- 332 Hillenbrand, Carole. "1092. A murderous year." *Arabist. Budapest Studies in Arabic* 15–16 (1995): 281–296 (*Proceedings of the fourteenth congress of the Union Européenne d'Arabisants et Islamisants in Budapest* 1988, vol. 11).
- 333 Browne, Jonathan A.C. "The last days of al-Ghazzālī and the tripartite division of the Sunni world." *The Muslim World* 96 (2006): 89–113.
- 334 Campanini, Massimo. "In defence of Sunnism. Al-Ghazālī and the Seljuqs." In *The Seljuqs. Politics, Society and Culture*. Ed. by Christian Lange and Songül Mecit. Edinburgh, 2011, 228–239.
- 335 Yavari, Neguin. *The Future of Iran's Past. Nizam al-Mulk Remembered*. New York, 2018.

*Intellectual Contexts*

350 Allard, Michel. *Le problème des attributs divins dans la doctrine d'al-Aš'arī et de ses premiers grands disciples*. Beirut, 1965.

351 van Ess, Josef. *Zwischen Ḥadīṭ und Theologie. Studien zur Entstehung prädestinarianischer Überlieferung*. Berlin, New York, 1975.

352 Janssens, Jules. "Le Dānesh-Nāmeh d'Ibn Sīnā. Un texte à revoir?" *Bulletin de philosophie médiévale* 28 (1986): 163–177.

353 Gimaret, Daniel. *Les noms divins en Islam. Exégèse lexicographique et théologique*. Paris, 1988.

354 van Ess, Josef. *Theologie und Gesellschaft im 2. und 3. Jahrhundert Hidschra. Eine Geschichte des religiösen Denkens im frühen Islam*, 4 vols. Berlin, New York, 1991–1997.

355 Davidson, Herbert A. *Alfarabi, Avicenna, and Averroes, on Intellect. Their Cosmologies, Theories of Active Intellect, and Theories of Human Intellect*. New York, Oxford, 1992.

356 Mitha, Farouk. *Al-Ghazali and the Isma'ilis. A Debate on Reason and Authority in Medieval Islam*. London, New York, 2001.

357 Elkaisy-Friemuth, Maha. *God and Humans in Islamic Thought. 'Abd al-Jabbār, Ibn Sīnā and al-Ghazālī*. (London, New York 2006).

358 Wisnovsky, Robert. *Avicenna's Metaphysics in Context*. London, 2003.

359 Madelung, Wilferd. "Abū l-Ḥusayn al-Baṣrī's proof for the existence of God." In *Arabic Theology, Arabic Philosophy. From the Many to the One. Essays in*

*celebration of Richard M. Frank*. Leuven, 2006, 273–280.

360 Eichner, Heidrun. *The post-Avicennian Philosophical Tradition and Islamic Orthodoxy. Philosophical and Theological Summae in Context*. Professorial Diss., Universität Halle-Wittenberg, 2009.

361 De Cillis, Maria. *Free Will and Predestination in Islamic Thought. Theoretical Compromises in the Works of Avicenna, al-Ghazālī and Ibn 'Arabī*. London, New York, 2014.

362 Platti, Emilio. "Les thèses des philosophes rejetées par Ghazālī telles que les présente Yahyā ibn 'Adī († 974)." *Mélanges de l'Institut Dominicain d'Études Orientales* 30 (2014): 75–89.

363 Goetz, Hans-Werner: *Gott und die Welt. Religiöse Vorstellungen des frühen und hohen Mittelalters*. Part 1, Vol. 3: iv. *Die Geschöpfe: Engel, Teufel, Menschen*. Göttingen, 2016.

364 Rudolph, Ulrich. "Occasionalism." In Schmidtke (ed.) 2016 [\*7: 347–363].

365 Thiele, Jan. "Between Cordoba and Nisābūr. The emergence and consolidation of Ash'arism (fourth-fifth/tenth-eleventh century)." In Schmidtke (ed.) 2016 [\*7: 225–241].

366 Thomann, Johannes. "The second revival of astronomy in the tenth century and the establishment of astronomy as an element of encyclopedic education." *Asiatische Studien* 71 (2017): 907–957.

367 Germann, Nadja and Noel A. Rivera Calero. "The causes of grammar. Ibn Jinnī on the nature of language." In *Philosophy and Language in*

*the Islamic World*. Ed. by Nadja Germann and Mostafa Najafi. Berlin, Boston, 2021. 49–75.

### *Influence*

380 Lewes, George Henry. *A Biographical History of Philosophy, from its Origins in Greece to Present Day*. Library edition. Much enlarged and thoroughly revised. London, 1857.

381 Steinschneider, Moritz. *Die hebräischen Übersetzungen des Mittelalters und die Juden als Dolmetscher*, 2 vols. Berlin, 1893. – Repr. Graz, 1956 (1 vol.).

382 Salman, Dominique. “Algazel et les latins.” *Archives d'histoire doctrinale et littéraire du moyen âge* 10 (1936): 103–127.

383 Gardet, Louis and M.M. Anawati. *Introduction à la théologie musulmane. Essai de théologie compare*. Paris, 1948, 1970 (2nd ed.), 1981 (3rd ed.).

384 Alonso, Manuel. “Influencia de Algazel en el mundo latino.” *Al-Andalus* 23 (1958): 371–380.

385 Misch, Georg. *Geschichte der Autobiographie* 111. *Das Mittelalter*. 2: *Das Hochmittelalter im Anfang*. Zweite Hälfte. Frankfurt a.M., 1962.

386 Lohr, Charles. “Logica Algazelis. Introduction and critical text.” *Traditio* 21 (1965): 223–290.

387 Laoust, Henri. “La survie de Al-Gazālī d'après Subkī.” *Bulletin d'Études Orientales* 15 (1972) [Damascus 1973]: 153–172.

388 Hana, Ghanem Georges. “Vorläufer des ‘Cogito, ergo sum’ Descartes’ in der arabischen Philosophie.” In *Erkenntnisse und Meinungen* 1. Ed. by Gernot Wießner. Wiesbaden, 1973, 107–134.

389 Hanley, T. “St. Thomas’s use of al-Ghazālī’s Maqāṣid al-falāsifa.” *Medieval Studies* 44 (1982): 243–271.

390 Hossain, Mary. “Pascal and al-Ghazālī.” *Seventeenth-Century French Studies* 6 (1984): 151–163.

391 Ormsby, Eric. *Theodicy in Islamic thought. The dispute over al-Ghazālī’s “Best of all possible worlds”*. Princeton, 1984.

392 Cortabarría Beita, Angel. “Fuentes árabes del «Pugio fidei» de Ramón Martí: Algazel (1058–1111).” *Ciencia Tomista* 112 (1985): 581–596.

393 D’Alverny, Marie-Thérèse. “Algazel dans l’occident latin.” In *Un trait d’union entre l’orient et l’occident. Al-Ghazzali et Ibn Maimoun*. Agadir, 27–29 novembre 1985. Agadir, 1986, 125–146. – Repr. in M.-T. D’Alverny. *La transmission des textes philosophiques et scientifiques au Moyen Age*. Ed. by Charles Burnett. Aldershot, 1994, no. VII.

394 Hossein, Mary. “Pascal and Islam.” *Journal of Islamic Studies* 2 (1991): 180–194.

395 Zakzouk, Mahmud. *Al-Ghazālī’s Philosophie im Vergleich mit Descartes*. Frankfurt, Bern, 1992. – (Ph. D. Diss. Univ. Munich 1968: *Al-Ghazālī’s Grundlegung der Philosophie, mit einer Erörterung seines philosophischen Grundansatzes im Vergleich mit Descartes*.)

396 Abdullah, M. Amin. *Kant and Ghazali. The Idea of Universality of Ethical Norms*. Frankfurt a.M., 2000. – Germ. transl. *Universalität der Ethik. Kant & Ghazali*. Frankfurt a.M., 2002.

397 Harvey, Steven. “Why did fourteenth-century Jews turn to Alghazali’s account of natural science.”

*Jewish Quarterly Review* 91 (2001): 359–376.

398 Reynolds, G. “A philosophical odyssey. Ghazzālī’s Intentions of the philosophers.” In *Medieval Philosophy and the Classical Tradition in Islam, Judaism and Christianity*. Ed. by J. Inglis. London, 2002, 37–50.

399 Menn, Stephen. “The discourse on the method and the tradition of intellectual autobiography.” In *Hellenistic and Early Modern Philosophy*. Ed. by Jon Miller and Brad Inwood. Cambridge, 2003, 141–191.

400 Sinai, Nicolai. *Menschliche oder göttliche Weisheit? Zum Gegensatz von philosophischem und religiösem Lebensideal bei al-Ghazali und Yehuda ha-Levi*. Würzburg, 2003.

401 Shihadeh, Ayman. “From al-Ghazālī to al-Rāzī. 6th/12th century developments in Muslim philosophical theology.” *Arabic Sciences and Philosophy* 15 (2005): 141–179.

402 Zakzouk, Mahmoud. *Ghazali und Descartes. Ein philosophischer Vergleich*. Nordhausen, 2005.

403 Serrano-Ruano, Delfina. “Why did the scholars of al-Andalus distrust al-Ghazali? Ibn Rushd al-Jadd’s fatwa on awliya’ Allah.” *Der Islam* 83 (2006): 137–156.

404 Opwis, Felicitas. “Islamic law and legal change. The concept of Maṣlaḥa in classical and contemporary Islamic legal theory.” In *Shari’a. Islamic Law in the Contemporary Context*. Ed. by Abbas Amanat and Frank Griffel. Stanford, 2007, 62–82.

405 Abrahamov, Binyamin. “Ibn al-‘Arabī’s attitude toward al-Ghazālī.” In *Avicenna and his Legacy. A Golden Age of Science and Philosophy*. Ed. by Y. Tzvi Langermann. Turnhout, 2009, 101–116.

406 Moad, Omar Edward. “Comparing phases of skepticism in al-Ghazālī and Descartes. Some first meditations on Deliverance from error.” *Philosophy East and West* 59 (2009): 88–101.

407 Reichmuth, Stefan. *The World of Murtaḍā al-Zabidī (1732–91). Life, Networks and Writings*. Gibb Memorial Trust, 2009.

408 Opwis, Felicitas. *Maṣlaḥa and the Purpose of the Law. Islamic Discourse on Legal Change from the 4th/10th to 8th/14th Century*. Leiden, Boston, 2010.

409 Travelletti, Damien. *Front commun. Raymond Martin, Al-Ġazālī et les philosophes. Analyse de la structure et des sources du Ier livre du Pugio fidei*. Ph.D. Diss., Université de Fribourg, 2010.

410 Yazıcı, Sedat. “Al-Ghazali and Hume on causation and miracles.” *Journal of Human Sciences* 7 (2010): 1143–1154.

411 Griffel, Frank. “The Western reception of al-Ghazālī’s cosmology from the Middle Ages to 21st century.” *Dîvân. Disiplinlerarası Çalışmalar Dergisi* 16 (2011), no. 30: 33–62.

412 Janssens, Jules. “Al-Ghazālī’s Maqāṣid al-falāsifa. Latin translation of.” In *Encyclopedia of Medieval Philosophy. Philosophy between 500 and 1500*, 2 vols [with continuous pagination]. Dordrecht, 2011; 2020 (2nd exp. ed.), 630–634.



- 413 Karadaş, C. "Hocazâde'nin Tehâfüt'ünde Sebeplilik Meselesi." In Yücedoğru (ed.) 2011 [\*417: 163–173].
- 414 van Lit, L.W.C. [Eric]. "The chapters on God's knowledge in Khojazâda's and 'Alâ' al-Dîn's studies on al-Ghazâlî's Tahâfut al-falâsifa." In Yücedoğru (ed.) 2011 [\*417: 175–199].
- 415 Shihadeh, Ayman. "Khojazâda on al-Ghazâlî's criticism of the philosophers' proof of the existence of God." In Yücedoğru (ed.) 2011 [\*417: 141–161].
- 416 Shihadeh, Ayman. "New light on the reception of al-Ghazâlî's Doctrines of the philosophers (Maqâsid al-falâsifa)." In *In the Age of Averroes. Arabic Philosophy in the Sixth/Twelfth Century*. Edited by Peter Adamson. London, Turin, 2011, 77–92.
- 417 Yücedoğru, T., O.S. Koloğlul, U.M. Kılavuz and K. Gömbeyaz (eds.) *Uluslararası Hocazâde Sempozyumu*. Bursa, 2011.
- 418 Akasoy, Anna. "Al-Ghazâlî, Ramon Llull and Religionswissenschaft." *Muslim World* 102 (2012): 33–59.
- 419 Michot, Yahya. "An important reader of al-Ghazâlî. Ibn Taymiyya." *Muslim World* 105 (2013): 1–30.
- 420 Bou Akl, Ziad. *Averroes. La philosophie et la loi. Édition, tradition et commentaire de l'Abrégé du Mustasfâ*. Boston, Berlin, München, 2015.
- 421 Girdner, Scott Michael. "Ghazâlî's hermeneutics and their reception in Jewish tradition. Mishkât al-anwâr (The Niche of lights) and Maimonides' Shemonah peraqim (Eight chapters)." In Tamer (ed.) 2015 [\*69: 253–274].
- 422 Harvey, Steven. "The changing image of al-Ghazâlî in Medieval Jewish thought." In G. Tamer (ed.) 2015 [\*69: 288–302].
- 423 Ivry, Alfred L. "Al-Ghazâlî, Averroes and Moshe Narboni. Conflict and conflation." In G. Tamer (ed.) 2015 [\*69: 275–287].
- 424 Janssens, Jules. "R. Marti and his references to al-Ghazâlî." In G. Tamer (ed.) 2015 [\*69: 326–344].
- 425 Michot, Yahya M. "Al-Ghazâlî's esotericism according to Ibn Taymiyya's Bughyat al-Murtâd." In Tamer (ed.) 2015 [\*69: 345–374].
- 426 Özervarlı, M. Sait. "Arbitrating between al-Ghazâlî and the philosophers. The Tahâfut commentaries in the Ottoman intellectual context." In Tamer (ed.) 2015 [\*69: 375–397].
- 427 Takahashi, Hidemi. "The influence of al-Ghazâlî on the juridical, theological and philosophical works of Barhebraeus." In Tamer (ed.) 2015 [\*69: 303–325].
- 428 Garden, Kenneth. "The Revival of the religious sciences in the twenty-first century. Su'ad al-Ḥakīm's adaptation of al-Ghazâlî's Revival." In Griffel (ed.) 2016 [\*70: 310–331].
- 429 Hoover, Jon. "Ḥanbalî theology." In Schmidtke (ed.) 2016 [\*7: 625–646].
- 430 Janos, Damien. "Intuition, intellection, and mystical knowledge. Delineating Fakhr al-Dîn al-Râzî's cognitive theories." In Griffel (ed.) 2016 [\*70: 189–228].
- 431 Janssens, Jules. "Fakhr al-Dîn al-Râzî's use of al-Ghazâlî's Mishkât in his commentary on the Light verse (Q 24:35)." In Griffel (ed.) 2016 [\*70: 229–252].
- 432 Özervarlı, M. Sait. "Ottoman perceptions of al-Ghazâlî's works and

discussions on his historical role in its late period." In Griffel (ed.) 2016 [\*70: 253–282].

433 Riexinger, Martin. "Commonplace apology in the Muslim reception of modern science – and its limitations." In Griffel (ed.) 2016 [\*70: 283–309].

434 Lammer, Andreas. "Eternity and origination in the works of Sayf al-Dīn al-Āmidī and Athīr al-Dīn al-Abharī. Two discussions from the seventh/thirteenth century." *The Muslim World* 107 (2017): 432–481.

435 Rudolph, Ulrich. "Abd al-Rahmān al-Jāmī (d. 898/1492) on the eternity of the world." *The Muslim World* 107 (2017): 537–548.

436 Shihadeh, Ayman. "Al-Rāzī's commentary on Avicenna's Pointers. The confluence of exegesis and aporetics." In El-Rouayheb, Schmidtke (eds.) 2017 [\*8: 296–325].

437 Gutas, Dimitri. "Avicenna and after. The development of paraphilosophy. A history of science approach." In *Islamic Philosophy from the 12th to the 14th Century*. Bonn, Göttingen, 2018, 19–71.

438 Rudolph, Ulrich. "Auf der Suche nach Erkenntnis zwischen Asien und Europa. Al-Ġazālī, Descartes und die moderne Forschungswissenschaft." *Asiatische Studien* 71 (2018): 1–29.

439 Yılmaz, Hüseyin. *Caliphate Redefined. The Mystical Turn in Ottoman Political Thought*. Princeton, Oxford, 2018.

440 Bedir, Mürteza. "Books on Islamic legal theory (uṣūl al-fiqh)." In Necipoğlu et al. (eds.) 2019 [\*442: 423–438].

441 Kafadar, Cemal and Ahmet Karamustafa. "Books on sufism, lives of

saints, ethics, and sermons." In Necipoğlu et al. (eds.) 2019 [\*442: 439–508].

442 Necipoğlu, Gülru, Cemal Kafadar and Cornell H. Fleischer (eds.) *Treasures of Knowledge. An Inventory of the Ottoman Palace Library (1502/3–1503/4)*, 2 vols. Leiden, Boston, 2019.

443 Yılmaz, Hüseyin. "Books on ethics and politics. The art of governing the self and others at the Ottoman court." In Necipoğlu et al. (eds.) 2019 [\*442: 509–526].

444 Casassas Canals, Xavier and Delfina Serrano-Ruano. "Putting criticisms against al-Ghazālī in perspective. New materials on the interface between law, rational theology and mysticism in Almoravid and Almohad al-Andalus (Ibn Rushd al-Jadd and al-Qurṭubī)." In Shihadeh, Thiele (eds.) 2020 [\*445: 254–297].

445 Shihadeh, Ayman and Jan Thiele (eds.). *Philosophical Theology in Islam. Later Ash'arism East and West*. Leiden, Boston, 2020.

446 Griffel, Frank. *The Formation of Post-classical Philosophy in Islam*. New York, Oxford, 2021.

447 Rudolph, Ulrich. *Ein Dominikaner in Tunis. Raimundus Martini und sein Studium der islamischen Theologie und Philosophie im 13. Jahrhundert*. Göttingen, 2022.

448 Kokew, Stephan. *Die Wirkungskraft der Wiederbelebung. Untersuchungen zu arabisch-sunnitischen Rezeptionsformaten von Abū Ḥāmid al-Ġazālīs Iḥyā' 'ulūm ad-dīn aus dem 20. Jahrhundert*. Professorial Diss., Universität Erlangen-Nürnberg 2023.

# Philosophy after Ibn Sīnā and al-Ġazālī (6th/12th Century)

1 Continuing Ibn Sīnā's Tradition – 2 Critical Approaches to Ibn Sīnā – 3 Secondary Literature

## 1 Continuing Ibn Sīnā's Tradition

*Frank Griffel*

1.1 'Umar al-Ḥayyām – 1.2 Šaraf al-Zamān al-Īlāqī, Muḥammad b. 'Alī b. 'Abdallāh al-Hindī, and Mağd al-Dīn al-Ġilī – 1.3 Ibn Sahlān al-Sāwī

### 1.1 *Umar al-Ḥayyām*

1.1.1 Primary Sources – 1.1.2 Life – 1.1.3 Works – 1.1.4 Doctrine

#### 1.1.1 Primary Sources

Testimonies on his Life, Work, and Influence [\*1–\*11] – Works and Editions [\*12–\*18]

*Testimonies on his Life, Works, and Influence*

1 al-Ġazālī, Muḥammad b. Muḥammad (d. 505/1111). *Al-Ḥikma fī maḥlūqāt Allāh 'azza wa-ğalla*. – Ed. by Rif'at Fawzī 'Abd al-Muṭṭalib and 'Alī 'Abd al-Bāsiṭ Mazīd. Cairo, 1422/2002.

2 al-Ġazālī. *Al-Munqid min al-ḍalāl / Erreur et délivrance*. – Ed. and French transl. by Farid Jabre. Beirut, 1959, 1969 (3rd ed.).

3 al-Ḥāzinī, 'Abd al-Raḥmān. *Mizān al-ḥikma*. (Hyderabad, 1359 H. [1940]). – A work on hydrostatics composed in 515/1121.

4 al-Šahrastānī, Muḥammad b. 'Abd al-Karīm (d. 548/1153). *Muṣāra'at al-falāsifa / Struggling with the Philosopher. A refutation of Avicenna's Metaphysics*. – Ed. and Engl. transl. by Wilferd Madelung and Toby Mayer. London, 2001.

5 Nizāmī-yi 'Arūḍī-yi Samarqandī, 'Umar b. 'Alī, (d. after 551/1156). *Čahār Maqāla*. – Ed. by Muḥammad Qazwīnī and Muḥammad Mu'īn. Tehran, 1333–35/1955–57. – Engl. transl. by Edward G. Browne. "The Chahār Maqāla (Four Discourses) of Nidhāmī-i-'Arūḍī-i-Samarqandī." *Journal*

of the Royal Asiatic Society 31 (London, 1899): 613–663, 757–845.

6 al-Bayhaqī, ʿZahīr al-Dīn Abū l-Ḥasan ʿAlī b. Zayd Ibn Funduq (d. 565/1169–1170). *Tatimmat Šiwān al-ḥikma*. – Ed. by Rafīq al-ʿAḡam. Beirut, 1994. – Ed. by Muḥammad Šafiʿ. Lahore, 1351/1932. – Ed. by Muḥammad Kurd ʿAlī. *Taʾrīḥ ḥukamāʾ al-islām*. Damascus, 1365/1946; repr. 1396/1976. – Ed. by Mamdūḥ Ḥasan Muḥammad (Cairo, 1996). – Engl. transl. of excerpts, including an English index, by Max Meyerhof, “ʿAlī al-Bayhaqī’s *Tatimmat Šiwān al-Ḥikmah*. A biographical work on learned men of the Islam.” *Osiris* 8 (1948): 122–217. – Repr. of both works in *Historiography and Classification of Science in Islam* VIII. Ed. by Fuat Sezgin. Frankfurt a.M., 2005.

7 al-Naysābūrī, Muʿīn al-Dīn Muḥammad b. Maḥmūd (d. c. 590/1194). *Itmām Tatimmat Šiwān al-ḥikma*, MS Istanbul, Murad Molla 1431. – A sequel to al-Bayhaqī’s *Tatimmat Šiwān al-ḥikma* composed around 590/1193 and so far unedited.

8 Faḥr al-Dīn al-Rāzī, Muḥammad b. ʿUmar (d. 606/1210). *Risāla fī l-Taṇbīḥ ʿalā baʿḍ al-asrār al-mūdaʿa fī baʿḍ suwar al-Qurʾān al-ʿaẓīm wa-l-furqān al-karīm*. – Ed. by Bahāʾ al-Dīn Dārtmā [Dartma]. Amman, 2004.

9 Ibn al-Aṭīr, ʿIzz al-Dīn ʿAlī b. Muḥammad (d. 630/1233). *Al-Kāmil fī l-taʾrīḥ / Chronicon quod perfectissimum inscribitur*. – Ed. by Carl J. Tornberg, 14 vols. Leiden, Uppsala, 1851–1876).

10 al-Qiftī, ʿAlī b. Yūsuf (d. 646/1248). *Taʾrīḥ al-ḥukamāʾ [Iḥbār al-ʿulamāʾ*

*bi-aḥbār al-ḥukamāʾ, Epitome des Muḥammad b. ʿAlī az-Zawzānī]*. – Ed. by Julius Lippert, *Ibn al-Qiftī’s Taʾrīḥ al-ḥukamāʾ*. Leipzig, 1903.

11 al-Šāhrazūrī, Muḥammad b. Maḥmūd (d. after 687/1288). *Nuzhat al-arwāḥ wa-rawḍat al-afrāḥ fī taʾrīḥ al-ḥukamāʾ wa-l-falāsifa*. – Ed. by Sayyid Ḥwaršīd Aḥmad, 2 vols. Hyderabad, 1396/1976).

### Works and Editions

The present list contains all philosophical prose texts written by the author; not, however, those on mathematics, the applied natural sciences (hydrostatics etc.), or poetry. Texts are in Arabic unless otherwise stated.

12 Ġawāb ... ʿUmar b. Ibrāhīm al-Ḥayyāmī ʿan kitāb ... Muḥammad b. ʿAbd al-Raḥīm al-Nasawī, *tilmīḍ al-Šayḥ al-Raʾīs*. In Ġāmiʿ al-badāʾiʿ. *Maḡmūʿ ... yaḥtawī ʿalā ṭamāniya ʿaṣrata risāla ... li- ... Ibn Sīnā wa- ... ʿUmar al-Ḥayyām*. – Ed. by Muḥyi al-Dīn Šabri al-Kurdī. Cairo, 1335/1917, 165–174. – Photostatic reprint with divergent pagination (here 168–177): *Maḡmūʿat rasāʾil Ibn Sīnā*. Paris, 2009.

This is one of three short philosophical texts published in Cairo in 1335/1917 in the edition of a manuscript copied in 699/1299–1300, that has since been lost. The majority of the brief treatises in this volume are by Ibn Sīnā. – Ḥāšimīpūr 2000 [\*51] has information on a further MS (Istanbul, Revan Köşkü 2042/26) and the publication history, provides a critical edition of the text [\*51: 137–145] as well as a Persian translation. – As early as 1998 Riḍāzāda-yi Malik (*Dānišnāma-yi*

*Ḥayyāmī* [\*47: 322–342]) described the publication history and printed the Arabic text in facsimile of Nadwī's edition published in India [\*38: 375–384] together with a Persian translation. – This edition also in *Mawsū'at al-Ḥayyām* (2013 [\*63: 287–294]). – An English translation is published in *Tirtha (Nectar of Grace* [\*40: XLV–XLVI. XC–XCIX]). New Engl. transl. by M. Aminrazavi 2005 [\*56: 284–292]. – Arabic text with Russian transl. by B.A. Rosenfeld in [\*42].

13 *Ġawāb ... 'an ṭalaṭ masā'il su'ila 'anhā ...: Ḍarūrat al-taḍādd fi l-'ālam wa-l-ḡabr wa-l-baqā'. In Ġāmi' al-badā'i'. Maǧmū' ... h yaḥṭawī 'alā ṭamāniya 'aṣrata risāla ... li- ... Ibn Sīnā wa- ... 'Umar al-Ḥayyām. – Ed. by Muḥyī al-Dīn Ṣabrī al-Kurdī. Cairo, 1335/1917, 175–185. – Photostatic reprint with divergent pagination (here 178–188) in *Maǧmū'at rasā'il Ibn Sīnā*. Paris, 2009. – Karabulut [\*32: 11, 1031] mentions a further MS in Istanbul, which does not appear to have been consulted so far. – Iṣfahānī 2000 [\*52] includes information on the publication history and an edition of the text [\*52: 163–170] based on the Cairo textual witness only and provides a Persian translation. – Riḍāzāda-yi Malik (*Dānišnāma-yi Ḥayyāmī* [\*47: 343–361]) provides information on the modern publication history and prints the Arabic text in facsimile from Nadwī's Indian edition [\*38: 385–392] as well as providing a Persian translation. – A further edition of the Arabic text together with an English translation is included in *Tirtha (Nectar of Grace* [\*40: XCIX–CX]); repr. of this Engl. transl. in *An Anthology of Philosophy in Persia**

[\*48: (1) 401–406]. New Engl. transl. by Aminrazavi 2005 [\*56: 292–299]. – This edition also in *Mawsū'at al-Ḥayyām* (2013 [\*63: 299–306]) – Arabic with Russian transl. by B. A. Rosenfeld also in [\*42].

14 *al-Ḍiyā' al-'aqlī fi mawḍū' al-'ilm al-kullī. In Ġāmi' al-badā'i'. Maǧmū' ... yaḥṭawī 'alā ṭamāniya 'aṣrata risāla ... li- ... Ibn Sīnā wa- ... 'Umar al-Ḥayyām. – Ed. by Muḥyī al-Dīn Ṣabrī al-Kurdī. Cairo, 1335/1917, 186–193. – Photostatic reprint with divergent pagination (here 189–196) in *Maǧmū'at rasā'il Ibn Sīnā*. Paris, 2009. – We know of no further textual witnesses. – Riḍāzāda-yi Malik (*Dānišnāma-yi Ḥayyāmī* [\*47: 370–375]) prints the Arabic texts in facsimile from Nadwī's edition [\*38: 394–397]. – This edition also in *Mawsū'at al-Ḥayyām* (2013 [\*63: 309–314]) – Engl. transl. by Aminrazavi 2005 [\*56: 284–292]. – Arabic text with Russian transl. by B. A. Rosenfeld in [\*42].*

15 *Risāla fi 'ilm al-kullīyyāt / Risāla dar 'ilm-i kullīyyāt-i wuǧūd* (in Persian) – The text has been transmitted in a comparatively large number of MSS, and edited by Hāšimīpūr [\*53: 67–87] (besides printed versions, she also consults five MSS). It was first edited in 1906 together with a French transl. by Christensen [\*36]. In her article [\*53], Hāšimīpūr provides information on the previous publication history as well as analysing the text. – Further editions by Riḍāzāda-yi Malik in *Dānišnāma-yi Ḥayyāmī* [\*47: 381–393] and in Nadwī [\*38: 414–423]. – Modern Arabic transl. in *Mawsū'at al-Ḥayyām* (2013 [\*63: 345–353]) – An edition together with English translation are

included in *Tīrtha* (*Nectar of Grace* [\*40: XLVII–XLVIII and CXVII–CXXIX]), an incomplete repr. of the Engl. transl. in *An Anthology of Philosophy in Persia* [\*48: I 406–411]. New Engl. transl. by M. Aminrazavi 2005 [\*56: 303–310]. – Persian text with a Russian transl. by B.A. Rosenfeld also in [\*42].

16 *Risāla fi l-wuḡūd*. – Edited on the basis of two MSS by Awwal [\*50: 101–118], who translates the text into Persian as well. – Edited on the basis of two other MSS by Riḍāzāda-yi Malik in *Dānišnāma-yi Ḥayyāmī* [\*74: 396–409]. – Earlier editions in Nadwī [\*38: 401–411] and in *Tīrtha* (*Nectar of Grace* [\*40: CX–CXVI]). – Edition also in *Mawsūʿat al-Ḥayyām* (2013 [\*63: 319–326]) – Engl. transl. by Aminrazavi 2005 [\*56: 311–321]. – The text is mentioned by al-Bayhaqī [\*6: 112] and is extant in a number of MSS in Istanbul, Mashhad, Tehran, and also Berlin (described in Ahlwardt no. 2369, 2370 [\*17: III, 548]). – Arabic text with Russian transl. by B. A. Rosenfeld also in [\*42].

17 *Risāla katabahā ʿUmar al-Ḥayyām ḡawāb<sup>an</sup> li-talāt masāʿil*. – Text edited so far only in *Mawsūʿat al-Ḥayyām* (2013 [\*63: 331–337]) transmitted in at least two MSS: MS Istanbul, Revan Köşkü 2042 (not listed in Karatay's

Catalogue [\*23: II, 548, no. 8974], but mentioned by Dānišpażūh 1969 [\*48: I, 437] as text no. 27 in this manuscript collection) and MS Istanbul, Esat Efendi 1933. The text is printed in facsimile of the last-named MS in *Dānišnāma-yi Ḥayyāmī* [\*47: 414–422]. – Engl. transl. by M. Aminrazavi 2005 [\*56: 321–327], which unfortunately does not do the text justice.

18 Persian translation of Ibn Sīnā's (d. 428/1037) so-called *Glorious Sermon* (*al-Ḥuṭba al-ḡarrā*), which is also known under the titles *al-Ḥuṭba al-tawḥīdiyya* (Sermon on the profession of God's oneness) and *Risālat al-Tamḡīd* (Epistle of the glorification) (Mahdawī no. 70 [\*22: 99–100]). – Akhtar 1935 [\*39: 220–231] edits the translation and the Arabic original on the basis of an Indian MS, translating both into English. – Ed. by Riḍāzāda-yi Malik in *Dānišnāma-yi Ḥayyāmī* [\*47: 305–319] on the basis of two MSS. – Further editions in *Tīrtha* 1941 [\*40: LXXIX–LXXXIII], Nafisī 2009 (incl. the Arabic original [\*59: 355–362]), and *Mawsūʿat al-Ḥayyām* (2013 [\*63: 381–388]). In the Arabic introduction to the text, ʿUmar al-Ḥayyām writes that he translated the text in 472/1079–80 in Isfahan at the request of friends.

### 1.1.2 Life

Ġiyāṭ al-Dīn Abū l-Faṭḥ (also: Abū l-Ḥāḡṣ) ʿUmar b. Ibrāhīm al-Ḥayyām was born around 439/1048 in Nishapur and was above all a widely respected astronomer, mathematician, and scientist (Suter no. 266 [\*1: 112–113]) in the second half of the 5th/11th and around the turn of the 6th/12th century. Arabic sources – among others, his close associate al-Ḥāzinī [\*3: 87. 151] – also call him ʿUmar al-Ḥayyāmī, in the manner of the people of Ḥwārazm, Ġurḡān, and also Ḥurāsān, of using Arabic professions – in this case *ḥayyām*, 'tentmaker' – as

a *nisba*. From Nishapur ‘Umar al-Ḥayyām went to Isfahan to the Seljuk court, presumably returning to Ḥurāsān after 485/1092, and worked at the court of Saṅḡar (r. 511–552/1117–1157) in Marv. He died in the city of his birth, where his grave is venerated to this day.

Today, he is mostly known for his Persian poems in four verses (*rubā’iyyāt*), which became popular in Europe and North America from 1859 onwards thanks to the considerably adapted English translation by Edward Fitzgerald (1809–1883). ‘Umar al-Ḥayyām’s contemporaries mention his Arabic poetry, but not these Persian quatrains. The earliest transmission of the *rubā’iyyāt* begins more than 50 years after his death with Faḥr al-Dīn al-Rāzī (d. 606/1210) ([\*8: 55–56], further early testimonies are collected in Mirafḡalī 2003 [\*55]). This raises questions of authenticity that have not been fully answered to this day (cf. the discussion and verdict on the authenticity in Daštī [\*43]). Among ‘Umar’s biographers, Mu‘īn al-Dīn al-Naysābūrī ([\*7: 143<sup>r-v</sup>]), and after him al-Šahrazūrī (*Nuzhat al-arwāḥ* [\*11: 11 48–51]) and al-Qiftī [\*10: 243–244] mention his poetry, and all three transmit Arabic verses penned by him (transl. in Daštī [\*43: 92–98, Engl. transl. 80–82], another Engl. transl. by Aminrazavi [\*56: 347–348]).

Besides Arabic poetry, Persian quatrains, and works on mathematics (cf. Rashed, Vahabzadeh 1999 [\*49]), astronomy (cf. Hashemipur 2007 in [\*13: 627–628]), mechanics and music (collected in the *Dānišnāma-yi Ḥayyāmī* [\*47], in *Mawsū‘at al-Ḥayyām* [\*63], and in Segal, Yuškewič 1961 [\*42], cf. also Rosenfeld in EI<sup>2</sup> [\*5: x 828–833]), six short philosophical texts by ‘Umar al-Ḥayyām have been transmitted as well, all of them strongly influenced by Ibn Sīnā.

The date of ‘Umar al-Ḥayyām’s birth was calculated by Tīrtha [\*40: xxxii–xxxiv] on the basis of a horoscope of his transmitted by al-Bayhaqī [\*6: 112–113]. The sources do not specify a date. It is possible that in his youth ‘Umar went to Gurgāṅḡ in Ḥwārazm in order to study there (Lambert, De Prémare 1987 [\*45: 197], Riḡāzāda-yi Malik [\*47: 17]), and also to Samarqand where he composed his first texts on mathematics (Youschkevitch, Rosenfeld 1973 [\*8: vii 324]). The earliest documented event in ‘Umar’s life is his collaboration in the mathematical and astronomical preparations for Malik-Šāh’s ‘Ġalālī’ calendar reform in 471/1079. Ibn al-Aṭīr [\*9: x 67–68] mentions that the work for this reform began in 467/1074–1075 in an observatory in Isfahan, and that ‘Umar al-Ḥayyām contributed to it along with other scholars (on the observatory Sayılı 1960 [\*6: 160–166]). Al-Naysābūrī adds that ‘Umar al-Ḥayyām worked together with the Avicennan philosopher al-Lawkarī ([\*7: fol. 141<sup>v</sup>], the passage is edited in [\*6: 204]). ‘Umar’s early scientific career is closely linked to this observatory in Isfahan. However, this existed only until after Malik-Šāh’s death in 485/1092, and received no further support afterwards.

During the later years of his career at Sanġar's court in Marv, al-Ĥāzinī may have been one of his pupils (regarding him cf. Hull 1973 [\*8 VII 334–351]). He composed a work on hydrostatics [\*3] in which 'Umar al-Ĥayyām's works on this subject are quoted extensively. The Persian man of letters Niẓāmī-yi 'Arūḏī, who saw himself as his pupil, met 'Umar in Balḥ in 506/1112–1113, and narrates some events from the latter's life in his *Ġahār Maqālah* [\*5: 100–103, Engl. transl. 806–809]. Niẓāmī-yi 'Arūḏī visited 'Umar al-Ĥayyām's grave in Nishapur in 530/1135; one of the manuscripts remarks that this was four or possibly fourteen years after his death (Tīrtha [\*40: LIV–LV]).

The most detailed biography of 'Umar al-Ĥayyām is found in al-Bayhaqī's *Tatimmat Šiwān al-ḥikma* [\*6: 112–117], Engl. transl. in Shafī 1932 [\*37: 603–607], French transl. in Lambert, De Prémare 1987 [\*45: 203–207]), who met him personally when he was eight years old. Al-Bayhaqī notes the circumstances of 'Umar's death, but does not give a date. He lists two of his philosophical works and emphasises that his contemporaries regarded 'Umar as a philosopher (*faylasūf* and *wāḥid min al-ḥukamā'*, [\*6: 112–113]) and considered him to be superior to other contemporary scholars on this field [\*6: 119]. Al-Naysābūrī adds that he was the most competent or most highly-ranked (*arfa'uhum qadr<sup>an</sup>*) as well as most skilful (*adḥaruhum niḥr<sup>an</sup>*) of the philosophers of Ḥurāsān [\*7: fol. 143<sup>r</sup>]. Al-Bayhaqī narrates how 'Umar al-Ĥayyām defended Ibn Sīnā's philosophy vehemently against Abū l-Barakāt al-Baġdādī's (d. c. 560/1165) criticism in conversation with 'Alā' al-Dawla Garšās b. Farāmarz b. 'Alī (d. c. 536/1141), a local ruler in Yazd, [\*6: 110–111]. Further anecdotes in al-Bayhaqī's account concern a conversation between 'Umar and al-Ġazālī, during which the latter countered 'Umar's 'false' doctrine with the 'truth' of religion (the call to prayer in this instance), as well as an account according to which 'Umar died holding a copy of the *Metaphysics* (*Ilāhiyyāt*) from Ibn Sīnā's *al-Šifā'* in his hands [\*6: 116–117]. Al-Qiftī [\*10: 244] tells us that 'Umar's contemporaries doubted the sincerity of his religious beliefs and that he eluded the resulting pressure by going on pilgrimage to Mecca via Baghdad.

The date of 'Umar al-Ĥayyām's death is not entirely certain. While many authors of the early 20th century concluded the year 526/1131–1132 from Niẓāmī 'Arūḏī's account (Nadwī [\*38: 56], Tīrtha [\*40: LIV–LV], also Youschkevitch, Rosenfeld in 1973 [\*8: (VII) 324]), as early as 1895 Wittstein [\*35: 3] had referred to an item in an unidentified Persian source which claims that 'Umar died in AH 517. This source was edited by Thomas Hyde in the Persian original in 1760 and printed together with a Latin translation [\*34: 529–531] which refers to it only as *Libro Persico D. Bunclei*. The source, which has still not been identified, has been recognised by M. Mu'īn (in the notes on the edition of *Ġahār Maqāla* [\*5: 336]), with the result that Ch.-H. de Fouchécour (in EI<sup>2</sup> [\*5: x, 828]) states



in 2000 that 'general opinion places the death of Ḥayyām around 517/1123'. If we do indeed recognise this source, we should say more precisely *in* the year 517/1123–1124.

### 1.1.3 Works

Ġawāb ... 'Umar b. Ibrāhīm al-Ḥayyāmī 'an kitāb Muḥammad b. 'Abd al-Raḥīm al-Nasawī, *tilmīd al-Šayḥ al-Ra'īs*

'Umar al-Ḥayyām's Reply to the Text by Muḥammad al-Nasawī, a Student of Ibn Sīnā

The text is also known under the title *Risāla fi l-Kawn wa-l-taklīf* (*Epistle on Creation and on Moral Duties*) (e.g. in al-Bayhaqī [\*6: 112]). The epistle is a reply to a written inquiry by Abū Naṣr Muḥammad b. 'Abd al-Raḥīm al-Nasawī, asked in 473/1080–1081 and quoted in excerpts at the beginning of the text. Al-Nasawī is introduced as an 'imam and judge of the region of Fārs' and as a pupil of Ibn Sīnā. He is probably the same person referred to in [\*17] as 'Qāḍī l-quḍāt Fārs, Abū Ṭāhir'. He asks 'Umar al-Ḥayyām about 'wisdom', or rather the purpose or reason behind God's creation of the world and in particular of humans as well as their obligation to serve God (*taklīf al-nās bi-l-'ibādāt*). The two questions are a test of 'Umar al-Ḥayyām more than a genuine request for information (one might even say, trick questions), and 'Umar begins his response by extolling the inquirer and praising the two questions as culminating points of the highest of the sciences, metaphysics (*al-ḥikma al-ūlā*).

Rosenfeld (E1<sup>2</sup> [\*5: 833]) is of the opinion that the questions are linked to al-Ḥayyām's Persian quatrains (*rubā'īyyāt*), and that the judge al-Nasawī asked them in order to absolve him of the accusation of heresy. However, it does in fact seem to be a discussion between two expert Avicennans, as 'Umar's own answer is very technical and almost banal. He guides his readers into a discussion on what it means to ask after the 'why' (*lima*) of something, and in what way this differs from an existential question (*maṭlab hal*) and other types of questions.

All questions concerning the reasons for something end with the Being that is

necessarily existent of itself (*wāḡib al-wuḡūd bi-dātihi*), 'and this is the One, the Living, the Constant, from whom all that exists receives its existence' [\*51: 140,12]. As there can be neither infinite regress (*tasalsul*) nor circularity, all causes must of necessity end in the one cause that has no cause itself, and philosophical theology (*al-'ilm al-ilāhī*) shows that this is the Necessary Existent, perfectly One and free from fault. The 'why' question can thus be asked of everything except this Being. It asks after the cause of something, and this Being has no cause. 'Umar al-Ḥayyām refers to 'my teacher, the best among the later scholars [...] Ibn Sīnā' [\*51: 142,5], adducing further instances of his teachings which are aimed at answering the second question of the 'why' of religious obligations.

Creation occurs as an orderly sequence of causes and effects, and for everything that is good in this world, there must be something evil to balance it. Everything created is an expression of God's eternal wisdom (*al-ḥikma al-sarmadiyya*). Religious obligation (*taklīf*) is part of this system and necessary in order to regulate human communities. This requires prophets to be sent, who are endowed with 'revelation and insight into the world of the celestial spheres' (*al-waḥy wa-mušāhadat al-malakūt*) [\*51: 144,8], and these prophets lay down the religious law (*ḥukm al-šar'*) for the people.

Ġawāb 'an ṭalaṭ masā'il su'ila 'anhā ...: *Ḍarūrat al-taḍādd fi l-'ālam wa-l-ḡabr wa-l-baqā'*

Response to Three Questions: the Necessity of the Opposition [between Good and Evil] in the World, and on Determinism and on Continuing

This epistle is a written reply as well, although it does not state to whom it is replying. Nadwī [\*66] and Rosenfeld (E1<sup>2</sup> [\*5: x, 833]) assume that these questions were also asked by Abū

Naṣr Muḥammad b. 'Abd al-Rahīm al-Nasawī and are a continuation of the exchange about the first two questions in [\*12]. The title of the epistle is certainly not original, as there is really only one question; the two last sections of the text are anti-Aṣ'arī polemic.

The epistle focusses on the problem of theodicy: how can there be evil (*ṣarr*) in the world, if everything is created by God 'as you [sc. 'Umar al-Ḥayyām] have established with certainty that evil cannot emanate from God' (*wa-qad qaṭa'tum bi-anna l-ṣurūr lā tufīdu min 'indahū* [\*13: 177,10]). 'Umar al-Ḥayyām begins his reply with a presentation of the Avicennan dogma that 'existence' is a modulated term, i.e. neither univocal (*'alā sabīl al-tawāṭu'*) nor purely equivocal (*'alā sabīl al-iṣtirāk*). Rather, 'existence' is used with modulation (*'alā sabīl al-taṣkīk*), in the sense that it sometimes applies to things more, sometimes less [\*13: 178–179]. Thus, it applies to things in the external world more than to the existence in the mind, although both are existent.

Similarly Avicennan is the dogma that evil is a privation of good. Existence in itself is good, and the privation of existence, i.e. non-existence, is evil (*ṣarr*). This also means that with every creation of something good, evil is created with it accidentally, as a privation of that thing. Indeed, Ibn Sīnā did teach that good cannot exist without evil. This is in the nature of every act of creation, according to 'Umar al-Ḥayyām, and the Creator cannot be held responsible for it [\*13: 183,13]. The many good aspects of creation, however, are opposed by considerably fewer that are evil, with good outweighing evil to such a degree that God's creation as a whole is good.

At the end of the epistle, 'Umar al-Ḥayyām asks himself, as the corollary of this discussion, as it were, which of the 'two groups' (*ayy al-fariqayn*) was closer to truth. He does not, however, clarify which two groups he means, explaining only one, the 'determinists' (*al-ḡabrī*). This seems to refer to the Aṣ'arī *mutakallimūn*, as the discussion quickly moves on to the predicate of continuing (*al-baqā'*) which, according to some Aṣ'arī theologians, must be added to every accident for

it to exist from one moment to the next. 'Umar al-Ḥayyām argues that it makes much more sense to speak of the existence (*wuḡūd*) of something than of a continuation (*baqā'*) that must be added to its existence, and thus concludes that the position of the 'determinists' (*al-ḡabrī*) is untenable. 'It frequently seems at first glance and purely superficially that the determinist is closer to the truth, without all the nonsense he stammers and the stupidity into which he penetrates. However, he is much further away from truth' [\*13: 183–184].

*al-Dīyā' al-'aqlī fī mawḏū' al-'ilm al-kullī*  
*The Light of the Intellect Shining on the Subject*  
*of Universal Knowledge*

In this text, 'Umar al-Ḥayyām investigates Ibn Sīnā's position that the subject of metaphysics is Being in itself ('existence insofar it is existent'). In this sense, 'existence' is a concept immediately present and comprehensible to the human intellect. 'Umar al-Ḥayyām explains that in order to understand the concept (*taṣawwur*) of 'existence', no other concepts are necessary, as there is nothing more general (*a'amm*) than existence. Existence can be found in things of the external world as well as in the soul (*nafs*). 'Umar al-Ḥayyām explains that 'existence' is neither an accident (*'araḍ*) nor a 'thing' (*ṣay*) distinct from the essence of the existing entity (*dāt al-mawḡūd*) [\*14: 188–189]. This is especially important when we consider the existence of God, as here especially there can be no separation between His essence and His existence. 'In that case, the essence of God would not be One, but multiplicity, which is impossible' [\*14: 189,6].

All things in the external world possess a *ḥaqīqa* (true nature) and *māhīyya* (quiddity) that is different from the existence of the thing in the external world. This *ḥaqīqa* and *māhīyya* is free from all accidents and can thus not exist as a universal in the external world, but it can exist within the soul. Here, 'Umar al-Ḥayyām argues against the 'dialectician' (*al-ḡadalī*), which in this context probably refers to the *mutakallimūn*.

*Risāla fī ʿilm al-kullīyyāt / Risāla dar ʿilm-i kullīyyāt-i wuğūd*  
*Epistle on the Knowledge of the Universals*

A brief Persian treatise known under several titles, among them *Risāla fī kullīyyāt al-wuğūd* (*Epistle on the Universals*), *Risāla mawsūma bi-silsilat al-tartīb* (*Epistle Called the Chain of Order*), and *Rawḍat al-ʿuqūl* (*The Garden of Intellects*). The text was composed for Faḥr al-Mulk b. Nizām al-Mulk (d. 500/1106), a high-ranking dignitary in the Seljuk administration. Between 485/1092 and his death, he held the office of vizier a number of times under Sultan Berkyārūq (r. 487–498/1094–1104) and his rival half-brother Sanğar.

This is an introductory philosophical treatise which ʿUmar al-Ḥayyām wrote for administrators at the Seljuk court, not for philosophers, whose Arabic may not have been fluent enough for them to understand a philosophical treatise in that language. ʿUmar provides a summary of an abridged Avicennan cosmology, in which the first emanation of the necessary existent (*wāğib al-wuğūd*), i.e. God (*bārī taʿālā*), is the Active Intellect (*ʿaql faʿāl*), from which first a universal soul (*naḥs-i kull*) emanates and out of that a universal body (*ğism-i kull*) [\*53: 69,7]. These are the ‘universals’ of the work’s title. They are all effects of the *wāğib al-wuğūd* and possess eternal duration (*dawām*). ‘The sequence of existing things is like the sequence of letters, where each letter emerges from another’. Individuals (*ğuzwiyyāt*) play no part in this chain of order (*silsilat al-tartīb*), for individuals come and go. ‘Whoever knows the universals, will of necessity know their individuals as well’. The genus (*ğins*) of a thing, the species (*naḥ*), the specific difference (*faṣl*), the proprium (*ḥāṣṣa*), and the accident (*ʿaraḍ*) are also universals.

All of this is not particularly original in itself, and is based on Ibn Sīnā, but it is interesting with regard to the changes or simplifications ʿUmar introduces compared to him. The dogma that the Active Intellect is the first emanation, is an Ismāʿīlī interpretation of philosophical cosmology, also found in this form in, e.g., an Ismāʿīlī text by his younger

contemporary al-Šahrastānī (d. 548/1153) [\*4: Ar. 131, Engl. 97]. The reference to a universal soul as well as the letter and number mysticism in this treatise may point in the same direction.

On the last page of the Epistle, ʿUmar adds a classification of the scholars of his time that is truly original and became influential. Those who strive for the knowledge of God (*ṭālibān-i šināht-i ḥudā*) are divided into four groups: (1) the *mutakallimān*, i.e. the *kalām* scholars who are satisfied with transmitted doctrine and arguments; (2) the philosophers (*falāsifa wa ḥukamā*) who seek God through reason and arguments. However, they find that their arguments are ultimately not truly compelling; (3) the Ismāʿīlīs (*Ismāʿīliyyān wa taʿlīmīyyān*), who teach that one must acquire knowledge of God from the correct source, namely the imam of the time; finally (4) the Sufis (*ahl-i taṣawwuf*), who seek knowledge of God in contemplation (*fikr*) and the purification of the hearts. This last one, ʿUmar al-Ḥayyām points out, is the path indicated by the Prophet Muhammad.

*Risāla fī l-wuğūd*  
*Epistle on Existence*

Like the epistle of ʿUmar al-Ḥayyām just described, this is a work of Avicennan philosophy interesting above all for its didactic technique. It is also transmitted under the titles *al-Risāla al-tāniya fī l-wuğūd* (*Second Epistle on Existence*) and *Risālat al-Awṣāf wa-l-mawṣūfāt* (*Epistle on Descriptions and Attributes*). It begins with a classification of all things into substances and accidents, then into accidents that are always inherent in their objects compared to those who are not, etc. The text includes an interesting distinction between ‘existential’ (*wuğūdī*) and ‘conceptual’ (*ʿtibārī*) attributes. The latter are second-order attributes to which no object of knowledge in the external world corresponds, unlike in the case of the former. Wisnovsky (2012) [\*62: 37–39, 44–47] perceived here a reaction to Ašʿarī dogmas regarding the so-called ‘states’ (sg. *ḥāl*) of certain of

God's attributes. The doctrine presented by 'Umar in this text, he says, are those of *ahl al-ḥikma* (the philosophers) and their discipline, namely metaphysics and philosophical theology (*al-'ilm al-a'lā ilāhī al-kullī*). 'Umar contrasts these with the teachings of a second group, who must be the Aṣṣārī *mutakallimūn*. The absurdity of their dogmas takes up considerable space in this treatise.

*Risāla katabahā 'Umar al-Ḥayyām ḡawāb<sup>an</sup> li-talāt masā'il*

*An Epistle Written by 'Umar al-Ḥayyām in Response to Three Questions*

'Umar al-Ḥayyām answers three questions: (1) As the rational soul of humans, which survives the death of the body, was created together with the body, do both have an individual existence independent of each other (*wuḡūd ḥāṣṣ bi-aṣḥāṣihā*)? (2) If all contingent things and events of this world have,

as taught by the philosophers (*ḥukamā'*), one effective cause only, and are all derived in causative chains from the Being that is necessary-existent of itself, does this mean the dogma of the 'natures' (sg. *ṭabī'a*) is false (*bāṭil*)? (3) Only the beginning of the third question is quoted: 'It is established that time exists together with motion, and is defined as the measure of the movement of the spheres. Subsequently it was established that movement cannot exist of itself ... [and so on] to the end of the question.'

In his answer, 'Umar al-Ḥayyām focusses on the differing conceptions of time among the *mutakallimūn* and the philosophers (*ḥukamā'*), affirming the latter. The three answers discuss interesting questions on problems arising from the works of Ibn Sīnā, and have not yet been analysed. In this text, 'Umar al-Ḥayyām refers to Ibn Sīnā's *al-Naǧāt* and *al-Samā'* al-*ṭabī'ī* in al-*Šifā'*, and also refers to his own treatise [\*12].

#### 1.1.4 Doctrine

The impression given in al-Bayhaqī's biography, which presents 'Umar al-Ḥayyām as a faithful follower of Ibn Sīnā's philosophy, who was in contact with al-Ġazālī but ultimately fell out with him, is confirmed by his six brief philosophical treatises. Frequently, 'Umar follows Ibn Sīnā almost word for word, yet he also introduces significant innovations in his brief texts, anticipating later developments in the 6th/12th century. Benevich 2018 [\*65: 351] emphasised 'Umar's understanding of all kinds of predication as merely 'conceptual' (*i'tibārī*), i.e. words do not refer directly to things in the external world but in the first instance to concepts in the mind. This is applied to Ibn Sīnā's distinction between the essence and the existence of a thing, too, which is present only 'conceptually', i.e. in our minds but not in the external world (Benevich 2017, 2020 [\*64: 206. 218–221. 235; \*66: 137]). 'Umar's brief texts also confirm his close links with Sufism reported by biographical sources, for instance when al-Qifṭī writes at the beginning of the 7th/13th century that 'Umar's poems were recited by Sufis in their gatherings [\*10: 244].

The six brief philosophical treatises credibly attributed to 'Umar al-Ḥayyām have found little attention among historians of the philosophy of the Islamic world writing in European languages. The exceptions are studies by Nasr 2001 [\*54], 2006 [\*58: 165–185], Aminrazavi 2005 [\*56: 157–186], Wisnovsky [\*62: 37–39. 44–45], and Benevich 2017, 2018, 2020 [\*64, \*65, \*66]. There

remains scope for further articles, or even a monograph, focussing on these texts and reading them in the context of their time. Possible Ismā'īlī influences, above all in the Persian epistle [\*15], have not even been mentioned by scholarship, and ought to be investigated in comparison with contemporaneous texts. These six texts are documents of early Avicennism in the second generation after Ibn Sīnā, and throw an interesting light on the period. 'Umar al-Ḥayyām calls Ibn Sīnā 'my teacher' (*mu'allimī* [\*51: 142,5]), and his status as a member of the group of people called, after al-Ġazālī, *al-falāsifa* – i.e. the pupils and followers of Ibn Sīnā and his philosophical system – cannot be denied. He criticises positions of the *mutakallimūn* in several texts [\*12, \*13, \*16], contrasting them with what he saw as the greatly superior teachings of Ibn Sīnā. 'Umar al-Ḥayyām is thus one of the first scholars to contrast the doctrines of *kalām* and *falsafa* openly, which alone is reason enough to read his texts more attentively. He polemically calls the *mutakallimūn* dialecticians (*ġadalī*) [\*14: 191,1] and determinists (*ġabrī*) [\*13: 186,15]. The second word is drawn from the Mu'tazila's anti-Aš'arī polemic, which makes it surprising, as rather like the Aš'arīs the Avicennans deny an entirely free will of humans. Unlike *ġadalī*, which is aimed at the divergent methods of *kalām* and *falsafa*, this term does not become established among philosophers.

From the point of view of the history of philosophy, two aspects are of particular interest. On the one hand, 'Umar al-Ḥayyām emphasises in almost all the six texts that God's creation takes place in the form of chains of secondary causation, within which a ranked ordering (*tartīb*) of existence prevails. This is made particularly clear in the epistle *The Necessity of the Opposition [of Good and Evil] in the World* [\*13] where, though the context does not require it, he summarises Ibn Sīnā's dogma of 'existence' as a modulated term (*ism mušakkik*) (regarding this dogma in Ibn Sīnā cf. Treiger 2012 [\*61]). Elsewhere in his works, too, we frequently come across the idea that God's creation occurs in accordance with rank (*tartīb*) in chains of causation (sg. *silsila*). A second interesting aspect is connected with 'Umar's longest, and presumably also earliest, treatise *Ġawāb ... 'an kitāb Muḥammad b. 'Abd al-Raḥīm al-Nasawī* [\*12] from 473/1080–1081. Here he investigates the problem of theodicy, asking whether there are causes for God's actions, and whether the cause or purpose of any given element in God's creation can be determined. The first question is answered with a vehement 'no'. 'Umar answers the question of what could be the motive or purpose (*ḥikma*) of the act of creation just as Ibn Sīnā had done: there can be none, as the Avicennan system depicts God as a being without causes. 'Umar provides a different answer in the context of the question, asked in this treatise, of what the reason is to serve God (*taklīf al-'ibādāt*). Here he explains how service to God fits into Ibn Sīnā's interpretation of the revealed

religions. This suggests that, while overall God does not act out of motives, one may still look for the motive – or indeed the purpose – that moved God to design a certain element in a certain way within the whole of his creation. This attitude reconciles Avicennism with the trend, already well-established, in philosophical and medical literature of examining the functions of individual things such as e.g. body parts (cf. Galen's *De usu partium*).

This approach would enable 'Umar al-Ḥayyām's contemporary al-Ġazālī to postulate that God's creations (including the revealed religions) serve a purpose, and to formulate an extensive teleological proof of the existence of God on this basis. One instance is in his work *The Wisdom in the Creations of God* (*al-Ḥikma fī maḥlūqāt Allāh* [\*1]), in which he depends on Galen as well as Avicennan doctrine. As al-Ġazālī, being an Aš'arī, also presumed that God's actions have no purpose and thus no objective (*ḡaraḍ*), he applies the very same distinction 'Umar al-Ḥayyām used in his solution to the problem in [\*12].

That al-Ġazālī was familiar at least with some of the philosophical works by 'Umar al-Ḥayyām, his senior by a little over ten years, is documented by a passage in his autobiography composed in 500/1106 (*al-Munqid min al-ḍalāl* [\*2: 15]). Daštī pointed out as early as 1966 [\*43: 108–116, transl. 89–93] the connection between this text and 'Umar's Persian *Risāla fī 'Ilm al-kullīyyāt* (*Epistle on the Knowledge of the Universals*); it was van Ess who first noted the connection in Western literature (1987 [\*44: 65–66]). In his autobiography, al-Ġazālī describes four groups of 'seekers' or 'students' (*ṭālibūn*), namely the *mutakallimūn*, the Bāṭīnīs (i.e. Ismā'īlīs), the *falāsifa*, and the Sufīs, explaining that truth (*al-ḥaqq*) must be found within one of these groups. In his youth, he set out – as he describes in pseudo-autobiographical style – to study these groups in detail. In four separate chapters, al-Ġazālī's autobiography introduces the reader to the doctrine, the advantages, and the disadvantages of the respective group. In each of them, with the exception of the last group, the Sufīs, al-Ġazālī finds errors. In his book, the sequence is (1) *mutakallimūn*, (2) *falāsifa*, (3) Bāṭīniyya, and (4) Sufīs [\*2: 16–40], which is precisely the order in which 'Umar al-Ḥayyām lists the four groups of those who seek the knowledge of God (*ṭālibān-i šināht-i ḥudā'*) at the end of his Persian *Epistle on the Knowledge of the Universals* (*Risāla fī 'Ilm al-kullīyyāt* [\*15], edited in [\*53: 76–77]). 'Umar al-Ḥayyām's text precedes al-Ġazālī's by at least five years; consequently, the direction of influence is clear. Because of the parallels with al-Ġazālī, Daštī [\*43: 116–112, transl. 94–98] inferred that 'Umar al-Ḥayyām had close ties with Sufism and scepticism.

It should also be said that the six brief epistles might be part of a much more voluminous philosophical oeuvre written by 'Umar al-Ḥayyām, which has not come down to us. Considering the place occupied by 'Umar al-Ḥayyām's

quatrains in Persian literature, it is certainly no coincidence that his text in Persian [\*15] – a rarity in the philosophical literature of the time – is the one that has been transmitted most. The coincidence that transmitted the three texts in Šabrī al-Kurđī's (d. after 1357/1938) 1917 Cairo edition, *Ġāmi' al-badā'i'* [\*12, \*13, \*14], shows that there may have been many more Arabic texts by 'Umar al-Ḥayyām that were copied less frequently and might have been included in manuscript collections that are now lost.

## 1.2 *Šaraf al-Zamān al-Īlāqī, Muḥammad b. 'Alī b. 'Abdallāh al-Hindī, and Mağd al-Dīn al-Ġilī*

1.2.1 Primary Sources – 1.2.2 Šaraf al-Zamān al-Īlāqī – 1.2.3 Muḥammad b. 'Alī b. 'Abdallāh al-Hindī – 1.2.4 Mağd al-Dīn al-Ġilī

### 1.2.1 Primary Sources

Testimonies on their Life, Work, and Influence [\*19–\*31] – Works and Editions [\*32–\*36]

#### *Testimonies on their Life, Works, and Influence*

19 al-Šahrastānī, Muḥammad b. 'Abd al-Karīm (d. 548/1153). *Kitāb al-Milal wa-l-niḥal*. – Ed. by Muḥammad Badrān, 2 vols. Cairo, 1951–1955. – French transl. by Daniel Gimaret, Jean Jolivet and Guy Monnot. *Livre des Religions et des Sectes*, 2 vols. Louvain, Paris, 1986).

20 al-Bayhaqī, Ṣaḥīr al-Dīn Abū l-Ḥasan 'Alī b. Zayd Ibn Funduq (d. 565/1169–1170). *Tatimmat Šiwān al-ḥikma*. – Ed. by Rafīq al-Ağam. Beirut, 1994. – Ed. by Muḥammad Šafi'. Lahore, 1351/1932. – Ed. by Muḥammad Kurd 'Alī, *Ta'rīḥ ḥukamā' al-iṣlām*. Damascus, 1365/1946. – Repr. 1396/1976. – Ed. by Mamdūḥ Ḥasan Muḥammad. Cairo, 1996. – Partial Engl. transl. and index by Max Meyerhof, "'Alī al-Bayhaqī's *Tatimmat Šiwān al-Ḥikmah*. A biographical work on learned men of the Islam." *Osiris* 8 (1948) 122–217. – Repr.

of both works in *Historiography and Classification of Science in Islam* VIII. Ed.

by Fuat Sezgin. Frankfurt a.M., 2005.

21 *Mağmū'a-yi falsafī-yi Marāğa / A Philosophical Anthology from Maragha*. Containing works by Abū Ḥamid Ghazzālī, 'Ayn al-Qudāt al-Ḥamadānī, Ibn Sīnā, 'Umar b. Sahlān Sāvi, Majduddīn Jīlī and others. Ed. by Naṣrallāh Pūrğawādī [Pourjavady]. Tehran, 1380/2002. – Facsimile of a manuscript copied in 596–597/1199–1201 in Marāğa in the Muğāhid or Muğāhidiyya madrasa.

22 al-Ḥusaynī, 'Alī b. Nāṣir (d. after 622/1225). *Zubdat al-tawāriḥ. Aḥbār al-umarā' wa-l-mulūk al-salğūqiyya*. – Ed. by Muḥammad Nūr al-Dīn. Beirut, 1405/1985.

23 Yāqūt al-Ḥamawī al-Rūmī (d. 626/1229). *Mu'ğam al-udabā'. Iršād al-arīb ilā ma'rifat al-adīb*. – Ed. by Iḥsan 'Abbās, 7 vols. Beirut, 1993.

- 24 Ibn al-Aṭīr, 'Izz al-Dīn 'Alī b. Muḥammad (d. 630/1233). *Al-Kāmil fī l-ta'riḥ. Chronicon quod perfectissimum inscribitur*. – Ed. by Carl J. Tornberg, 14 vols. Leiden, Uppsala, 1851–1876.
- 25 Ibn al-Ša'ār, al-Mubārak b. Aḥmad (d. 644/1256–57). *Uqūd al-ġumān fī farā'id šu'arā' hādā al-zamān = Qalā'id al-ġumān fī farā'id šu'arā' hādā al-zamān*. – Ed. by Fuat Sezgin, 9 vols. Frankfurt 1990.
- 26 Ibn Abī Uṣaybi'a, Aḥmad b. al-Qāsim (d. 668/1270). *Uyūn al-anbā' fī ṭabaqāt al-aṭibbā'*. – Ed. by August Müller, 2 vols. Cairo, 1299/1882, Königsberg, 1884. – Ed. and Engl. transl. by Emily Savage-Smith, Simon Swain and Geert Jan van Gelder, *A Literary History of Medicine. The 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā' of Ibn Abī Uṣaybi'ah*. 3 vols. Leiden, 2020 [The page numbers of Müller's edition are included in the Arabic text in square brackets].
- 27 Ibn Ḥallikān, Aḥmad b. Muḥammad (d. 681/1282). *Wafayāt al-a'yān wa-anbā' abnā' al-zamān*. – Ed. by Iḥsān 'Abbās, 8 vols. Beirut, 1968–77.
- 28 al-Šahrazūri, Muḥammad b. Maḥmūd (d. after 687/1288). *Nuzhat al-arwāḥ wa-rawḍat al-afrāḥ fī ta'riḥ al-ḥukamā' wa-l-falāsifa*. – Ed. by Sayyid Ḥwaršid Aḥmad, 2 vols. Hyderabad, 1396/1976.
- 29 Ibn al-Fuwaṭī, 'Abd al-Razzāq b. Aḥmad (d. 723/1323). *Mağma' al-ādāb fī muğam al-alqāb*. – Ed. by Muḥammad Kāzim, 6 vols. Tehran 1374 h.š. [1995].
- 30 Ḥāğğī Ḥalīfa, Kātib Çelebi Muṣtafā b. 'Abdallāh (d. 1067/1657). *Kašf al-ẓunūn 'an asāmī l-kutub wa-l-funūn*. – Ed. by

Şerefettin Yaltkaya and Rifat Bilge, 2 vols. Istanbul, 1941–1943).

- 31 Bağdatlı Paşa, İsmail b. Muḥammad (d. 1339/1920). *Hadiyyat al-'arīfīn. Asmā' al-mu'allifin wa-aṭār al-muşannifin min Kašf al-ẓunūn*. – Ed. by Mahmud K. Inal and Avni Aktuğ, 2 vols. Istanbul, 1951–1955).

### Works and Editions

*Šaraf al-Zamān al-Īlāqī* (d. 536/1141)

- 32 Philosophical correspondence between al-Īlāqī and al-Šahrastānī (d. 548/1153). MS Tehran, Mağlis 599, 242–250. – Printed in facsimile by Muḥammad Riḍā Ġalālī Nā'inī in *Mağlis-i maktūb* [\*88: 145–156] and again in *Amr wa-ḥalq wa-ilm-i wāğib al-wuğūd* [\*89: 157–167], without typesetting the text. – The text is extant in a paginated manuscript, compiled by Nūḥ b. Yūsuf al-Sayrāfī or al-Sayrāqī, possibly a student of Ibn Ġaylān al-Balḥī's (d. after 580/1184), in the years 570/1175, not long after al-Īlāqī's death. It contains treatises by Ibn Sīnā as well as works in the 'questions and answers' genre, and correspondences between philosophical scholars of the 6th/12th century, namely 'Umar b. Sahlān al-Sāwī (d. c. 540/1145), Ibn Ġaylān al-Balḥī, and Šaraf al-Dīn al-Mas'ūdī (d. after 582/1186). – Many sheets of the manuscript have been lost, and it is described insufficiently and with many errors regarding details in the catalogue of the Kitābhāna-yi Mağlis-i Šūrā [\*48: II 367–368]. This text, for instance, is attributed to a certain Tağ al-Dīn Muḥammad Sahlānī, which is simply a



misreading of Tağ al-Dīn Šaraf al-Zamān Muḥammad al-Īlāqī [\*29: 242]. – The text is lacking most diacritics, and the facsimile reproduction in Ġalālī Nāʾimī in particular is barely legible.

33 *Risāla min kalām al-ağall al-Sayyid Šaraf al-Zamān b. [sic!] al-Īlāqī*. – MS Beirut, Université Saint Joseph 410, fol. 35<sup>v</sup>–36<sup>v</sup> (previously fol. 31<sup>v</sup>–32<sup>v</sup>). – Cheikho includes a very meagre description of the text (*Catalogue raisonné* [\*45: 139–140]), identifying it as a ‘treatise on certain philosophical definitions’. The colophon at the end states that the author wrote the work in Ramaḍān 534/April–May 1140. Here in the colophon as well as the title, the author is named as Ibn al-Īlāqī.

34 *Min risāla fārisiyya al-musammā ḥaqq-namāy*. – Short fragment on psychology and the doctrine of the intellect in MS Istanbul, Ayasofya 4855, fol. 99<sup>r</sup>–99<sup>v</sup>. Possibly a translated excerpt

from a lost text in Persian entitled *Ḥaqq-namāy* (*Showing the Truth*).

*Muḥammad b. ʿAlī b. ʿAbdallāh al-Hindī* (fl. 529/1135)

35 *Ġumal al-falsafa*, MS Istanbul, Esat Efendi 1918. – The MS is a holograph by the author, completed in Dū l-Qaʿda 529/August 1135. – Facsimile edition: *Problems of Philosophy. Jumal al-falsafa*. – Ed. by Fuat Sezgin. Frankfurt a.M., 1985.

*Mağd al-Dīn al-Ġilī* (fl. 570/1175)

36 *al-Lāmiʿ fi l-šakl al-rābiʿ*. – The text is extant in a manuscript in Aṣḡar Mahdawī’s private library in Tehran, published in facsimile in 2002 [\*10: 345–364]. – Ed. by Asadallāh Fallāḥī, *Taṣṣiḥ wa-taḥqīq-i Risāla-yi al-Lāmiʿ fi l-šakl al-rābiʿ niwīšta-yi Mağd al-Dīn-i Ġilī*. In *Falsafa wa-kalām-i islāmī* 48 (Tehran 2015–2016): 201–244.

## 1.2.2 Šaraf al-Zamān al-Īlāqī

### 1.2.2.1 Life and Doctrine – 1.2.2.2 Works

#### 1.2.2.1 *Life and Doctrine*

Šaraf al-Zamān (thus al-Bayhaqī [\*20: 125]; Ibn Abī Uṣaybiʿa [\*26: 11 20] has the incorrect form Šaraf al-Dīn) Tağ al-Dīn Abū ʿAbdallāh Muḥammad b. Yūsuf al-Īlāqī was an influential teacher and the author of a very successful medical textbook, known as *al-Fuṣūl al-Īlāqīyya* (*al-Īlāqī’s Chapters*), a synopsis (*muḥtaṣar*) of the first part on the method of medicine (*al-kullīyyāt*) in Ibn Sīnā’s medical summa *al-Qānūn fi ṭ-ṭibb*. Al-Īlāqī’s *Fuṣūl* were transmitted in many manuscripts, and the subject of numerous later commentaries (cf. GAL [\*4: I 485; SI 826–827] and Ḥāğḡī Ḥalīfa [\*30: II 1266–1267]; concerning this and other works on medicine cf. Şeşen et al. [\*51: 144–146] and Richter-Bernburg in EIr [\*9: XII 641–643]). As an author of philosophical works, al-Īlāqī plays a very minor part. Hardly any works by him on philosophy have been transmitted, with the exception of a correspondence with his contemporary al-Šahrastānī (d. 548/1153) and a very brief philosophical epistle. In the correspondence with

al-Šahrastānī, he only poses questions and does not provide answers. The brief epistle [\*33] has not received any attention from historians of philosophy so far. In it, al-Īlāqī uses philosophical commonplaces to describe the perfection of the theoretical and the practical intellect. Of interest are above all his deliberations towards the end, regarding the Sufis and their claim of reaching this perfection. It is probably a commentary on al-Ġazālī's appropriation of philosophical concepts in his form of Sufism. The name al-Ġazālī, however, remains unspoken, and al-Īlāqī's ambiguous reaction to 'the Sufis' (*al-ṣūfiyya*) should be studied in greater detail. Al-Bayhaqī attributes further texts to al-Īlāqī that might be on philosophical subjects, but are not extant. In his opinion, al-Īlāqī was a prominent scholar who united 'all theoretical and practical virtues' in his person [\*20: 125–126].

Al-Īlāqī was a *sayyid*, a descendant of the Prophet Muhammad. It is not known which location his *nisba* al-Īlāqī indicates, but Īlāq might be a village in the vicinity of Nishapur (Richter-Bernburg in EI<sup>r</sup> [\*9: XII 641]) or – which is more probable – the valley of the Angren river near present-day Tashkent in Transoxania (present-day Uzbekistan) (Barthold 1928 [\*3: 514]). According to al-Bayhaqī, al-Īlāqī lived in Bāḥarz (cf. Bosworth in EI<sup>r</sup> [\*9: III 533–534]), a district in southern Ḥurāsān, but moved to Balḥ after a while. He was embroiled in disputes with 'Umar al-Ḥayyām and 'Abd al-Razzāq al-Ṣignāḥī from Bukhara, a student of al-Lawkarī's [\*20: 124, 126].

The date of al-Īlāqī's death, and consequently his position in the history of philosophy, were long uncertain. Al-Bayhaqī writes that he belonged to the entourage of 'Alā' al-Dīn b. Qumāğ in Balḥ, a high-ranking officer in the Seljuk army [\*20: 185–186, 232] and son of Qumāğ (d. 548/1153), one of Sultan Sanğar's most powerful generals, at this time tenant of a military fief (*muqatṭi'*) in Balḥ (regarding him see Ibn al-Aṭīr [\*24: X 158, 180, 348; XI 57, 107, 116–118]). Al-Īlāqī, he says, was killed in 536/1141 in the battle of Qatwān – when Sanğar was defeated by the Qarā-Ḥiṭāy. This information is confirmed by the historian al-Ḥusaynī, who wrote around the turn of the 7th/13th century [\*22: 187]. Brockelmann accepted the date of 536/1141 as the date of al-Īlāqī's death (GAL [\*4: S I 887]).

This is contradicted, however, by Ibn Abī Uṣaybi'a's information that al-Īlāqī was a direct pupil of Ibn Sīnā's (*min ġumlat talāmīd al-ṣayḥ al-ra'īs wa-l-āḥidīn 'anhu* [\*26: II 20]), and thus lived in the early 5th/11th century. Al-Šahrastūrī (Nuzhat [\*18: II 55–56]) writes that al-Īlāqī was killed in the battle of Qatwān as well as being a pupil (*min talāmīd*) of Ibn Sīnā's, which can really only mean in this instance that he was an indirect pupil or follower of his doctrine. The presumed identification as a pupil of Ibn Sīnā was often the first information linked to al-Īlāqī (cf. e.g. Ḥāğğī Ḥalīfa [\*30: II 1266] and Bağdathī Paşa [\*37: II 71]). As late as 1976, Sellheim eloquently and originally argued for locating al-Īlāqī

in the 5th/11th century [\*27: 147]. In 2004, however, Richter-Bernburg in Elr [\*9: XII 641–643] firmly agreed with al-Bayhaqī, followed by al-Rahim in 2009 [\*84: 86–89]. The decisive factor in both cases was probably the correspondence with al-Šahrastānī transmitted in an Iranian manuscript and published by M. Ġalālī Nāʾinī in 1990 (first in *Maǧlis-i maktūb* [\*75: 145–156]). Only if we assume that al-Īlāqī was living at the beginning of the 6th/12th century can it be explained that he was ʿUmar b. Sahlān al-Sāwī's teacher of medicine (as mentioned by Ibn Abī Uṣaybiʿa [\*26: II 184]). Further manuscript discoveries have confirmed al-Īlāqī's lifetime to the first half of the 6th/12th century.

### 1.2.2.2 Works

#### *Philosophical correspondence between al-Īlāqī and al-Šahrastānī*

Al-Īlāqī and al-Šahrastānī correspond on the knowledge possessed by the necessary existent (*wāǧib al-wuǧūd*), i.e. God. The text in the Tehran manuscript begins with al-Īlāqī's juxtaposition of the position of the *mutakallimūn* according to which the well-ordered creation indicates the creator's omniscience, with the position of the *falāsifa*, i.e. Ibn Sīnā, according to which the necessary existent (*wāǧib al-wuǧūd*) is pure intellect and consequently devoid of matter. The implication that for this reason God knows only universals but not individuals, is not mentioned by al-Īlāqī.

Al-Īlāqī explains the position of the *falāsifa*, defending their doctrine according to which God is in essence both thinking (*ʿāqil bi-dātihi*) and object of thought (*al-maʿqūl bi-dātihi*). Al-Šahrastānī's response [\*26: 245] must be compared in detail with his criticism of Ibn Sīnā's position in his *Book of the Wrestling Match* (*Kitāb al-Muṣāraʿa*). In this work, the question of God's knowledge is the fourth of five objections he raises against Ibn Sīnā ([\*4: Ar. text 67–92; Engl. transl. 60–74], review in Madelung 1976 [\*71: 255–256]). Here, in the correspondence with al-Īlāqī – whom al-Šahrastānī calls Sayyidunā Taǧ al-Dīn, which is confusing, as al-Šahrastānī himself bore the honorific (*laqab*) Taǧ al-Dīn – he explains al-Īlāqī's attitude as originating with the position of Theophrastus (Tāwufraṣṭīs), who is mentioned several times in this letter. His position plays no part in the *Book of the*

*Wrestling Match*, but is introduced briefly in his *Book of Religions and Faiths* (*Kitāb al-Milal wa-l-niḥal*). Here, we read that Theophrastus taught that 'the divine does not move, i.e. it does not change' [\*19: II 1022]. In both texts, this letter as well as the *Book of the Wrestling Match*, the position that God is intellect (*ʿaql*), thinking (*ʿāqil*), and being thought (*al-maʿqūl*) is the bone of contention for al-Šahrastānī. The starting point of al-Šahrastānī's criticism of al-Īlāqī in this text is the latter's position that God's possessing no matter was a negative attribute. This point, and the name of Theophrastus, do not appear in the *Book of the Wrestling Match*. This may indicate that the exchange between al-Īlāqī and al-Šahrastānī concerns issues arising from the latter's refutation in the *Book of the Wrestling Match*. However, a detailed analysis would be required to determine whether this correspondence was composed before the *Book of the Wrestling Match*, and maybe even provoked the fourth discussion there, or whether the book provided the stimulus to which the correspondence was the reaction.

#### *Risāla min kalām al-aǧall al-Sayyid Šaraf al-Zamān b. (sic!) al-Īlāqī*

##### *An Epistle by Šaraf al-Zamān b. (sic!) al-Īlāqī*

This treatise of only three pages goes into the question of how the perfection of the practical intellect (*kamāl al-ʿaql al-ʿamalī*) may be achieved through the perfection of the theoretical intellect (*kamāl al-ʿaql al-naẓarī*), and which high and sublime status is occupied by

people who have perfected the practical intellect. The text begins with a few very general deliberations on logic and its part in achieving the perfection of the theoretical intellect.

The treatise endeavours to clarify the relation between theoretical and practical perfection. The relationship of the latter to the perfection of the theoretical intellect is comparable to that between a servant (*ḥadam*) and the master or the person he serves (*maḥdūm*). Theoretical perfection, which is achieved by means of acquiring true knowledge, is thus superior to practical perfection. Even so, the goal of human action is practical perfection.

The last page is a commentary on a *ḥadīth* that is non-canonical in this form: 'He who does not wish to do humans any wrong is better than enough gold to fill the earth'. Al-Īlāqī refers this dictum of Muhammad's to humans who have achieved perfection of the practical intellect. The Sufis (*al-ṣūfiyya*) claim that they achieve this, but while there are many who pretend to be Sufis, those who truly reach this stage (*al-muḥaqqiqūn minhum*) 'are rare in our time or not existent at all'. At the end the author describes how the education of the soul (*riyāḍat al-naḥs*) can help one achieve this condition.

### 1.2.3 Muḥammad b. 'Alī b. 'Abdallāh al-Hindī

#### 1.2.3.1 Life – 1.2.3.2 Work

##### 1.2.3.1 Life

With the exception of his approximate lifetime (1st half of the 6th/12th century), which can be inferred from the year 529/1135 noted in the colophon of his book *Ġumal al-falsafa* [\*35: 483], we have no knowledge of Muḥammad b. 'Alī b. 'Abdallāh al-Hindī's life.

##### 1.2.3.2 Work

###### *Ġumal al-falsafa*

###### *A Synopsis of Philosophy*

The work is divided into seven separate treatises (*maqālāt*): 1. On arithmetic (*aritmāṭiqī / 'ilm al-ʿadad*) – 2. On geometry (*ġumatriyā / al-handasa*) – 3. On astronomy (*astrunūmiyā / 'ilm al-nuġūm*) – 4. On music (*al-mūsīqī / al-ġinā*) – 5. On logic (*al-mantiq*) – 6. On the natural sciences (*al-'ilm al-ṭabīʿī*) – 7. On philosophical theology / metaphysics (*al-'ilm al-ilāhī wa-huwa al-'ilm al-ma'rūf bi-utlūġyā*).

The title of the work is given as *al-Taḍkira bi-ġumal al-falsafa* in the introduction, and later mainly as *Ġumal al-falsafa* or *Ġawāmi' al-falsafa*. In actual fact, it is an introductory epitome (sg. *ġāmi'*, pl. *ġawāmi'*) to subdivisions of the philosophical sciences. Three mathematical treatises were investigated in 1987/1988 in articles on arithmetic, geometry, and music. Astronomy as well as the two longest sections on the natural sciences and on philo-

sophical theology / metaphysics, on the other hand, have so far been given less in-depth study. Brentjes [\*72] researched arithmetic, finding influences by Euclid, the *Rasā'il Iḥwān al-Ṣafā'*, and Ibn Sīnā's *Kitāb al-Naġāt*. Hogendijk [\*73] determined that the author considered geometry as a discipline propaedeutic to astrology and recurred to Greek material (Euclid) also found in the *Rasā'il Iḥwān al-Ṣafā'*, as well as Indian mathematics as included in al-Ḥwārizmī's *Mafātīḥ al-'ulūm*. In the section on music, Neubauer [\*74] once again found influences of the *Rasā'il Iḥwān al-Ṣafā'* as well as of al-Fārābī's *Kitāb al-Mūsīqī al-kabīr*. Neither of these investigations into the mathematics section of the book attests to the author's originality. Türker Küyel [\*76] compares the section of the *Ġumal* on apodeixis that corresponds to the *Posterior Analytics* to a brief text on the same topic by al-Fārābī (*Šarā'iṭ al-yaqīn*), her analytical focus being more on al-Fārābī than on al-Hindī.

## 1.2.4 Mağd al-Dīn al-Ġilī

## 1.2.4.1 Life – 1.2.4.2 Work

1.2.4.1 *Life*

The only text transmitted from Abū l-Faḍl Mağd al-Dīn (‘Abd al-Razzāq?) Yūsuf b. Naṣr al-Ġilī is a brief treatise on a problem of syllogistics [\*36]. In the biographies of al-Suhrawardī (d. 587/1191) and Faḥr al-Dīn al-Rāzī (d. 606/1210), al-Ġilī is mentioned as their teacher in Marāğa (Ziai [\*77: 16–17], Griffel [\*82: 318–319]). Al-Ġilī studied under Muḥammad b. Yaḥyā al-Ġanzī (d. 549/1154), a student of al-Ġazālī’s in Nishapur, subsequently working as a teacher in Rayy and, from c. 565/1170 onwards, in Marāğa (Ibn Ḥallikān [\*27: IV 250]). He died before 596/1199 (Pūrğawādī [\*79: 18]).

Under the Īl-Ḥānids in the 7th/13th century Marāğa, the ancient capital of the province of Azerbaijan, would be transformed into an important scientific centre with its own observatory and become home to a famous tradition of astronomers (Endress [\*81: 401], Sayılı [\*6: 189–223] and Saliba [\*78]). A little over a century earlier, after the middle of the 6th/12th century, it must already have been a city with famous madrasas. The historian Ibn al-Fuwaṭī (d. 723/1323), librarian at the observatory in Marāğa between 660/1261 and 679/1281, mentions al-Ġilī as a teacher here, confirming that Faḥr al-Dīn al-Rāzī studied under him in 570/1174–1175. Ibn Abī Uṣaybī’a [\*23: II 23] specifies that Faḥr al-Dīn studied ‘philosophy’ (*al-ḥikma*) under al-Ġilī, adding: ‘This Mağd al-Dīn was one of the best scholars of his time, and the author of several good books.’ Ibn al-Ša‘ār [\*25: VI 107] writes that Faḥr al-Dīn learnt the ancient sciences (*al-‘ulūm al-awwāl*) from al-Ġilī. Yāqūt [\*23: VI 2586. 2591] recollects how he asked one of Faḥr al-Dīn’s sons who had taught him in the sciences, with al-Ġilī being the only answer – and al-Ġilī, Yāqūt points out, ‘was one of the great scholars of philosophy’ (*min kibār al-ḥukamā*). Ibn Ḥallikān [\*27: IV 250] tells us that Faḥr al-Dīn first studied under al-Ġilī in his hometown of Rayy, following him to Marāğa when al-Ġilī received an invitation to move there.

More information on al-Ġilī’s work in this city is provided by a manuscript held in Aṣḡar Mahdawī’s private library (described by Dānišpažūh as early as 1958 [\*68: 60–62] and 1969 [\*24: I 563–564]) and published in facsimile in 2002 [\*27]. This manuscript was copied in 596–597/1199–1201 in Marāğa in a madrasa called Muḡāhid or Muḡāhidiyya [\*27: 120. 190]. Besides texts by Ibn Sīnā, al-Ġazālī, ‘Ayn al-Quḍāt al-Hamaḍānī or possibly ‘Umar b. Sahlān al-Sāwī, and Šaraf al-Dīn al-Mas‘ūdī, it contains a brief epistle on syllogistics by al-Ġilī [\*36]. Pūrğawādī [\*79: 18] assumes the copyist of the manuscript to have been one of al-Ġilī’s students, and al-Ġilī himself to have taught at the same madrasa.

In this sole text transmitted from him, al-Ġilī returns to a discussion that had begun a generation earlier with Ibn al-Šalāḥ (also: Ibn al-Sarī, d. 548/1154) (cf. Sabra 1965 [\*69]; Rescher 1966 [\*70: 49–87]). Like the latter, al-Ġilī argues in favour of the independent productivity of the fourth figure of the syllogism. Mīrāyī 2011 [\*11: XIX 156] points out the originality of al-Ġilī's position within Aristotelian syllogistics. It led to a prolonged discussion in Arabic philosophy on the productivity of the fourth figure of the syllogism (cf. El-Rouayheb 2019 [\*85: Index]). Al-Ġilī's contribution, however, played only a minor part. The latest reference to him occurs in an anonymous philosophical summa written towards the end of the 6th/12th century (Michot 2007 [\*83: 106]).

#### 1.2.4.2 Work

*al-Lāmi' fī l-šakl al-rābi'*

*Illuminating the Fourth Figure*

Al-Ġilī endeavours to prove that the so-called fourth and last figure in Aristotle's syllogistics (An. Pr. I 7, 29a19–29b24) is distinct from the first figure and produces valid deductions. The

independence of the fourth figure, which generates syllogisms of the pattern A–B, B–C, C–A (e.g. the syllogism known in Medieval Europe as *Camenes* AeB BeC, CeA: All trees are plants. No plant is a bird. Ergo: No bird is a tree) has been contested ever since Aristotle (Henle 1949 [\*67]).

### 1.3 Umar b. Sahlān al-Sāwī (d. after 536/1141)

1.3.1 Primary Sources – 1.3.2 Life – 1.3.3. Works – 1.3.4 Doctrine – 1.3.5 Influence

#### 1.3.1 Primary Sources

Testimonies on his Life, Works, and Influence [\*37–\*46] – Works and Editions [\*47–\*59]

*Testimonies on his Life, Works, and Influence*

37 al-Bayhaqī, Ṣāḥib al-Dīn Abū l-Ḥasan 'Alī b. Zayd Ibn Funduq (d. 565/1169–1170). *Tatimmat Ṣiḥwān al-ḥikma*. – Ed. by Muḥammad Šafi'. Lahore, 1935. – Excerpts transl. and English index by Max Meyerhof, "Alī al-Bayhaqī's Tatimmat Ṣiḥwān al-ḥikmah. A biographical work on learned men of the Islam." *Osiris* 8 (1948): 122–217. – Repr. of both works in *Historiography and Classification of Science in Islam*, VIII. Ed. by Fuat Sezgin. Frankfurt a.M., 2005.

38 al-Šahrastānī, Tāğ al-Dīn Muḥammad b. 'Abd al-Karīm (d. 548/1153). *Muṣāra'at al-falāsifa / Struggling with the Philosopher. A Refutation of Avicenna's Metaphysics*. Ed. and Engl. transl. by Wilferd Madelung and Toby Mayer, London, 2001.

39 al-Suhrawardī, Šihāb al-Dīn Abū l-Futūḥ Yaḥyā b. Ḥabaš, (d. c. 587/1192). *Kitāb al-Muqāwamāt. al-Ilāhiyyāt*. In *Mağmū'a-yi muṣannafāt-i šayḥ-i iṣrāq Šihāb al-Dīn Yaḥyā Suhrawardī*. – Ed. by H. Corbin, 3 vols. Tehran, 2535–2536 (1976–1977), I 124–192.

- 40 al-Suhrawardī. *al-Maṣārīʿ wa-l-muṭārahāt. al-Ilāhiyyāt*. In *Maǧmūʿa-yi muṣannaḡāt-i šayḥ-i iṣrāq Šihāb al-Dīn Yaḥyā Suhrawardī*. – Ed. by H. Corbin, 3 vols. Tehran, 2535–2536 (1976–1977), I 193–506.
- 41 al-Naysābūrī, Muʿīn al-Dīn Muḥammad b. Maḥmūd (d. c. 590/1194). *Itmām Tatimmat Šiwān al-ḥikma*, MS Istanbul, Murad Molla 1431. – A so far unedited continuation of al-Bayhaqī's *Tatimmat Šiwān al-Ḥikma*.
- 42 *Maǧmūʿa-yi falsafī-yi Marāǧa. A philosophical anthology from Maragha. Containing works by Abū Ḥāmid Ghazzālī, ʿAyn al-Quḍāt al-Ḥamadānī, Ibn Sīnā, ʿUmar b. Saḥlān Sāvi, Majduddīn Jīlī and others*. – Ed. by N. Pourjavady, Tehran 1380/2002.
- 43 Ibn Abī Uṣaybiʿa, Muwaffaq al-Dīn Aḥmad b. al-Qāsim (d. 668/1270). *ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ*. – Ed. by A. Müller, 2 vols. Cairo, 1299/1882. – Ed. and Engl. transl. by Emily Savage-Smith, Simon Swain and Geert Jan van Gelder, *A Literary History of Medicine. The ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ of Ibn Abī Uṣaybiʿah*. 3 vols. Leiden, 2020 [The page numbers of Müller's edition are included in the Arabic text].
- 44 al-Šahrazūrī, Šams al-Dīn Muḥammad b. Maḥmūd (d. after 687/1288). *Nuzhat al-arwāḥ wa-rawḡat al-afrāḥ fī taʾrīḥ al-ḥukamāʾ wa-l-falāsifa*. – Ed. by S.Ḥ. Aḥmad, 2 vols. Hyderabad, 1396/1976.
- 45 al-Qazwīnī, Zakariyyā b. Muḥammad (d. 682/1283). *ʿAǧāʾib al-maḥlūqāt wa-ǧarāʾib al-mawǧūdāt*. – Ed. by F. Wüstenfeld. Göttingen, 1849.

- 46 Ḥāǧǧī Ḥalīfa. *Kašf al-ẓunūn ʿan asāmī l-kutub wa-l-funūn*. – Ed. by Ş. Yaltkaya and R. Bilge, 2 vols. Istanbul, 1941–1943.

### Works and Editions

- 47 *al-Bašāʾir al-našīriyya fī ʿilm al-manṭiq* (Arabic), with a commentary by Muḥammad ʿAbduh (d. 1323/1905), first printed in Cairo, 1316/1898. – New edition by Rafīq al-ʿAǧam, who (for the first time) separates al-Sāwī's text from ʿAbduh's commentary. Beirut, 1993.
- 48 *Kitāb al-Tabšira* (Persian). – Ed. by M.T. Dānišpažūh, *Tabšira wa-du risāla-yi dīgar dar manṭiq*. Tehran 1337 h.š. (1958), 3–125. – A Persian treatise on logic independent of [ \*47 ], i.e. not a Persian translation of the Arabic *al-Bašāʾir*. This text is shorter than *al-Bašāʾir*, and structured in a different, more innovative way. – On pp. 174–177 the edition contains a list of the passages in Ibn Sīnā's works on which al-Sāwī drew in the individual chapters. These are, above all, Ibn Sīnā's Persian work *Dānišnāma-yi ʿAlāʾī* and the Arabic *al-Naǧāt*, as well as a few passages from *al-Išārāt wa-l-tanbihāt*.
- 49 *Muḥtaṣar dar bayān-i ʿulūm-i ḥaqīqī* (Persian). – Ed. by M.T. Dānišpažūh, *Tabšira wa-du risāla-yi dīgar dar manṭiq*. Tehran, 1337 (1958), 127–155. – A Persian treatise on philosophy presumably composed for Saṅǧar, of which only the section on logic in ten short chapters is extant in MS Istanbul, Fatih 5426, fol. 174<sup>v</sup>–182<sup>r</sup>.
- 50 *Risāla fī Taḥqīq naqīd al-wuǧūd* (Arabic). – Ed. by M.T. Dānišpažūh, *Tabšira wa-du risāla-yi dīgar dar manṭiq*. Tehran 1337 (1958) 157–167. – Ed. by

Ġulāmriḍā Dādḥwāh [Dadkhah] and Muḥammad Karīmī Zangānī Aṣl [Karimi Zanjani Asl], *Three Logical and Philosophical Treatises / Si risāla-yi manṭiqī wa-falsafī*. Bonn, 2013, 73–88. – The text is extant in a MS of Aṣḡar Mahdawī's private library, and published in facsimile in 2002 [\*42: 301–306].

51 *al-Tawṭī'a fi l-mu'ǧizāt wa-l-karāmāt*. – Ed. by Ġulāmriḍā Dādḥwāh [Dadkhah] and Muḥammad Karīmī Zangānī Aṣl [Karimi Zanjani Asl], *Three Logical and Philosophical Treatises / Si risāla-yi manṭiqī wa-falsafī*. Bonn, 2013, 89–118. Alternative title: *Bayān al-mu'ǧizāt wa-l-karāmāt wa-l-a'ǧīb*. – Extant in a MS in Aṣḡar Mahdawī's private library, entitled *al-Risāla al-musammāt bi-l-Tawṭī'a* and published in facsimile in 2002 [\*42: 289–300].

52 *Šarḥ Risālat al-Ṭayr* (Persian). – Ed. by Otto Spies and S.H. Ḥatak, *Three Treatises on Mysticism by Shihābuddīn Suhrawardī Maqtūl*. Wiesbaden, 1935, 47–89. – Repr. in *Ibn Sīnā: Risālat al-Ṭayr šāriḥ-i 'Umar b. Sahlān Sāwī*. – Ed. by M.Ḥ. Akbarī, n.p. [Tehran], 1370 h.š. (1991), 7–64. – Commentary on Ibn Sīnā's *Risālat al-Ṭayr*.

53 *Nahǧ al-taqdīs* (Arabic). In *Nahǧ al-taqdīs wa-as'ila wa-aǧwiba: Risālatān fi l-manṭiq wa-l-falsafa*. – Ed. by Ḥasan al-Marāǧī. Tehran, 1385/1427/2006, 29–70. – Ed. by Ġulāmriḍā Dādḥwāh [Dadkhah] and Muḥammad Karīmī Zangānī Aṣl [Karimi Zanjani Asl], *Three Logical and Philosophical Treatises / Si risāla-yi manṭiqī wa-falsafī*. Bonn, 2013, 119–160.

54 *al-As'ila wa-l-aǧwiba* (Arabic). – Ed. by Ḥ. al-Marāǧī, *Nahǧ al-taqdīs wa-as'ila*

*wa-aǧwiba. Risālatān fi l-manṭiq wa-l-falsafa*. Tehran, 1427/2006, 71–78, on the basis of MS Tehran, Maǧlis 599, 198–204. – The sheets or fascicles of the MS got out of sequence and were not put together correctly again. The editor is unaware that al-Sāwī's text ends on p. 78 of the edition (p. 204 in the MS) and remains incomplete. He assumes incorrectly that the text on pp. 79–108 of his edition (pp. 205–239 in the MS), which is actually part of a work by Ibn Ġaylān al-Balḥī, is part of this work by al-Sāwī.

55 Written response to al-Šahrastānī's *Mušāra'at al-falāsifa* (Arabic), MS Kazan, University Library 1125, fol. 99<sup>r</sup>–136<sup>v</sup>, and MS Istanbul, Topkapı Sarayı, Revan Köşkü 2042/23 (in Karatay's catalogue listed under no. xvii [\*23: IV, 548, no. 8974]; in Dānišpažūh 1969 under no. 23 [\*24: I, 437]).

56 *Muḥtaṣar Šiwān al-ḥikma* (Arabic). – Ed. by R. Mulyadhi Kartanegara, *The Muḥtaṣar Šiwān al-ḥikma of 'Umar b. Sahlān al-Sāwī. Arabic Text and Introduction*. PhD Diss., University of Chicago, 1996. – Edition of the only known manuscript of the text, MS Istanbul, Fatih 3222, fol. 1<sup>r</sup>–60<sup>v</sup>. – Summary of the 4th/10th cent. doxography and gnomology *Šiwān al-ḥikma*.

57 *al-Risāla al-Sanǧariyya fi l-kā'ināt al-unšuriyya* (Persian). – Ed. by M.T. Dānišpažūh, *Du risāla dar bāra-yi ātār-i 'ulwī. Two Persian Texts on Meteorology*. Tehran, 1337/1958, 1–56.

58 *Risāla-i dar bāra-yi ātār-i 'ulwī* (Persian). – Ed. by M.T. Dānišpažūh, *Du risāla dar bāra-yi ātār-i 'ulwī. Two Persian Texts on Meteorology*. Tehran, 1337/1958, 57–127.



59 *Kitāb al-Mubīn fī šarḥ al-matīn*  
(Arabic). – A so far unedited work on  
logic, extant in MS Istanbul Ahmet III  
3432 (Karatay no. 6891). – The text is an

Arabic translation of a Persian text by  
al-Sāwī, prepared for the Ottoman sultan  
Mehmet II. (r. 848–886/1444–1481).

### 1.3.2 Life

Zayn al-Dīn ʿUmar b. Sahlān (also: al-Sahl) al-Sāwī (also: al-Sāwaḡī), who also bore the honorific Burhān al-Ḥaqq or Lisān al-Ḥaqq, was a philosopher and above all a logician in his hometown of Sāwa in western Iran (between Tehran and Hamadan) and in Nishapur in Ḥurāsān in the northeast of present-day Iran. We have no historical date we can link to al-Sāwī's life, knowing neither when he was born nor when he died. Three brief biographical sketches about him are extant, by al-Bayhaqī (d. 565/1169–70) [\*37: 127–129], Muʿīn al-Dīn al-Naysābūrī (d. c. 490/1193) [\*41: 153<sup>v</sup>–154<sup>r</sup>], and al-Šahrastūrī (d. after 687/1288) [\*44 II 56–57], with the later version(s) depending heavily on the earlier one(s).

The time during which al-Sāwī was active can only be deduced from the titles of two of his works, dedicated to a ruler and a vizier, respectively. A work about meteorology [\*57] is dedicated to Saṅḡar b. Malik-Šāh (d. 552/1157), governor of Ḥurāsān (from 490/1097 onwards) and sultan of the Great Seljuk Empire from 511/1118 to 548/1153. Al-Sāwī's best-known text on logic, *al-Baṣāʾir al-Naṣīriyya* [\*47], is dedicated to Naṣīr al-Dīn Abū l-Qāsim Maḥmūd b. Abī Tawba, a vizier of Saṅḡar who came originally from Marv and held office from 521/1127 to 526/1132. Saṅḡar held court in Marv and in a mobile army camp in Ḥurāsān, and distinguished himself as a patron of Persian-speaking men of letters and scholars. Al-Sāwī was thus active during the first half of the 6th/12th century and was the most important champion of Ibn Sīnā's philosophy against a variety of attacks from philosophical anti-Avicennans (Abū l-Barakāt al-Baḡdādī and al-Šahrastānī) of his time.

Al-Bayhaqī writes [\*37: 127] that al-Sāwī was a judge (*qāḍī*) in his hometown of Sāwa, but gladly abandoned this office in order to move to Nishapur in Ḥurāsān where he wanted to live on the fruits of his labours and to teach. He earned his income by copying Ibn Sīnā's *al-Šifāʾ*, selling it for the handsome sum of 100 gold dinars. While nothing in al-Sāwī's own writings indicates a religious or legal career, there can be no question that he was a judge – according to some manuscripts even chief judge (*qāḍī l-quḍāt*). Al-Naysābūrī [\*41: 153<sup>v</sup>] adds that he turned his back on this profession 'because he preferred seclusion to society and leisure to work'. Al-Bayhaqī, who was friendly with al-Sāwī, introduces him [\*37: 127] as someone 'who found one system (*niẓām*) for the revealed law (*al-šarʿa*) and philosophy'. In the subjects of medicine and

philosophy, al-Sāwī is believed to have been a pupil of al-Īlāqī's (d. 536/1141) [\*43: 11 184]. He is said to have composed numerous texts on logic, mathematics, and other subjects, some of which were lost in a fire at his library in Sāwa not long after his death [\*37: 128]. Al-Sāwī is also believed to have written a history of the city of Isfahan [\*46: 1 282], which has not survived. Al-Naysābūrī [\*41: 153<sup>v</sup>–154<sup>r</sup>] transmits some lines of his poetry.

The year 536/1141 may be regarded as a vague *terminus post quem* for the date of al-Sāwī's death, as this was the year of the battle of Qaṭwān which al-Šahrastānī appears to mention in his *Muṣāraʿat al-falāsifa* (cf. the reference to *fitan al-zamān* [\*38: Ar. 120, Engl. 91]). As al-Sāwī wrote a text responding to the arguments of this book, it is likely that he died after this date.

### 1.3.3 Works

*al-Baṣāʾir al-Naṣīriyya*  
*The Book of Insights for Naṣīr al-Dīn*

At the beginning of the work, al-Sāwī expresses his desire to grow closer to his patron Naṣīr al-Dīn Abū l-Qāsim Maḥmūd b. Abī Tawba by summarising for him 'some works on the genuinely true sciences' (*al-ʿulūm al-ḥaqīqīyya*), i.e. philosophy. He begins with logic, alluding to it as the gateway to philosophy.

Like other philosophers of this time (e.g. al-Lawkarī), his aim was to find the right balance for an introduction. While the authority of al-Fārābī and Ibn Sīnā is explicitly recognised, their works are considered unsuitable for beginners. In the introduction to *al-Baṣāʾir al-Naṣīriyya*, al-Sāwī tells us that his book will be neither too long and taxing, nor too short or incomplete. 'From the field of logic, I present that of which a student of the genuinely true sciences must not be ignorant, limiting myself to the exposition of the two categories of true knowledge, namely conception (*taṣawwūr*) and composed judgment (*taṣdīq*), and the methods leading to their acquisition, namely definition (*ḥadd*) and demonstration (*burhān*)' [\*74: 22 al-ʿAḡam]. The focus is, as with al-Fārābī and Ibn Sīnā, on the Aristotelian project of *apodeixis* (*burhān*). In the philosophy of this time its effectiveness had been not entirely abolished by al-Ġazālī but certainly significantly challenged.

While Ibn Sīnā and al-Fārābī composed their writings on logic in accordance with the transmitted canon of the *Organon*, al-Sāwī is the first in the Arabic tradition to deviate from this comparatively strict system. He divides his work into three 'articles' (sg. *maqāla*). In the first (... *fī l-mufradāt*), he explains linguistic expressions and the way in which they represent things in the external world. It is here, for instance, that al-Sāwī discusses the difference between substances and accidents, or Aristotle's ten categories. In the second, comparatively brief article (... *fī ta'arruf al-aqwāl al-šāriḥa al-mūšila ilā l-taṣawwūr*), al-Sāwī's objective is to make clear how one can scientifically determine concepts and things using formally correct definitions. The third article (... *fī l-ta'līfāt al-mawšila ilā l-taṣdīq*) constitutes the majority of the text. It contains an introduction to the entire field of syllogistics and demonstrative theory in Aristotelianism. This article is divided into five 'sections' (sg. *fann*), which adopt traditional divisions from the *Organon*. Al-Sāwī identifies the first section, for instance, with the third text of the *Organon*, *On Interpretation* (*bābir miniyās*). The second and fourth sections represent, respectively, the First and Second Analytics (*fī šuwar al-ḥuḡaḡ* and *fī l-burhān*), while the third section with its classification of the various types of premises to be employed in arguments (*fī mawādd al-ḥuḡaḡ*) ties into an

important discussion from the *Second Analytics* also discussed by earlier authors (Ibn Sīnā, al-Ġazālī), albeit according to a new and independent position preceding the actual discussion of demonstration. At the end follows, quite briefly in only six pages, the fifth section containing the *Sophistic Refutations* (*fī l-muḡālīṭāt*).

*Response to al-Šahrastānī's Mušāra'at al-falāsifa (The Wrestling Match with the Avicennan Philosophers)*

Al-Sāwī's response to two questions asked by al-Šahrastānī (d. 548/1153) that were also presented as objections to Ibn Sīnā in his *Mušāra'at al-falāsifa (The Wrestling Match with the Avicennan Philosophers)* [\*38]. In the Kazan MS this text is referred to as *Mušāra'at al-mušāra'a*, a title probably not selected originally by al-Sāwī but added by a later reader. The title in the Istanbul MS expresses the situation more clearly: *I'tirāḡāt al-Šahrastānī 'alā kalām Ibn Sīnā, arsalahu ilā l-Qāḡī 'Umar b. Sahl multamīs<sup>an</sup> ḡawābahā ma'a aḡwibat Ibn Sahl (Al-Šahrastānī's objections to Ibn Sīnā's doctrines, which he sent to al-Sāwī requesting an answer, together with al-Sāwī's responses)*. In the first objection, al-Šahrastānī turns against Ibn Sīnā's position that God's essence cannot be composed out of elements, in the second objection against the claim that a pure intellect must be entirely dissociated from matter. In his answer, which starts on fol. 107<sup>r</sup> in the Kazan MS, al-Sāwī argues against both objections in some detail, defending Ibn Sīnā's positions.

*Nahḡ al-taqdīs  
How we Should Understand (Divine)  
Transcendence*

To begin with, al-Sāwī explains that some friends asked him to study an epistle (*risāla*) composed by a prominent scholar among his contemporaries (*ba'd fuḡalā' al-zaman wa-kibārihi*), and containing an account (*ḡikāya*) of doctrines composed by Abū l-Barakāt, the 'master of the Jews (*šayḡ al-yahūd*)', in refutation of Ibn Sīnā. The subject of the debate is Ibn Sīnā's doctrine

according to which 'God knows individual things (*ḡuz'īyyāt*) not in an individual way (*bi-tariḡ ḡuz'ī*) but only in a universal way (*'alā waḡh kullī*)'. Al-Sāwī was asked, he writes, to respond to Abū l-Barakāt al-Baḡḡādī's answer, and defend Ibn Sīnā's doctrine. 'I begin by presenting [Ibn Sīnā's] clear arguments for the impossibility of God's knowing individual things other than in a universal way. Then I shall move on to the objections mentioned in the Epistle, devoting myself to answering them and to that which they [sc. the opponent] assume to be a demonstration (*burhān*), and elucidate the kind of error in it' [\*53: 31]. – Al-Sāwī does indeed begin by presenting Ibn Sīnā's position, using explicit quotations from *al-Šifā'* in order to clarify the problem that God's knowledge of particulars cannot change together with every change of these things within time. Al-Sāwī then goes on to focus on the objections, which he appears to quote verbatim from the epistle in his possession, refuting them with traditionally Avicennan arguments. He seems to overlook that Abū l-Barakāt's criticism of Ibn Sīnā's doctrine of God's universal knowledge is in fact part of a much more radical criticism of the Aristotelian and Avicennan doctrine of the intellect and the soul. Frequently al-Sāwī merely repeats elements of Ibn Sīnā's doctrine without actually realising that they are not endorsed by his opponents. The course of the discussion allows inferences regarding the epistle to which al-Sāwī was referring, and should be compared to the respective passages in Abū l-Barakāt's *al-Mu'tabar*, which the latter seems to have made available to a wider public only years after this refutation.

*Risāla fī Taḡḡīḡ naḡīḡ al-wuḡūd  
Epistle on Determining the Opposite  
of Existence*

A short treatise on that which is the opposite of propositions with existential implications, i.e. under what conditions these propositions would be true or false. Al-Sāwī frequently refers to Ibn Sīnā as well as to his own work *al-Bašā'ir* [\*7].

## 1.3.4 Doctrine

While research has so far shown little interest in al-Sāwī, and besides few articles in specialist reference works (Brockelmann 1937 [\*4: S I 830], Muwaḥḥid 1990 [in: \*11: III 726–28], Ziai 1997 [in: \*9: VIII 52–53]) there are only two studies on his work (Dānišpažūh 1958 [\*86] as well as Dādḥwāh and Zanḡānī-Aṣl 2013 [\*89]), he was an innovative thinker during a time of transition from pure Avicennism (*falsafa*) to post-classical philosophy (*ḥikma*). In a *Synopsis of the Sciences of Truth* (*Muḥtaṣar dar bayān-i 'ulūm-i ḥaqīqī*), al-Sāwī promises his readers a comprehensive and at the same time brief presentation of the philosophical sciences in three parts: firstly, 'the rules, namely that which is called logic, which a student of the sciences must master in order to avoid mistakes'; secondly, 'the explanation of the bodies and of their motion and rest and everything connected with this; these are the natural sciences (sg. *'ilm-i ṭabī'ī*)'; and thirdly 'proof of the creator and of His transcendence (*tanzīh wa-taqdīs*) as well as the way in which He causes existences that are able to exist by themselves, and this is called the divine science (or also metaphysics, *'ilm-i ilāhī*)' [\*49: 129]. It seems that al-Sāwī was not able to realise this ambitious plan, as the only manuscript of the text (MS Istanbul, Fatih 5426, fol. 174<sup>v</sup>–182<sup>r</sup>) contains just the first part on logic. This is significant in that al-Sāwī, although he left behind works in other disciplines as well, became known and influential above all for his works on logic. Much remains to be investigated in greater depth, as only a detailed study of his logic and a comparison with his predecessors Ibn Sīnā, Bahmanyār, al-Lawkarī, and al-Ġazālī as well as his successors Abū l-Barakāt al-Baġdādī, al-Suhrawardī, and Faḥr al-Dīn al-Rāzī will be able to reveal his true achievement in this field. To date there is only one study on Arabic logic that takes al-Sāwī into account (Madkour 1969 [\*87: 106. 247–248]). However, even without detailed studies, the structure of his works on logic makes clear that in important respects he diverges from the tradition of Ibn Sīnā and his followers, preparing – at the very least – future ground-breaking innovations in logic and the theory of science proposed by Faḥr al-Dīn al-Rāzī and subsequent thinkers.

In *Muḥtaṣar dar bayān-i 'ulūm-i ḥaqīqī*, logic is divided into ten chapters (sg. *faṣl*) which no longer represent the texts of the nine-part *Organon*. The sequence of the *Organon* still determined the structure of logic for Ibn Sīnā and his pupils; in *Muḥtaṣar dar bayān-i 'ulūm-i ḥaqīqī* al-Sāwī employs analytical criteria of arrangement. He begins with the distinction between conception (*taṣawwur*) and composed judgment (*taṣdīq*), and moves on to theoretical linguistic deliberations on words (*mufradāt*) and that which they denote. He discusses definition (*ḥadd*) and description (*rasm*) only briefly, going on to explain judgments (sg. *qaḍīyya*) in the fourth chapter. Individual chapters are dedicated to judgments that contradict one another, or to those

that may be converted logically. The two core chapters of every Aristotelian theory of science, namely syllogistic (*qiyās*) and demonstration (*burhān*), are discussed very briefly in chapters eight and nine, before the logic concludes with a short chapter on sophistic fallacies (*qiyāsāt-i nāqīṣ wa-bāṭil*). Compared to his Avicennan predecessors – and even with many introductions to logic that would come later – all this is innovative and demonstrates that al-Sāwī had devoted careful thought to the ‘rules which a student of the sciences must master in order to avoid mistakes’ [\*49: 129].

A similarly innovative structure, which really bears hardly any relation to the division of the *Organon*, determines the *Tabṣīra*, also composed in Persian [\*48]. The text is considerably more comprehensive than the brief logic in *Muḥtaṣar dar bayān-i ‘ulūm-i ḥaqīqī*, and is divided into approximately fifty chapters, each dedicated to a constituent question of logic and the theory of science. Similar to *Muḥtaṣar dar bayān-i ‘ulūm-i ḥaqīqī*, this work, too, includes issues of epistemology as well as the philosophy of language.

Compared to these two Persian works, the Arabic *al-Baṣā’ir al-Naṣīriyya fī ‘ilm al-mantiq* [\*47] appears to be more conservative. However, al-Sāwī is innovative in this work as well, dividing logic into three parts: (1) reflections on language, (2) determination of concepts, and (3) deducing convincing judgments. From here it is only a small step to the future division of logic into the two fundamental units of Arabic philosophical linguistic theory, namely conception (*taṣawwur*) and composed judgment (*taṣdīq*). All the same, this Arabic text remains more conservative than the two Persian ones. In the third part on composed judgment, al-Sāwī applies the traditional structure of the third to the seventh part of the *Organon* (*On Interpretation* through *On Sophistical Refutations*).

Beyond the confines of logic, al-Sāwī appears as an unbending defender of Ibn Sīnā’s doctrines. Indeed, this may be no different in logic, as here, too, his innovations primarily consist in the arrangement and pedagogical presentation of Ibn Sīnā’s doctrines. Detailed comparisons will be required to reach secure conclusions on this question. His educational background as a judge (*qāḍī*), who was presumably trained in the traditional religious sciences as well, shows that the frequently strict separation between *falsafa* and religious scholarship, of which al-Ġazālī, for instance, tries to persuade us, probably never existed at all. In several works, al-Sāwī defended Ibn Sīnā’s doctrine against criticism that either came directly from Muslim theology (Aṣ‘arī *kalām* and Ismā‘īliyya) [\*55], or from a new trend in philosophy which, encouraged by the theologians’ criticism, submitted Ibn Sīnā’s doctrines to an extremely critical philosophical examination [\*53]. All these texts, too, require in-depth investigation before a conclusive evaluation will be possible.

### 1.3.5 Influence

In 1969, Ibrahim Madkour described al-Sāwī's *al-Baṣā'ir al-Naṣīriyya* as 'the clearest, methodologically most developed and most complete of all logical texts in Arabic, second only to the works of Ibn Sīnā' [\*87: 248]. Fifty years later and in view of our broader knowledge above all of the texts on logic after the 6th/12th century, this assessment must be qualified. Even so, al-Sāwī was one of the most prominent logicians in his time whose works were well-known and studied at least until the publication of two much-used and much-commented *madrasa* textbooks: Aṭīr al-Dīn al-Abharī's (d. 663/1265) *Īsāgūḡī* and Naḡm al-Dīn al-Kātibī al-Qazwīnī's (d. 675/1276) *Šamsiyya*.

Al-Sāwī's importance consists furthermore in the fact that he, a jurist with religious education, adhered to and defended Ibn Sīnā's teachings at a time when they were increasingly subject to attack. However, this also means that many of his works are very much testimonies of their time, and with the exception of his Arabic textbook on logic, *al-Baṣā'ir al-Naṣīriyya*, none of al-Sāwī's works were able to establish lasting philosophical influence. The fact that two of his smaller works on logic were included in a manuscript compiled in the early 7th/13th century for teaching purposes at the Muḡāhidiyya madrasa in Marāḡa in north-eastern Iran [\*42: 289–306] is significant. His synopsis of the *Šiwān al-ḥikma* (*Muḥtaṣar Šiwān al-ḥikma*) [\*56] is also of some relevance, at least until the end of the 6th/12th century, when it was overshadowed by Mu'īn al-Dīn al-Naysābūrī's comprehensive *Muntaḥab Šiwān al-ḥikma*.

In later scholarly literature, al-Sāwī is mentioned only rarely. Ṣaḥīr al-Dīn al-Fārisī, of whom we know nothing except that he may have been one of his pupils, introduced al-Suhrawardī (d. c. 587/1191) to the study of *al-Baṣā'ir al-Naṣīriyya* [\*44: II 123]. Al-Sāwī's innovative rearrangement of the *Organon* correspondingly left its imprint on al-Suhrawardī (Ziai 1990 [\*88: 17, 52]). Al-Suhrawardī mentions al-Sāwī as 'the author of *al-Baṣā'ir*' in at least two of his works [\*39: 146; \*4: 278, 352]. Ibn Abī Uṣaybi'a reports that he himself studied al-Sāwī's *Tabṣira* with his teacher Šams al-Dīn al-Ḥuwayyī (d. 637/1240), a student of Faḥr al-Dīn al-Rāzī's (d. 606/1210), in Damascus [\*43: II 171]. This is probably another reference to the textbook of logic *al-Baṣā'ir al-Naṣīriyya*, which may have been circulating under this parallel title. Al-Qazwīnī (d. 682/1283) mentions al-Sāwī's contribution to the solution of a geometrical problem [\*45: 98]. Later references are rare, although Mullā Šadrā (d. 1050/1640–1641) refers to a short text of his [\*51] in his popular commentary on Aṭīr al-Dīn al-Abharī's *Kitāb al-Hidāya* (cf. Ḥasan al-Marāḡī in the introduction to [\*53: 14]).

Al-Sāwī's work experienced an unexpected renaissance towards the end of the 19th century, when the Egyptian reformer Muḥammad 'Abduh (d. 1323/1905) selected *al-Baṣā'ir al-Naṣīriyya* for the study of logic at al-Azhar University. The

book suited ‘Abduh’s Salafi endeavour to go back to sources that preceded the established textbooks used in *madrassa* education (in this context the *Īsāğūṣī* and the *Šamsiyya*). At the beginning of the 1898 edition he oversaw, ‘Abduh tells of how a copy of the book fell into his hands in 1304/1887–1888 during his enforced exile in Beirut, saying that he was immediately impressed by the excellence of the exposition. It was, he said, comprehensive (*ḥāwin*) as well as selective, and contained none of the often long-winded debates found in later works on logic. ‘I thought that it had such a good arrangement (*tartīb*) as I have never found in a book by those who follow Ibn Sīnā, or who were scholars of a similar rank in this discipline.’ When he finally returned to Cairo – he writes in 1898 – he was able to convince the authorities at al-Azhar University of the advantages of this book and succeeded in having the book accepted as a textbook [\*47: 21 n.1 al-‘Aḡam].

## 2 Critical Approaches to Ibn Sīnā

2.1 Ibn al-Malāḥimī – 2.2 al-Šahrastānī – 2.3 Abū l-Barakāt al-Baḡdādī – 2.4 al-Mas‘ūdī and Ibn Ġaylān al-Balḥī – 2.5. ‘Abd al-Laṭīf al-Baḡdādī

### 2.1 *Ibn al-Malāḥimī* (d. 536/1141)

*Frank Griffel*

2.1.1 Primary Sources – 2.1.2 Life – 2.1.3 Doctrine – 2.1.4 Influence

#### 2.1.1 Primary sources

Testimonies on his Life, Work, and Influence [\*60–\*64] – Works and Editions [\*65–\*68]

*Testimonies on his Life, Works, and Influence*

60 al-Bayhaqī, Ibn Funduq ‘Alī b. Zayd (d. 565/1169–70). *Ma‘āriḡ Nahḡ al-balāḡa*. – Ed. by M. Taqī Dānišpažūh and Maḥmūd al-Mar‘ašī. Qum, 1409 (1988).

61 Faḥr al-Dīn al-Rāzī (d. 606/1210). *Tafsīr al-kabīr aw Maḡātīḥ al-ḡayb*, 12 vols. Cairo, 1934.

62 al-Šarīfīnī (d. 641/1243).

*Al-Muntaḡab min al-Siyāq li-Ta’rīḡ Nīsābūr*. In *The Histories of Nishapur*. – Ed. by Richard Frye, London, 1965 (Text 3).

63 Ibn Taymiyya (d. 728/1328). *Dar’ ta‘āruḡ al-‘aql wa-l-naql*. – Ed. by M.R. Sālim, 11 vols. Beirut, 1980.

64 Ibn al-Murtaḡā (840/1437). *Ṭabaqāt al-mu’tazila*. – Ed. by Susanne Diwald-Wilzer. Beirut, Wiesbaden, 1961.

*Works and Editions***65** *Tuhfat al-mutakallimīn fī l-radd*

*‘alā l-falāsifa*. – Ed. by Hasan Ansari and Wilferd Madelung. Tehran, Berlin, 2007. – Edition of the only known manuscript of this text, from the library of the Imam Reza Shrine in Mashhad (Iran), which is unfortunately not identified completely including the shelf mark. The editors have undertaken numerous emendations of this text, the transmission of which is often unsure. Most of the emendations are based on parallel texts in other Arabic works; as the sources are not always fully cited, it is difficult to evaluate the reliability of the edited text.

**66** *Kitāb al-Mu‘tamad fī uṣūl al-dīn*. –

Ed. by Wilferd Madelung. Tehran, 2012 (2nd ed.). – Partial edition of all known

fragments of the work which together amount to around a fourth of the complete original work.

**67** *Kitāb al-Fā’iq fī uṣūl al-dīn*. – Ed.

by Wilferd Madelung and Martin McDermott. Tehran, Berlin, 2007. – An abridged version of [\*66], much circulated as a textbook of Mu‘tazilī theology of Abū l-Ḥusayn al-Baṣrī’s school, apparently superseding even Abū l-Ḥusayn’s own works. Transmitted in several manuscripts and edited here as a complete work.

**68** *al-Taḡrīd fī uṣūl al-fiqh*. – Ed. by

Hasan Ansari and Sabine Schmidtke. Tehran, Berlin, 2011. – An epitome of Abū l-Ḥusayn al-Baṣrī’s work *al-Mu‘tamad fī uṣūl al-fiqh* on the methods of jurisprudence.

**2.1.2** Life

Rukn al-Dīn Maḥmūd b. Muḥammad b. al-Malāḥimī al-Ḥwārazmī was a Mu‘tazilī theologian in the early 6th/12th century who composed a detailed refutation of Ibn Sīnā’s philosophical system that is similar in many respects to al-Ġazālī’s *Tahafūt al-falāsifa* (cf. § 3 above). Ibn al-Malāḥimī was a late representative of Mu‘tazilī theology, which is why we possess only sparse information about his life. Among his contemporaries, al-Bayhaqī (d. 565/1169–1170) is the only one to mention him in a list of *kalām* scholars, and with deep respect: he was ‘possessed of an inclination to express himself clearly on issues [of *kalām*]' [\*60: 36]. Because of their theological and philosophical significance, his works were studied and transmitted above all in Yemen by Zaydī scholars (Ansari 2007 [\*93]). There is scant information about him in the biographical literature. Only Ibn al-Murtaḍa (d. 840/1437), the historian of the Mu‘tazilī school, mentions him [\*64: 119]. It has been possible to deduce important dates of his life from the manuscripts of his works, though, and from writings by his contemporaries and colleagues.

Ibn al-Malāḥimī lived in Ḥwārazm, an oasis region south of the former Aral Sea in present-day Uzbekistan and Turkmenistan. His family may have come



from Marv in Ḥurāsān, as a Sufi scholar named al-Malāḥimī is mentioned in a chronicle of the city of Nishapur as a visitor from Marv [\*62: 115<sup>v</sup>]. However, this scholar was not our Ibn al-Malāḥimī himself, although he may have been an older kinsman.

At the beginning of the 6th/12th century, Ḥwārazm was a centre of Muʿtazilī theology, even though this school had already faded in most other regions in the Islamic World. Within the Muʿtazila, Ibn al-Malāḥimī represented the school of thought of Abū l-Ḥusayn al-Baṣrī (d. 436/1044), a renegade pupil of the Qāḍī ʿAbd al-Ġabbār (d. 415/1025). The latter was the most important representant of the Bahšāmiyya school which goes back to Abū Hāšim al-Ġubbārī (d. 321/933). Abū l-Ḥusayn al-Baṣrī developed an alternative to the Bahšāmiyya. He was a practising physician and as such in touch with Greek scholarship. Probably he studied philosophy under Abū ʿAlī Ibn al-Samḥ (d. 418/1027), which may have encouraged his objections to some of Qāḍī ʿAbd al-Ġabbār’s teachings (Madelung 2007 [\*94]). He taught in Baghdad, leaving several works of which only fragments are extant, with the exception of texts on the method of jurisprudence (*uṣūl al-fiqh*). Ultimately it is not clear how Ibn al-Malāḥimī came in contact with Abū l-Ḥusayn al-Baṣrī’s theology. Possibly the link between them was Abū Muḍar Maḥmūd b. Ġarīr al-Ḍabbī (d. 508/1115), who moved from Isfahan to Ḥwārazm towards the end of the 5th/11th century, introducing Muʿtazilī theology to that region (Schmidtke 2016 [\*97: 173]). Ibn al-Murtaḍā [\*64: 119] writes that Ibn al-Malāḥimī was a pupil (*tilmīd*) of Abū l-Ḥusayn al-Baṣrī’s, although personal contact between the two must be ruled out. Al-Andarasbānī (d. after 569/1173), a biographer of Ibn al-Malāḥimī’s slightly older Muʿtazilī contemporary al-Zamaḥṣārī (d. 538/1144), reports that Ibn al-Malāḥimī taught al-Zamaḥṣārī theology (*al-uṣūl*), while the latter taught him in his expert field, Quranic commentary (al-Yāfi 1982 [\*90: 368]). Ibn al-Malāḥimī became the most important champion of Abū l-Ḥusayn al-Baṣrī’s school of thought, and was recognised as such by later Muslim theologians such as Faḥr al-Dīn al-Rāzī (d. 606/1210) and al-ʿAllāma al-Ḥillī (d. 726/1325), who studied his works with great attention. Ibn al-Malāḥimī died on 17 Rabiʿ 1 536/ 20 October 1141, probably in Ḥwārazm (al-Yāfi 1982 [\*90: 382]).

### 2.1.3 Doctrine

Of the four extant works by Ibn al-Malāḥimī, *Tuḥfat al-mutakallimīn fī l-radd ʿalā l-falāsifa* (*Gift to the Theologians in [their] Refutation of the Philosophers*) [\*65] is the latest, composed after *al-Fāʾiq fī uṣūl al-dīn* (*The Outstanding Book of Theology*) [\*67] which was written in 532/1137, and before his death in 536/1141. The book is a comprehensive refutation of Ibn Sīnā’s philosophical system, to a large extent based on arguments Ibn al-Malāḥimī had already

expounded in his theological summa, *al-Mu'tamad fī uṣūl al-dīn* (*The Reliable Book on Theology*), mainly in the chapter on the teachings of the *falāsifa* [\*66: 683–798]. Ibn al-Malāḥimī's *Tuḥfat al-mutakallimīn* is the second work of this kind after al-Ġazālī's *Tahāfut al-falāsifa*. It differs from the latter in that it is not limited to refuting the demonstrative character of much of Ibn Sīnā's doctrine but attempts to document these opinions as wrong, contrasting them with those of 'the Muslims', i.e. the Mu'tazila's, which are presumed to be correct. Accordingly, Ibn al-Malāḥimī's catalogue of Ibn Sīnā's and the *falāsifa*'s 'false beliefs' is considerably longer than al-Ġazālī's. Like the latter, Ibn al-Malāḥimī argues against the claim that the world is created without a beginning in time, and that God acts without choosing between possible alternatives. A second main topic in Ibn al-Malāḥimī is the absence of any moral theory in Ibn Sīnā's works, and his refusal to recognise moral duties (*taklīf*). In this context he attacks the entire cosmology proposed by Ibn Sīnā and the *falāsifa*, with its celestial spheres and immaterial movers, as well as the doctrines of Aristotelian substances and accidents. All this, he says, leads to Ibn Sīnā's entirely determinist explanation of human action, which leaves no space for human freedom of choice. As a Mu'tazilī, Ibn al-Malāḥimī polemicises vociferously against Ibn Sīnā's determinism and the cosmology at its basis, arguing instead for an atomist cosmology in which there are no immaterial substances such as intellects and souls that can be separated from bodies (Madelung 2012 [\*96]). Following the same train of argument, Ibn al-Malāḥimī also rejects Ibn Sīnā's doctrine of the soul and his concomitant and quite popular explanation of divination, miracle-working, and prophecy.

Unlike al-Ġazālī, Ibn al-Malāḥimī quotes from many philosophical works, giving us an insight into the literature circulating in his day. Also, unlike al-Ġazālī, who condemns three of the *falāsifa*'s teachings as unbelief and apostasy from Islam, Ibn al-Malāḥimī regards the movement of the *falāsifa* as a threat to Islam from within. It cannot be fought by legal measures but must be seen as a heterodox deviation against which only arguments will serve. He states that many Muslim theologians, especially of the Šāfi'ī but also the Ḥanafī schools of law, had by then adopted Ibn Sīnā's philosophical interpretation of Islam. This, he holds, leads to a dangerous distortion of the original doctrine of Islam, as had already happened in the case of Christianity. Ibn al-Malāḥimī may well have been familiar with al-Ġazālī's *Tahāfut al-falāsifa*; if so he did not take this book seriously as a refutation of the *falāsifa*. On the contrary, Ibn al-Malāḥimī quotes from al-Ġazālī's works, such as *Maqāṣid al-falāsifa* and *Naḥḥ al-rūḥ wa-l-taswīya* (cf. Koloğlu 2010 [\*95: 156–227. 297–330]), as sources of philosophical doctrine and endeavours to refute them. In his eyes, al-Ġazālī was one of the Muslim scholars who threatened Islam from within, because

they adopted Ibn Sīnā's philosophical interpretation of Islam with only a few modifications, which were in Ibn al-Malāḥimī's view irrelevant.

#### 2.1.4 Influence

Ibn al-Malāḥimī was in all likelihood the teacher of Abū l-Ma'ālī Šā'id b. Aḥmad al-Uṣūlī, who wrote a textbook of Mu'tazilī theology comparing the systems of Abū l-Ḥusayn and the Bahšāmiyya (Schmidtke 2016 [\*97: 173–174]). Ibn al-Murtaḍā [\*64: 119] writes that there were many among the 'later scholars' (*al-muta'ahḥirūn*) who followed Ibn al-Malāḥimī and Abū l-Ḥusayn al-Baṣrī, among them the Zaydī Imam Yaḥyā b. Ḥamza (d. 745/1344) from Yemen as well as 'the majority of the Twelver Ši'īs' (*akṭaru l-imāmiyya*). It is true that interest in Ibn al-Malāḥimī's theological and philosophical doctrine continued in Yemen during the 6th/12th century, in which *Tuḥfat al-mutakallimīn* played a part (Ansari 2007 [\*93]). Ibn al-Murtaḍā adds that even the Aš'arī Faḥr al-Dīn al-Rāzī (d. 606/1210) referred to Ibn al-Malāḥimī for technical details [\*64: 119]. Faḥr al-Dīn al-Rāzī did indeed discuss Ibn al-Malāḥimī in some depth, quoting him in, for instance, his monumental Quranic commentary [\*67] (cf. Lagarde 1996 [\*92: 155, no. 2387]). However, *Tuḥfat al-mutakallimīn* is not mentioned as the title of a book, and there is no indication that Faḥr al-Dīn al-Rāzī was familiar with this specific work of Ibn al-Malāḥimī's. Later *mutakallimūn* of mainly Mu'tazilī inclination, such as al-'Allāma al-Ḥillī (d. 726/1325), are also very familiar with Ibn al-Malāḥimī's theology, but more thanks to his *Kitāb al-Fā'iḳ*, which enjoyed broad reception, without *Tuḥfat al-mutakallimīn* being mentioned (Schmidtke 1991 [\*91: Index]). Around the same time Ibn al-Malāḥimī is mentioned by Ibn Taymiyya (d. 728/1328) as Maḥmūd al-Ḥwārazmī in a list of al-Ġazālī's early opponents [\*63: vi 240].

## 2.2 Al-Šahrastānī

Wilferd Madelung†

2.2.1 Primary Sources – 2.2.2 Life – 2.2.3 Works – 2.2.4 Doctrine

### 2.2.1 Primary Sources

Bio-bibliographical Testimonies [\*69–\*71] – Works and Editions [\*72–\*77]

#### *Bio-bibliographical Testimonies*

69 al-Sam'ānī, Abū Sa'īd 'Abd al-Karīm b. Muḥammad (d. 562/1166). *Dayl Ta'rīḥ Baġdād*. – Ed. by Muḥammad

'Abd al-Fattāḥ al-Ḥilw and Maḥmūd b.

Muḥammad al-Ṭanāḥī. In *Tāġ al-Dīn al-Subkī: Ṭabaqāt al-Šāfi'iyya al-kubrā*.

Cairo 1383–1396/1964–1976, vol. 6, 128–130.

70 al-Bayhaqī, Zāhīr al-Dīn Abū l-Ḥasan ‘Alī b. Zayd Ibn Funduq (d. 565/1169). *Tatimmat Šiwān al-ḥikma*. – Ed. by Muḥammad Šafi‘. Lahore, 1935, 137–140.  
 71 al-Ḥwārazmī, Abū Muḥammad Maḥmūd b. Muḥammad b. ‘Abbās b. Arslan (d. 568/1172): *Ta’rīḥ Ḥwārazm*. – Ed. by Ferdinand Wüstenfeld. In *Yāqūt al-Ḥamawī: Muḡam al-buldān*. Leipzig, 1866–1873, vol. 3, 343–344.

### Works and Editions

72 *Kitāb al-Milal wa-l-niḥal*. – Ed. by Muḥammad b. Faṭḥallāh Badrān, 2 vols. Cairo, 1364 (2nd ed.), 241. 249. – French transl. by Daniel Gimaret, Jean Jolivet and Guy Monnot, *Livre des religions et des sectes. Traduction avec introduction et notes*, 2 vols. Louvain, 1986–1992.  
 73 *Kitāb Nihāyat al-aqdām fi ‘ilm al-kalām*. – Ed. by Alfred Guillaume. Oxford, London, 1934. – Edition and abridged Engl. transl.; includes an edition of *Mas‘ala fi iṭbāt al-ḡawhar al-fard*, 505–514.

### 2.2.2 Life

Tāḡ al-Dīn Abū l-Faṭḥ Muḥammad b. ‘Abd al-Karīm b. Aḥmad al-Šahrastānī came from Šahrastāna, a small town in north-eastern Iran near Nasā. The date of his birth is uncertain. The account by his biographer Ibn Ḥallikān, according to which al-Šahrastānī himself claimed that he was born in 479/1086–1087, appears to be based on an error. We should instead rely on information in early sources, according to which he was already in 469/1076–1077 or 467/1074–1075 (van Ess 2012 [\*106]). No details are known about his apparently Sunni Šafi‘ī family. After his basic education in the religious sciences, he went to Nishapur, the metropolitan centre of Ḥurāsān, in order to pursue his further education while still young (before 494/1100). His teachers in Nishapur were mainly pupils of the imam al-Ḥaramayn Abū l-Ma‘ālī al-Ġuwaynī (d. 478/1085), who commanded great authority among the contemporary Šafi‘īs of the city. He studied Aš‘arī theology and Quranic exegesis under Abū l-Qāsim Salmān b. Nāšīr al-Anšārī (d. 512/1118), who is said to have impressed him greatly. His teachers

74 *Struggling with the philosopher. A refutation of Avicenna’s Metaphysics*. – Ed. with Engl. transl. by Wilferd Madelung and Toby Mayer. London, New York, 2001. – Ed. and Engl. transl. of al-Šahrastānī’s *Kitāb al-Mušāra‘a*.  
 75 Nāšīr al-Dīn al-Tūsī. *Mašārī‘ al-mušārī‘*. – Ed. by Wilferd Madelung. Tehran, 2004, 15. 13. 231.  
 76 Muḥammad Riḍā Ġalālī Nā‘inī. *Du maktūb*. Tehran, 1369/1990. – Includes an edition of *Maḡlis-i maktūb-i Šahrastānī mun‘aqid dar Ḥwārazm* and a facsimile edition of *Risāla ilā Šaraf al-Zamān al-Īlāqī*. – New edition of *Maḡlis-i maktūb* with Engl. transl. by Daryoush Mohammad Poor, *Command and Creation. A Shi‘i Cosmological Treatise*. London, 2021.  
 77 *Tafsīr al-Šahrastānī al-musammā Mafātīḥ al-asrār wa-mašābīḥ al-abrār*. – Ed. by Muḥammad ‘Alī Āḍaršab. Tehran, 1418/1997 (vol. 1), Tehran, 1429/2008 (vol. 2).

in Šāfiʿī law included the *qāḍī* of Tūs Abū l-Muẓaffar Aḥmad b. Muḥammad al-Ḥwāfī (d. 500/1106) and Abū Naṣr ʿAbd al-Raḥīm al-Quṣayrī (d. 514/1120), son of the famous mystic Abū l-Qāsim al-Quṣayrī. He studied *ḥadīṭ* under Abū l-Ḥasan ʿAlī b. Aḥmad al-Madīnī (d. 494/1100). It is noticeable that al-Ġuwaynī's most famous pupil, Abū Ḥāmid al-Ġazālī (d. 505/1111), is not mentioned as one of his teachers, even if al-Šahrastānī could have had the opportunity of hearing al-Ġazālī during the latter's time teaching at the Nizāmiyya in Nishapur between 499/1105 and 505/1111. This is in keeping with the fact that in his later writings, al-Šahrastānī frequently quotes al-Ġuwaynī and his theological doctrines, while never mentioning al-Ġazālī at all.

On the other hand, he appears to have established connections with the Nizārī Ismāʿīlīs, who were generally regarded as heretics, during his study years in Nishapur. In his Quranic commentary *Mafāṭiḥ al-asrār*, he mentions studying exegesis with his master Salmān b. Nāṣir al-Anṣārī who revealed to him 'noble words of the Prophet's family and their followers' which 'indicated to him hidden secrets and the solid foundations of Quranic science'. Subsequently he found 'a pious servant of God' from whom he learnt the true methods and principles of Quranic exegesis [\*104: 65]. While the 'words of the Prophet's family' al-Šahrastānī heard from his teacher al-Anṣārī were presumably only those commonly heard among Sunni Sufis, the pious servant of God – whom he does not name – was probably a Shiite and introduced him to Quranic exegesis supported by Ismāʿīlī theology.

In his history of Ḥwārazm, the Šāfiʿī traditionist and Sufi Maḥmūd b. Muḥammad al-Ḥwārazmī reports that al-Šahrastānī came to Ḥwārazm a few years before 510/1117, settling in the capital Ġurġāniyya. He hosted sermon meetings (*mağālis waʿẓ*) during which he wholeheartedly championed the theories of the philosophers. Al-Ḥwārazmī recalls having been present at some of these meetings and never hearing a single passage from the Quran nor a prophetic *ḥadīṭ*. While recognising al-Šahrastānī's scholarship and incisive intelligence, he accuses him of being confused in his faith and inclining to atheism (*ilḥād*). This, he says, was the result of his turning his back on the light of religious law (*šarīʿa*) and his dedication to the dark abysses of philosophy [\*71: 343–344]. Al-Ḥwārazmī's accusation of atheism most probably refers to al-Šahrastānī's Ismāʿīlī tendencies, as Sunni polemic frequently called Ismāʿīlīs 'atheists' (*malāḥida*). The text of one of al-Šahrastānī's sermons from Ḥwārazm is extant. It is a metaphorical exegesis of the Quran which makes extensive use of the terminology and concepts of Ismāʿīlī thought. Al-Šahrastānī also quotes prophetic *ḥadīṭs* and professes the religious precedence of the Prophet's family in accordance with Shiited dogma.

In 510/1117, al-Šahrastānī went on the pilgrimage to Mecca from Ḥwārazm. He interrupted his return journey in Baghdad, staying in the capital of the

Abbasid caliphate for three years. Here, too, he hosted sermon meetings which were popular with the people according to Sa'd al-Dīn al-Sam'ānī. The Šāfi'ī professor (*mudarris*) at the Nizāmiyya in Baghdad, As'ad al-Mayhanī, with whom he had been friendly in Ḥwārazm, arranged a teaching position at this highly respected institution for him, where he probably taught Aš'arī theology. Al-Mayhanī himself taught Šāfi'ī law and, according to Ibn Funduq al-Bayhaqī, he was a Sufi and pupil of the philosopher Abū l-'Abbās al-Lawkarī. He enjoyed the particular favour of the Abbasid court, at the same time maintaining good relations with the Seljuk courts in Iran. His sponsorship may well have protected al-Šahrastānī from the suspicion of heresy to which he had been subject in Ḥwārazm.

When al-Mayhanī was released from his professorship at the Nizāmiyya in 513/1120, al-Šahrastānī lost his position as well. He returned to Ḥurāsān where he appears to have joined the court of the Seljuk sultan Sanğar in Marv. Našīr al-Dīn Maḥmūd b. al-Muẓaffar b. Abī Tawba al-Marwazī, Sanğar's vizier from 521/1127 to 526/1132, appointed him head of the chancellery (*nā'ib dīwān al-rasā'il*). Al-Šahrastānī dedicated his great *Kitāb al-Milāl wa-l-niḥāl* (*The Religions and the Doctrines*) to him. During this time, he took a deep interest in philosophy and carried out critical studies of Ibn Sīnā's theology and metaphysics. He corresponded on questions of philosophy with the physician and philosopher Šaraf al-Zamān Muḥammad al-Īlāqī and his pupil 'Umar b. Sahlān al-Sāwī, the author of a handbook on logic dedicated to Našīr al-Dīn al-Marwazī. In his biographical note on al-Šahrastānī, Ibn Funduq al-Bayhaqī reports that he met him around this time and that al-Šahrastānī read some chapters from his *Kitāb al-Manāhiğ wa-l-āyāt* (*Book of Methods and Signs*) in which he expressed disparaging criticism of Ibn Sīnā's views. Al-Bayhaqī also mentions that al-Šahrastānī was working on a Quranic commentary at the time, in which he mixed the standards of religious law (*šarī'a*) and those of philosophy (*ḥikma*). Al-Bayhaqī criticised him for deviating from the appropriate method, as in his opinion the Quran was to be interpreted only on the basis of the tradition of the Prophet's Companions and the generation of their Successors. Philosophy had to be kept well away from Quranic exegesis. Nobody, furthermore, combined religious law and philosophy more perfectly than the imam al-Ġazālī. Al-Šahrastānī is said to have reacted angrily to this reference [\*70: 138–140], which fits with his exceedingly critical attitude towards al-Ġazālī.

When the vizier Našīr al-Dīn al-Marwazī was deposed and imprisoned in 526/1132, al-Šahrastānī joined the emir Mağd al-Dīn 'Alī b. Ġa'far al-Mūsawī as his new patron. Mağd al-Dīn was a descendant of the Seventh Imam of the Twelver Shiites, Mūsā al-Kāẓim, as well as the official marshal of Alid nobility and as such representative of the Shiite community with Sultan Sanğar. It

seems that in his entourage, al-Šahrastānī felt less exposed to criticism of his writings than he had been as a follower of the Sunni vizier Našīr al-Dīn. He presented a copy of his *Kitāb al-Milal wa-l-niḥal*, which he had originally dedicated to the vizier, to his new master, who judged it most favourably. Al-Šahrastānī then proceeded to rewrite his earlier criticism of Ibn Sīnā's metaphysics, dedicating the book to the emir Mağd al-Dīn, now with the title *al-Muṣāra'a*, meaning *The Wrestling Match (with the Philosopher)*. Due to adverse circumstances, he was not able to complete the last two of the seven chapters. In 536/1141, Sultan Sanğar suffered a severe defeat against the Qarā-Ḥiṭāy near Qaṭwān in Transoxania, in which his philosophical adviser al-Īlāqī was killed. While the sultan fled to Balḥ, his capital Marv was pillaged by the Ḥwārazm-Šāh Atsız, destroying for good the courtly atmosphere in which al-Šahrastānī had been able to devote himself to his philosophical interest. He seems to have left Mağd al-Dīn shortly after he submitted his unfinished work to him, returning to his hometown of Šahrastāna. He began to compose a Quranic commentary on a grand scale in 538/1143–1144. He died in Ša'bān 548/November 1153 in Šahrastāna.

### 2.2.3 Works

#### *Doxography*

##### *al-Milal wa-l-niḥal*

##### *The Religions and the Doctrines*

The first part describes the sects of Islam, the other religions of the book (i.e. Judaism and Christianity) as well as Zoroastrianism and Dualism. The second part discusses the religious beliefs of the so-called Sabians (a community following a pre-Islamic astral cult), the philosophers, the pre-Islamic Arabs, and the Indians.

#### *Aš'arī Theology*

##### *Nihāyat al-aqdām fī 'ilm al-kalām*

##### *The Furthest Extents in Theology*

Comprehensive presentation of Aš'arī theology in twenty fundamental propositions. The Aš'arī doctrine is set against, above all, Mu'tazilī and philosophical doctrines.

##### *Mas'ala fī itbāt al-ğawhar al-fard*

##### *Question on the Proof of the Existence of the Atom*

Detailed argumentation in favour of the existence of atoms in accordance with Aš'arī doctrine.

#### *Philosophy*

##### *al-Muṣāra'a* or *Muṣāra'at al-falāsifa* or

##### *al-Muṣāra'a li-l-Šahrastānī ma'a l-Šayḥ al-ra'īs*

##### *Abī 'Alī b. Sīnā*

##### *The Wrestling Match, or: The Wrestling Match*

##### *with the Philosophers, or: al-Šahrastānī's*

##### *Wrestling Match with Ibn Sīnā*

Polemic against Ibn Sīnā's metaphysics. The first five of the intended seven chapters of the book discuss the following topics: (1) The division of existence into necessary and contingent existence, (2) Ibn Sīnā's proof of the existence of God, (3) Ibn Sīnā's theory of the

oneness of God, (4) Ibn Sīnā's theory of God's knowledge, and (5) Ibn Sīnā's theory of the eternal duration of the world. The sixth chapter was to discuss the primary principles of the spiritual world. In its place, the unfinished book lists a selection of questions on difficult individual problems addressed at Ibn Sīnā's followers. A detailed refutation of the book from the perspective of Ibn Sīnā's philosophy was composed by Naṣīr al-Dīn al-Ṭūsī (d. 676/1274) in his *Maṣāri' al-muṣāri'* (*The Wrestler's Defeat*).

*Risāla ilā Šaraf al-Zamān Muḥammad b. Yūsuf al-Īlāqī*  
*Epistle to Šaraf al-Zamān Muḥammad b. Yūsuf al-Īlāqī*

The topics of the text are existence and its necessity, as well as the modality of God's omniscience.

*Religious Writings*

*Mağālis*

*Sermon Meeting*

Persian text of a didactic sermon on the divine command (*amr*) and creation. An English translation and commentary have been published by Diane Steigerwald (1998 [\*103]).

*Maḡātiḥ al-asrār wa-maṣābīḥ al-abrār*  
*The Keys of the Secrets and the Lights of the Pious*

Esoteric Quranic commentary. The methodological introduction as well as the commentary on the first two suras *al-Fātiḥa* (The Opening) and *al-Baqara* (The Cow) are extant. The esoteric exegesis is strongly influenced by Ismā'īlī thought of Nizārī tendency. The first half of the extant part has been published in English translation with a commentary by Toby Mayer (2009 [\*105]).

#### 2.2.4 Doctrine

Al-Šahrastānī was above all a religious scholar. His interest in philosophy was of a theological nature. He regarded the prophetic wisdom conveyed by the imams of the Prophet's family and rational philosophical knowledge as complementary. Al-Šahrastānī's intellectual world is thus part of the Ismā'īlī religious tradition. He adopts many of his basic terms and theories from the contemporary doctrine of the Nizārī Ismā'īlis.

In his criticism of Ibn Sīnā's philosophy, al-Šahrastānī emphasises the absolute transcendence of God, rejecting Ibn Sīnā's rational proof of God's existence. The reality of God, he says, is overwhelming, and to recognise God is immediately inherent in human nature. God's essence, on the other hand, is entirely beyond human understanding, and all the attributes ascribed to Him must be interpreted equivocally. Thus, the modality of God's omniscience is beyond human understanding: it is not limited to the universals, as Ibn Sīnā taught in order to preserve God's eternal immutability. According to al-Šahrastānī, the spiritual world is the result of God's command (*amr*) and is timeless. The material world, on the other hand, is the result of God's creation (*ḥalq*) and is, contrary to Ibn Sīnā's dogma of the eternal duration of the world,



finite in time. The limits in time of the material world can be proven in analogy to the philosophical proof of its limits in space.

Al-Šahrastānī also rejects Ibn Sīnā's proposition that only one being, the First Intellect, could be generated by the One. Rather, all things must be generally and specifically placed into immediate relation with God, independent of the sequence of causes that led to their generation. Contrary to Ibn Sīnā's doctrine, God is not an intellect and cannot be described under three aspects as thinker, thinking, and object of thought. The highest intellect, according to al-Šahrastānī, is the first of the spiritual beings that came into existence through God's command. Moreover, al-Šahrastānī questions Ibn Sīnā's identification of the Active Intellect, which gives form to human intellects and leads them into actuality, with the tenth World Intellect, the lord of the lunar sphere. He appears to regard the prophetic intellect, being the immediate recipient of God's grace, as the giver of forms (on al-Šahrastānī's engagement with Ibn Sīnā's metaphysics cf. Benevich 2018 [\*65]).

The influence exerted by al-Šahrastānī's philosophical teachings was limited. In his opposition to *kalām* theory and Greek philosophy, the Šāfi'ī Sufi Šihāb al-Dīn 'Umar al-Suhrawardī (d. 632/1234) adopted some ideas and terminology from al-Šahrastānī's *Muṣāra'ā* and *Mağlis* (Hartmann 1990 [\*101]).

### 2.3 *Abū l-Barakāt al-Bağdādī*

*Frank Griffel*

2.3.1 Primary Sources – 2.3.2 Life – 2.3.3 Works – 2.3.4 Doctrine – 2.3.5 Influence

#### 2.3.1 Primary Sources

Testimonies on his Life, Works, and Influence [\*78–\*88] – Works and Editions [\*89–\*93]

*Testimonies on his Life, Works, and Influence*

78 al-Sāwī, 'Umar b. Sahlān (d. ca. 540/1145). *Nahğ al-taqdīs*. In *Risālatān fī l-mantīq wa-l-falsafa: Nahğ al-taqdīs wa-as'ila wa-ağwiba*. – Ed. by Ḥasan al-Marāğī. Tehran 1375/2006, 31–70.  
79 Ibn al-Malāḥimī (d. 536/1141). *Kitāb al-Mu'tamad fī uṣūl al-dīn*. – Ed. by Wilferd Madelung. Tehran, 2012.

80 Samaw'al b. Yahyā al-Mağribī. *Ifḥām al-yahūd / Silencing the Jews*. – Ed. with Engl. transl. by Moshe Perlmann. New York, 1964.

81 al-Bayhaqī, Ṣahīr al-Dīn Abū l-Ḥasan 'Alī b. Zayd Ibn Funduq (d. 565/1169–1170). *Tatimmat Šiwān al-ḥikma*. – Ed. by Rafīq al-'Ağam. Beirut, 1994. – Ed. by Muḥammad Šafī'. Lahore, 1351/1932. – Ed. by Muḥammad Kurd

‘Alī, *Ta’rīḥ ḥukamā’ al-islām*. Damascus, 1365/1946; repr. 1396/1976. – Ed. by Mamdūḥ Ḥasan Muḥammad. Cairo, 1996. – Engl. transl. with excerpts and an English index by Max Meyerhof, “Alī al-Bayhaqī’s *Tatimmat Šiwān al-Ḥikmah*. A biographical work on learned men of the Islam.” *Osiris* 8 (1948): 122–217. – Repr. of both works in *Historiography and Classification of Science in Islam* VIII. Ed. by Fuat Sezgin. Frankfurt a.M., 2005.

82 al-Naysābūrī, Mu‘īn al-Dīn Muḥammad b. Maḥmūd (d. c. 590/1194). *Itmām Tatimmat Šiwān al-ḥikma* (MS Istanbul, Murad Molla 1431). – A so far unedited continuation of al-Bayhaqī’s *Tatimmat Šiwān al-Ḥikma*.

83 Yāqūt al-Ḥamawī al-Rūmī (d. 626/1229). *Mu‘jam al-udabā’. Iršād al-arīb ilā ma‘rifat al-adīb*. – Ed. by Iḥsān ‘Abbās, 7 vols. Beirut, 1993.

84 al-Qiftī, ‘Alī b. Yūsuf (d. 646/1248). *Ta’rīḥ al-ḥukamā’*. – Ed. by Julius Lippert, *Ibn al-Qiftī’s Ta’rīḥ al-ḥukamā’*. Leipzig, 1903.

85 Ibn Abī Uṣaybi‘a, Muwaffaq al-Dīn Aḥmad b. al-Qāsim (d. 668/1270). *Uyūn al-anbā’ fī ṭabaqāt al-aṭibbā’*. – Ed. by August Müller, 2 vols. Cairo, 1299/1882; Königsberg, 1884. – Ed. and Engl. transl. by Emily Savage-Smith, Simon Swain and Geert Jan van Gelder, *A Literary History of Medicine. The ‘Uyūn al-anbā’ fī ṭabaqāt al-aṭibbā’ of Ibn Abī Uṣaybi‘ah*, 3 vols. Leiden, 2020 [The page numbers of Müller’s edition are included in the Arabic text in square brackets].

86 Ibn al-‘Ibrī, Abū l-Farağ Gregorios [Bar Hebraeus] (d. 685/1286). *Ta’rīḥ*

*muḥtaṣar al-duwal*. – Ed. by Anṭūn Ṣāliḥānī. Beirut, 1890, 1958 (2nd ed.).

87 al-Šahrazūrī, Šams al-Dīn Muḥammad b. Maḥmūd (d. after 687/1288). *Nuzhat al-arwāḥ wa-rawḍat al-afrāḥ fī ta’rīḥ al-ḥukamā’ wa-l-falāsifa*. – Ed. by Ḥwaršīd Aḥmad, 2 vols. Hyderabad, 1976.

88 Ibn Ḥallikān, Šams al-Dīn Aḥmad b. Muḥammad (d. 681/1282). *Wafayāt al-a‘yān wa-anbā’ abnā’ al-zamān*. – Ed. by Iḥsān ‘Abbās, 8 vols. Beirut, 1968–1977.

### Works and Editions

89 *al-Kitāb al-Mu‘tabar fī l-ḥikma*. – Ed. by Zayn al-‘Ābidīn Mūsawī. Hyderabad, 1357–1358 (1938–1939). – Three parts in one volume, edited by Turkish and Indian scholars; with an Arabic afterword (vol. III, 230–252). The edition was apparently initiated by M. Şerefettin Yalçınkaya who had already translated the third part of the work into Turkish in 1932 (Yalçınkaya 1932 [\*109]). It is based on three of the seven manuscripts preserved in Istanbul, namely MS Laleli 2553, Esad Efendi 1931, and Köprülü 919. In addition, the editors mention (III 253) a very old manuscript from Istanbul, which came into the possession of the Āṣafiyya library in Hyderabad (I 278), and was compared in 556/1160–1161 with a copy authorised by the author. The edition is based above all on this last-named MS, in addition mentioning a few variants of the other three. The edition does not include comprehensive information of the *variae lectiones* or footnotes. – Repr.

Isfahan, 1415 H. (1994), Ġubayl, Paris and Beirut/Freiberg, 2012 (2nd ed.). – Repr. in 2 vols. Cairo, 2015. – French transl. of the beginning of the work by Pines (1955 [\*114: 8–13]), and Germ. transl. of select chapters on natural science by Rosenthal (1965 [\*110: 224–242]).

90 *Kitāb Ṣaḥīḥ adillat al-naql fī māhiyyat al-ʿaql*. – Ed. by Aḥmad al-Ṭayyib, “Un traité d’Abū l-Barakāt al-Baġdādī sur l’intellect.” *Annales Islamologiques* 16 (1980): 127–147. – A brief treatise on Abū l-Barakāt’s doctrine of the soul, edited using MS Leipzig 882, fol. 1<sup>v</sup>–17<sup>r</sup>. According to the colophon, the work was composed in 552/1157. The text *al-Maqālā al-awḥadiyya fī l-ʿaql wa-l-ʿāqil wa-l-maʿqūl*, in MS no. 636, fol. 9<sup>r</sup>–18<sup>r</sup> in Dr Yaḥyā Mahdawī’s private library in Tehran (film of the university library Tehran no. 1559) appears to be a further copy of this work. Like [\*90], it begins with by declaring the intention of devoting itself to the subject of ‘the intellect, that which is possessed of intellect, and the intelligible’ (*al-ʿaql wa-l-ʿāqil wa-l-maʿqūl*).

91 *Risāla fī l-Malāl*. – Ed. by Tuna Tunagöz, “Ebü’l-Berakāt el-Baġdādī’nin Risāle fī Māhiyyeti’l-Melāl Adlı Eseri: İnceleme, Eleştirel Metin ve Çeviri.” *Ankara Üniversitesi İlahiyat Fakültesi Dergisi* 57 (2016): 1–45.

92 *Kitāb fī ʿilm al-nafs*. Short fragment in MS Istanbul, Ayasofya 4855, fol. 104<sup>r</sup>–109<sup>v</sup>. Possibly an excerpt from a longer, lost text.

93 [*Tafsīr Sifr Qohelet*]. – This text is extant in two MSS, complete in MS Oxford, Bodleian Library, Pococke 274, and in the form of a 56-page fragment in the Firkovich Collection in St. Petersburg, Russian National Library, Evr.-Arab 1, 1767. The Oxford MS is described briefly in Neubauer (1886–1906 [\*16: 21, no. 131]). It was copied in 1335 in the Syrian town of Misyaf by Jews and contains a long colophon with a paean by Abū l-Barakāt’s student Ishāq b. ʿEzra, composed in the month Siwan 1454 of the Seleucid calendar, i.e. in June 1143 (fol. 176<sup>v</sup>–177<sup>r</sup>). The beginning of the text was edited by Poznanski 1913 [\*108], further excerpts *ibid.* and in Pines 1963 [\*116].

### 2.3.2 Life

Abū l-Barakāt Hibatallāh b. ʿAlī b. Malkā (also Hibatallāh b. Malkā) al-Baġdādī had converted to Islam from Judaism and lived in the first half and towards the middle of the 6th/12th century, working in Baghdad, Iraq, and western Iran as a philosopher and physician. He was called *awḥad al-zamān* by his contemporaries, which may be translated as ‘the best of his era’ and was probably an officially granted honorific. While he is well known to the Arab historians of the philosophical sciences, there are hardly any historical sources that transmit reliable dates of Abū l-Barakāt’s life. The closest contemporary is the historian al-Bayhaqī (d. 565/1169–1170) who reports having composed a response to Abū l-Barakāt’s major work that is no longer extant. Al-Bayhaqī’s claim [\*87: 150–153] that Abū l-Barakāt died in Hamadan in 547/1152–1153 (thus also

Madelung 1983 [in: \*9: I 266–268]), however, cannot be accurate as his epistle on the intellect was composed in 552/1157. If we add to this the sources about his life that were composed at least fifty years later, above all al-Qiftī (d. 646/1248) [\*84: 343–345], Ibn Abī Uṣaybiʿa (d. 668/1270) [\*85: I 255. 259. 278–280], and Bar Hebraeus (d. 685/1286) [\*86: 359–360. 363–365], we are left with a comparatively clear picture of his life, but without certainty as to the date and circumstances of his conversion to Islam. Further information on his life is found in al-Šahrazūrī (fl. 679/1280) [\*87: II 47. 79–81] and Ibn Ḥallikān (d. 681/1282) [\*88: VI 74–75]. Gil 2004 [\*121: 470] and Pavlov 2017 [\*130: 4–10] are of the opinion that Abū l-Barakāt al-Baġdādī was identical with the Jewish Talmud scholar Rabbi Baruch ben Melek, an assumption that can be ruled out for chronological reasons (Griffel 2018 [\*131]).

Abū l-Barakāt must have been born around 477/1085 in the locality of Balad (either near Mosul in northern Iraq or near Samarra). His studies took him to Baghdad, where he studied medicine and the ancient sciences under Abū l-Ḥasan Saʿīd b. Hibatallāh (d. 495/1101) even before the turn of the 6th/12th century. While the latter did not originally admit Jews to his lectures, he was so impressed by Abū l-Barakāt's intelligence, dedication, and strong will that he made an exception in his case. Like his teacher, Abū l-Barakāt worked as a physician at the Seljuk court in western Iran and in Baghdad. He first served Sultan Muḥammad Tapar b. Malik-Šāh (r. 498–511/1105–1118), and subsequently also his successors in Hamadan and Isfahan. Abū l-Barakāt moreover worked at the courts of the caliphs al-Mustaršīd (r. 512–529/1118–1135) and al-Muqtaḍī (r. 530–555/1136–1160) in Baghdad. One of the earliest and most loyal followers of his philosophy was 'Alā' al-Dawla Garšāsb II Farāmarz b. 'Alī (d. c. 536/1141), a local prince from the Kākūyid dynasty, who held court in Yazd in western Iran (al-Bayhaqī [\*87: 110–111], cf. Bosworth 1983 [\*9: I 328–329]). Abū l-Barakāt died at an advanced age (80 or possibly 90 years old) during the rule of the caliph al-Mustanḡid (r. 555–566/1160–1170).

The existence of his Judeo-Arabic commentary on Ecclesiastes [\*93], composed around 536/1142, as well as a reference in that text of a further commentary on the Book of Genesis [\*93: Ms Oxford, fol. 30r] which is not extant, document that Abū l-Barakāt was a recognised philosophical scholar even before his conversion to Islam. 'Alā' al-Dawla Garšāsb II. Farāmarz b. 'Alī, for instance, defended Abū l-Barakāt's philosophical doctrine against 'Umar al-Ḥayyām's (d. 517/1123–1124) criticism before 517/1124 [\*87: 110–111]. His older contemporary Ibn al-Malāḥimī (d. 536/1141) describes Abū l-Barakāt as a 'Jewish philosopher' in a book that was composed before 532/1137 [\*79: 695–696], and at approximately the same time 'Umar b. Sahlān al-Sāwī (fl. 525/1130) called him 'the master of the Jews' (*ṣayḥ al-yahūd*) in his refutation of Abū l-Barakāt's

teachings [\*78: 31]. As Abū l-Barakāt's *Epistle on the Intellect* [\*90] is a work of Islamic literature, with references to the Quran and to *ḥadīṭ* but not to the Jewish revelation, Abū l-Barakāt's conversion may be placed during the years between 536/1142 and 552/1157, i.e. between Ibn Ezra's paean on the occasion of his Jewish commentary on the Book of Ecclesiastes [\*93] and the *Epistle on the Intellect* [\*90]. At this time Abū l-Barakāt was approximately between 57 and 62 years old. Pines 1937 [\*112: 2], and many authors who followed him on this, state that Abū l-Barakāt converted to Islam at a 'very old age' (dans son extrême vieillesse). This information is based on Ibn Ḥallikān [\*88: VI 74,12] who writes that he converted 'towards the end of his life' (*fī ākhir 'umrihi*). Yet here Ibn Ḥallikān likely misunderstood the earlier historian al-Qiftī ([\*84: 343,3] repeated by Bar Hebraeus [\*86: 364,16]) who merely writes that Abū l-Barakāt was a Muslim 'at the end of his life' (*fī ākhir amrihi*), without, however, clarifying when he converted.

Arab historians offer four different explanations for Abū l-Barakāt's conversion. Al-Bayhaqī reports that Abū l-Barakāt was taken prisoner together with the caliph al-Mustaršid's retinue when the caliph fell into the hands of the Seljuk sultan Mas'ūd b. Muḥammad Tapar (r. 529–547/1134–1152) in Ša'bān 529/May–June 1135 after the battle of Day Marg near Hamadan. As a prisoner of war and facing death, Abū l-Barakāt became a Muslim, saving his life [\*88: 151–152]. Al-Qiftī's explanation, by contrast, does not assume compulsion but regards Abū l-Barakāt's desire for recognition as the core motivation. Even after he had achieved great fame and wealth at the Seljuk courts in western Iran, satirical poems on his Jewish faith were still circulating among scholars in Baghdad. This, says al-Qiftī, led Abū l-Barakāt to conclude that he would never be granted the highest recognition while he remained a Jew, and consequently he converted to Islam. Al-Qiftī also cited a third explanation according to which Abū l-Barakāt saw himself compelled to convert to Islam because his treatment of a Seljuk princess was unsuccessful and he consequently feared Sultan Maḥmūd b. Muḥammad Tapar's (r. 511–525/1118–1131) wrath [\*84: 343–344]. The motive of Abū l-Barakāt feeling slighted due to a lack of appreciation, however, stands out among all the explanations, not least because Ibn Abī Uṣaybi'a and Bar Hebraeus emphasise in a fourth account of the conversion that Abū l-Barakāt was deeply hurt by the fact that high-ranking Muslim personalities – they mention the chief judge (*qāḍī l-quḍāt*) in Baghdad – refused to accord him the deference customary among them because he was a Jew [\*85: I 280; \*86: 365]. Suggestions that he converted in a ceremony in the presence of the caliph, after the latter had assured him that he could leave his not inconsiderable fortune to his three Jewish daughters, thus appear plausible.

Abū l-Barakāt played an active part in the intellectual life of Baghdad and western Iran, teaching pupils in medicine as well as philosophy, among them

on the Jewish side Ishāq b. ‘Ezra, the son of Abraham b. ‘Ezra (d. 562/1167), who came to him from Cordoba, and Samaw’al al-Mağribī (d. 569/1174) from North Africa (Gil 2004 [\*121: 471–475]). Both these students converted to Islam like their teacher. Samaw’al al-Mağribī wrote not only a popular anti-Jewish polemic but also a vivid account of his own conversion [\*80: Engl. 74–88; Ar. 94–120], which allows some inferences regarding Abū l-Barakāt’s motives for conversion. Samaw’al presents his own conversion as, among other things, the result of his realisation that all religions are either equally true or equally false (\*80: Engl. 36–38. 79–80; Ar. 12–15. 103–104). A Muslim historian reports [\*85: I 280] that after his conversion, Abū l-Barakāt also engaged in anti-Jewish polemic. Abū l-Barakāt had Muslim students, too, among them the father of the philosopher ‘Abd al-Laṭīf al-Bağdādī (d. 629/1231) [\*85: I 280]). As a physician Abū l-Barakāt enjoyed great standing and was called to Isfahan and Hamadan as well as Mosul to treat high-ranking dignitaries. In Baghdad he was engaged in a lengthy public dispute with the Christian physician Ibn al-Tilmīd (d. 560/1165) [\*83: VI 2772–2773].

Abū l-Barakāt probably spent a long time working on his philosophical magnum opus, *al-Kitāb al-Mu’tabar* (*The Carefully Considered Book*), which he published around 540/1145 when he was approximately sixty years old. In his old age, Abū l-Barakāt went blind and suffered from leprosy or elephantiasis (*ḡudām*) of which he, so the historians report, was able to cure himself [\*87: 151].

### 2.3.3 Works

Besides texts on philosophy and his commentary on the Old Testament, extant works by Abū l-Barakāt discuss medicine as well as pharmacology (cf. Dietrich 1966 [\*111: 288–230]), and also include a brief epistle on why the stars are visible at night but not during the day, which he dedicated to Sultan Muḥammad Tapar b. Malik-Šāh (r. 498–511/1105–1118).

#### *al-Kitāb al-Mu’tabar fī l-ḥikma*

#### *The Carefully Considered Book on Philosophy*

Abū l-Barakāt’s main work is a philosophical compendium, a summa, divided in the traditional Aristotelian fashion, and expressing a critical approach to the Neo-Platonic-Aristotelian tradition and Ibn Sīnā in particular. Following Ibn Sīnā’s great compendium *al-Šifā’*, Abū l-Barakāt divides his work into three books (logic, natural sciences, and

metaphysics), omitting – like some of his contemporaries, such as al-Lawkarī, who also followed Ibn Sīnā – the book on mathematics that preceded the book on metaphysics in Ibn Sīnā’s work. Within logic and the natural sciences, Abū l-Barakāt adopts the sequence of topics that had been set by Aristotle’s main works and was standard within the eastern Peripatetic tradition. Muwaḥḥid 1993 ([\*41: v 202–209], transl. in [\*14: I 632–644]) includes a synopsis of the work in accordance with the topics discussed.

The chapter on logic contains eight ‘treatises’ (*maqālāt*), six of which correspond to the books of the *Organon* (without Porphyry’s *Isagoge*), and *Rhetoric* (*fī l-qiyāsāt al-ḥiṭābiyya*) as well as *Poetics* (*fī l-qiyāsāt wa-l-aqāwīl al-šī’rīyya*), which were part of the study of logic and the *Organon* in the East. – Natural sciences are divided into six

parts (*ağzā*) following the books of the Aristotelian canon: Part 1 corresponds to *Physics* (*al-Samā' al-ṭabīʿī*), Part 2 *On the Heavens and Earth* (*al-Samā' wa-l-ʿālam*), Part 3 *On Generation and Corruption* (*al-Kawn wa-l-fasād*), Part 4 *Meteorology* (*al-Āṭār al-ʿulwīyya*) and *On Minerals* (*al-Maʿādin*), Part 5 *On Animals* (*al-Ḥayawān*) and *On Plants* (*al-Nabāt*), and Part 6 *On the Soul* (*al-Nafs*). – The third book discusses metaphysics and philosophical theology (*Ilāhiyyāt*) and is divided into two treatises (sg. *maqāla*) without titles. In the first treatise, Abū l-Barakāt follows Ibn Sīnā's tradition, discussing first existence as such and then God and his attributes. In the second treatise, which has no counterpart in the Aristotelian or Avicennan tradition but may be influenced by deliberations on 'the actions of God' (*aʿfāl Allāh*) in Muslim theology, Abū l-Barakāt discusses the doctrine of the creation and cosmology, including the doctrine of the intellect and prophecy.

At the beginning of the book, Abū l-Barakāt writes that, at the request of a high-ranking personality, he collated his ever more comprehensive philosophical notes into a central work [\*89: 1 3]. According to a marginal note in one manuscript this was 'Alā' al-Dawla Garšāsb II. Farāmarz b. 'Alī (cf. Pines 1955 [\*114: 10–11]). Ibn Abī Uṣaybi'a mentions the names of four students to whom Abū l-Barakāt dictated the book because of his blindness [\*85: 1 280]. *Al-Kitāb al-Mu'tabar* was published between 537/1143 and 549/1154. It is first referred to in al-Bayhaqī's autobiography, probably written around 549/1154–1155 (in *Yāqūt* [\*83: IV 1763]). The oldest known MS

of the work was copied in 538/1144 (al-Ḥusaynī 1971 [\*25: 70]); an authorised version, which was used for the Hyderabad edition, was produced in 556/1160–1161 [\*89: III 252). The book was probably published after the Jewish commentary on Ecclesiastes, as it includes a positive and simultaneously controversial commentary on the Muslim creed [\*89: III 147].

*Risāla fi l-Malāl*  
*Epistle on Boredom*

A brief text on how boredom (*malāl*) is generated in the human soul. At the beginning, a ruler is addressed as 'Aḍud al-Dīn 'Alā' al-Dawla Šams al-Mulūk; this refers to the Kākūyid 'Alā' al-Dawla Garšāsb II Farāmarz b. 'Alī (d. c. 536/1141), a well-known patron of Abū l-Barakāt, to whom Bayhaqī [\*81:110] accords similar titles. According to Tunagöz 2016 [\*9r: 9–13], the treatise was composed before *al-Kitāb al-Mu'tabar* [\*89] between 517/1123 and 537/1143.

[*Tafsīr Sifr Qohelet*]  
*Commentary on the Book of Ecclesiastes*

A Judeo-Arabic commentary on the Book of Ecclesiastes (Qohelet) of the Old Testament. As customary in this genre, the language changes frequently from Arabic to Hebrew quotations, with both languages written in Hebrew characters. Abū l-Barakāt quotes Arab authors such as al-Ma'arrī and also the Quran, and expresses his opinion on problems that arose in Islamic theology such as the predestination of human actions.

### 2.3.4 Doctrine

Abū l-Barakāt wrote a single philosophical work of importance, *The Carefully Considered Book* (*al-Kitāb al-Mu'tabar*). The author avoids references to any established religion, eschewing the thanks given to God and/or His prophet customary at the beginning of a work in Islamic as well as Jewish tradition. Instead, he presents it as a book of pure philosophy that corresponds with the revealed religions in its conclusions, but is independent of them in reaching these conclusions. The book is thus neither Jewish nor Muslim, even though

Abū l-Barakāt implicitly refers to a controversial statement by al-Ġazālī (without naming him) in the third part on metaphysics ([\*89: 111 147], Pines 1960 [\*115: 162–163]). Al-Ġazālī had claimed that the profession of faith of the highest intellectual elite in Islam was not ‘There is no God but God’ but rather ‘There is nothing but He’ (*lā huwa illā huwa*), and Abū l-Barakāt explicitly agrees with this controversial opinion.

Abū l-Barakāt understands himself as a representative of the philosophical tradition which he, like others of his contemporaries (e.g. al-Bayhaqī or al-Šahrastānī) divided into the period of the ‘ancients’ (*al-qudamā*), i.e. the Greeks, and the ‘later scholars’ (*al-muta’ahḥirūn*), meaning philosophers who wrote in Arabic. In the introduction of the *al-Kitāb al-Mu’tabar*, however, he makes clear that his position is a critical one with regard to both these periods of the history of philosophy. In his understanding, the philosophy of the ancients, i.e. Greek philosophy, was originally transmitted only orally, and written down only as a result of a decline in the numbers of practising philosophers. When there were hardly any philosophers left, the knowledge of the teachings of the ancients was lost. Those texts that had been written down were often obscure and full of allusions; in fact, not really comprehensible without a living teaching tradition. These texts, which were written for trained philosophers, now fell into the hands of ignorant people. The new philosophers, that is, the Arabs, reacted to the problem by composing a multitude of explanations and commentaries of older philosophical works which, in Abū l-Barakāt’s estimation, created more misunderstandings than they solved. In sum, the tradition of philosophy was in a parlous state, as the texts of the ancients were incomprehensible and those of the later scholars unreliable, as they did not really base their conclusions on arguments.

In his own book, Abū l-Barakāt intends nothing less than a new beginning of philosophy, wishing to restore the true doctrine of the ancients without relying on the recent philosophers as authorities. He invokes the method of *‘iṭibār*, which may be translated as ‘careful consideration’ (Griffel 2011 [\*124: 66], regarding the translation see also Pines 1955 [\*114: 8] and 1960 [\*115: 123]). Abū l-Barakāt thus establishes himself as independent of Ibn Sīnā’s system, which determined the teaching of philosophy at his time. He rejects the idea that the recent philosophers command any authority, claiming that his method of ‘carefully considering’ all arguments and aspects of each question has led him to the solutions the ancients would have preferred. The most important point, however, is his implicit rejection of demonstration (*burhān*) as a truth criterion in philosophy (Griffel 2011 [\*124: 66]). This method, so central for al-Fārābī and Ibn Sīnā, plays barely any part in Abū l-Barakāt’s system. He does



not distinguish between arguments claiming to comply with the high standard of unequivocal demonstration, and those that are non-demonstrative. Instead, he treats all arguments as non-demonstrative and dialectical, and evaluates their persuasive force in each case. Abū l-Barakāt does indeed frequently adopt the method described at the beginning of his work, by first listing all the arguments for or against a certain position or the solution of a problem, elucidating suggestions one by one, and finally deciding on the position that is in his opinion the most convincing [\*89: 1 4].

Abū l-Barakāt's implicit rejection of demonstration may be seen as a reaction to the criticism al-Ġazālī had levelled at the philosophy of al-Fārābī and Ibn Sīnā fifty years before the publication of *al-Kitāb al-Mu'tabar* (Griffel 2011 [\*124: 64–71]). In his *Tahāfut al-falāsifa*, al-Ġazālī complains that many arguments which the Arab philosophers claimed were demonstrative, in fact failed to reach this high standard. As a result, al-Ġazālī rejected the *falāsifa*'s claims of superiority over the religious sciences and also revealed religious texts. Instead, he regarded philosophy as a scholarly tradition wedded to problematic teachings, such as that the world has no beginning, which had been taken over from its founding fathers without critical scrutiny (Griffel 2005 [\*123]). Abū l-Barakāt abandons the claim to demonstration, and consequently also the claim of philosophy to superiority on the basis of an epistemological and technical criterion. Simultaneously, he separates the tradition of Arabic philosophy, with its doctrines that al-Ġazālī had already identified as problematic, from the tradition of the ancient Greeks, implicitly absolving the latter from al-Ġazālī's criticism. Finally, and this is the most important aspect of his book in the longer term, Abū l-Barakāt opens the philosophical tradition to arguments and doctrines that had previously been exclusively part of theological literature, above all of Muslim *kalām*. His method of 'careful consideration' (*i'tibār*) of all arguments allowed him to take seriously and even to accept views that had been vehemently rejected in the Neo-Platonic–Aristotelian tradition, such as the existence of the void or of indivisible atoms. Thus, after careful deliberation and consideration, Abū l-Barakāt expresses himself in favour of an inner-cosmic void (Nony 2011 [\*125], Pines 1937 [\*112] and Rosenthal 1965 [\*110: 224–242]).

He applies a similarly critical approach to the Neo-Platonic principle that out of 'the One', i.e. God, there can emanate only one, eternally enduring, action. He rejects this, and the whole emanative scheme, as an arbitrary limitation of God's power. After careful consideration, Abū l-Barakāt distances himself from Ibn Sīnā's idea of a God who acts out of the necessity of His being, professing instead the concept of a God possessing positive attributes who may have created the world with the help of intermediaries (angels), but is still the only

agent cause (*fā'il*) in the world. On the basis of an original understanding of time as 'the measure of the extension of existence' (*miqdār imtidād al-wuġūd*), he simultaneously professes the eternal duration of the world (Lammer 2018 [\*132]). Compared to the Arabic philosophical tradition – especially Ibn Sīnā's philosophical system – Abū l-Barakāt has a much more personal idea of God who is not an abstract principle (*mabda'*) but is rather, as in Muslim *kalām* (and also in Jewish theology), furnished with positive attributes such as knowledge, power, and will.

Abū l-Barakāt's independence from the Arabic philosophical tradition becomes clearest in his theory of the soul and the intellect, and his resultant epistemology. He rejects the idea of 'faculties' internal to the human soul, embraced by nearly all earlier Arabic philosophers, claiming instead that the soul is a single whole without a multiplicity of distinct powers. This leads to a multitude of philosophical innovations in his psychology and doctrine of the intellect (Pines 1954 [\*113], Arnaldez 1987 [\*118], Davidson 1992 [\*119: 154–161. 180], Marcotte 2004 [\*122]). Thus, Abū l-Barakāt rejects the existence of a single separate Active Intellect (*'aql fa'āl*) for all of humanity, and entertains the possibility that there might be one or more such separate intellects for each individual, acting as both efficient and final cause. Indeed, humanity might be divided into a number of different species whose souls are linked, respectively, to one of the many celestial souls, which we perceive in e.g. the fixed stars [\*89: II 303. 388–94; III 152–53. 157–58]. Abū l-Barakāt's radical reformulation of Aristotelian philosophy is grounded on the one hand in his criticism of Ibn Sīnā's understanding of self-awareness (*šū'ūr al-dāt*, cf. Kaukua 2016 [\*129]), and on the other in a desire to provide a philosophical foundation for the claim that God knows every individual thing in the world (cf. 'Umar b. Sahlān's refutation [\*78]); something Ibn Sīnā had insisted upon but had difficulty explaining.

A new approach to epistemology is also connected with Abū l-Barakāt's innovative psychology. If there are no faculties within the soul, there is nowhere that sensory perceptions may be 'impressed' (*irtasama*) and represented, and where they may be gradually stripped of their accidental qualities in order to yield a separate universal essence (the *māhīyya* or 'quiddity') in the intellect. This is the process of abstraction according to Ibn Sīnā. Abū l-Barakāt rejects his 'representalism' (Benevich 2020 [\*133]) and consequently also the distinction between two kinds of cognition, namely sensory perception of individual objects and intellectual understanding of universals ('concepts'). Rather, all acts of knowledge possess the 'unified structure of direct relations between the perceiving subject, i.e. the immaterial soul, and the object of cognition' (Benevich 2020 [\*133: 41. 65]). This relation (*idāfa*) gives the cogniser a direct relation to the object, rather than cognition being explained by a

representation in a psychological faculty. Abū l-Barakāt is thus able to reject Ibn Sīnā's theory that God knows individuals only universally. God's knowledge of the world is superior to that possessed by humans: though it cannot encompass all events (as their number is infinite in an eternal world), it does include a vast number of them [\*83: III 80–81].

Abū l-Barakāt is one of a number of philosophical authors of the 6th/12th century who are on the one hand strongly dependent on Ibn Sīnā (cf. Janssens 2016 [\*128]) and on the other express sometimes severe criticism of his philosophical system. While other critics of Ibn Sīnā came from Muslim *kalām* and were ultimately connected to al-Ġazālī's philosophical and legal religious criticism of Avicennism, Abū l-Barakāt is usually regarded as having a different profile. His philosophical influences have been sought, especially by Shlomo Pines 1955 [\*114], among non-Aristotelian philosophers of the Arabic tradition such as Abū Bakr al-Rāzī (d. 313/925) and al-Bīrūnī (d. c. 440/1048). This approach is justifiable, but on closer inspection we also find a significant affinity with al-Ġazālī's teachings, suggesting that he, too, exerted a degree of influence, which need not have been direct. Al-Qifṭī already noted that Abū l-Barakāt followed al-Ġazālī in the issue of God's knowledge of individual things [\*84: 53]. Unlike other critics of Ibn Sīnā, however, Abū l-Barakāt is not indebted to the religious sciences, presenting himself in *al-Kitāb al-Mu'tabar* as a pure philosopher who, while recognising the existence of revelations, does not – in contrast to al-Ġazālī – consider them as a valid source of knowledge worth heeding.

### 2.3.5 Influence

ʿUmar b. Sahlān al-Sāwī's refutation [\*78] of Abū l-Barakāt's teachings on God's knowledge of individual things shows that his innovative theory of the soul and the intellect met with great resonance even during his lifetime. His contemporary al-Bayhaqī also composed a refutation of *al-Kitāb al-Mu'tabar* [\*83: IV 1763], now sadly lost. Abū l-Barakāt's doctrine of the afterlife was quoted at the end of the 6th/12th century by the Jewish Gaon Samuel ben Eli (d. c. 593/1197) in Baghdad in a polemic directed against Maimonides, to which the latter responded around 587/1191 in his Arabic *Maqāla fī teḥiyyat ha-metim* (*Epistle on the Resurrection*). However, Maimonides does not take Abū l-Barakāt seriously as a philosophical scholar, instead criticising his close ties with *kalām* (Stroumsa 1993 [\*120]).

Ibn Ġaylān al-Balḥī and Šaraf al-Dīn al-Mas'ūdī (both d. c. 585/1190) studied Abū l-Barakāt's teachings intensively and must be regarded as his faithful followers (cf. Shihadeh 2014 [\*126]). Al-Suhrawardī (d. c. 587/1191) and Faḥr al-Dīn al-Rāzī (d. 606/1210) also studied Abū l-Barakāt's work in detail, frequently quoting him by name. Unlike Ibn Ġaylān and al-Mas'ūdī, however, they do not simply take over Abū l-Barakāt's criticism of Ibn Sīnā, but endeavour to

distance themselves from him even while depending on him. Al-Baġdādī's criticism of the Avicennan understanding of self-awareness was adopted by, for instance, al-Suhrawardī, for whom it was the basis for fundamental innovations (Kaukua 2015 [\*129: 104–160]). Al-Qifṭī as well as Ibn Abī Uṣaybi'a document the great appreciation scholars showed Abū l-Barakāt in the 7th/13th century. For al-Qifṭī, Abū l-Barakāt was the most significant representative of a serious philosophical criticism of Aristotelianism [\*84: 52]. Al-Šahrazūrī writes polemically, but not without justification [\*87: 11 148], that Abū l-Barakāt anticipated many arguments and objections (*šubah*) that would emerge two generations later in Faḥr al-Dīn al-Rāzī's work and enjoy widespread circulation thanks to him. In fact, there is not only this direct influence of Abū l-Barakāt's arguments on Faḥr al-Dīn al-Rāzī, but also a connection between the former's method of 'careful consideration' (*i'tibār*) and Faḥr al-Dīn's scientific method in his philosophical compendia. In Faḥr al-Dīn's work and the scientific tradition influenced by him, which includes almost all later thinkers, the search for demonstrative proof is superseded by an exhaustive survey of all relevant arguments and positions. These are evaluated individually and if needed weighed against each other. In this sense, Abū l-Barakāt played a determining part in the emergence of the scholarly style of post-classical philosophical literature in Islam. Nāṣir al-Dīn al-Ṭūsī (d. 672/1274) devoted one of his books to the refutation of Abū l-Barakāt's views on the infinite extension of space (MS Istanbul, Revan Köskü 2042/25). In later centuries, Abū l-Barakāt was studied by scholars such as, among others, Ibn Taymiyya (d. 728/1328), who employed his arguments against the dominating trends of Avicennism, or simply quoted him as proof of the high degree of discord prevailing, in his view, among the *falāsifa*.

## 2.4 *Ibn Ḡaylān al-Balḥī and Šaraf al-Dīn al-Mas'ūdī*

*Frank Griffel*

### 2.4.1 Primary Sources – 2.4.2 Life – 2.4.3 Works – 2.4.4 Doctrine and Influence

#### 2.4.1 Primary Sources

Testimonies on their Life, Work, and Influence [\*94–\*112] – Works and Editions [\*113–\*128]

*Testimonies on their Life, Works, and Influence*

94 al-Ġazālī, Abū Ḥamid Muḥammad b. Muḥammad (d. 505/1111). *Tahāfut al-falāsifa / The Incoherence of the*

*Philosophers*. – Ed. and transl. by Michael E. Marmura. Provo, 2000 (2nd ed.).

95 al-Sāwī, 'Umar b. Sahlān (d. c. 540/1145). *al-As'ila wa-l-ağwiba*.

- In *Nahǧ al-taqdīs wa-as'ila wa-aǧwiba: Risālatān fī l-mantiq wa-l-falsafa*. – Ed. by Ḥasan al-Marāǧī. Tehran, 1385/1427/2006, 71–108.
- 96 al-Bayhaqī, Ibn Funduq 'Alī b. Zayd (d. 565/1169–70). *Tatimmat Šiwān al-ḥikma*. Ed. by Muḥammad Šafī'. Lahore, 1935. – English transl. of excerpts, with index, by Max Meyerhof, "Alī al-Bayhaqī's Tatimmat Šiwān al-ḥikmah. A biographical work on learned men of the Islam." *Osiris* 8 (1948): 122–217. – Repr. of both in *Historiography and Classification of Science in Islam*, VIII. Ed. by Fuat Sezgin. Frankfurt a.M., 2005. – A collection of biographies of Arab and Islamic philosophers, composed around 560/1165.
- 97 al-Sam'ānī, Taǧ al-Dīn 'Abd al-Karīm b. Muḥammad (d. 562/1166). *al-Ansāb*. – Ed. by M. 'Awwāma et al., 12 vols. Beirut, 1976–1984.
- 98 al-Sam'ānī, Taǧ al-Dīn 'Abd al-Karīm b. Muḥammad (d. 562/1166). *al-Taḥbīr fī l-mu'ǧam al-kabīr*. – Ed. by M.N. Sālim, 2 vols. Baghdad, 1395/1975.
- 99 al-Ġaznawī, Ḥāhīr al-Dīn Abū-l Maḥāmid Muḥammad b. Mas'ūd. *Kifāyat al-ta'līm fī šinā'at al-taǧīm* (Pers.). MS Istanbul, Bagdath Vehbi 894.
- 100 al-Ġaznawī. [Šarḥ] *Kifāyat al-ta'līm fī šinā'at al-taǧīm* (Ar.). MS Berlin, Wetzstein I 1154.
- 101 *Maǧmū'a-yi falsafī-yi Marāǧa*. A philosophical anthology from Maragha. Containing works by Abū Ḥāmid Ghazzālī, 'Ayn al-Quḍāt al-Ḥamadānī, Ibn Sīnā, 'Umar b. Sahlān Sāvi, Majduddīn Jīlī and others. – Ed. by Naṣrallāh Pūrǧawādī (Tehran 1380/2002). – Facsimile of a manuscript copied in 596–597/1199–1201 in Marāǧa at the Muǧāhid or Muǧāhidiyya Madrasa.
- 102 Faḥr al-Dīn al-Rāzī, Muḥammad b. 'Umar (d. 606/1210). *al-Munāẓarāt fī bilād mā warā' al-nahr*. – Ed. and Engl. transl. by Fathalla Kholeif, *A Study on Fakhr al-Dīn al-Rāzī and his Controversies in Transoxiana*. Beirut, 1966.
- 103 Faḥr al-Dīn al-Rāzī. *Muḥaṣṣal afkār al-mutaqaddimīn wa-l-muta'aḥḥirīn min al-'ulāmā' wa-l-ḥukamā' wa-l-mutakallimīn*. – Ed. by Ḥusayn Atay. Cairo, 1411/1991.
- 104 Faḥr al-Dīn al-Rāzī. *Ġawābāt al-mas'āl al-buḥārīyya*. – Ed. in Shihadeh 2014 [\*152: 11–61].
- 105 al-Ḥusaynī al-Saraḥsī, Šadr al-Dīn Abū l-Ḥasan 'Alī b. Nāšir (d. after 622/1225). *Aḥbār al-dawla al-salǧūqiyya*. – Ed. by Muḥammad Iqbāl. Lahore 1933. – Engl. transl. by C.E. Bosworth, *The History of the Seljuq State*. A translation with commentary of the 'Akhbār al-dawla al-salǧūqiyya'. London, New York, 2011.
- 106 Yāqūt al-Ḥamawī al-Rūmī (d. 626/1229). *Mu'ǧam al-udabā' Iršād al-arīb ilā ma'rīfat al-adīb*. – Ed. by Iḥsān 'Abbās, 7 vols. Beirut, 1993.
- 107 al-Qiftī, 'Alī b. Yūsuf (d. 646/1248). *Ta'rīḥ al-ḥukamā' [Iḥbār al-'ulamā' bi-aḥbār al-ḥukamā', Epitome des Muḥammad b. 'Alī al-Zawzanī]*. – Ed. by Julius Lippert. Leipzig, 1903. – A collection of biographies of Arab physicians, scientists, and philosophers.
- 108 Ibn al-Ša'ār, al-Mubārak b. Aḥmad (d. 644/1256–57). *'Uqūd al-ǧumān fī farā'id šu'arā' ḥādā l-zamān = Qalā'id*

*al-ğumān fī farā'id šu'arā' hādā l-zamān*. – Ed. by Fuat Sezgin, 9 vols. Frankfurt, 1990.

- 109 Naşir al-Dīn al-Ṭūsī, Muḥammad b. Muḥammad (d. 672/1274). *Ḥall muškilāt al-Işārāt*. In *Ibn Sīnā: al-Işārāt wa-l-tanbihāt*. – Ed. by Sulaymān Dunyā, 4 vols. Cairo, 1968–1971 (2nd ed.).
- 110 al-Şafadī, Şalāḥ al-Dīn Ḥalīl b. Aybak (d. 764/1363). *Al-Wāfi bi l-wafayāt*. – Ed. by Hellmut Ritter et al., 32 vols. Istanbul, Beirut, 1929–2013.
- 111 Tāşköprüzāde, 'Işām al-Dīn Aḥmad b. Muştafā (d. 968/1561). *Miftāḥ al-sa'āda wa-mişbāḥ al-siyāda*, 3 vols. Hyderabad, 1328–1356 H. (1911–1937).
- 112 Hāğgī Ḥalīfa, Kātib Çelebī Muştafā b. 'Abdallāh (d. 1067/1657). *Kaşf al-ẓunūn 'an asāmī l-kutub wa-l-funūn*. – Ed. by Ş. Yaltkaya and R. Bilge, 2 vols. Istanbul, 1941–1943.

### Works and Editions

#### *Ibn Ḡaylān al-Balḥī*

##### *Philosophical Works*

- 113 *Ḥudūt al-'ālam* – Ed. by Mahdī Muḥaqqiq, Tehran 1377/1998. – Ed. and French transl. of the introduction (pp. 1–14) in Michot 1993 [\*139: 299–344].
- 114 Two acephalous philosophical works in the manuscript collection Tehran, Mağlis 599, pagination 1–70 and 205–239.

##### *Works on Medicine and Mathematics*

- 115 *Fī šarḥ al-maqāla al-'āşira min kitāb Uqlīdis fī uşul al-maqādīr*. MS Tehran, Mağlis 599, pagination 190–195. – Cf. the

catalogue entry [\*26: II, 357]. Composed before Ġumāda II 576 / November 1186, the date of the colophon, and copied during the author's lifetime. A brief mathematical text in which Ibn Ḡaylān responds to Abū Bakr Muḥammad b. 'Abd al-Bāqī (d. 535/1141), 'the judge at the hospital in Baghdad' (*qāḍī mārīstān Bağdād*), and his work on the 10th book in Euclid's *Elements* (on this work cf. Busard 1997 [\*140]). Regarding Abū Bakr Muḥammad b. 'Abd al-Bāqī cf. Schützinger 1977 [\*138]. Cf. also Dānişpażūh [\*24: III, 103].

116 *Tanbūḥ 'alā l-iḥtilāf wa-l-tafāwut wa-l-tanāquḍ fī Kitāb al-Adwiya al-mufrada min Kitāb al-Qānūn fī l-ṭibb li-Ibn Sīnā*. MS Tehran, Mağlis 1538, fol. 203<sup>r</sup>–206<sup>v</sup> (pagination 399–402). – Ed. and Engl. transl. by Ayman Shihadeh 2013 [\*149: 160–173]. – A medical work on the administration of drugs, composed as correction for a chapter (the one on 'simple drugs' [*al-adwiya al-mufrada*]) in Ibn Sīnā's *Canon of Medicine* [*al-Qānūn fī l-ṭibb*].

117 *Talqīḥ al-albāb fī tanqīḥ ṭuruq al-abwāb fī l-ḥisāb*. MS Leipzig, Universitätsbibliothek 825. – Brief work on mathematics, described in Vollers 1906 [\*19: 266–267].

#### *Şaraf al-Dīn al-Mas'ūdī*

##### *Philosophical Works*

- 118 *Kitāb al-Mabāḥiṭ wa-l-şukūk 'alā l-Işārāt*. – Ed. in Shihadeh 2016 [\*155: 195–289]. – Earlier facsimile edition of an unidentified manuscript from the library of the Madrasat-i Imām-i

‘aṣr in Šīrāz (Iran) in *Kitāb al-Mabāḥiṭ wa-l-ṣukūk*. – Ed. by Muḥammad Barakāt. Tehran 1389 h.š. (2010).

**119** *Risāla fī l-Qiyāsāt al-ḥamliyya*. The text is extant in a manuscript in Aṣḡar Mahdawī’s private library in Tehran, published in facsimile in 2002 [\*101: 307–344]. This text does not mention an author. Dānišpažūh 1958 [\*135: 61] assumed that it was *Risālat al-Muḥṭaliṭāt* by al-Mas‘ūdī, a text mentioned by Ibn Ġaylān [\*114: 49, 56] as this author’s work. Pūrḡawadī 2002 [\*143: 19] adopts this opinion, while Anṣārī 2014 [\*151] expresses reservations in connection with his analysis of [\*114]. The text refers to ‘the author of the Baṣā’ir’ (*ṣāhib al-Baṣā’ir*), i.e. ‘Umar b. Sahlān al-Sāwī (d. ca. 540/1145), a number of times [\*101: 312, 313, 317, 328, 331]. Dānišpažūh [\*135: 61], repr. in [\*143: 19] and Anṣārī [\*151] interpret it as part of the debate on issues of syllogistics between al-Mas‘ūdī and Ibn Ġaylān.

**120** *Šarḥ al-Ḥuṭba al-ḡarrā’ li-Ibn Sīnā*. MS Istanbul, Hasan Hüsnü Paşa 1243, fol. 1<sup>r</sup>–58<sup>r</sup>. Commentary on Ibn Sīnā’s (d. 428/1037) so-called *Glorious Sermon* (*al-Ḥuṭba al-ḡarrā’*), which is also known under the titles *al-Ḥuṭba al-tawḥīdiyya* (*Sermon on the Profession of God’s Oneness*) and *Risālat al-Taṣḡīd* (*Epistle on Praise*) (Mahdawī no. 70 [\*22: 99–100, 279]). In his *Ġawābāt* [\*104: 48, 5] Faḥr al-Dīn al-Rāzī affirms the attribution of this text to Šaraf al-Dīn al-Mas‘ūdī. It is also described by Āḡā Buzurg al-Ṭihrānī [\*10: XIII, 223], who incorrectly attributes it to the historian al-Mas‘ūdī (d. 345/956).

*Works on Astrology, Astronomy, Meteorology, Medicine, and fiqh:*

**121** *al-Kifāya fī ‘ilm al-hay’a*. MS Istanbul, Hafid Efendi 154, fol. 107<sup>v</sup>–149<sup>r</sup>. On astronomy and geography in two parts (sg. *maqāla*) of 23 and 14 chapters (sg. *bāb*). The manuscript is described in Şeşen, Muḥṭarāt [\*31: 509]. Ḥāḡḡī Ḥalifa [\*106: I 1500] mentions the text under the title *al-Kifāya fī l-hay’a*; it is also known as *al-Kifāya fī hay’at al-‘ālam* [\*10: v 299]. In the commentary on Ibn Sīnā’s *al-Ḥuṭba al-ḡarrā’* [\*119: fol. 44<sup>r</sup>], it is mentioned as a work by the same author. According to Ḥaṣūrī [\*141: 18] the text was composed in 544/1149–1150, according to Shihadeh 2016 [\*155: 22–23], however, in 549/1154–1155.

**122** *Ġahān-i dāniš*. – Ed. by Muḥammad Mīrfahra’ī. Tehran, 1315/1936. – New edition by Ġalīl I. Zangānī. Tehran, 1382 (2003). The author’s own Persian translation of his Arabic treatise *al-Kifāya fī ‘ilm al-hay’a*. Ḥāḡḡī Ḥalifa [\*106: I 1500] mentions the text; Pertsch (no. 328 [\*18: 348–349]) and Āḡā Buzurg al-Ṭihrānī [\*10: v 298–299] describe it. Further MSS in Storey [\*2: II 51–52]. In the book on meteorology [\*123: 69 Dānišpažūh], the text is referred to as the same author’s work, and must thus have been composed before 550/1155–1156. The text itself (pp. 44–45) mentions 549/1154–1155 as its date of origin, but this may refer to the original version in Arabic [\*121].

**123** *Risāla dar ma’rifat-i ‘anāšir va-kā’ināt al-ḡaww* (Pers.). – Ed. by Mohammad Shāfi’. *Oriental College Magazine* 4.3 (1928): 31–91. – New edition

under the title *Risāla-ī dar bāra-yi ātār-i ‘ulwī*. In *Du risāla dar bāra-yi ātār-i ‘ulwī*. *Two Persian texts on meteorology*. – Ed. by M.T. Dānišpažūh. Tehran, 1337/1958, 57–127. In the text [69. 92 Dānišpažūh] *Ġahān-i dāniš* is mentioned as a work by the same author. Dānišpažūh [\*136: 11] infers that the text was composed 550/1155–1156.

124 *Mağma‘ al-aḥkam* (Pers.). – Ed. by ‘Alī Ḥaṣūrī. Tehran, 1379 h.š. (2000). – On astrology. Mentioned by Āgā Buzurg al-Ṭihirānī [\*10: 1, 8f.] and described briefly in the catalogue of the Köprülü library [\*29: 11 372]. According to Ḥaṣūrī [\*141: 15] composed in 557/1162, and according to Shihadeh 2016 [\*155: 24] dedicated to a member of the Qarā-Ḥānid dynasty.

125 *Manāfi‘ al-abdān* (Pers.). MS Istanbul, Köprülü 1624, fol. 30<sup>v</sup>–31<sup>v</sup>.

A very short text on medicine, described briefly in the catalogue of the Köprülü library [\*29: 11, 373] and in Şeşen 1984 [\*28: 358].

126 *al-Muntaḥab al-asğar min al-Wasīṭ*. MS Cairo, Dār al-Kutub, *fiqh šāfi‘ī* 251 (124 fol.). A compendium of al-Ġazālī’s (d. 505/1111) *Wasīṭ* on substantive legal verdicts of the Šāfi‘ī school of law. The manuscript is mentioned in the old catalogue of the Khedival Library in Cairo as no. 1765 [\*15: III 278].

127 *Maqāla min ḥisāb al-ğabr wa-l-muqābala* (Ar.). MS Tashkent, Beruniy Institute 10364 (75 fol.). – Mentioned by Ṭāšköprüzāde [\*11: 1 327] and Ḥāğğī Ḥalifa [\*12: 1, 857].

128 *Šarḥ al-tağnīs fī l-ḥisāb li-l-Sağawandī*. MS Istanbul, Reşit Efendi 1185 (80 fol.).

## 2.4.2 Life

### 2.4.2.1 *Ibn Ġaylān al-Balḥī* (fl. 580/1184)

Farīd al-Dīn (also: Afḍal al-Dīn) ‘Umar b. ‘Alī Ibn Ġaylān al-Balḥī (also: al-Farīd al-Ġaylānī) was born in Balḥ around 505/1111. In an autobiographical passage of his philosophical magnum opus *Ḥudūt al-‘ālam* (*The World’s Temporal Origination*), Ibn Ġaylān describes his education and mentions that he enrolled at the Nizāmiyya madrasa in Marv as a young student in 523/1129, and moved to the Nizāmiyya in Nishapur after a year in order to study logic [\*113: 10–11]. The only concrete dates known regarding Ibn Ġaylān’s life are the years 570/1174 and 576/1180, when the copies of two texts (of which we know that they were copied during his lifetime [\*114: 1–70; \*24]) were completed. In his autobiographical work *al-Munāẓarāt fī bilād mā warā’ al-nahr* (*Disputes [with Scholars] in Transoxania*), Faḥr al-Dīn al-Rāzī (d. 606/1210) describes visiting Ibn Ġaylān in Samarqand full of expectation, in order to discuss his philosophical magnum opus with him [\*102: 59; transl. 81–82]. This must have been after 579/1184, as the completion of Faḥr al-Dīn’s *al-Mulaḥḥaṣ*, documented for this year, is presumed. It was probably shortly after 582/1186, as Faḥr al-Dīn was also debating with scholars in neighbouring Bukhara [\*102: 32; Engl. 55–56],



travelling on to Samarqand from there [\*102: 54; transl. 76]. In his *Muḥaṣṣal afkār al-mutaqaddimīn wa-l-mutaʾaḥḥirīn* (*The Summary of the Thoughts of Ancients and Recent Scholars*), datable to the middle of Faḥr al-Dīn al-Rāzī's career, he mentions Ibn Ḡaylān as an active scholar (referring to him as Afḍal al-Dīn al-Ḡaylānī [\*103: 228]). When Faḥr al-Dīn wrote *al-Munāẓarāt fī bilād mā warāʾ al-nahr* around 602/1206, he included a eulogy which indicates that Ibn Ḡaylān was by now dead [\*102: 59; transl. 81–82]. We may thus assume that Ibn Ḡaylān died between 580/1184 and the turn of the 7th/13th century.

The only (and brief) biographical entry on Ibn Ḡaylān is by al-Bayhaqī who met him in person [\*96: 156]. According to al-Bayhaqī, Ibn Ḡaylān possessed comprehensive knowledge of philosophy (*wa-lahu maḥṣūl min al-ḥikma*) and was 'the best philosopher at court' (*afḍal ḥukamāʾ al-ḥaḍra*). Šafiʿ [\*96: 212] interpreted this as a reference to Saṅḡar's (r. 511–552/1117–1157) court in Marv. Shihadeh 2013 and 2016, however, found evidence of a connection with the court of the Qarā-Ḥānids in Bukhara or Samarqand [\*149: 140; \*155: 16–17]. In the introduction to his brief work on mathematics, Ibn Ḡaylān is given many honorifics, among them 'king of the scholars of the East and of China' (*malik fuḍalāʾ al-šarq wa-l-šīn*) ([\*117] cf. Vollers [\*19: 266]). It is true that Transoxania and Samarqand, where Ibn Ḡaylān worked, were under the rule of the non-Muslim Qarā-Ḥiṭāy between 536/1141 and 608/1212, and thus within the Chinese sphere of influence.

Once again referred to as 'Afḍal al-Dīn al-Ḡaylānī', Ibn Ḡaylān appears in a much-noted sequence (*silsila*) of philosophical educators which Nāṣir al-Dīn al-Ṭūsī (d. 672/1274) used in an attempt to document his close connection with Ibn Sīnā (cf. al-Ḥuḍayrī 1952 [\*134: 55–57], transl. in al-Rahim 2003 [\*144: 220–221]). In this lineage, Ibn Ḡaylān is a pupil of al-Lawkarī (d. after 503/1109), and a teacher of Šadr al-Dīn al-Saraḥsī. As the chain of transmission clearly serves apologetic ends, the information on teacher–pupil relationships it offers must be interpreted with great caution. Even so, the reference to Šadr al-Dīn Abū l-Ḥasan 'Alī b. Nāṣir al-Ḥusaynī al-Saraḥsī is interesting in this context, not least because he was not a prominent philosopher. He wrote a work on the history of the Seljuks (*Zubdat al-tawārīḥ*) extant in an abridged version (*Aḥbār al-dawla al-salġūqiyya* [\*105]), corresponded with Faḥr al-Dīn al-Rāzī (Anšārī 2001 [\*142]), and may indeed have been one of Ibn Ḡaylān's pupils.

#### 2.4.2.2 Šaraf al-Dīn al-Masʿūdī (d. after 582/1186)

Šaraf al-Dīn Muḥammad b. Masʿūd al-Masʿūdī is frequently confused with his contemporary Ṣaḥīr al-Dīn Abū-l Maḥāmid Muḥammad b. Masʿūd b. al-Zakī al-Ġaznawī, the author of the Persian work *Kifāyat al-taʿlīm fī šīnāʾat al-tanġīm* on astronomy and astrology, composed in 542/1147 and extant in Persian as

well as Arabic [\*99, \*100] (cf. Storey [\*2: 11 47] and Ḥāḡḡī Ḥalīfa [\*112: 11 1497]). Occasionally, the two are even taken for one and the same person, an error easily made, considering that the central part of the two scholars' names (Muḥammad b. Mas'ūd) is identical, and that both composed a book on astronomy with a very similar title. Reference works often treat them as one and the same person (e.g. Suter no. 496 [\*1: 198], Brockelmann [\*4: S I 863–864], Krause, no. 496 [\*21: 512], Rescher [\*7: 176], and Āḡā Buzurg al-Ṭīhrānī [\*10: v 298–299]). It has even happened that the names and lives of these two scholars were conflated, and new persons constructed, named – for instance – Šaraf al-Dīn Ḥalīf al-Dīn (...) Mas'ūdī Ġaznawī (thus e.g. Dānišpažūh 1958 [\*135: 61] reprinted in [\*143: 19]). In 1958, Storey undertook the first serious endeavour to distinguish the two scholars [\*2: 11 46–47. 51. 447].

Šaraf al-Dīn Muḥammad b. Mas'ūd al-Mas'ūdī al-Buḥārī is the author of the philosophical work *al-Mabāḥiṭ wa-l-šukūk 'alā l-kitāb al-Išārāt wa-l-tanbihāt* (*Investigations and Doubts Concerning the Book of Pointers and Reminders*) as well as works on astronomy, astrology, meteorology, mathematics, and Šāfi'ī law [\*121–\*128] which, insofar as they can be dated, were composed in the years between 544/1149–1150 and 557/1162. His treatise *al-Mabāḥiṭ wa-l-šukūk* can be dated to shortly after 560/1165, as it refers to Abū l-Barakāt al-Baḡdādī (d. c. 560/1165) as a recently deceased scholar [\*118: 215, 11]. It is mentioned in turn in Ibn Ḡaylān's *Ḥudūt al-'ālam* [\*113: 111, 11]. Ḥāḡḡī Ḥalīfa [\*112: 11 2026] attributes a work entitled *al-Hādīfī-l-furū'* (*Guidance in Legal Verdicts*) on Ḥanafī law to Šaraf al-Dīn al-Mas'ūdī, which is not extant. This is in all probability a misunderstanding as according to Shihadeh 2016 [\*155: 12–13. 26–28], al-Mas'ūdī was a Šāfi'ī himself and came from a Šāfi'ī family background. In a fragment on logic [\*114: 49. 56], Ibn Ḡaylān mentions two further works by al-Mas'ūdī: *Risālat al-Muḥtaliṭāt* and *Risālat al-Aḡwiba*, neither of which survives.

Šaraf al-Dīn al-Mas'ūdī was born in the first or second decade of the 6th/12th century. Some Iranian manuscripts refer to him as 'al-Marwāzī' (e.g. Dānišpažūh [\*24: I 71; II 74; \*135: 11], Mahdawī [\*22: 100]). Shihadeh 2016 [\*155: 12–13] was the first to succeed in proving that he was indeed born in Marv and a member of an established family of respected Šāfi'ī legal scholars. His grandfather, his father, and his uncle moved in the same circles in Marv as the family of the Šāfi'ī historian al-Sam'ānī (d. 562/1166) [\*97: XI 308–309]. In addition, his father was al-Sam'ānī's teacher and a preacher at the great mosque in Marv [\*98: 11 303–304]. The son probably showed an early interest in philosophy and is likely to have been the very al-Mas'ūdī whom al-Šafadī [\*110: XII 283] mentions as 'Umar b. Sahlān al-Sāwī's *ḡulām* (assistant) (*pace* Shihadeh 2016 [\*155: 15]). Al-Mas'ūdī lived in Bukhara. Neither al-Bayhaqī [\*96] nor the *Itmām Tatimmat Šiwān al-ḥikma*, nor indeed the Syrian historians of the rational

sciences in Islam, i.e. above all al-Qiftī [\*107] and Ibn Abī Uṣaybi'a, mention him. He is most noticeable in the discussions on the 8th to the 11th questions in Faḥr al-Dīn al-Rāzī's autobiographical work *al-Munāẓarāt fī bilād mā warā' al-nahr* (*Disputes [with Scholars] in Transoxania*) [\*102: 31–47, transl. 55–70], where he appears as a defender of astrology and of al-Ġazālī's works against the attacks of Faḥr al-Dīn al-Rāzī, who was at this time around 35 years old. In his argument with al-Mas'ūdī, Faḥr al-Dīn mentions the former's predictions on the great planetary conjunction in Raġab 582/September 1186, making clear that their meeting took place shortly beforehand in Bukhara when al-Mas'ūdī was a respected scholar of over 60 years of age. Years later Faḥr al-Dīn al-Rāzī wrote *Ġawābāt al-masā'il al-buḥārīyya* (*Responses to the Questions from Bukhara*) in response to al-Mas'ūdī's *al-Mabāḥiṭ wa-l-ṣukūk* [\*104]. Shihadeh 2016 [\*155: 16–17, 24] has been able to prove that al-Mas'ūdī dedicated two of his works to high-ranking dignitaries at the court of the Turkish Qarā-Ĥānids in Bukhara or Samarqand, who were under the rule of the Qarā-Ĥiṭāy in those years. He further assumes [\*155: 18–19] that at the end of his life, al-Mas'ūdī left Bukhara to return to Marv, the city of his birth, although the evidence adduced is not fully convincing. Like Ibn Ġaylān, al-Mas'ūdī appears in a chain of transmitters by means of which a scholar of the 8th/14th century endeavours to link his studies of Ibn Sīnā's *Iṣārāt* with the author himself (mentioned by al-Ṣafādī [\*110: II 142–143], transl. in Endress 2006 [\*147: 41], and Shihadeh 2016 [\*155: 13–14]). In this chain, al-Mas'ūdī is 'Umar al-Ḥayyām's pupil and Faḥr al-Dīn al-Rāzī's teacher; in both cases there may be a kernel of truth, even if al-Mas'ūdī was never al-Rāzī formal teacher. Yāqūt [\*106: II 653] and al-Ṣafādī [\*110: IX 108; XII 273] mention Šaraf al-Dīn al-Mas'ūdī as the teacher of pupils born in 568/1172–1173 and 572/1176–1177. The subjects in which he was an expert are named as philosophy (*ḥikma*) and *ḥadīṭ* sciences. The year 582/1186 is the latest verified date in Šaraf al-Dīn al-Mas'ūdī's life.

### 2.4.3 Works

*Ibn Ġaylān al-Balḥī*

*Ḥudūt al-'ālam*

*The World's Temporal Origination*

At the beginning of the text, Ibn Ġaylān describes his two goals: on the one hand to prove the creation of the world at one point in time (*ittibāt ḥudūt al-'ālam*), on the other the refutation of Ibn Sīnā, especially his *Epistle Judging the Arguments of Those Who Claim that the Past has a Beginning at One Point in*

*Time* (*Risālat al-Ḥukūma fī ḥuḡaḡ al-muṭbitīn li-l-mādī mabda'an zamaniyyan*; edited by Muḥaqqiq [\*113: 131–158], cf. also Maḥdawī no. 64 [\*22: 93–94]). To this end, he divided the book into two main parts. The first (pp. 14–47) is dedicated to the detailed refutation of Ibn Sīnā's epistle, and the second (pp. 47–129) discusses and refutes the objections (*ṣubah*) levelled by the *falāsifa* against the dogma of the createdness of the world within time, elucidating the way in which this question is linked to opinions on God's determining

power (*qadar*) and what God can possibly create. In an introduction (pp. 1–14) to these two main parts, Ibn Ġaylān discusses the importance of the issue of the temporal createdness of the world. Since the *falāsifa* reject this, they embrace a concept of God that regards God as merely the first cause (*al-ʿilla al-ūlā*) of the world and thus deny that he is an omniscient and self-aware creator (*al-ṣānī*) (p. 2). This is in fact the main topic of the philosophical and theological dispute between two groups, designated by him respectively as the *falāsifa* and *ṣārīʿūn*, i.e. ‘those who abide by revelation (*al-ṣarʿ*)’, also identified as *ʿulamāʾ al-kalām* (*kalām* scholars) (pp. 9–11). *Falāsifa* refers to – as in al-Ġazālī’s *Tahāfut al-falāsifa* (*The Precipitance of the Philosophers*) [\*94] (regarding the title cf. § 3.3.5 above) – Ibn Sīnā and his followers. The second group includes above all Ibn Ġaylān himself and all those whom he considers to be on his side, among them al-Ġazālī and al-Masʿūdī (p. 11). The reference to al-Masʿūdī and *al-Mabāḥiṭ wa-l-ṣukūk* (p. 111) allows us to date Ibn Ġaylān’s *Ḥudūt al-ʿālam* to the time after Abū l-Barakāt’s death around 560/1165.

Ibn Ġaylān takes as his basis al-Ġazālī’s *Tahāfut al-falāsifa* (p. 8), following its strategy throughout. The errors of the *falāsifa* in the field of logic lead to false doctrines in metaphysics (p. 11). The *falāsifa*’s doctrines in metaphysics are not, as they claim, supported by demonstrative proofs. As they contradict in many instances the wording of revelation, their metaphysical teachings must be rejected as false. In general, one should not be dazzled by the argumentative glamour of the *falāsifa*’s writings, as their doctrines are often – albeit not always – false (p. 11). Ibn Ġaylān’s criticism of Ibn Sīnā is influenced not only by al-Ġazālī but also by Abū l-Barakāt al-Baġdādī, whose magnum opus *al-Muʿtabar* he frequently quotes; however, the precise nature of the latter’s influence on Ibn Ġaylān has not been investigated to date.

Two acephalous texts in the manuscript collection MS Tehran, Maġlis 599, pagination 1–70 and 205–239, the titles of which have not

been transmitted, were also composed by Ibn Ġaylān al-Balḥī.

The manuscript collection MS Ṭihrān, Maġlis 599 is a significant document for the history of philosophy in Islam during the 6th/12th century. Besides known works by Ibn Sīnā and al-Bīrūnī, it contains a series of rare texts (most of them unique) by authors of the 6th/12th century, among them al-Šahrastānī and ʿUmar b. Sahlān al-Sāwī, in which these authors respond to the teachings and objections of contemporaries such as al-Īlāqī and Abū l-Barakāt al-Baġdādī. The manuscript is paginated (it also has an older, incorrect folio numbering) and was copied between 569/1174 (p. 190) and 576/1180 (p. 195). Ibn Ġaylān as well as al-Masʿūdī are referred to in eulogies that make clear that both were living at the time the manuscript was produced. M.T. Dānišpažūh described the manuscript in the catalogue of the Kitābhāna-yi Maġlis-i Šūrā [\*24: 11, 367f.] in 1980. It seems that some pages are missing at the beginning, and it is possible that the existing pages are not in order. Two acephalous works in the MS are attributed to Ibn Ġaylān by Dānišpažūh 1958 [\*135: 61–62] and 1961 [\*137] and by Anšārī 2014 [\*151], although the latter provides no page or folio numbers.

The first text (pp. 1–70) is the fragment of a treatise on syllogistics by Ibn Ġaylān. The copyist of this text, Nūḥ b. Yūsuf al-Širāfi, writes (p. 70), that Ibn Ġaylān completed this ‘composition’ (*taḥrīr*) in Muḥarram 570/August 1174. The text was identified by Dānišpažūh ([\*135: 61], repr. in [\*143: 19]) as Ibn Ġaylān’s *al-Tawḥīʿa li-l-taḥṭīʿa* (*Prolegomenon to the Refutation*). In 2014, Anšārī corrected this to the effect that it is not the text *al-Tawḥīʿa li-l-taḥṭīʿa* itself but rather a response by Ibn Ġaylān in which he reacts to al-Masʿūdī’s objections to his earlier *al-Tawḥīʿa li-l-taḥṭīʿa* [\*151]. The chronology of the relevant texts is thus: (1) Ibn Ġaylān’s *al-Tawḥīʿa li-l-taḥṭīʿa*, (2) al-Masʿūdī’s response to it, quoted in this text as *al-Aġwiba* (*The Answers*) (p. 49. 56), and (3) Ibn Ġaylān’s response to the latter. The text in MS Ṭihrān, Kitābhāna-yi

Mağlis-i Šūrā-yi Islāmī 599 (pp. 1–70) is the last-named of Ibn Ġaylān's works. The preceding two are not extant.

Ibn Ġaylān's text is divided into six 'discussions' (*mabāḥiṭ*), apparently a reaction to a similar arrangement in Šaraf al-Dīn al-Mas'ūdī's lost work *al-Ağwiba*. The lost work *al-Tawṭī'a li-l-taḥṭī'a*, which inspired this exchange, predates *Ḥudūt al-'ālam*, as it is referred to there [\*113: 11] as well as in the *Tanbīh* [\*149: 172]. The last-named source characterises it as a text dedicated to the 'mixed syllogisms that [Ibn Sīnā] omitted in his logic'. Ibn Ġaylān's response mentions on p. 56 Rašīd al-Dīn Muḥammad b. Muḥammad al-Waṭwāt (d. 573/1177–1178 or 578/1182–1183) as someone who made mistakes in syllogistics (the passage is partially edited in Dānišpažūh [\*137: 292]). Rašīd al-Dīn al-Waṭwāt was a high-ranking secretary, poet, and philosophical scholar at the court of the Ḥwārazm-Šāh in Gurgān. He is known above all for his Persian poems and his Arabic and Persian prose. However, al-Bayhaqī also mentions him as a philosopher (concerning him cf. GAL [\*4: S I 486], F.C. de Blois in EI<sup>2</sup> [\*5: XIII 444–445], and N. Chalisova in the online edition of EI<sup>9</sup>). In contrast with Rašīd al-Dīn al-Waṭwāt's errors, Ibn Ġaylān emphasises the method of 'our master (*sayyidunā*), the imam Šaraf al-Dīn' (p. 56). This refers to al-Mas'ūdī, whose works *Risālat al-Muḥtaliṭāt* and *Risālat al-Ağwiba* are mentioned, the latter being the response to Ibn Ġaylān's treatise *al-Tawṭī'a li-l-taḥṭī'a*, which inspired this text (mentioned once again on p. 49). Dānišpažūh [\*135: 61], repr. in [\*143: 19] and Anṣārī [\*151] both assume that the text attributed to al-Mas'ūdī in the Marāğa MS [\*119] is also a part of this debate on syllogistics between Ibn Ġaylān and al-Mas'ūdī. As 'Umar b. Sahlān al-Sāwī is referred to in these texts as deceased, they must have been composed no earlier than c.540/1145 and, on the evidence of the colophon, no later than 570/1174.

The second text by Ibn Ġaylān al-Balḥī (pp. 205–239) follows 'Umar b. Sahlān al-Sāwī's *al-As'ila wa-l-ağwiba* [\*95] in the manuscript, but is missing the pages with

the beginning of the text. This explains why it was incorrectly edited as part of al-Sāwī's *al-As'ila wa-l-ağwiba* in al-Marāğī's edition of that work. Dānišpažūh edited and analysed the text as early as 1961 [\*137]. It has thus been edited twice, once by Dānišpažūh [\*137: 293–310], and a second time as part of a text by al-Sāwī [\*95: 78–107]. As a result of Rašīd al-Dīn al-Waṭwāt being mentioned on p. 56 of this manuscript, Dānišpažūh [\*137] concluded that it is a response by Ibn Ġaylān to a brief text on logic by Rašīd al-Dīn al-Waṭwāt, quoting the last-named text verbatim. The beginning of the extant part of this text (p. 205) [\*137: 293; \*95: 78–79] mentions an unidentified scholar named Šihāb al-Dīn, and a second one named Šaraf al-Zamān, who is said to have asked a question on syllogistics. The second name presumably refers to al-Ilāqī (d. 536/1141). Finally the text refers to a work on logic entitled *Kitāb 'Uyūn al-rasā'il fi funūn al-masā'il* (p. 206) [\*137: 294; \*95: 80], which is quoted in detail and discussed intensively. Dānišpažūh interpreted pp. 206–239 of the MS as part of the text *Kitāb 'Uyūn al-rasā'il fi funūn al-masā'il*, which he attributed to Rašīd al-Dīn al-Waṭwāt. Consequently, he edited these pages of the manuscript as a text by Rašīd al-Dīn al-Waṭwāt on syllogistics with responses by Ibn Ġaylān [\*137: 294–311]. A comparison with the MS Tokyo, Institute of Oriental Culture, Daiber Collection 11 no. 85, fol. 11<sup>v</sup>–14<sup>r</sup> (cf. Daiber [\*30: 115]), with which Dānišpažūh was not familiar, shows that only pages 206–213 of MS Ṭihrān, Mağlis 599 (edited in [\*137: 294–297] and in [\*95: 80–87]) are al-Waṭwāt's *Risāla fi l-Šakk 'alā qiyās al-ḥulf*. All the remaining text (pp. 213–239) is probably Ibn Ġaylān's response to it.

#### *Šaraf al-Dīn al-Mas'ūdī*

*al-Mabāḥiṭ wa-l-šukūk 'alā l-kitāb al-Išārāt wa-l-tanbīhāt*

*Investigations and Doubts Concerning the Book of Pointers and Reminders*

Other parallel titles of this book are *I'tirāḍāt 'alā l-Išārāt* (*Objections to [the Book of]*

*Pointers*) and *al-Šukūk wa-l-šubah* (*Doubts and Uncertainties*). It is a critical and mostly negative discussion of fifteen dogmas championed by Ibn Sīnā in his book *al-Išārāt wa-l-tanbīhāt* (*Pointers and Reminders*) (cf. the list of the fifteen discussions in Wisnovsky 2013 [\*150: 359], Shihadeh 2014 [\*152: 10], and Shihadeh 2016 [\*155: 55]). It exhibits clear similarities with al-Ġazālī's *Tahāfut al-falāsifa* [\*94], the main difference being that al-Mas'ūdī focusses on a single work by Ibn Sīnā – namely the one that impressed religious scholars in Islam most – and thus established the commentary tradition for *al-Išārāt wa-l-tanbīhāt*, or at least contributed to it significantly. Al-Mas'ūdī's *al-Mabāḥiṭ wa-l-šukūk* is the first transmitted contribution in a long series of commentaries on this work. The text mentions Abū l-Barakāt

al-Baġdādī several times, agreeing with his criticism of Ibn Sīnā. In one instance it makes use of a eulogy for Abū l-Barakāt that is often used with reference to recently deceased persons ([\*113: 215, 11], cf. also Shihadeh 2005 [\*146: 155]). The fifteen questions discussed differ from al-Ġazālī's *Tahāfut al-falāsifa*, in that they are much more technical but not based on a unified strategy of refutation (regarding al-Ġazālī's strategy cf. Griffel 2005 [\*145]). Al-Mas'ūdī discusses Ibn Sīnā's fifteen doctrines in the sequence in which they are presented in *al-Išārāt wa-l-tanbīhāt*, ignoring questions from the part on logic. Five doctrines are drawn from the natural sciences, three of these from psychology; all the others are drawn from metaphysics.

#### 2.4.4 Doctrine and Influence

Ibn Ġaylān al-Balḥī and Šaraf al-Dīn al-Mas'ūdī are presented in research (especially by Shihadeh 2005 [\*146] and Griffel 2009 [\*148: 62–63, 116–120]) as representatives of 'Ġazālism', i.e. a trend in Islamic philosophy of the 6th/12th century that adopted and pursued al-Ġazālī's criticism of Ibn Sīnā (especially in *Tahāfut al-falāsifa* [\*94]). Unlike al-Ġazālī, these two scholars not only consider Ibn Sīnā's doctrine in general but also discuss his individual works. They endeavour to demonstrate that these neither meet the standards al-Ġazālī had set for philosophy, nor those he had set as criteria for all *Muslim* scholars. While Ibn Ġaylān and al-Mas'ūdī are often grouped together, Shihadeh 2005 [\*146: 156] already made clear that Ibn Ġaylān was the more severe critic, and that al-Mas'ūdī immersed himself more deeply in the intellectual world of *falsafa* with the result that his criticism was more discriminating. Besides al-Ġazālī, Abū l-Barakāt al-Baġdādī's (d. c. 560/1165) *al-Kitāb al-Mu'tabar* (*The Carefully Considered Book*) exerted a great influence on both Ibn Ġaylān and al-Mas'ūdī. They both quote it in their main works [\*113: 28. 65. 101. 123; \*118: 215. 217. 224] and support their criticism of Ibn Sīnā with arguments from this book. Thus, they must be regarded as followers not only of al-Ġazālī but also of Abū l-Barakāt al-Baġdādī.

The strategy al-Ġazālī employed in his criticism of Ibn Sīnā is characterised by his acceptance of the outward meaning (*ẓāhir*) of the Muslim revelatory texts (by which he meant the Quran and the corpus of authentic *ḥadīths*) as long as this outward meaning is not contradicted by philosophical teachings that are supported by valid demonstrative arguments (cf. Griffel 2009 [\*148: 97–115]).

Al-Ġazālī's refutation of Ibn Sīnā in his *Tahāfut al-falāsifa* rests on proving that the philosopher is unable to provide apodeictic demonstrations of his positions, for instance in the case of the pre-eternity of the world. In other cases, such as e.g. Ibn Sīnā's doctrine of the afterlife, where he does not even claim to produce demonstrative arguments, his teachings clearly contradict the words of the Muslim revelation. To al-Ġazālī, these words are the standard for every Muslim philosopher, which may be suspended (i.e. interpreted metaphorically) only if a demonstrative argument demands it (cf. Griffel 2005 [\*145]). According to this strategy it is sufficient to show that Ibn Sīnā's teachings have no demonstrative basis or – quite generally – that the great respect enjoyed by his writings is part of a philosophical illusion (*talbīs*) that pretends to be methodologically strict but in truth is not. Many of Ibn Ġaylān's works are dedicated to the task of documenting the weaknesses in Ibn Sīnā's works in order to unmask this illusion. He describes his lost book *al-Tawṭī'a li-l-taḥṭī'a* (*Prolegomenon to the Refutation*), for instance, as a work in which he demonstrates the mistakes that Ibn Sīnā made in his logic [\*113: 11]. In the same place, he writes in a similar vein about a planned commentary on Ibn Sīnā's *al-Iṣārāt wa-l-tanbīhāt*, entitled *al-Tanbīh 'alā tamwīhāt Kitāb al-Tanbīhāt* (*Alluding to the Distortions of the Book of Reminders*) [\*113: 11]. No such work, however, has come down to us. As for Ibn Ġaylān's transmitted works, his philosophical magnum opus *Ḥudūt al-'alam* (*The World's Temporal Origination*) [\*113] is the refutation of a brief text by Ibn Sīnā on the eternal duration of the world, the *Epistle Judging the Arguments of Those Who Claim that the Past has a Beginning at One Point in Time* (*Risālat al-Ḥukūma fī ḥuḡaḡ al-muṭbitīn li-l-māḍī mabda'<sup>an</sup> zamanīyy<sup>an</sup>*). A further work [\*116] is the critical reckoning with the chapter on drugs in Ibn Sīnā's *al-Qānūn fī l-ṭibb* (*The Canon of Medicine*). Michot 1993 [\*139: 296] described Ibn Ġaylān's basic attitude in his approach to Ibn Sīnā's philosophy as an 'anti-philosophical crusade' (*croisade anti-philosophique*); Shihadeh 2005 [\*147: 152] calls it 'negativism to the extreme'. By contrast the two texts transmitted in the ms Tehran, Maḡlis 599, go beyond this Ġazālīan project of refuting Ibn Sīnā. The criticism in *al-Tawṭī'a li-l-taḥṭī'a* appears to have given rise to a discussion with al-Mas'ūdī as well as with the well-known vizier and scholar Raṣīd al-Dīn al-Waṭwāṭ (d. 573/1177–1178 or 578/1182–1183) on individual issues of logic, which is documented in this manuscript [\*114].

Ibn Ġaylān is best known for his philosophical magnum opus [\*113] and the debate with Faḥr al-Dīn al-Rāzī it sparked, which the latter reported in detail [\*102: 59–63, transl. 81–85]. Shihadeh 2005 [\*146: 160–62] and Griffel 2009 [\*148: 116–120] analyse Faḥr al-Dīn's harsh criticism of Ibn Ġaylān's Ġazālism. Faḥr al-Dīn is not satisfied with refuting Ibn Sīnā's arguments. Any satisfactory discussion of a scientific issue must include every transmitted

opinion and debate in detail the reasons in favour of it as well as those against it. In the next generation, Ibn Ġaylān's attitude, linked by Shihadeh [\*146: 161] closely to the 'negative' argumentative strategy of *kalām*, was superseded by Faḥr al-Dīn al-Rāzī's teachings, which distances itself clearly from Ġazālism in this respect. In an autobiographical passage of his main philosophical work [\*113: 10–11], Ibn Ġaylān informs us that he first studied mathematics and geometry in Balḥ before his education at the Niẓāmiyya madrasas in Marv and in Nishapur, and that his studies in jurisprudence, *kalām*, and theology led to his interest in logic and philosophy. Unfortunately, we have no comparably informative passage concerning his contemporary al-Mas'ūdī. We know that he grew up in Marv, where a school for disseminating Avicennan philosophy in Ḥurāsān had become established, centred around the person of al-Lawkarī (cf. § 2.2 above). Al-Mas'ūdī's commentary on Ibn Sīnā's *Glorious Sermon* [\*120] is an interesting document, as the main text displays no signs of the author's critical Ġazālism. Rather, it is an explanatory commentary presenting Ibn Sīnā's doctrine without criticising it. Only at the beginning of the text do we find the following caveat: 'This commentary is [written] in accordance with the methods of philosophy (*ḥikma*), its rules, the methods of its teachings, and its demonstrative arguments. That is not [the same] as what my tongue utters or what is brought forward in my (own) explanation, [meaning] that what I am convinced of in my innermost. For God forbid that we may harbor any conviction contrary to the revealed law (*al-sharī'a*) and that we may have any pretext other than love for it.' [\*110: fol. 2<sup>r</sup>]. The text expresses a great interest in and fascination with Ibn Sīnā's philosophy, but at the same time al-Mas'ūdī does not wish to deviate from that which al-Ġazālī set as the boundaries of Islam.

This basic attitude is also displayed in his main philosophical work, the commentary on Ibn Sīnā's *al-Iṣārāt wa-l-tanbīhāt*. While it is the oldest extant example commentary on this book, we know that at least one other was composed by al-Mas'ūdī's contemporaries. Al-Bayhaqī (d. 565/1169–1170) mentions such a commentary (*ṣarḥ*) in his autobiography (in Yāqūt [\*106: IV 1763]). Furthermore, in his *Ḥudūt al-ālam*, Ibn Ġaylān declares his intention of writing a text entitled *al-Tanbīh 'alā tamwīhāt kitāb al-Tanbīhāt* (*Alluding to the Distortions of the Book of Reminders*) in which he would 'refute all the positions in which Ibn Sīnā diverges from truth' [\*113: 11. 128]. As the two last-named texts have not been transmitted and are not mentioned by al-Mas'ūdī, we cannot say which one was the first commentary on Ibn Sīnā's *al-Iṣārāt wa-l-tanbīhāt*. Unlike later commentaries, al-Mas'ūdī's work is not a collection of comments on particular passages but rather an independent work with fifteen chapters on individual issues mentioned in Ibn Sīnā's book. Wisnovsky 2013 [\*150: 357] called this genre a 'problem-commentary' as distinct from the



so-called ‘system-commentaries’ of later authors. Shihadeh 2016 [\*155: 44–49] called al-Mas‘ūdī’s book an ‘aporetic commentary’, delimiting it from later ‘exegetical commentaries’. Shihadeh’s fundamental study [\*155] investigates individual discussions in al-Mas‘ūdī’s book (nos. 1, 7, 9, 10, 14), reconstructing his criticism of Ibn Sīnā and analysing the degree to which this corresponds with al-Ġazālī’s and Abū l-Barakāt al-Baġdādī’s criticism, or was influenced by them (cf. also the detailed review by Mayer 2016 [\*154]). Shihadeh had already made clear in 2014 [\*153], with reference to the discussion on the non-corporeal nature of prime matter, the degree to which al-Mas‘ūdī is dependent on Abū l-Barakāt. His proximity to al-Ġazālī is illustrated by the way in which he, in the fifteenth discussion [\*118: 287] on Ibn Sīnā’s theory of God’s awareness of Himself and knowledge of His creatures, merely refers to an exhaustive discussion of the topic in al-Ġazālī’s *Tahāfut al-falāsifa*. Even a superficial comparison of the last-named text and al-Mas‘ūdī’s [\*118] shows that the latter engages with Ibn Sīnā’s original wording and doctrines in much greater detail than al-Ġazālī. Al-Ġazālī’s main objective in *Tahāfut al-falāsifa* is the refutation of Ibn Sīnā, which does not include, for instance, a detached and balanced discussion of Ibn Sīnā’s innovative proof of the existence of God. Al-Mas‘ūdī, on the other hand, discusses Ibn Sīnā’s proof of the existence of God from the fourth *namaṭ* of *al-Iṣārāt wa-l-tanbihāt*, distinguishing it from the proof of God’s radical oneness that is also presented there (Ibn Sīnā regarded the two as being closely linked) [\*118: 248–261]. This important distinction will be adopted by al-Mas‘ūdī’s successors, above all Faḥr al-Dīn al-Rāzī. It enables the Avicennans inspired by *kalām* to recognise Ibn Sīnā’s proof of the existence of God as a Necessary Existent, while simultaneously denying the implication intended by Ibn Sīnā, that this being cannot possess attributes that diverge from its essence. Here al-Mas‘ūdī, unlike Ibn Ġaylān, leaves behind the confines of strict Ġazālism, paving the way for Faḥr al-Dīn al-Rāzī to depart from al-Ġazālī’s strategy of refutation.

The influence of Ibn Ġaylān and al-Mas‘ūdī is particularly visible in Faḥr al-Dīn al-Rāzī. In his autobiography Faḥr al-Dīn writes in detail about his study of the two scholars, not holding back criticism or polemic. This ultimately led to a negative image of these two scholars in the Islamic philosophical tradition – an incorrect assessment they, and especially al-Mas‘ūdī, do not deserve. Faḥr al-Dīn al-Rāzī responds to al-Mas‘ūdī’s commentary on *al-Iṣārāt wa-l-tanbihāt* in a separate text [\*104], composed after his influential system commentary on *al-Iṣārāt wa-l-tanbihāt* (pace Shihadeh 2014 [\*152: 2]). In their respective lists of his works, Ibn al-Ša‘‘ār [\*108: VI 110] as well as al-Qifṭī [\*107: 293] also mention a response (*ġawāb*) by Faḥr al-Dīn to Ibn Ġaylān that is unfortunately not available to us. Nāṣir al-Dīn al-Ṭūsī, whose own much-studied commentary to

*al-Iṣārāt wa-l-tanbīhāt* is a reaction to Faḥr al-Dīn's system-commentary, was familiar with the latter's discussions with Ibn Ḡaylān and al-Mas'ūdī. He had access to Faḥr al-Dīn's response to al-Mas'ūdī and quotes it in his commentary, mentioning al-Mas'ūdī's name three times in this context ([\*109: 11 189. 354. 366], analysed in Wisnovsky 2013 [\*150: 370–371]). The reception of Ibn Ḡaylān and al-Mas'ūdī experienced its heyday with Faḥr al-Dīn al-Rāzī, and was subsequently mediated by his texts.

## 2.5 *ʿAbd al-Laṭīf al-Baġdādī*

*Frank Griffel*

2.5.1 Primary Sources – 2.5.2 Life – 2.5.3 Works – 2.5.4 Doctrine – 2.5.5 Influence

### 2.5.1 Primary Sources

Testimonies on his Life, Works, and Influence [\*129–\*139] – Works and Editions [\*140–\*150]

#### *Testimonies on His Life, Works, and Influence*

129 Mošeh ben Maimon [Moses Maimonides] (d. 601/1204). *Dalālat al-ḥā'irīn*. – Ed. by Ḥusayn Āṭāy [Hüseyin Atay]. Cairo, n. d. (c.1985).

130 Yāqūt al-Ḥamawī al-Rūmī (d. 626/1229). *Mu'ğam al-udabā'. Iršād al-arīb ilā ma'rifat al-adīb*. – Ed. by Iḥsān 'Abbās, 7 vols. Beirut, 1993.

131 al-Qifṭī, 'Alī b. Yūsuf (d. 646/1248). *Ta'rīḥ al-ḥukamā' [Iḥbār al-'ulamā' bi-aḥbār al-ḥukamā', Epitome des Muḥammad b. 'Alī al-Zawzanī]*. – Ed. by Julius Lippert, *Ibn al-Qifṭī's Ta'rīḥ al-ḥukamā'*. Leipzig, 1903. – Repr. Frankfurt a.M., 1999.

132 al-Qifṭī. *Inbāḥ al-ruwāt 'alā anbāḥ al-nuḥāt*. – Ed. by M. Abū l-Faḍl Ibrāhīm, 4 vols. Cairo, Beirut 1406/1986.

133 Ibn Abī Uṣaybi'a, Muwaffaq al-Dīn Aḥmad b. al-Qāsim (d. 668/1270). *Uyūn*

*al-anbā' fī ṭabaqāt al-aṭibbā'*. – Ed. by August Müller, 2 vols. Cairo, 1299/1882; Königsberg, 1884. – Ed. and Engl. transl. by Emily Savage-Smith, Simon Swain and Geert Jan van Gelder, *A Literary History of Medicine. The 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā' of Ibn Abī Uṣaybi'aḥ*, 3 vols. Leiden, 2020 [The page numbers of Müller's edition are included in the Arabic text in square brackets].

134 Ibn Ḥallikān, Šams al-Dīn Aḥmad b. Muḥammad (d. 681/1282). *Wafayāt al-a'yān wa-anbā' abnā' al-zamān*. – Ed. by Iḥsān 'Abbās, 8 vols. Beirut, 1968–1977.

135 Ibn al-Fuwaṭī, 'Abd a-Razzāq b. Aḥmad (d. 723/1323). *Mağma' al-ādāb fī mu'ğam al-alqāb*. – Ed. by M. al-Kāzīm, 6 vols. Tehran, 1374/1416, 1995.

136 al-Kutubī, Muḥammad b. Šākir (d. 764/1363). *Fawāt al-wafayāt*. – Ed. by Iḥsān 'Abbās, 4 vols. Beirut, 1973–1974).

137 al-Ḍahabī. *Siyar a'lām al-nubalā'*. – Ed. by Š. al-Arnā'ūṭ, 28 vols. Beirut, 1996.

138 al-Ḍahabī. *Ta'riḥ al-Islām wa-wafayāt al-mašāhīr wa-l-a'lām*. – Ed. by 'U. 'A. Tadmurī Beirut, 1987ff.

139 al-Šafadī, Šalāḥ al-Dīn Ḥalīl b. Aybak (d. 764/1363). *Al-Wāfi bi l-wafayāt*. – Ed. by Hellmut Ritter et al., 32 vols. Istanbul, Beirut, 1929–2013.

### Works and Editions

The following list includes 'Abd al-Laṭīf al-Baġdādī's philosophical works as well as those texts relevant to his life, his philosophical teachings, and their impact. In addition, he composed works in other sciences, among them medicine (cf. Ullmann 1970 [\*167: 170–72] and Pormann, Savage-Smith 2007 [\*182: 60, 73–4]), zoology (cf. Kruk 2008 [\*184]), historiography (cf. von Somogyi 1937 [\*159] and Cahen 1970 [\*166]), jurisprudence (*fiqh*), Quranic commentary (*tafsīr*), Arabic linguistics, and *ḥadīth* science. Work lists of all his writings may be found in Yāqūt [\*130: IV 1572–1573], Ibn Abī Uṣaybi'a [\*137: II 211–213], al-Kutubī [\*136: II 386–388] and al-Šafadī [\*139: XIX 109–111]. Work lists of the transmitted texts in GAL [\*4: I 481 and S I 880–881], in I. E. Videan's introduction to the English translation of [\*149: 6–8 Zand et al.], in Şeşen 1997 [\*31: 578–580], Karabulut 2005 [\*32: II 846], in Kāmil Ġād's introduction to his edition of [\*147: 48–63] and, most complete, in Martini Bonadeo 2013 [\*188: 197–208].

*Works on Metaphysics, the Natural Sciences (except Medicine and Pharmacology), and Philosophy of Science*

140 *Kitāb fi 'Ilm mā ba'd al-ṭab'ra* (*Book on Metaphysics*). – Ed. by Yūnus Aġ'ūn on the basis of the only two textual witnesses in MS Istanbul, Carullah, fol. 140<sup>r</sup>–187<sup>r</sup> and MS Cairo, Dār al-Kutub al-Miṣriyya, Aḥmad Taymūr Paša, *ḥikma* 117, pagination 16–178. Beirut, 1438/2017. – Partial edition of chapters 13–16 concerned with Book Λ of Aristotle's *Metaphysics* with Germ. transl. and commentary by Angelika Neuwirth, 'Abd al-Laṭīf al-Baġdādī's *Bearbeitung von Buch Lambda der Aristotelischen «Metaphysik»*. Wiesbaden, 1978. Cf. the addenda in Gutas 1980 [\*169: 220–222]. – Partial edition of the first chapter concerned with Books α and A of Aristotle's *Metaphysics* in Neuwirth 1977–78 [\*168: 96–100]. – Partial edition of chapter 20 on the *Kitāb fi l-Ḥayr al-maḥḍ* (*Liber de causis*) by Pseudo-Aristotle in Badawī 1955 [\*160: 248–256] and in Martini Bonadeo 2017 [\*190: 293–301]. – Partial edition of chapter 21 concerned with the *Uṭulūġiyā* (*Theology*) of Pseudo-Aristotle in Badawī 1955 [\*161: 199–240]. – Germ. transl. of chapter 18 on 'divine providence' (*'ināya*) in Rosenthal 1965 [\*165: 214–222]. – Engl. transl. of chapter 20 of the *Kitāb fi l-Ḥayr al-maḥḍ* (*Liber de causis*) by Pseudo-Aristotle in Taylor 1984 [\*171].

141 *Kitāb al-Naṣīḥatayn ilā l-nās kāffat<sup>an</sup>* (*Book of Two Pieces of Advice for the Wider Public*). MS Bursa, Hüseyin Çelebi 823, fol. 62<sup>r</sup>–100<sup>v</sup>. – Ed.

by Muḥammad Kāmil Ġād, in *Kitāb al-Naṣīḥatayn li-l-aṭibbā' wa-l-ḥukamā'*. Cairo, 2017. – Partial edition, facsimile reproduction and Engl. transl. of the first part (fol. 62<sup>r</sup>–78<sup>r</sup>) on medicine in Joose 2013 [\*189]. – Detailed Engl. paraphrase and partial transl. of the second part on philosophy in Martini Bonadeo 2013 [\*188: 157–196]. – Paraphrase in Stern 1962 [\*163: 59–66].

**142** *Maqāla fi ḥawāss wa-masā'il tāniya fi l-ḥawāss* (*Treatise on the Senses and Two Questions Concerning Their Function*). In *Maqālatān fi l-ḥawāss wa-masā'il ṭabī'iyya*. – Ed. by Bül Ġaliyūnġi [Paul Ghalioungui] and Sa'īd 'Abduh [Said Abdou]. Kuwait, 1972, 77–89. – Repr. in Ġaliyūnġi 1985 [\*172: 165–175].

**143** *Masā'il ṭabī'iyya* (*Questions Concerning the Natural Sciences*). In *Maqālatān fi l-ḥawāss wa-masā'il ṭabī'iyya*. – Ed. by Bül Ġaliyūnġi [Paul Ghalioungui] and Sa'īd 'Abduh [Said Abdou]. Kuwait, 1972, 93–121. – Repr. in Ġaliyūnġi 1985 [\*172: 177–196].

**144** *Risāla fi Muḡādalāt al-ḥakīmāyn al-kimīyā'i wa-l-naẓarī* (*Epistle on the Debate between the Alchemist and the Philosopher*). MS Bursa, Hüseyin Çelebi 823, fol. 100<sup>v</sup>–123<sup>v</sup>. – Ed. and Germ. transl. by Franz Allemann, *Das Streitgespräch zwischen dem Alchemisten und dem theoretischen Philosophen. Eine textkritische Bearbeitung der Handschrift Bursa, Hüseyin Çelebi 823, fol. 100–123 mit Übersetzung und Kommentar* (Ph. D. dissertation) Universität Bern, 1988. – Paraphrased in Stern 1962 [\*163: 66–67].

**145** *Fuṣūl muntaza'a min kalām al-ḥukamā'* (*Excerpts from the Works of Philosophers*). MS Bursa, Hüseyin Çelebi 823, fol. 132<sup>v</sup>–135<sup>v</sup>. – Ed. with French transl. by Marwan Rashed, “Priorité de l'EIAOΣ ou du l'ENOΣ entre Andronicos et Alexandre: vestiges arabes et grecs inédit.” *Arabic Sciences and Philosophy* 14 (Cambridge 2004): 9–63.

**146** *al-Baḥṭ 'an māhīyyat al-makān bi-ḥasab ra'y Ibn al-Hayṭam* (*Inquiry into the Essence of Space According to Ibn al-Hayṭam's Opinion*). MS Bursa, Hüseyin Çelebi 823, fol. 23<sup>v</sup>–27<sup>v</sup> and 39<sup>r</sup>–52<sup>r</sup>. – Alternative title: *Fī l-Radd 'alā Ibn al-Hayṭam fī l-makān* (*Refutation of Ibn al-Hayṭam's Opinion of Space*), thus in Ibn Abī Uṣaybi'a [\*133: II 213]. – Ed. and French transl. by Roshdi Rashed, *Les mathématiques infinitésimales du IX<sup>e</sup> au XI<sup>e</sup> siècle*, vol. 4. London, 1993–2006, 908–953. – Cf. also El-Bizri 2007 [\*180: 57–80].

#### *Relevant Works in Other Sciences*

**147** *al-Awrāq allatī 'amiltuhā 'alā kitāb Muḥammad b. 'Umar al-ma'rūf bi-Ibn Ḥaṭīb al-Rayy alladī 'amilahū 'alā ba'd al-ġuz' al-awwal min Kitāb al-Qānūn wa-ḥuwa al-mulaqqab bi-kulliyāt* (*Pages Composed by Me, Regarding a Commentary by Faḥr al-Dīn ar-Rāzī on the First Part of [Ibn Sīnā's] 'Canon', also Known as 'The Universals'*). MS Bursa, Hüseyin Çelebi 823, fol. 1<sup>v</sup>–19<sup>v</sup> and 28<sup>r</sup>–34<sup>r</sup>. – Described in Stern 1962 [\*163: 57–58] and Martini Bonadeo 2013 [\*188: 200–201].

**148** *Qawl li-'Abd al-Laṭīf b. Yūsuf 'alā ḥāl Ibn Ḥaṭīb al-Rayy fī tasfīr sūrat*

*al-ihlāṣ* (What 'Abd al-Laṭīf al-Baġdādī said on the Value of *Faḥr al-Dīn al-Rāzī's* Commentary on the 'Sura of Sincerity' [Q 112]). MS Bursa, Hüseyin Çelebi 823, fol. 34<sup>r</sup>–38<sup>r</sup> and 20<sup>r</sup>–23<sup>r</sup>. – Described in Stern 1962 [\*163: 57–58] and Martini Bonadeo 2013 [\*188: 201–202].

149 *Kitāb al-lfāda wa-l-i'tibār fī l-umūr al-mušāhada wa-l-ḥawādīṭ al-mu'ayyana bi-arḍ Miṣr* (Book of Instruction and of the Lessons Learnt from the Things and Events Observed and Recorded in the Land of Egypt). – Ed. by 'Alī Muḥsin 'Īsā Mālallāh, Baghdad, 1987. – Germ. transl. by S.F. Günther Wahl, *Abdallatif's, eines arabischen Arztes Denkwürdigkeiten Egypts ... Aus dem Arabischen übersetzt und erläutert*. Halle, 1790. – Engl. transl. by Kamal Hafuth Zand et al.,

incl. a facsimile reproduction of the holograph MS Oxford, Bodleian Library, Pococke 230, *The Eastern Key. Kitāb al-lfādah wa-l-i'tibār of 'Abd al-Laṭīf al-Baġhdādī*. Cairo, London, 1964. – French transl. by M. Silvestre de Sacy, *Relation de l'Égypte, traduit et enrichi de notes historiques et critiques*. Paris, 1810. Repr. Frankfurt, 1992. – Lat. transl. by Edward Pococke the Younger, *Abdallatiphi historiae Aegypti compendium*. Oxford, n.d. (c.1702), 2nd revised ed. by John White. Oxford, 1800.

150 *Šarḥ taqdimat al-ma'rifa* (Commentary on the 'First Premise of Knowledge' by Hippocrates), MS Istanbul, Köprülü 885, fol. 96<sup>r</sup>–130<sup>r</sup>. – Brief description in [\*29: 1 437].

## 2.5.2 Life

Muwaffaq al-Dīn Abū Muḥammad 'Abd al-Laṭīf b. Yūsuf al-Baġdādī was a scholar active in many fields of knowledge who produced, among other works, an important treatment of Aristotle's *Metaphysics*. While contemporaries and later authors usually call him 'Muwaffaq al-Dīn 'Abd al-Laṭīf', his contemporary Yāqūt writes that 'by his descent' (*qadīm<sup>an</sup>*) he was also known as 'Ibn al-Labbād' [\*130: IV 1571], which ought to be interpreted as a family name similar to 'Ibn Ruṣd'. As the author of books on history, he is called 'Ibn al-Labbād' to this day (cf. Jackson 2017 [\*192: 16. 20]). 'Abd al-Laṭīf composed a most informative but unfortunately lost historical chronicle. Excerpts, especially on the history of the Mongols and their invasions into Transoxania and Iran beginning in 616/1219, are transmitted in al-Ḍahabī's chronicle [\*138] for the years 575–617 AH (von Somogyi 1937 [\*159] and Cahen 1970 [\*166]).

'Abd al-Laṭīf composed at least two autobiographies with a wealth of detail (a lost, third, one is probably quoted by his pupil Ibn Ḥallikān [\*134: IV 76–77]), with the result that we are uncommonly well-informed about his life. The first autobiography is transmitted in the context of the biographical entry dedicated to him in Ibn Abī Uṣaybi'a's *Uyūn al-aḥbār fī ṭabaqāt al-aṭṭiba'* (*The Sources of Information about the Generations of Physicians*) [\*133: II 202, 20–207, ult.], and is probably part of his lost chronicle. The significance of this autobiography

was recognised as early as 1808 by Mousley, who edited it as well as translated it into Latin and annotated it [\*157], and by de Sacy, who edited the text anew in 1810, also translating it into French and annotating it [\*149: 457–494. 534–548 de Sacy]. Martini Bonadeo 2013 [\*189: 111–137] translates Ibn Abi Uṣaybi'a's entry into English and provides a commentary. Further partial translations and relevant secondary sources can be found in Gibb 1927 [\*158], Makdisi 1981 [\*170: 88–91], Allemann 1988 [\*138: 12–26]), Toorawa 1996 [\*175], 1997 [\*176], 2004 [\*178], and 2005 [\*179], and in Toorawa's translation in Reynolds 2001 [\*177: 156–164].

The second autobiography is included in 'Abd al-Laṭīf's *Kitāb al-Naṣīḥatayn* (*Book of Two Pieces of Advice*) [\*141: 149–157] and corresponds in many respects – but not entirely – to the first. The *Kitāb al-Naṣīḥatayn* is transmitted in a unique manuscript, produced under the author's instructions in Erzincan in 622/1225 and preserved in the İl Halk Kütüphanesi in Bursa, Turkey (MS Hüseyin Çelebi 823) today. The MS, which contains ten works by 'Abd al-Laṭīf and one by Alexander of Aphrodisias, has been described by Stern 1962 [\*163: 55–70], Dietrich 1964 [\*164: 85–148], and Martini Bonadeo 2013 [\*188: 144–145. 200–208]. The text of the *Kitāb al-Naṣīḥatayn* is divided into two parts, a medical and a philosophical one. At the end of the second, philosophical part, the author includes a critical discussion of the works of Ibn Sīnā, beginning with a description of his own philosophical education as well as that of his father Abū l-'Izz Yūsuf b. Muḥammad al-Mawṣilī (concerning him cf. Toorawa 2004 [\*179: 93]), who according to Ibn Abi Uṣaybi'a [\*133: 1280] was a student of Abū l-Barakāt al-Baġdādī's (d. c. 560/1165). An English translation of this autobiographical part of the *Kitāb al-Naṣīḥatayn* is included in Martini Bonadeo 2013 [\*188: 173–181]. Further information on 'Abd al-Laṭīf's biography may be found in his own epitome [\*149] of the lost *Kitāb Aḥbār Miṣr al-kabīr* (*The Long Book about Egypt*), mentioned in the catalogues of his works by al-Ṣafadī [\*139: XIX 109] and al-Kutubī [\*136: II 386], as well as in the biographies by Yāqūt [\*130: IV 1571–1573], al-Qiftī [\*132: II 195–196], Ibn al-Fuwaṭī [\*135: v 625–626], al-Kutubī [\*136: II 385–388], al-Dahabī [\*137: XXII 320–323], [\*138: XXXV: 353–358], and al-Ṣafadī [\*139: XIX 107–115]. The biography of 'Abd al-Laṭīf al-Baġdādī gleaned from this information has been presented chronologically by Toorawa 2004 [\*179: 63–65].

'Abd al-Laṭīf was born either in Rabī' I or Rabī' II 557 (February–April 1162) in Baghdad into a family of Šāfi'ī scholars connected with the Nizāmiyya madrasa. The family came originally from Mosul; his grandfather appears to have moved to Baghdad from there. 'Abd al-Laṭīf's early education took place in Baghdad where he concentrated above all on studying the religious and linguistic sciences. He enrolled at the Nizāmiyya madrasa in Baghdad at an early

age, studying tradition and legal sciences as well as the basics of Arabic philology [\*133: 11 203–204]. He developed an interest in medicine and philosophy, studying the works of al-Ġazālī and Ibn Sīnā. At this time, he was impressed by Ibn al-Tātalī (d. 587/1191) who had fled from al-Andalus to Baghdad; he introduced ‘Abd al-Laṭīf to the arts of alchemy and of talismans. Later ‘Abd al-Laṭīf met him again in Damascus and developed a passionate dislike of these sciences (Allemann 1988 [\*144: 13–18]).

In 585/1189 ‘Abd al-Laṭīf moved to Mosul in search of good teachers, joining the philosopher and mathematician Kamāl al-Dīn Ibn Yūnus (d. 639/1242) and like him becoming fascinated with the teachings of al-Suhrawardī (d. c. 587/1192). He planned to study under the latter in Aleppo, but dismissed the idea after studying some of his works (Allemann 1988 [\*144: 16. 108–109, Ar. 35–36]). Disillusioned with Ibn Yūnus as well as with al-Suhrawardī, he moved on to Damascus the following year, continuing his studies under the leading scholars of that city. His search for a suitable teacher of philosophy led him from Damascus to Jerusalem and in the summer of 587/1191 into the camp of the Ayyūbid sultan Ṣalāḥ al-Dīn [Saladin], whose army besieged the armies of the Third Crusade under Richard I encamped before Acre. Here ‘Abd al-Laṭīf encountered the famous scholars Ibn Šaddād (d. 632/1235), ‘Imād al-Dīn al-Kātib al-Iṣfahānī (d. 597/1201), and al-Qāḍī al-Fāḍil (d. 596/1200), who worked in Ṣalāḥ al-Dīn’s administration and at his court. Al-Qāḍī al-Fāḍil decided to send ‘Abd al-Laṭīf back to Damascus with a stipend, but the latter insisted on going to Cairo where he hoped to find a better education in philosophy. One of the three philosophical scholars whose reputation drew ‘Abd al-Laṭīf to Cairo was the Jewish philosopher Moses Maimonides (d. 601/1204). ‘Abd al-Laṭīf called on him but was disappointed by his political ambitions, by his close and time-consuming cooperation with the Ayyūbid administration, and by his philosophical and theological magnum opus *Dalālat al-ḥā’irīn* (*Guide for the Perplexed*). In ‘Abd al-Laṭīf’s view, this was a ‘bad book’ (*kitāb sū’*) which, albeit well-intentioned, corrupted theology and the tenets of faith (*uṣūl al-šarā’i’ wa-l-aqā’id*) [\*133: 11 205–206]. In the end ‘Abd al-Laṭīf found his philosophical teacher in another of the three scholars in Cairo, Abū l-Qāsim al-Šārī’ī (d. c. 595/1198), whose identity ultimately remains a mystery. While de Sacy’s suggestion of 1810 [\*149: 490 de Sacy] that he was in fact Abū l-Qāsim Hibatallāh al-Būširī (d. 598/1201) (regarding him cf. Ibn Ḥallikān [\*134: vi 67–68] and al-Dahabī [\*138: xxxxi 375–377]) was adopted by many scholars over the years, improved access to sources has led to the discovery of at least nine contemporaries of ‘Abd al-Laṭīf’s who bear the *nisba* ‘al-Šārī’ī, most of them members of scholarly families in Cairo, and two among them also bearing the *kunya* Abū l-Qāsim (cf. the indices of al-Dahabī’s volumes dedicated to

the years 591–630 [\*138]). Neither al-Būṣīrī nor the known bearers of the *nisba* ‘al-Šārī’ī were known for their philosophical scholarship, and it would seem that Abū l-Qāsim al-Šārī’ī was a Cairo scholar and a member of one of the families known as ‘al-Šārī’ī but who, as he did not choose a religious career, was ignored by the historians. ‘Abd al-Laṭīf describes Abū l-Qāsim al-Šārī’ī as an excellent teacher of philosophy who admired above all the works of ‘the ancients’ (*al-quḍamā*) [\*133: II 206,6] as well as those of al-Fārābī, while not having great respect for Ibn Sīnā. ‘Abd al-Laṭīf’s own philosophical education had led him to the erroneous conclusion, he admits, that ‘Ibn Sīnā possessed all of philosophy, and that his works filled it out entirely’ [\*133: II 206,7–8]. Under Abū l-Qāsim al-Šārī’ī’s guidance, this would change, and like his teacher, ‘Abd al-Laṭīf developed a dislike of Ibn Sīnā and his followers (above all Faḥr al-Dīn al-Rāzī), turning instead to the Greek authors (primarily Aristotle) and to al-Fārābī whom he esteemed as the only true follower of Aristotle among the Arabic authors.

After the Ayyūbids were defeated at the Battle of Acre, ‘Abd al-Laṭīf returned to Jerusalem in the autumn of 588/1192, where he met Ṣalāḥ al-Dīn in person, who awarded him a generous stipend linked to a teaching position at the Umayyad Mosque in Damascus. For a few years ‘Abd al-Laṭīf remained in the service of the Ayyūbid sultans al-Afḍal (r. 582–592/1186–1196) and al-‘Ādil (r. 596–615/1200–1218), which resulted in his occupying teaching positions, sometimes over several years, at madrasas and mosques in Cairo, Jerusalem, and Damascus, including the al-Aqṣā mosque in Jerusalem and the al-Azhar madrasa in Cairo. Here, ‘Abd al-Laṭīf witnessed a famine and epidemic in 597–598/1201–1202, which he described most vividly in his book on Egypt [\*149: 222–269 Zand et al.]. Subsequently he went to Jerusalem, and in the years 600–608/1204–1212 he taught in Damascus, including at the ‘Azīziyya madrasa. In the spring of 608/1212, he went to Aleppo, another city under Ayyūbid rule, where he remained for several years before accepting positions in Erzincan and Erzurum in Anatolia, where he benefited from the support of the Rum Seljuks and the petty princes dependent on them. Other locations he visited in Anatolia are Kemah, Divriği, and Malatya, before he returned to Aleppo in 625/1229, where he settled as a private teacher of medicine, natural sciences, *ḥadīth*, and grammar until shortly before the end of his life. In the autumn of 628/1231, ‘Abd al-Laṭīf decided to go on pilgrimage to Mecca (according to al-Qifṭī [\*132: II 196,6]) and travelled from Aleppo to Baghdad, where he presented some of his works to the caliph al-Mustanṣir (r. 623–640/1226–1242). Here in Baghdad, he died at the age of 69 on 12 Muḥarram 629 / 9 November 1231. Ibn Abī Uṣaybi’a mentions a son of ‘Abd al-Laṭīf’s named Ṣaraf al-Dīn Yūsuf [\*133: II 211,28]. No other descendants are known.



In many respects ‘Abd al-Laṭīf al-Baġdādī was a typical polymath of the transition years to the post-classical period of Islam, mastering the religious as well as the rational sciences, while distinguishing himself by loyalty, rare at the time, to the works of the Greeks and select scholars of the *falsafa* movement, above all to al-Fārābī. His insatiable desire for a high-quality education in many branches of the sciences was typical, inspiring his early travels to Syria and Egypt. He himself writes [\*133: II 204,2] that one of his early teachers in Baghdad awakened in him a ‘longing for every kind of knowledge’ (*ṣawq ilā al-‘ulūm kullihā*). Toorawa 1997 [\*176] emphasises the sexual undertone that accompanies the search for and ultimate discovery of the exemplary teacher and (male) companion Abū l-Qāsim al-Šārī‘ī in ‘Abd al-Laṭīf’s autobiographies. Also typical was his later activity at madrasas and mosques, with frequent changes of location due to the great dependence of these institutions on political patronage. ‘Abd al-Laṭīf saw himself above all as an academic teacher of medicine and the religious sciences, who never practised as a physician or a religious expert (Joose 2011 [\*186]) but still had the confidence to criticise individual physicians (cf. Joose and Pormann 2010 [\*185: 16, 28] and Joose 2007 [\*181]) or Quranic commentators (cf. his work [\*148]) most scathingly. His contemporary al-Qifṭī from Aleppo reports that towards the end of his life, ‘Abd al-Laṭīf attempted ‘to make a living from medicine’ but was not successful ‘because he was not [sufficiently] versed in it’ [\*132: II 196,5].

He is notable for the methodological severity he applied to all branches of knowledge that attracted his attention. Thus, for instance he spoke out against alchemy throughout his life, regarding it as well as other occult sciences as pure charlatanism [\*144] (see also Joose 2008 [\*183]). Combined with a most conservative attitude to the philosophical sciences, directed above all against two authors popular among his contemporaries, namely Ibn Sīnā and Faḥr al-Dīn al-Rāzī (on the latter see his works [\*147] and [\*148]), this earned him not only personal enmity (cf. ‘Influence’ below) but also a considerable degree of respect among the younger generation of rationalist scholars. While this admiration is clear in, e.g., Ibn Abī Uṣaybi‘a’s commentaries on ‘Abd al-Laṭīf’s life [\*133: II 201–213], it did not lead, either in his own or in later generations, to a shift away from Ibn Sīnā.

### 2.5.3 Works

*Kitāb Mā ba’d al-ṭabī‘a*  
*Book of Metaphysics*

‘Abd al-Laṭīf’s main philosophical work is a presentation updating the teachings in Aristotle’s *Metaphysics* as well as four other books

by Greek authors on metaphysics. ‘Updating’, because it frequently refers to commentaries by later authors, especially Alexander of Aphrodisias, Themistius, and al-Fārābī, and takes up metaphysical teachings that were developed by authors of the Arabic tradition,

including works by Ibn Sīnā. The work is divided into twenty-two chapters (*fuṣūl*) each of which focusses on an individual text, presenting its teachings and incorporating them into 'Abd al-Laṭīf's own understanding of metaphysics. Chapters 1–12 are dedicated to the chapters of Aristotle's *Metaphysics*, with the exception of Book Λ, which is investigated in chapters 13–16. Chapters 17–19 discuss Alexander of Aphrodisias' *On Providence* without, however, naming the author. Chapter 20 is dedicated to the anonymous Arabic paraphrase from the works of Proclus known as *Liber de Causis* or in Arabic *Kitāb al-Ḥayr al-maḥd* (*Book of the Pure Good*), frequently attributed to Aristotle. Chapter 21 also discusses an anonymous paraphrase of 20 propositions from Proclus' *Institutio theologica* as well as five fragments by Alexander of Aphrodisias. Chapter 22 is an epitome of *Uṭlūḡiyyā* (*Theology*), an Arabic compilation from Plotinus' *Enneads* IV–VI which are pseudepigraphically attributed to Aristotle as well (concerning this programme cf. Neuwirth 1976 [\*140: \*1–\*2] and Martini-Bonadeo 2013 [\*188: 217–268]).

*Kitāb al-Naṣīḥatayn ilā l-nās kāffat<sup>an</sup>*  
*Book of the two Pieces of Advice for the Wider Public*

The text of the *Kitāb al-Naṣīḥatayn* was composed between 614/1217 and 622/1225 either in Aleppo or in Anatolia (cf. Joose 2013 [\*189: 9], who does not consider that the book ([\*141: 105,11 Ġād] and Joose 2013 [\*189: Ar. 103, Engl. 74]) mentions the year 614 AH) and consists of two parts of approximately equal length, one on medicine and one on philosophy. In each of the two parts, 'Abd al-Laṭīf has a core 'piece of advice' (*naṣīḥa*) for his readers. The book begins with the medical part ([\*141: 91–125 Ġād] and Joose 2013 [\*189]), in which 'Abd al-Laṭīf criticises contemporary physicians and their treatment methods, contrasting them with Hippocrates and Galen as positive ideals. One of the latter's works (*De sectis*) is 'Abd al-Laṭīf's source for the division of medical men into three groups, each

determined by their respective method of diagnosing and treating illnesses. These are the 'methodists' (*aṣḥāb al-ḥiyāl*), 'empiricists' (*aṣḥāb al-taḡriba*), and the 'rationalists' (*aṣḥāb al-qiyās*). Being an Aristotelian, 'Abd al-Laṭīf felt most attracted by the last of these groups, but he does admit the advantages of the other two. 'Our contemporaries belong to none of these three groups, ... instead trusting to luck and coincidence, just as a blind man shoots [an arrow] without knowing where the target is' (Joose 2013 [\*189: Ar. 100, Engl. 71]). The correctly trained physician may occasionally err in minor details, but will be right in hundreds of cases, just like a good archer who will hit the target frequently, his arrows never going completely in the wrong direction (Joose 2013 [\*189: Ar. 97, Engl. 66]). Besides these deliberations on the method of the medical sciences, in the first part of the book 'Abd al-Laṭīf also warns against teaching medicine based merely on theory and without practical experience, and against administering laxative without the necessary knowledge (Joose, Pormann 2010 [\*185: 7]). 'Abd al-Laṭīf's polemic in this text is clearly informed by economic considerations and also misogyny, when he calls lay physicians – among whom there were many women, he says – 'aliens' (*ḡurābā'*) and 'parasites' (*mustarziqa*), i.e. people who prosper at the expense of others, in this case the correctly trained physicians (Joose, Pormann 2010 [\*185]).

'Abd al-Laṭīf takes a similar approach in the second part on philosophy ([\*141: 129–176 Ġād], cf. Martini-Bonadeo 2013 [\*188: 157–196]), although he does not distance himself from an entire profession here but merely from the members of one scholarly tradition. He criticises philosophers of the Islamic world, first and foremost Ibn Sīnā, contrasting him with the positive ideal of Plato and 'his pupil' Aristotle [\*141: 147,9 Ġād]. 'Abd al-Laṭīf's advice is thus in both instances to dismiss the Arabic authorities in medicine and philosophy, whom his contemporaries held in high esteem, and instead return to the Greeks. Authors who wrote in Arabic, such as al-Fārābī, are considered in a positive

light only if they contribute to the faithful transmission of Greek authors in their works. After presenting the merits of Plato and Aristotle, 'Abd al-Laṭīf devotes the second part to a critique of Ibn Sīnā's works, beginning this last section of the *Kitāb al-Naṣīḥatayn* with an autobiographical account of his own philosophical education as well as that of his father ([\*141: 149–157 Ğād], transl. by Martini-Bonadeo 2013 [\*188: 173–180]). The objective of this insertion is ultimately to explain how in his younger days 'Abd al-Laṭīf could have arrived at the erroneous belief that Ibn Sīnā, as he puts it in his other autobiography, 'possessed

all of philosophy, and that his works filled it out entirely' [\*133: 11 206,7–8]. The autobiographical account in the *Kitāb al-Naṣīḥatayn*, which mentions a multitude of Arabic authors and their works, together with the parallel text in the autobiography in Ibn Abī Uṣaybi'a [\*133: 11 202–207], is very valuable for our knowledge of the philosophical education as well as the books studied in Baghdad, Mosul, Damascus, and Cairo in the second half of the 6th/12th century, and should be evaluated accordingly (something first undertaken in Gutas 2011 [\*187]).

#### 2.5.4 Doctrine

'Abd al-Laṭīf al-Baġdādī's *Kitāb al-Naṣīḥatayn* may be seen as the manifesto of his medical and philosophical doctrine. In both fields he clearly and eloquently advocates a return to the Greek founders of these sciences, acknowledging the value of Arabic authors only if he is convinced that they closely follow the 'ancients' (*al-qudamā*). In this regard, 'Abd al-Laṭīf's oeuvre must be understood as a reaction to the increasing 'appropriation' and subsequent 'naturalisation' of the Greek sciences within Arabic–Islamic culture, postulated by A.I. Sabra in 1987 [\*174]. The protagonists of this process in philosophy were above all Ibn Sīnā and al-Ġazālī, both of whom are criticised harshly in the *Kitāb al-Naṣīḥatayn*. While al-Ġazālī is regarded as hardly more than a bad imitator of Ibn Sīnā ([\*141: 152–153, 165–166 Ğād], but see the positive commentary in [\*144: Ar. 35, Germ. 107–108]), Ibn Sīnā is seen as the root of all evil in the sciences during 'Abd al-Laṭīf's lifetime, his work being denounced over many pages of the second part of the work where he is referred to as, among other things, the archetype of the 'worthless philosopher' (*al-faylasūf al-bāṭil*) [\*141: 174,6 Ğād]. 'Abd al-Laṭīf accuses Ibn Sīnā of a superficial and ultimately sloppy method that ignores the order of philosophical questions set by Aristotle and al-Fārābī, omits important subjects such as ethics, and includes frequent repetitions. The last part of the *Organon* (from the *Posterior Analytics* to the *Rhetoric*) in particular was presented entirely unsatisfactorily by Ibn Sīnā, who fell far short of Aristotle and al-Fārābī. Furthermore, he set a bad example with his lifestyle that included drinking alcohol and promiscuity, bringing philosophy into disrepute. 'Abd al-Laṭīf considered Ibn Sīnā unscientific and immoral, accusing him moreover of having acted irresponsibly by introducing to philosophy many whose intellectual powers were not sufficient and who did not have the correct religious foundations (cf. the analysis

of the criticism in Allemann 1988 [\*144: 22–24. 58]). ‘Abd al-Laṭīf contrasts the inferior Arabic scholars with the ideal of Plato and ‘his pupil’ [\*141: 147,9 Ġād] Aristotle, although he was not able to consult them in the original Greek. While Aristotle’s works were available to him in their entirety in Arabic translations, ‘Abd al-Laṭīf endeavoured to reconstruct Plato’s teachings from texts by al-Fārābī ([\*141: 132–137 Ġād], cf. Martini-Bonadeo 2013 [\*188: 158–163]). At the centre of ‘Abd al-Laṭīf’s philosophical interest was Aristotle whom he regarded, together with Plato and al-Fārābī, as the ideal of the ‘true philosopher’ (*al-faylasūf bi-l-ḥaqīqa*) [\*141: 172,16. 174,12 Ġād].

In his review of Neuwirth’s partial edition of [\*140], Gutas 1980 [\*169: 219] vehemently rejected the verdict that ‘Abd al-Laṭīf was not an original thinker, and that his book on metaphysics was worth considering only under the aspect of its transmission of Greek ideas. Martini-Bonadeo’s detailed study of 2013 [\*188] confirmed the originality of this work. While it is formally an ‘adaptation’ (*Bearbeitung*, as Neuwirth 1976 [\*140] puts it) of Aristotle’s text together with Arabic translations of Plotinus and Proclus which in the Arabic tradition were attributed pseudepigraphically to Aristotle, ‘Abd al-Laṭīf also presents his own interpretation of these metaphysical texts. This deliberately follows a select group of interpreters of Aristotle’s *Metaphysics*, expressed in lengthy quotations from texts by Alexander of Aphrodisias, Themistius, and al-Fārābī. As the two last-named authors teach Aristotle from a Neo-Platonic point of view, they affirm ‘Abd al-Laṭīf’s Neo-Platonic understanding of the Stagirite, informed not least by pseudepigraphic texts based on Plotinus and Proclus.

As his criticism of Ibn Sīnā’s *Organon* shows, ‘Abd al-Laṭīf assumes that philosophy is divided into different topics or tasks which an author can execute more or less successfully. This understanding of philosophy is closely linked to Andronicus of Rhodes’ (1st cent.) structure of Aristotle’s works and assumes that a philosopher will present the topics connected to Aristotle’s individual works comprehensively and as systematically as possible. ‘Abd al-Laṭīf endeavours to present his readers with everything that comprises the subject of ‘metaphysics’ (*mā ba’d al-ṭabī’a*) based on the works of select authors. The subject matter is determined by Aristotle’s book on metaphysics. Influenced by al-Fārābī, ‘Abd al-Laṭīf considers metaphysics to be the study of three topics, firstly: existence and its accidents (discussed in the first four chapters of ‘Abd al-Laṭīf’s book), secondly: the principles of science, above all definition and demonstrative proof (chapters 5–11), and finally (chapters 13–22) the hierarchy of all material and immaterial substances, culminating in ‘Abd al-Laṭīf’s doctrine of God and his relationship with the world (Zimmermann 1986 [\*173: 181], Martini Bonadeo 2013 [\*188: 268–293]).

‘Abd al-Latīf’s presentation is based on the Arabic translations of a series of Greek texts accessible to him in the form of five Arabic books. The first of these is Aristotle’s *Metaphysics*, then *De providentia* by Alexander of Aphrodisias (d. c. 200), finally the anonymous Arabic paraphrase from the works of Proclus (d. 485) known as *Liber de Causis* or in Arabic *Kitāb al-Ḥayr al-maḥḍ* (*Book of the Pure Good*), a further paraphrase from Proclus’ *Elements of Theology* together with five works of Alexander’s, which ‘Abd al-Latīf calls *Fī Utūlūḡiyyā* (*On Theology*), and finally the *Utūlūḡiyyā* (*Theology*), an Arabic compilation from Plotinus’ (d. c. 270) *Enneads* IV–VI. As many of these texts begin with the words *qāla l-ḥakīm* (‘the philosopher says’), Neuwirth concluded that ‘Abd al-Latīf regarded all five as works by Aristotle (1976 [\*140: \*2–\*3]). Zimmermann 1986 [\*173: 180–181] disagrees, pointing out that other Arabic scholars had provided correct ascriptions, so that we should assume that ‘Abd al-Latīf was aware that not all these texts were by Aristotle. Even so, ‘Abd al-Latīf attempts to harmonise them, and ‘the philosopher’ should be read as an archetype of true philosophical scholarship. Even if the texts are not by Aristotle himself, to ‘Abd al-Latīf they represent an ‘Aristotelian’ canon which should be familiar to anyone who wishes to study metaphysics (*mā ba’d al-ṭabī‘a*). ‘Abd al-Latīf deliberately takes distance from Arabic authors, referring only to Greek works. However, his understanding of philosophy is informed by the working method of classical Arabic authors, foremost among them al-Fārābī, who stayed fairly close to the subjects and the sequence of Aristotle’s works. We do not find in ‘Abd al-Latīf the post-classical structuring of philosophy that diverged from this sequence, as in for instance the *Kitāb al-Mulaḥḥaṣ* of ‘Abd al-Latīf’s older contemporary Faḥr al-Dīn al-Rāzī (d. 606/1210).

In his rejection of Ibn Sīnā’s philosophy and his endeavour to return to the Greek Aristotle, ‘Abd al-Latīf may be compared to Ibn Ruṣd (d. 595/1198) who was active a generation before him in al-Andalus; however, ‘Abd al-Latīf was not familiar with the latter’s works. Unlike Ibn Ruṣd in his approach to Aristotle, ‘Abd al-Latīf could not free himself from the Neo-Platonic interpretation that had considerably determined the Arabic reception of Aristotle ever since the 3rd/9th century. The main reason was that unlike e.g. Ibn Ruṣd, ‘Abd al-Latīf had studied Neo-Platonic texts intensively, some of which circulated as pseudepigraphs of Aristotle and were composed in the early period of this reception. In this respect, ‘Abd al-Latīf followed his model al-Fārābī who also strove to harmonise Aristotle and Plato. Fritz Zimmermann (1986 [\*173: 184]) pointed out that ‘Abd al-Latīf, similar to many Arabic scholars, adopted the understanding of al-Kindī’s circle according to whom works such as the pseudepigraphic *Utūlūḡiyyā* (*Theology*) were to be understood as a ‘complement’ to Aristotle’s *Metaphysics*, even though they might not be by that author

himself. According to Zimmermann (1986 [\*173: 130–131]), the fact that ‘Abd al-Latīf included a multitude of post-Aristotelian theological texts in his ‘adaptation’ of the *Metaphysics* may be the result of these having been regarded as a unity from the 3rd/9th century onwards; informally they may be described as ‘al-Kindī’s metaphysics file’.

In his philosophical theology ‘Abd al-Latīf follows the Neo-Platonic interpreters, understanding Aristotle’s ‘unmoved mover’ in chapters 6–9 of Book Λ of the *Metaphysics* as a creator God who caused the world to exist without this act of causation having a beginning in time (Martini Bonadeo 2017 [\*190: 286–290]). ‘Abd al-Latīf understands this creator God in the tradition of Aristotle’s late antique interpreters as a ‘first principle’ (*al-mabda’ al-awwal*) that is necessarily one, free of composition. Starting with Aristotle’s *Metaphysics* (1074b33–1075a10), ‘Abd al-Latīf describes this first principle as an intellect that grasps itself intellectually and whose ‘knowledge’ is thus not subject to any composition (Martini Bonadeo 2017 [\*191: 486–487]). In this he opposes Ibn Sīnā’s understanding of God’s knowledge as comprising the ‘universals’ (*kullīyāt*), namely the genera of things and their essential characteristics, and adopts Themistius’ interpretation of God’s knowledge as non-composite and unified (Martini Bonadeo 2017 [\*190: 272–275]). In his efforts at harmonising Aristotle’s *Metaphysics* with other Neo-Platonic sources, ‘Abd al-Latīf teaches that the unmoved mover is the first principle, the first cause, cause of causes, the only true cause, the One, the pure good, and the First Intellect, not mentioning the occasionally divergent teachings in ‘Abd al-Latīf’s sources. Like Ibn Sīnā, ‘Abd al-Latīf teaches that the first principle possesses no form (*ḥilya*) and consequently no essence and no quiddity, instead it is pure existence (*annīya*) without attributes that might go beyond pure existence ([\*140: 256, 258 Aġ’ūn], cf. Martini Bonadeo 2017 [\*190: 275, 280]). In this he once again disagrees with Faḥr al-Dīn al-Rāzī and his interpretation that even the philosophers’ God must have an essence (*dāt*) that must be different from its existence (*wuġūd*).

The unmoved mover, ‘Abd al-Latīf says in chapter 13 of his book on metaphysics [\*140: 199 Aġ’ūn, 17 Neuwirth], ‘is the first cause (*sabab*) of all existing things, being the cause in the first intention (*bi-qaṣd awwal*) for some, and in the second intention (*bi-qaṣd tānin*) for others.’ In the first case, the first principle intends its effects and causes them, while in the second the effect is implied but not intended. Objects God creates in the first intention are his immediate effects, the celestial souls; all further effects are consequences of these. God’s comprehensive care (*ināya*) for the world is thus only an effect at the level of second intention. This distinction ensures that the first principle exercises comprehensive care for the world but does not act for the sake of anything else, i.e. has no final cause. God ‘wills’ (*murīd*) in just the sense that

his actions result in ‘the order of the world and its welfare’ (*nizām al-‘ālam wa-salāmatuhu*), but it is not intended by him ([\*140: 243 Aḡ‘ūn], cf. Martini Bonadeo 2017 [\*188: 488–491]). These theological teachings are a part of metaphysics for ‘Abd al-Laṭīf, which he calls ‘the divine philosophy’ (*al-falsafa al-ilāhīya*) and ‘the knowledge of [God’s] lordship’ (*‘ilm al-rubūbiyya*) ([\*140: 264 Aḡ‘ūn], cf. Martini Bonadeo 2017 [\*190: 291]) at the end of the 20th book.

### 2.5.5 Influence

‘Abd al-Laṭīf must have had a number of pupils during his long career as a teacher, but no school or group of loyal followers ever became established. Among those who later regarded themselves as his pupils were e.g. the historians Ibn Ḥallikān, Ibn al-‘Adīm (d. 660/1262), and Zakī al-Dīn al-Birzālī (d. 636/1239), grandfather of the much more famous historian ‘Alam al-Dīn al-Birzālī (d. 699/1300), as well as the botanist Ibn al-Sūrī (d. 640/1242) and the medical scholar al-Tifāṣī (d. 651/1253) (cf. Joose, Pormann 2010 [\*185: 5–6]). Some later scholars regarded ‘Abd al-Laṭīf as a notorious know-it-all who criticised practising physicians, philosophers, and religious scholars from his position of purely theoretical knowledge, being incapable himself of actually practising in these professions. Especially his younger contemporary from Aleppo al-Qifṭī [\*132: II 194–195] accused him of having been barely more than a dull plagiarist: ‘He always claimed to have composed original books, but he produced hardly anything that had not been written by others before him. Either he summarised [other books], or added something that no one needed. His books are dry as dust and pallid in style’ (*fī ḡāyat al-burūda wa-l-rakāka*). This harsh judgment may be an expression of al-Qifṭī’s personal hostility against ‘Abd al-Laṭīf, a hostility caused by the latter’s accusation of quackery and even murder against al-Qifṭī’s friend Yūsuf Ibn Ṣam‘ūn [Joseph ben Judah Ben Simeon] (d. 623/1226) (cf. Joose 2007 [\*181]). Still, the long-windedness and dry style of ‘Abd al-Laṭīf’s writings were proverbial. Thus, in a satirical poem the Damascene poet Ibn ‘Unayn (d. 630/1233) describes an unnecessarily drawn-out argument as ‘lengthy words behind a short meaning – just as the understanding shown by the theoretician ‘Abd al-Laṭīf’ (reported by Ibn Ḥallikān [\*134: v 265–266]).

This negative attitude among his contemporaries, which may well have been caused by ‘Abd al-Laṭīf’s personal combativeness and schoolmasterly style, may help explain why his philosophical writings and teachings were hardly quoted at all by later generations. More significant, however, was that he was moving against the trend of the time by seeking to return to the Greek roots of the *falsafa* movement. In the east of the Islamic world, Ibn Sīnā had replaced Aristotle as the main point of reference of philosophy in the 5th/11th and 6th/12th centuries. Moreover, during ‘Abd al-Laṭīf’s own lifetime Faḥr

al-Dīn al-Rāzī created a reinterpretation of philosophy in Ḥwārazm and Herat that moved even further away from Aristotle. It ultimately became established in Syria, Egypt, and Anatolia as well during the 7th/13th century, before giving rise to a further counter-trend. The upshot is that we find no later references to ‘Abd al-Laṭīf’s book about metaphysics. The only exception are two manuscripts, one of which was probably produced in Egypt in 936/1529. We are better informed about the second, Istanbul MS, in which the text is included in an important philosophical single-volume library produced around 882/1477 in Sa’dā in Yemen. It also contains, among others, the only copy of Moṣṣeh ben Maimon’s [Maimonides’] *Dalālat al-ḥā’irīn* (*Guide for the Perplexed*) in Arabic characters (edited by Atay [\*129]). Its copyist Muḥammad b. Ḥasan al-Nihmī (d. after 885/1480) was a bookseller with philosophical interests who collated the c.40 texts in this volume, many of them philosophical, for his own use (cf. Rosenthal 1955 [\*162]).

### 3 Secondary Literature

Reference Works, Dictionaries [1–14] – Manuscript Catalogues and Lists [15–33] – ‘Umar al-Ḥayyām [34–66] – Šaraf al-Zamān al-Īlāqī, Muḥammad b. ‘Alī b. ‘Abdallāh al-Hindī, and Maḡd al-Dīn al-Ġilī [67–85] – Ibn Sahlān al-Sāwī [86–89] – Ibn al-Malāḥimī [90–97] – al-Šahrastānī [98–106] – Abū l-Barakāt al-Baḡdādī [107–133] – al-Mas‘ūdī and Ibn Ḡaylān al-Balḥī [134–156] – ‘Abd al-Laṭīf al-Baḡdādī [157–192]

#### *Reference Works, Dictionaries*

- 1 Suter, Heinrich. *Die Mathematiker und Astronomen der Araber und ihre Werke*. Leipzig, 1900.
- 2 Storey, Charles Ambrose. *Persian Literature. A Bio-bibliographical Survey*, 4 vols. London, 1927–1997.
- 3 Barthold, Wasili. *Turkestan Down to the Mongol Invasion* (transl. from Russian). London, 1928.
- 4 GAL = Brockelmann, Carl. *Geschichte der arabischen Litteratur*, 2 vols; 3 suppl. vols. Leiden 1937–1949 (2nd ed.) – Edition adapted to the supplement volumes.
- 5 EI<sup>2</sup> = *The Encyclopaedia of Islam. New Edition*. Ed. by Clifford E. Bosworth

- et al., 11 vols, 6 suppl. vols and index vol. Leiden, London, 1960–2009.
- 6 Sayılı, Aydın. *The Observatory in Islam and its Place in the General History of the Observatory*. Ankara, 1960.
- 7 Rescher, Nicholas. *The Development of Arabic Logic*. Pittsburgh, 1964.
- 8 *Dictionary of Scientific Biography*. Ed. by Charles C. Gillispie, 16 vols. New York, 1971–1980). – Repr. in *Complete Dictionary of Scientific Biography*. Ed. by C.C. Gillispie et al., 25 vols, in *Gale Virtual Reference Library* (2008): <http://go.galegroup.com/ps/>.
- 9 EI<sup>r</sup> = *Encyclopaedia Iranica*. Ed. by Ehsan Yarshater, vols 1ff. London, 1982ff.



- 10 Āḡā Buzurg al-Ṭīhrānī, M.M. *al-Darī'a ilā taṣānīf al-Šī'a*, 26 vols. Beirut, 1983.
- 11 *Dā'irat al-ma'ārif-i buzurg-i Islāmī*. Ed. by Kāzīm Mūsawī Buḡnūrdī, vols 1ff. (Tehran 1376ff. [1988ff.]).
- 12 Daiber, Hans. *Bibliography of Islamic Philosophy*, 2 vols. Leiden, 1999. – Supplement. Leiden, 2007.
- 13 *The Biographical Encyclopedia of Astronomers*. Ed. by Thomas Hockey et al. New York, 2007.
- 14 *Encyclopaedia Islamica*. Ed. by Wilferd Madelung and Farhad Daftary, vols 1ff. Leiden, 2008ff.

#### *Manuscript Catalogues and Lists*

- 15 *Fihrist al-kutub al-'arabiyya al-mahfūza bi-l-Kutubhāna al-ḥidwīyya*, 7 vols. Cairo, 1301–1309 (1883–1891).
- 16 Neubauer, Adolf. *Catalogue of the Hebrew manuscripts in the Bodleian library and in the college libraries of Oxford, including Mss. in other languages ... written with Hebrew characters*, 2 vols. Oxford, 1886–1906.
- 17 Ahlwardt, Wilhelm. *Die Handschriften-Verzeichnisse der Königlischen Bibliothek zu Berlin. Verzeichnis der arabischen Handschriften*, 10 vols. Berlin 1887–1899. – Repr. Hildesheim, 1980.
- 18 Pertsch, Wilhelm. *Verzeichniss der persischen Handschriften der Königlichen Bibliothek zu Berlin*. Berlin, 1888.
- 19 Vollers, Karl. *Katalog der islamischen, christlich-orientalischen, jüdischen und samaritanischen Handschriften der Universitäts-Bibliothek zu Leipzig*. Leipzig, 1906.
- 20 Cheikho, Louis. "Catalogue raisonné des manuscrits de la Bibliothèque Orientale. iv Philosophie et écriture sainte." *Mélanges de l'Université Saint-Joseph* 10 (1925): 105–179.
- 21 Krause, Max. "Stambuler Handschriften islamischer Mathematiker." *Quellen und Studien zur Geschichte der Mathematik, Astronomie und Physik, Abteilung B*, vol. 3 (1936): 437–532. Repr. in *Beiträge zur Erschließung der arabischen Handschriften in Istanbul und Anatolien*, vol. 2. Ed. by Fuat Sezgin. Frankfurt, 1986, 683–778.
- 22 Mahdawī, Yaḥyā. *Fihrist-i nushahā-yi muṣannafāt-i Ibn-i Sīnā*. Tehran, 1333 h.š. (1954).
- 23 Karatay, Fehmi Edhem: *Topkapı Sarayı Müzesi Kütüphanesi Arapça yazmalar kataloğu*, 4 vols. Istanbul, 1962–1969.
- 24 Dānišpažūh, Muḥammad Taqī. *Fihrist-i mīkrūfīlmhā-yi kitābhāna-yi markazī va-markaz-i asnād-i Dānišgāh-i Ṭīhrān*, 3 vols. Tehran 1348–1363 h.š. (1969–1984).
- 25 al-Ḥusaynī, Aḥmad. *Fihrist maḥṭūṭāt Ḥizānat al-Rawḍat al-Ḥaydariyya fī Naǧaf al-ašraf*. Najaf, 1971.
- 26 Šīrāzī, Ibn Yūsuf et al. *Fihrist-i Kitābhānah-yi Maǧlis-i Šūrā-yi Millī*, later: *Fihrist-i nushathā-yi ḥaṭṭī-yi Kitābhānah-i Maǧlis-i Šūrā-yi Islāmī*, vols 1ff. Tehran 1353ff. h.š. (1974ff.).
- 27 Sellheim, Rudolf. *Verzeichnis der orientalischen Handschriften in Deutschland*, vol. 17, Ser. A, Part 1: *Materialien zur arabischen Literaturgeschichte*. Wiesbaden, 1976.

28 Şeşen, Ramazan, Cemil Akpınar and Cevad İzgi. *Fihrist maḥṭūṭāt al-ṭibb al-islāmī bi-l-luġāt al-ʿarabiyya wa-t-turkiyya wa-l-fārisiyya fī maktabāt Turkiyā*. *Catalogue of Islamic Medical Manuscripts (in Arabic, Turkish & Persian) in the Libraries of Turkey*. Ed. by E. İhsanoğlu. Istanbul, 1984.

29 Şeşen, Ramazan, Cevad İzgi and Cemil Akpınar. *Fihrist maḥṭūṭāt maktabat Küprilī*. *Catalogue of Manuscripts in the Köprülü Library*, 3 vols. Istanbul 1406/1986.

30 Daiber, Hans. *Catalogue of the Arabic Manuscripts in the Daiber Collection*, vol. 11. Institute of Oriental Culture, University of Tokyo. Tokyo, 1996.

31 Şeşen, Ramazan. *Muḥṭārāt min al-maḥṭūṭāt al-ʿarabiyya al-nādīra min maktabāt Turkiyā*. Istanbul, 1997.

32 Karabulut, Ali Reza. *İstanbul ve Anadolu kütüphanelerinde mevcut el yazması eserler ansiklopedisi*, 3 vols. Kayseri, 2005.

33 Dirāyatī, Muṣṭafā. *Fihristwāra-yi dastniwiṣṭhā-yi Īrān*, 12 vols. Tehran, 1389 h.š. (2010).

### ʿUmar al-Ḥayyām

List of works and Bibliography in Daiber 1999/2007 [\*12: II, 531–532; Suppl. 419], Dirāyatī [\*33: XII, 480], and Karabulut (no. 3278 [\*32: II 1031]).

34 Hyde, Thomas. *Veterum Persarum et Parthorum et Medorum Religionis Historia*. Oxford, 1760.

35 Wittstein, Armin. “Historische Miscellen II.” *Zeitschrift für Mathematik*

*und Physik – Historisch-literarische Abteilung* 40 (1895): 1–6.

36 Christensen, Arthur. “Un traité de metaphysique de ‘Omar Ḥayyām.” *Le Monde Oriental* 1 (1906): 1–16.

37 Shafi, Mohammad. “The Author of the oldest biographical notice of ‘Umar Khayyam & the Notice in Question.” *Islamic Culture* 6 (1932): 586–628.

38 Nadwī, Sayyid Sulaymān. *Ḥayyām awr us ke sawānīḥ wa-taṣānīf par nāqīdanah nazar*. Azamgarh, 1933.

39 Mian Akhtar, Kazi Ahmad. “A tract of Avicenna translated by ‘Umar Khayyām.” *Islamic Culture* 9 (1935): 218–233.

40 Tirtha, Swāmī Govinda. *The Nectar of Grace. ‘Omar Khayyām’s Life and Works*. Allahabad, 1941.

41 Henle, Paul. “On the fourth figure of the syllogism.” *Philosophy of Science* 16 (1949): 94–104.

42 ‘Umar Ḥayyām. *Traktaty*. Ed. by V.S. Segal and A.P. Yuškewič. Moscow, 1961. – Collection of all philosophical and scientific texts by ‘Umar al-Ḥayyām in Russian translation by Boris A. Rosenfeld with a preface by Rosenfeld and Adolf P. Yuškewič.

43 Daštī, ‘Alī. *Damī bā Ḥayyām*. Tehran 1344 (1965). – Engl. transl. by L.P. Elwell-Sutton, *In Search of Omar Khayyam*. London, 1971.

44 van Ess, Josef. “Quelques remarques sur le Munqid min aḍ-ḍalāl.” In *Ghazālī, la raison et le miracle*. Table ronde UNESCO, 9–10 December 1985 (Paris 1987): 57–68.

45 Lambert, Jean and Alfred-Louis De Prémare. “Un récit nommé Khayyām: La

- rivalité Ġazālī-Khayyām selon al-Bayhaqī et la première notice biographique concernant le Maître de Nishapur." *Arabica* 34 (1987): 197–220.
- 46 Saliba, Georges. "The astronomical tradition of Maragha. A historical survey and prospects for future research." *Arabic Sciences and Philosophy* 1 (1991): 67–99.
- 47 Riḍāzāda-yi Malik, Raḥīm (ed.). *Dānišnāma-yi Ḥayyāmī. Maḡmū'a-yi rasā'il-i 'ilmī, falsafī wa-adabī*. Tehran, 1377 h.š. (1998).
- 48 *An Anthology of Philosophy in Persia*. Ed. by Seyyed Hossein Nasr and Mehdi Aminrazavi, 5 vols. New York, Oxford, London, 1999–2015.
- 49 Rashed, Roshdi and Biyan Vahabzadeh. *Al-Khayyām mathématicien*. Paris, 1999. – Engl. transl. *Omar Khayyam, the Mathematician*. New York, 2000. – Ar. transl. *Riyāḍiyyāt 'Umar al-Khayyām*. Beirut, 2005.
- 50 Awwal, Ġulāmriḍā Ġamšid Naẓād. "Suḥanī dar-bāri-yi risāla fi l-wuḡūd az ḥakīm 'Umar b. Ibrāhīm Ḥayyām." *Farhang* 29–32 (1378 h.š. [1999]): 75–130.
- 51 Hāšimīpūr, Bihnāz [Behnaz Hashemipur]. "Guftārī dar bāb-i risāla fi l-kawn wa-t-taklīf az ḥakīm 'Umar Ḥayyām Nišābūrī." *Farhang* 29–32 (1378 h.š. [1999]): 131–156.
- 52 Iṣfahānī, Hāmid Nāḡī. "Taṣḥīḥ wa-tarḡama-yi Risāla-yi al-Ġawāb 'an talāt masā'il: ḍarūrāt al-taḍādd fi l-'ālam wa-l-ḡabr wa-l-baqā'." *Farhang* 29–32 (1378 h.š. [1999]): 157–179.
- 53 Hāšimīpūr, Bihnāz [Behnaz Hashemipur]. "Guftārī dar-bāri-yi risāla dar 'ilm-i kulliyāt-i wuḡūd." *Farhang* 39–40 (1380 h.š. [2001]): 29–87.
- 54 Nasr, Seyyed Hossein. "The Poet-Scientist Khayyām as Philosopher." In *Mélanges Luce López-Baralt*. Ed. by Abdeljelil Temimi, vol. 2. Zagħwan, 2001, 535–553.
- 55 Mirāfaḍlī, Sayyid 'Alī. *Rubā'iyāt-i Ḥayyām dar manābi'-i kuhan*. Tehran, 1382 h.š. (2003).
- 56 Aminrazavi, Mehdi. *The Wine of Wisdom. The Life, Poetry and Philosophy of Omar Khayyam*. Oxford, 2005.
- 57 Endress, Gerhard. "Reading Avicenna in the madrasa. Intellectual genealogies and chains of transmission of philosophy and the sciences in the Islamic East." In *Arabic Theology, Arabic Philosophy. From the Many to the One. Essays in celebration of Richard M. Frank*. Ed. by James Montgomery. Leuven, 2006, 371–422.
- 58 Nasr, Seyyed Hossein. *Islamic Philosophy from its Origin to the Present*. Albany (N.Y.), 2006.
- 59 Nafisī, Sa'īd. *Ibn Sīnā. Zandagī, ātār wa-afkār-i ḥakīm-i īrānī*. Tehran, 1388 h.š. (2009).
- 60 al-Rahim, Ahmed H. *The Creation of Philosophical Tradition. Biography and the Reception of Avicenna's Philosophy from the 11th to the 14th Century*. PhD Dissertation, Yale University. Yale, 2009.
- 61 Treiger, Alexander. "Avicenna's notion of transcendental modulation of existence (*taṣkīk al-wuḡūd, analogia entis*) and its Greek and Arabic sources." In *Islamic Philosophy, Science, and Religion. Studies in honor of Dimitri Gutas*. Ed. by Felicitas Opwis and David Reisman. Leiden, 2012, 327–363.
- 62 Wisnovsky, Robert. "Essence and existence in the eleventh- and

twelfth-century east (*mašriq*): A sketch." In *The Arabic, Hebrew and Latin Reception of Avicenna's Metaphysics*. Ed. by D.N. Hasse and A. Bertolacci. Berlin, 2012, 27–50.

63 Riḍāzāda-yi Malik, Raḥīm (ed.). *Mawsūʿat al-Ḥayyām. Rasāʾiluhu al-ʾilmīyya wa-l-falsafīyya wa-l-adabīyya*. Dubai, Damascus, Beirut, 2013.

64 Benevich, Fedor. "The essence – existence distinction: Four elements of the post-Avicennian metaphysical dispute (11–13th centuries)." *Oriens* 45 (2017): 203–258.

65 Benevich, Fedor. "The metaphysics of Muḥammad b. ʿAbd al-Karīm al-Shahrastānī (d. 1153): Aḥwāl and universals." In *Islamic Philosophy from the 12th to the 14th Century*. Ed. by Abdelkader Al Ghouz. Bonn, Göttingen, 2018, 327–355.

66 Benevich, Fedor. "The necessary existent (*wājib al-wujūd*): From Avicenna to Fakhr al-Dīn al-Rāzī." In *Philosophical Theology in Islam*. Ed. by A. Shihadeh and J. Thiele. Leiden, 2020, 123–155.

*Šaraf al-Zamān al-Īlāqī, Muḥammad b. ʿAlī b. ʿAbdallāh al-Hindī, and Mağd al-Dīn al-Ġilī*

67 Henle, Paul. "On the fourth figure of the syllogism." [\*41].

68 Dānišpažūh, Muḥammad Taqī. "Pišguftār" (Preface). In *ʿUmar b. Sahlān al-Sāwī. Tabšira wa du risala-yi diğar dar manṭiq*. Ed. by M.T. Dānišpažūh. Tehran, 1337 h.š. (1958) 2–63.

69 Sabra, Abdelhamid I. "A twelfth-century defence of the fourth-figure of the syllogism." *Journal of*

*the Warburg and Courtauld Institutes* 28 (1965): 14–28.

70 Rescher, Nicolas. *Galen and the Syllogism*. Pittsburgh, 1966.

71 Madelung, Wilferd. "Aš-Šahrastānīs Streitschrift gegen Avicenna und ihre Widerlegung durch Našīr ad-Dīn aṭ-Ṭūsī." In *Akten des VII. Kongresses für Arabistik und Islamwissenschaft* (Göttingen, 15–22 August 1974). Ed. by Albert Dietrich. Göttingen, 1976, 250–259.

72 Brentjes, Sonja. "Das Kapitel zur Zahlentheorie in den *Problemen der Philosophie* von al-Hindī." *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 4 (1987–1988): 33–50.

73 Hogendijk, Jan P. "The treatise on geometry in al-Hindī's *Problems of philosophy*." *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 4 (1987–1988): 19–32.

74 Neubauer, Eckhard. "Das Musikkapitel der Ġumal al-falsafa von Muḥammad b. ʿAlī al-Hindī (1135 n. Chr.)." *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 4 (1987–1988): 51–59.

75 Ġalālī Nāʾinī, Muḥammadriḍā. *Mağlis-i maktūb*. Tehran 1369/1990.

76 Küyel, Mübahat Türker. "Les *Sharāʾit al-Yaqīn* d'al-Fārābī et les *Jumal al-Falsafa* d'Ibn Hindī. Une comparaison entre elles en relation avec la notion de science." In *Knowledge and the Sciences in Medieval Philosophy: Proceedings of the eighth international congress of Medieval philosophy* (S.I.E.P.M.). Ed. by Simo Knuuttila et al., vol. 3. Helsinki, 1990, 181–190.

- 77 Ziai, Hossein. *Knowledge and Illumination. A Study of Suhrawardī's Hikmat al-Ishrāq*. Atlanta, 1990.
- 78 Saliba, Georges. "The astronomical tradition of Maragha. A historical survey and prospects for future research." *Arabic Sciences and Philosophy* 1 (Cambridge, 1991): 67–99.
- 79 Pürğawādī, Naṣrallah (Pourjavady). "Pişguftār" (Preface), in [\*21] 7–24.
- 80 Ġalālī Nā'inī, Muḥammadriḍā. *Amr wa-ḥalq wa-'ilm-i wāğib al-wuğūd. Du maktūb-i Muḥammad 'Abdalkarīm Šahrastānī. The Immanent's Command, Creation and Omniscience*. Tehran, 1382 h.š. (2003).
- 81 Endress, Gerhard. "Reading Avicenna in the madrasa. Intellectual genealogies and chains of transmission of philosophy and the sciences in the Islamic East" [\*57].
- 82 Griffel, Frank. "On Fakhr al-Dīn al-Rāzī's life and the patronage he received." *Journal of Islamic Studies* 18 (2007): 313–444.
- 83 Michot, Yahya. "Al-Nukat wa-l-fawā'id, an important summa of Avicennian falsafa." In *Classical Arabic Philosophy. Sources and Reception*. Ed. by Peter Adamson. London, Turin, 2007, 90–124.
- 84 al-Rahim, Ahmed H. *The Creation of Philosophical Tradition. Biography and the Reception of Avicenna's Philosophy from the 11th to the 14th Century* [\*60]. – Printed version: Wiesbaden, 2018.
- 85 El-Rouayheb, Khaled. *The Development of Arabic Logic (1200–1800)*. Basel, 2019.
- Umar b. Sahlān al-Sāwī*
- 86 Dānišpažūh, Muḥammad Taqī. "Pişguftār" (Preface). In *Umar b. Sahlān al-Sāwī: Tabşira wa dū risala-yi digar dar mantiq*. Tehran, 1337 h.š. (1958), 2–63.
- 87 Madkour, Ibrahim. *L'organon d'Aristote dans le monde arabe*. Paris, 1969 (2nd ed.).
- 88 Ziai, Hossein. *Knowledge and Illumination. A Study of Suhrawardī's Hikmat al-ishrāq* [\*77].
- 89 Dādḥwāh, Ġulamriḍā and Muḥammad Karīmī Zangānī Aşl. "Muqaddima-yi muşahḥiḥān" (Editors' introduction). In *Umar b. Sahlān al-Sāwī: Si risāla-yi mantiqī wa-falsafī. Three Logical and Philosophical Treatises* [\*50, \*51, \*53], 13–72 (Pers. pagination).
- Ibn al-Malāḥimī*
- 90 al-Yāfi, 'Abd al-Karīm. "Fī sirat al-Zamaḥşārī Ġarallāh." *Mağallat Mağma' al-luğa al-'arabiyya bi-Dimaşq* 57 (1982): 365–382.
- 91 Schmidtke, Sabine. *The Theology of al-'Allāma al-Ḥillī (d. 726/1325)*. Berlin, 1991.
- 92 Lagarde, Michel. *Index du Grand commentaire de Faḥr al-Dīn al-Rāzī*. Leiden, 1996.
- 93 Ansari, Hassan. "Al-Barāhīn al-zāhira al-jaliyya 'alā anna l-wujūd zā'id 'alā l-māhiyya by Ḥusām al-Dīn Abū Muḥammad al-Ḥasan b. Muḥammad al-Raşşās." In *A Common Rationality: Mu'tazilism in Islam and Judaism*. Ed. by C. Adang, S. Schmidtke and D. Sklare. Beirut, Würzburg, 2007, 337–348.

- 94 Madelung, Wilferd. "Ibn al-Malāḥimī's refutation of the philosophers." In *A Common Rationality: Mu'tazilism in Islam and Judaism*. Ed. by C. Adang, S. Schmidtke and D. Sklare. Beirut, Würzburg, 2007, 331–336.
- 95 Koloğlu, Orhan Ş. *Mutezile'nin felsefe eleştirisi: Harezmli Mutezili İbnü'l-Melâhimî'nin felsefeye reddiyesi*. Bursa, 2010.
- 96 Madelung, Wilferd. "Ibn al-Malāḥimī on the human soul." *Muslim World* 102 (2012): 426–432.
- 97 Schmidtke, Sabine. "The Mu'tazilite movement (III)." In *Oxford Handbook of Islamic Theology*. Ed. by S. Schmidtke. Oxford, 2016, 159–180.
- al-Šahrastānī*
- 98 Ġalālī Nā'inī, Muḥammad Riḍā. *Šarḥ-i ḥāl wa-āṭār-i Ḥuġġatu l-ḥaqq Abū l-Faḥ Muḥammad b. 'Abdalkarīm b. Aḥmad Šahrastānī*. Tehran 1343/1964.
- 99 Dānišpaẓūh, Muḥammad Taqī. "Dā' d-du'āt Taġuddīn-i Šahrastāna." *Nāma-yi Āstān-i Quds* 7.2 (1346): 77–80; 8.4 (1347): 61–71.
- 100 Madelung, Wilferd. "Aš-Šahrastānīs Streitschrift gegen Avicenna und ihre Widerlegung durch Naṣir ad-Dīn aṭ-Ṭūsī." In *Akten des VII. Kongresses für Arabistik und Islamwissenschaft*. Ed. by Albert Dietrich. Göttingen, 1976, 250–259. – Repr. in W. Madelung. *Religious Schools and Sects in Medieval Islam*. London, 1985, no. XVI.
- 101 Hartmann, Angelika. "Ismā'īlitische Theologie bei sunnitischen 'Ulamā' des Mittelalters." In *Ihr alle aber seid Brüder. Festschrift für A. Th. Khoury zum 60. Geburtstag*. Ed. by Ludwig Hagemann and Ernst Pulsfort. Würzburg, Altenberge, 1990, 190–206.
- 102 Steigerwald, Diane. *La pensée philosophique et théologique de Šahrastānī m. 548/1153*. Sainte-Foy [Québec], 1997.
- 103 Steigerwald, Diane. *ʿAbd al-Karīm Šahrastānī (m. 548/1153) Majlis. Discours sur l'ordre et la création. Traduction avec introduction et notes de la dernière édition de Jalālī Nā'inī*. Sainte-Foy [Québec], 1998.
- 104 Mayer, Toby. "Šahrastānī on the arcana of the Qur'ān: A preliminary evaluation." *Journal of Qur'anic Studies* 7.2 (2005): 61–100.
- 105 Mayer, Toby. *Keys to the Arcana. Šahrastānī's Esoteric Commentary on the Qur'ān*. (Oxford 2009).
- 106 van Ess, Josef. "Das Geburtsjahr des Šahrastānī." *Der Islam* 89 (2012): 111–117.
- Abū l-Barakāt al-Baġdādī*
- 107 Wiedemann, Eilhard. "Ueber den Grund, aus dem die Sterne bei Nacht sichtbar und bei Tage verborgen sind, von Hibbat Allāh Ibn Malkā al-Jehūdī al-Baġdādī." *Jahrbuch für Photographie und Reproduktionstechnik* 23 (Halle a.d.S. 1909): 49–54. – Repr. in E. Wiedemann. *Gesammelte Schriften zur arabisch-islamischen Wissenschaftsgeschichte*. Ed. by D. Girke, vol. 1. Frankfurt a.M., 1984, 348–353.

- 108 Poznanski, Samuel. "Aus Abu'l-Barakât Hibat-Allah's arabischem Kommentar zu Kohelet." *Zeitschrift für hebräische Bibliographie* 16.1 (1913): 32–36.
- 109 Şerefeddin, M. *İlâhiyat. Bağdatlı Ebulberekât namındaki feylesofun Kitabûlmuteber'inin üçüncü kısmının tercemesini muhtevidir*. Istanbul, 1932. – Turkish translation of the third part of [\*89].
- 110 Rosenthal, Franz. *Das Fortleben der Antike im Islam*. Zürich, 1965.
- 111 Dietrich, Albert. *Medicinalia Arabica*. Göttingen, 1966.
- 112 Pines, Shlomo. "Études sur Awḥad al-Zamân Abu'l-Barakât al-Baghdâdî." *Revue des études juives* 103 (Paris 1937): 3–64; 104 (1937) 1–33. – Repr. in Pines 1979 [\*117: 1–95].
- 113 Pines, Shlomo. "La conception de la conscience de soi chez Avicenne et chez Abu'l-Barakât al-Baghdâdî." *Archives d'histoire doctrinale et littéraire du Moyen Age* 21 (1954): 21–98. – Repr. in Pines 1979 [\*117: 181–258].
- 114 Pines, Shlomo. *Nouvelles études sur Awḥad al-Zamân Abu'l-Barakât al-Baghdâdî*. Paris, 1955. – Repr. in Pines 1979 [\*117: 96–173].
- 115 Pines, Shlomo. "Studies in Abu l-Barakât al-Baghdâdî's poetics and metaphysics." *Scripta Hierosolymitana* 6 (1960): 120–198. – Repr. in Pines 1979 [\*117: 259–338].
- 116 Pines, Shlomo. "Le-ḥeqer perušo šel Abu al-Barakat al-Bagdadi 'al Sefer Qoholet: Arba'ah tekstim." [Contributions to the study of Abū l-Barakât al-Baghdâdî's commentary on Ecclesiastes. Four Excerpts]. *Tarbiz* 33 (1963): 198–213.
- 117 Pines, Shlomo. *Studies in Abu'l-Barakât al-Baghdâdî. Physics and Metaphysics*. Leiden, Jerusalem, 1979.
- 118 Arnaldez, Roger. "La doctrine de l'âme dans la philosophie d'Abū'l-Barakât al-Baghdâdî." *Studia Islamica* 66 (1987): 105–112.
- 119 Davidson, Herbert A. *Alfarabi, Avicenna, and Averroes on Intellect. Their Cosmologies, Theories of the Active Intellect, and Theories of Human Intellect*. (New York 1992).
- 120 Stroumsa, Sarah. "Le-pulmos ha-Rambam be-Mizraḥ: Mikomo šel Abu al-Barakat al-Bagdadi." [On the Maimonides controversy in the East: The role of Abū l-Barakât al-Baghdâdî]. In *Hebrew and Arabic Studies in Honour of Joshua Blau*. Ed. by H. Ben-Shammai. Tel Aviv, Jerusalem, 1993, 415–422.
- 121 Gil, Moshe. *Jews in Islamic Countries in the Middle Ages*. Leiden, 2004.
- 122 Marcotte, Roxanne D. "La conversion tardive d'un philosophe: Abū al-Barakât al-Baghdâdî (mort vers 545/1150) sur 'L'intellect et sa quiddité' (al-'Aql wa māhiyyatu-hu)." *Documenti e Studi sulla Tradizione Filosofica Medievale* 15 (2004): 201–226.
- 123 Griffel, Frank. "Taqlid of the philosophers: Al-Ghazālī's initial accusation in the *Tahāfut*." In *Ideas, Images, and Methods of Portrayal. Insights into Arabic Literature and Islam*. Ed. by Sebastian Günther. Leiden, 2005, 273–96.
- 124 Griffel, Frank. "Between al-Ghazālī and Abū l-Barakât al-Baghdâdî. The dialectical turn in the philosophy of Iraq

and Iran during the 6th/12th century." In *In the Age of Averroes. Arabic Philosophy in the Sixth/Twelfth Century*. Ed. by Peter Adamson. London, Turin, 2011, 45–75.

125 Nony, Sylvie. "La dynamique d'Abū l-Barakāt: faire le vide pour penser le changement du changement." In *In the Age of Averroes. Arabic Philosophy in the Sixth/Twelfth Century*. Ed. by Peter Adamson. London, Turin, 2011, 93–116.

126 Shihadeh, Ayman. "Avicenna's corporeal form and proof of prime matter in twelfth-century critical philosophy: Abū l-Barakāt, al-Mas'ūdī and al-Rāzī." *Oriens* 42 (2014): 364–396.

127 Kaukua, Jari. *Self-awareness in Islamic Philosophy. Avicenna and Beyond*. Cambridge, 2015.

128 Janssens, Jules. "Abū al-Barakāt al-Baghdādī and his use of Ibn Sīnā's al-*Ḥikma al-'Arūḍiyya* (or another work closely related to it) in the logical part of his *Kitāb al-Mu'tabar*." *Nazariyat* 3 (2016): 1–22.

129 Kaukua, Jari. "Self, agent, soul: Abū al-Barakāt al-Baghdādī's critical reception of Avicennian psychology." In *Subjectivity and Selfhood in Medieval and Early Modern Philosophy*. Ed. by J. Kaukua, T. Ekenberg. Cham, 2016, 75–89.

130 Pavlov, Moshe M. *Abū'l-Barakāt al-Baghdādī's Scientific Philosophy. The Kitāb al-Mu'tabar*. London, New York, 2017.

131 Griffel, Frank. Review of Pavlov 2017 [\*45]. *Wiener Zeitschrift für die Kunde des Morgenlandes* 108 (2018): 443–446.

132 Lammer, Andreas. "Two sixth/twelfth-century hardliners on creation and divine eternity: al-Šahrastānī and Abū l-Barakāt al-Baghdādī on God's priority over the world." In *Islamic Philosophy from the 12th to the 14th Century*. Ed. by Abdelkader Al Ghouz. Bonn, Göttingen, 2018, 233–278.

133 Benevich, Fedor. "Perceiving things in themselves. Abū l-Barakāt al-Baghdādī's critique of representationalism." *Arabic Sciences and Philosophy* 30 (2020): 41–76.

### *Ibn Ḡaylān al-Balḥī and Šaraf al-Dīn al-Mas'ūdī*

#### *Lists of Works*

Ibn Ḡaylān al-Balḥī: in *Dirāyatī* [\*33: XI 864].

Šaraf al-Dīn al-Mas'ūdī (frequently together with the works of Ṣaḥīr al-Dīn Muḥammad b. Mas'ūd al-Gaznawī): in *GAL* [\*4: S I 817. 863–864]; in *Karabulut* no. 4568 [\*32: III 1401]; in *Dirāyatī* [\*33: XI 1183–1184]

#### *Studies; Individual Works and Topics*

134 al-Ḥuḍayrī, M. M. "Silsila muttašila min talāmīd Ibn Sīnā fī mi'atay 'ām." In *Millénaire d'Avicenne. Congrès de Bagdad, 20–28 mars 1952*. Cairo, 1952, 53–59 (Ar. pagination).

135 Dānišpažūh, Muḥammad Taqī. "Pišguftār" (Foreword). In *ʿUmar Ibn Saḥlān al-Sāwī. Tabšira va-du risāla-i digar dar manṭiq*. Tehran, 1337 h.š. (1958), 2–63.

136 Dānišpažūh, Muḥammad Taqī. "Dibāča" (Introduction). In *Du risāla dar*



- bāra-yi ātār-i 'ulwī. Two Persian Texts on Meteorology.* Tehran 1337 h.š./1958, 7–19.
- 137 Dānišpažūh, Muḥammad Taqī. “Gūša’ī az ta’rīḥ-i manṭiq dar Īrān. Radd-i Ġaylānī bar-šakk-i Rašīd Waṭwāt dar qiyās-i ḥulf.” *Našrīyya-yi dāniškada-yi adabīyyāt-i Tabrīz*. 13 (1961): 289–310.
- 138 Schützinger, Heinrich. “Der Qāḍī l-Māristān.” *Welt des Islams* 18 (1977): 101–115.
- 139 Michot, Jean R. “La pandémie avicennienne au VI<sup>e</sup>/XII<sup>e</sup> siècle. Présentation, editio princeps et traduction de l’introduction du Livre de l’advenue du monde (Kitāb ḥudūth al-‘ālam) d’Ibn Ghaylān al-Balkhī.” *Arabica* 40 (1993): 287–344.
- 140 Busard, Hubertus L.L. “A Latin translation of an Arabic commentary on book x of Euclid’s Elements.” *Medieval Studies* 59 (1997): 19–110.
- 141 Ḥaṣṣūrī, ‘Alī. “Mas‘ūdī wa-ātār-i ū” (Introduction), in: [\*124] 15–23.
- 142 Anṣārī Qummī, Ḥasan. “Faḥr-i Rāzī wa-makātiba-yi ū bā yakī az ḥukamā-yi mu‘āṣir-i ḥwad.” *Ma‘ārif* 18.3 (1380 h.š. [2001]): 10–26.
- 143 Pūrḡawādī, Naṣrallāh (Pourjavady). “Pišguftār” (Preface), in: [\*101] 7–24.
- 144 al-Rahim, Ahmed H. “The Twelver-Sī’ī reception of Avicenna in the Mongol period.” In *Before and after Avicenna. Proceedings of the first conference of the Avicenna Study Group*. Ed. by D. Reisman and A. al-Rahim. Leiden, 2003, 219–231.
- 145 Griffel, Frank. “Taqlīd of the philosophers: Al-Ghazālī’s initial accusation in his *Tahāfut*.” In *Ideas, Images, and Methods of Portrayal. Insights into Classical Arabic Literature and Islam*. Ed. by S. Günther. Leiden, 2005, 273–296.
- 146 Shihadeh, Ayman. “From al-Ghazālī to al-Rāzī: 6th/12th century developments in Muslim philosophical theology.” *Arabic Sciences and Philosophy* 15 (2005): 141–179.
- 147 Endress, Gerhard. “Reading Avicenna in the madrasa: Intellectual genealogies and chains of transmission of philosophy and the sciences in the Islamic East.” In *Arabic Theology, Arabic Philosophy. From the Many to the One. Essays in celebration of Richard M. Frank*. Ed. by James Montgomery. Leuven, 2006, 371–422.
- 148 Griffel, Frank. *Al-Ghazālī’s Philosophical Theology*. New York, 2009.
- 149 Shihadeh, Ayman. “A Post-Ghazālīan critic of Avicenna: Ibn Ghaylān al-Balkhī on the Materia medica of the *Canon* of medicine.” *Journal of Islamic Studies* 24 (2013): 135–174.
- 150 Wisnovsky, Robert. “Avicennism and exegetical practice in the early commentaries on the *Ishārāt*.” *Oriens* 41 (2013): 349–378.
- 151 Anṣārī, Ḥasan. *Mabāḥiṭāt-i du ḥakīm*. Internet blog at <http://anṣārī.kateban.com/entry2028.html>, published 9 Jan. 2014.
- 152 Shihadeh, Ayman. “Fakhr al-Dīn al-Rāzī’s response to Sharaf al-Dīn al-Mas‘ūdī’s critical commentary on Avicenna’s *Ishārāt*.” *Muslim World* 104 (2014): 1–61.
- 153 Shihadeh, Ayman. “Avicenna’s corporeal form and proof of prime matter in twelfth-century critical philosophy: Abū

- l-Barakāt, al-Mas'ūdī and al-Rāzī." *Oriens* 42 (2014): 364–396.
- 154 Mayer, Toby. Review of Shihadeh 2016 [\*155]. *Nazariyat* 3 (2016): 147–156.
- 155 Shihadeh, Ayman. *Doubts on Avicenna. A study and edition of Sharaf al-Dīn al-Mas'ūdī's al-Mabāḥith wa-l-shukūk*. Leiden, 2016.
- 156 al-Rahim, Ahmed H. *The Creation of Philosophical Tradition. Biography and the Reception of Avicenna's Philosophy from the 11th to the 14th Century* [\*60]. – Printed version: Wiesbaden, 2018.
- ʿAbd al-Latīf al-Baġdādī*
- 157 Mousley, Johannes. *Abdollahīphī baġdadensis vita, auctore Ibn Abi Osaiba. E codicibus MSS. Bodleianis descripsit, et Latine vertit*. Oxford, 1808.
- 158 Gibb, H.A.R. "Life of Muwaqqif ad-Din Abd al-Latif of Baghdad in Ibn Abi Usaybiya." In *Healing through spirit agency, by the great Persian physician, Abduhl Latif... and information concerning the life hereafter of the deepest interest to all enquirers and students of psychic phenomena*. Ed. by R.H Saunders. London, 1927, 65–89.
- 159 von Somogyi, Josef. "Ein arabischer Bericht über die Tataren im *Ta'riḥ al-Islām* von aḍ-Ḍahabī." *Der Islam* 24 (1937): 105–130.
- 160 Badawī, ʿAbd al-Raḥmān. *Al-Aflātūniyya al-muḥḍaṭa ʿinda al-ʿArab*. Cairo, 1955.
- 161 Badawī, ʿAbd al-Raḥmān. *Aflūṭīn ʿinda al-ʿArab*. Cairo, 1955.
- 162 Rosenthal, Franz. "From Arabic books and manuscripts v: A one-volume library of Arabic philosophical and scientific texts in Istanbul." *Journal of the American Oriental Society* 75 (1955): 14–23.
- 163 Stern, Salomon M. "A collection of treatises by ʿAbd al-Latif al-Baghdadi." *Islamic Studies* 1 (1962): 53–70.
- 164 Dietrich, Albert: *Die arabische Version einer unbekannten Schrift des Alexander von Aphrodisias über die Differentia specifica*. Göttingen, 1964.
- 165 Rosenthal, Franz. *Das Fortleben der Antike im Islam*. Zürich, Stuttgart, 1965. – Engl. transl.: *The Classical Heritage in Islam*. London, New York, 1994.
- 166 Cahen, Claude. "ʿAbdallaṭīf al-Baġhdādī, portraitiste et historien de son temps: Extraits inédits de ses mémoires." *Bulletin d'Études Orientales* 23 (1970): 101–128.
- 167 Ullmann, Manfred. *Die Medizin im Islam*. Leiden, 1970.
- 168 Neuwirth, Angelika. "Neue Materialien zur arabischen Tradition der beiden ersten *Metaphysik*-Bücher." *Welt des Islams* 18 (1977–1978): 84–100.
- 169 Gutas, Dimitri. "Editing Arabic philosophical texts." *Orientalistische Literaturzeitschrift* 75 (Berlin 1980): 214–222.
- 170 Makdisi, George. *The Rise of Colleges*. Edinburgh, 1981.
- 171 Taylor, Richard C. "ʿAbd al-Latif al-Baghdadi's epitome of the *Kalām fi maḥd al-khayr* (*Liber de causis*). In *Islamic Theology and Philosophy. Studies in honor of George F. Hourani*. Ed. by M.E. Marmura. 1984, 236–248. 318–323.
- 172 Ġaliyūnġi, Būl [Paul Ghalioungui]. *ʿAbd al-Latīf al-Baġdādī. Ṭabīb al-qarn al-sādis al-ḥiġrī. Ṣaḥṣīyyatuhu, inġāzātuhu*. Cairo, 1985.

- 173 Zimmermann, Fritz W. "The Origins of the so-called *Theology of Aristotle*." In *Pseudo-Aristotle in the Middle Ages*. Ed. by J. Kraye, W.F. Ryan and C.B. Schmitt. London, 1986, 110–240.
- 174 Sabra, Abdelhamid I. "The appropriation and subsequent naturalization of Greek sciences in medieval Islam: A preliminary statement." *History of Science* 25 (1987): 223–243.
- 175 Toorawa, Shawkat. "The educational background of 'Abd al-Laṭīf al-Baghdādī." *Muslim Education Quarterly* 13 (1996): 35–53.
- 176 Toorawa, Shawkat. "Language and male homosocial desire in the autobiography of 'Abd al-Latif al-Baghdadi (d. 629/1231)." *Edebiyât. The Journal of Middle Eastern Literatures* 7 (1997): 45–59.
- 177 Reynolds, Dwight F. (ed.). *Interpreting the Self. Autobiography in the Arabic Literary Tradition*. Berkeley, 2001.
- 178 Toorawa, Shawkat. "A portrait of 'Abd al-Laṭīf al-Baghdādī's education and instruction." In *Law and Education in Medieval Islam. Studies in memory of Professor George Makdisi*. Ed. by J.E. Lawry, D.J. Stewart and S.M. Toorawa. Cambridge, 2004, 91–109.
- 179 Toorawa, Shawkat. "Travel in the medieval Islamic world: The importance of patronage as illustrated by 'Abd al-Latif al-Baghdadi (and other littérateurs)." In *Eastward Bound. Travel and Travellers, 1050–1550*. Ed. by R. Allen. Manchester, 2004, 57–70.
- 180 El Bizri, Nader. "In defence of the sovereignty of philosophy. Al-Baghdādī's critique of Ibn Haytham's geometrisation of place." *Arabic Sciences and Philosophy* 17 (2007): 57–80.
- 181 Joose, N. Peter. "Pride and prejudice, praise and blame." 'Abd al-Laṭīf al-Baghdādī's views on bad and good medical practitioners." In *O ye Gentlemen: Arabic studies on science and literary culture in honour of Remke Kruk*. Ed. by A. Vrolijk and J.P. Hogendijk. Leiden, 2007, 129–141.
- 182 Pormann, Peter E. and Emilie Savage-Smith. *Medieval Islamic Medicine*. Edinburgh, 2007.
- 183 Joose, N. Peter. "Unmasking the Craft": 'Abd al-Laṭīf al-Baghdādī's views on alchemy and alchemists." In *Islamic Thought in the Middle Ages. Studies in text, transmission and translation, in honor of Hans Daiber*. Ed. by A. Akasoy and W. Raven. Leiden, 2008, 301–317.
- 184 Kruk, Remke. "'Abd al-Laṭīf al-Baghdādī's *Kitāb al-Ḥayawān*: a chimera?" In *Islamic Thought in the Middle Ages. Studies in text, transmission and translation, in honor of Hans Daiber*. Ed. by A. Akasoy and W. Raven. Leiden, 2008, 345–362.
- 185 Joose, N. Peter and Peter E. Pormann. "Decline and decadence in Iraq and Syria after the age of Avicenna? 'Abd al-Laṭīf al-Baghdādī (1162–1231) between myth and history." *Bulletin of the History of Medicine* 84 (2010): 1–29.
- 186 Joose, N. Peter. "'Abd al-Laṭīf al-Baghdādī as a philosopher and physician: myth or reality, topos or truth?" In *In the Age of Averroes. Arabic Philosophy in the Sixth/Twelfth Century*. Ed. by Peter Adamson. London, Turin, 2011, 27–43.
- 187 Gutas, Dimitri. "Philosophy in the twelfth century: one view from Baghdad, or the repudiation of al-Ghazālī." In *In the Age of Averroes. Arabic Philosophy*

*in the Sixth/Twelfth Century*. Ed. by Peter Adamson. London, Turin, 2011, 9–26.

188 Martini Bonadeo, Cecilia. *ʿAbd al-Laṭīf al-Baġdādī’s Philosophical Journey. From Aristotle’s Metaphysics to the ‘Metaphysical Science’*. Leiden, 2013.

189 Joose, N. Peter. *The Physician as a Rebellious Intellectual. The Book of the Two Pieces of Advice of Kitāb al-Nasīḥatayn by ʿAbd al-Laṭīf b. Yūsuf al-Baġhdādī (1162–1231). Introduction, edition and translation of the medical section*. Frankfurt, 2013.

190 Martini Bonadeo, Cecilia. “The first ‘Proclean’ section (chapter 20) of ʿAbd

al-Laṭīf al-Baġdādī’s book on the science of metaphysics: Is the pure good of the *Maḥd al-ḥayr* Aristotle’s first principle, intellect in actuality?” *Oriens* 45 (2017): 259–305.

191 Martini Bonadeo, Cecilia. “God’s will and the origin of the world: ʿAbd al-Laṭīf al-Baġhdādī’s sources and arguments.” *Muslim World* 107 (2017): 482–495.

192 Jackson, Peter. *The Mongols and the Islamic World. From Conquest to Conversion*. New Haven, 2017.

# Šihāb al-Dīn al-Suhrawardī

Hermann Landolt and Renate Würsch

1 Primary Sources – 2 Life – 3 Works – 4 Doctrine – 5 Influence – 6 Secondary Literature

## 1 Primary Sources

Bio-bibliographical Testimonies [\*1–\*9] – Works [\*21–\*52] – Commentaries on al-Suhrawardī's Works [\*60–\*68]

### *Bio-bibliographical Testimonies*

1 'Imād al-Dīn al-Iṣfahānī (wr. 592–593/1196–1197). *Bustān al-ġāmi'* – Ed. by Claude Cahen. *Bulletin d'études orientales* 7–8 (1937–1938): 113–158, esp. 150–151.

2 Yāqūt b. 'Abdallāh al-Ḥamawī al-Rūmī al-Baġdādī (d. 626/1229). *The Irshād al-arīb ilā ma'rifat al-adīb or Dictionary of learned men of Yāqūt*. – Ed. by D.S. Margoliouth. Cairo, Leiden, London, 1907–1926 (2nd ed. 1927), VI 269. – Ed. by A. Farīd Rifā'i. Cairo, 1936–1938.

3 Ibn Šaddād (d. 632/1235). *Al-Nawādir al-sulṭāniyya*. – Ed. by Ġamāl al-Dīn Šayyāl. Cairo, 1962, 10.

4 al-Qifṭī, Ġamāl al-Dīn 'Alī b. Yūsuf (d. 646/1248). *Ta'rīḥ al-ḥukamā' [Iḥbār al-'ulamā' bi-aḥbār al-ḥukamā', Epitome des Muḥammad b. 'Alī az-Zauzanī]*. – Ed. by Julius Lippert, *Ibn al-Qifṭī's Ta'rīḥ al-ḥukamā'*. Leipzig, 1903, 331–332.

5 Ibn Abī Uṣaybi'a, Muwaffaq al-Dīn Aḥmad b. al-Qāsim. (d. 668/1270). *Uyūn al-anbā' fī ṭabaqāt al-aṭibbā'*. – Ed. by

August Müller, vol. 1. Cairo, 1299/1882, Königsberg 1884, 167–171. – Ed. and Engl. transl. by Emily Savage-Smith, Simon Swain and Geert Jan van Gelder, *A Literary History of Medicine. The 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā' of Ibn Abī Uṣaybi'ah*, 3 vols. Leiden, 2020 [The page numbers of Müller's edition are included in the Arabic text in square brackets].

6 Ibn Ḥallikān, Abū l-'Abbās Šams al-Dīn Aḥmad b. Muḥammad (d. 681/1282). *Wafayāt al-a'yān wa-anbā' abnā' al-zamān*. – Ed. by Iḥsān 'Abbās, vol 6. Beirut 1968–1972 (several repr.), 268–274.

7 al-Šahrazūri, Šams al-Dīn Muḥammad b. Maḥmūd (d. after 687/1288). *Nuzhat al-arwāḥ wa-rawḍat al-afrāḥ fī ta'rīḥ al-ḥukamā' wa-l-falāsifa*. – Ed. by Ḥwaršid Aḥmad, 2 vols. Hyderabad, 1976. – Ed. by 'A. Abū Šuwayrib. Tripoli, 1398/1978. – Ed. by M.'A. Abū Rayyān. Alexandria, 1414/1993. – Pers. transl. by Maqṣūd 'Alī Tibrīzī (17th cent.), ed. by Muḥammad

Taqī Dānišpažūh and Muḥammad Sarwar Maulāī. Tehran, 1365/1986.

- 8 Munši-i Yazdī, Nāṣir al-Dīn (14th cent.). *Durrat al-aḥbār* (Persian transl. of Bayhaqī's *Tatimmat Šiwān al-ḥikma*, wr. c. 730/1330). Tehran, 1318 h.š. (1949).
- 9 Faṣīḥ Ḥwāfi, Faṣīḥ al-Dīn Aḥmad (d. 849/1445). *Muġmal-i Faṣīḥī*. – Ed. by Maḥmūd Farruḥ, 3 vols. Mašhad, 1339–1341 h.š. (1960–1962).

## Works

### Collections

- 21 *Luġat-i mūrān, Šafīr-i Sīmurġ, Risālat al-ṭayr*. – Ed. and transl. by Otto Spies and Sarfaraz Khan Khatak, *Three Treatises on Mysticism by Shihābuddīn Suhrawardī maqtūl. With an Account on his Life and Poetry*. Stuttgart, 1935.
- 22 *ʿAql-i surḥ, Partaw-nāma, Bustān al-qulūb*. – Ed. by Sayyid Muḥammad Bāqir Sabzawārī, *Čahārdah risāla. Taʿlīf wa tarġum-yi Faḥraddīn Rāzī, Šihābaddīn Suhrawardī* [et al.]. Tehran 1340/1961–1962.
- 23 OMM I = *Maġmūʿa fī l-ḥikma al-ilāhiyya*. – Ed. by Henry Corbin. Istanbul, 1945 [Opera metaphysica et mystica, I]. – Includes: *al-Talwihāt al-lauhiyya wa-l-ʿaršiyya, al-Muqāwamāt, al-Mašārīʿ wa-l-muṭārahāt*, of each of these only part 3. – Repr. *Maġmūʿa-yi mušannafāt-i šayḥ-i iṣrāq* 1. Tehran, 1976; 1993.
- 24 OMM II = *Œuvres philosophiques et mystiques de Shihabaddin Yahya Sohrawardi*, I. – Ed. with a French intro. by Henry Corbin. Tehran, 1952 [Opera metaphysica et mystica, II]. – Includes: *Kitāb Ḥikmat al-iṣrāq, Risāla fī iʿtiqād*

*al-ḥukamāʿ, Qiṣṣat al-ġurba al-ġarbiyya*. – Repr.: *Maġmūʿa-yi mušannafāt-i šayḥ-i iṣrāq* 2. Tehran, 1976; 1993.

25 OMM III = *Œuvres philosophiques et mystiques*, II. *Œuvres en persan*. – Ed. with a French intro. by Seyyed Hossein Nasr; analysis and commentary by Henry Corbin. Tehran, 1970 [Opera metaphysica et mystica, III]. – Includes: *Partaw-nāma, Hayākil al-nūr, Alwāḥ-i ʿimādī, Risālat al-ṭayr, Āwāz-i par-i Ġabrāʾīl, ʿAql-i surḥ, Rūzī bā ġamāʿat-i šūfiyān, Risāla fī Ḥālat al-ṭufūliyya, Muʿnis al-ʿuṣṣāq, Luġat-i mūrān, Šafīr-i Sīmurġ, Bustān-i qulūb yā Rawḍat al-qulūb, Yazdān-šināht, Risālat al-abrāġ*. – Repr.: *Maġmūʿa-yi mušannafāt-i šayḥ-i iṣrāq* 3. Tehran, 1976; 1993.

26 *L'archange empourpré. Quinze traités et récits mystiques*. – French transl. by H. Corbin. Paris, 1976. – Includes in transl.: *Risāla fī iʿtiqād al-ḥukamāʿ, Hayākil al-nūr, al-Alwāḥ al-ʿimādiyya, Partaw-nāma, Kalimat al-taṣawwuf, ʿAql-i surḥ, Āwāz-i par-i Ġabrāʾīl, Qiṣṣat al-ġurba al-ġarbiyya, Muʿnis al-ʿuṣṣāq, Risālat al-abrāġ, Rūzī bā ġamāʿat-i šūfiyān, Risāla fī ḥālat al-ṭufūliyya, Luġat-i mūrān, Šafīr-i Sīmurġ, Wāridāt wa-taqdīsāt*.

27 *Sih risāla: al-Alwāḥ al-ʿimādiyya; Kalimat al-taṣawwuf; al-Lamaḥāt*. – Ed. by Naġafqulī Ḥabībī, preface by Seyyed Hossein Nasr. Tehran, 1977. – Repr.: *Maġmūʿa-yi mušannafāt-i šayḥ-i iṣrāq* 4 = *Œuvres philosophiques et mystiques*, IV. Tehran, 1380/2001 [different pagination].

28 *The Mystical and Visionary Treatises of Shihabuddin Yahya Suhrawardi*. – Transl. by Wheeler McIntosh Thackston.

London, 1982. – Includes transl. of:  
*Risālat al-tayr, Āwāz-i parr-i Ġabrāʾīl, ʿAql-i surḥ, Rūzī bā ḡamāʿat-i šūfiyān, Risāla fī ḥālat al-ṭufūliyya, Muʿnis al-ʿuṣṣāq, Luḡat-i mūrān, Ṣafīr-i sīmurg, Qiṣṣat al-ḡurba al-ḡarbiyya.* – New ed. with Persian and English parallel text. Costa Mesa, 1999.

29 *Qiṣṣahā-yi šayḥ-i iṣrāq.* – Ed. by Ġaʿfar Mudarris-i Šādiqī. Tehran, 1377/1998 (2nd ed.).

30 *Il fruscio delle ali di Gabriele. Racconti esoterici.* Introduzione e note di Nasrollah Pourjavady, traduzione di Sergio Foti. Milan, 2008.

### Individual Titles

35 *ʿAql-i surḥ.* OMM III [\*25: 225–239]. – Ed. by Muḥsin Šabā, includes the facsimile of the Persian ms on which the edition is based. Tehran, 1330/1951. – Ed. by Sayyid Muḥammad Bāqir Sabzawārī [\*22: 212–219]. – French transl. with notes by Henry Corbin [\*26: 201–220]. – Germ. transl. by Bettina Löber, in *Das Rauschen der Flügel Gabriels*. Birnbach, 2006, 76–85.

36 *al-Atwāḥ al-ʿimādiyya.* OMM III [\*25: 109–195] (Pers. version). – Ed. by Naḡafqulī Ḥabībī [\*27: 31–98] (Ar. version). – Partial French transl. with notes by Henry Corbin [\*26: 99–131].

37 *Āwāz-i parr-i Ġabrāʾīl.* OMM III [\*25: 207–223]. – Ed. and French transl. by Henry Corbin and Paul Kraus, “Suhrawardī d'Alep: Le bruissement de l'aile de Gabriel, traité philosophique et mystique.” *Journal asiatique* 227 (1935): 1–82. – French transl. with notes by

Henry Corbin [\*26: 227–264]. – Germ. transl. by Bettina Löber, in *Das Rauschen der Flügel Gabriels*. Birnbach, 2006, 29–38.

38 *Hayākil al-nūr.* OMM III [\*25: 83–108]. – Ed. Muḥyī al-Dīn Šabrī al-Kurdī. {Miṣr}, 1335/1916. – Ed. by Muḥammad ʿAlī Abū Rayyān. Cairo, 1957. – Ed. by Muḥammad Karīmī Zangānī Aṣl. Tehran, 1379/2000. Includes the text of the Abū Rayyān ed., a new ed. of the Pers. transl., and a Pers. commentary *az ʿahd-i Āl-i Muẓaffar.* – French transl. with notes Henry Corbin [\*26: 41–89]. – Engl. transl. by Bilal Kuşpınar, *Temples of Lights*. Kuala Lumpur, 1996. – Engl. transl. by Tosun Bayrak, *The Shape of Light*. Louisville, 1998.

39 *Ḥikmat al-iṣrāq.* OMM II [\*24: 1–260]. – Ed. and transl. by John Walbridge and Hossein Ziai, *The Philosophy of Illumination*. A new critical edition of the text of Hikmat al-Ishraq. Provo, 1999. – French transl. (of the second part) by Henry Corbin, *Le livre de la sagesse orientale (Kitab hikmat al-ishraq) commentaires de Qotboddin Shirazi et Molla Sadra Shirazi*. Paris, 1986; includes an intro. by Christian Jambet. – Germ. transl. by Nicolai Sinai, *Shihāb al-Dīn al-Suhrawardī, Philosophie der Erleuchtung. Ḥikmat al-ishraq*. Berlin, 2011. – Partial Germ. transl. by Max Horten (Halle, 1912; reprograph Hildesheim, 1981).

40 *Kalimat al-taṣawwuf.* – Ed. by Naḡafqulī Ḥabībī [\*27: 99–139]. – Ed. by Ḥasan ʿAlī ʿĀṣī, “Kalimāt al-šūfiyya.” *Maḡallat Maʿhad al-maḥṭūṭāt*

*al-ʿarabiyya* (Kuwait 1404/1984): 139–186; earlier ed. Beirut, 1983, attributed to Ibn Sīnā. – Partial French transl. with notes by Henry Corbin [\*26: 153–181].

41 *Luġat-i mūrān*. OMM III [\*25: 293–311]. – Ed. with both Persian and English introductions by Naṣrallāh Pūrġawādī. Tehran, 1386/2007. – Ed. and transl. by Otto Spies and Sarfaraz Khan Khatak [\*21: 2–12 (Pers.), 13–27 (Engl.)]. – French transl. with notes by Henry Corbin [\*26: 420–439].

42 *al-Mašārīʿ wa-l-muṭāraḥāt*, MS Leiden Or. 365. – Ed. in OMM I [\*23: 193–506] (only part 3).

43 *Muʿnis al-ʿuṣṣāq*. OMM III [\*25: 267–291]. – Ed. and French transl. by Henry Corbin, “Pour l’anthropologie philosophique. Un traité persan inédit de Suhrawardī d’Aleḫ († 1191).” *Recherches philosophiques* 2 (Paris 1932–1933): 371–423. – French transl. with notes by Henry Corbin [\*26: 302–337].

44 *al-Muqāwamāt*. OMM I [\*23: 123–192] (only part 3).

45 *Partaw-nāma*. OMM III [\*25: 1–81]. – Ed. and transl. by Hossein Ziai, *The Book of Radiance*. Persian and English parallel text. Costa Mesa, 1999. – Cf. Naṣrallāh Pūrġawādī, “Partaw-nāma u tarġuma-yi ingilisī-yi ū.” In id. *Iṣrāq wa ʿirfān*. 2001 [\*56: 387–407]. – Ed. by Sayyid Muḥammad Bāqir Sabzawārī [\*22: 220–272]. – French transl. with notes by Henry Corbin [\*26: 201–220]. – Partial French transl. with notes by Henry Corbin [\*26: 139–152].

46 *Qiṣṣat al-ġurba al-ġarbiyya*. OMM II [\*24: 273–297]. – Ed. by Aḥmad Amīn,

*Ḥayy Ibn Yaqzān li-Ibn Sīnā wa-Ibn Ṭufayl wa-l-Suhrawardī*. Cairo, 1966. – French transl. with notes by Henry Corbin [\*26: 273–287]. – French transl. by Abdelwahab Meddeb, *Récit de l’exil occidental*. Saint-Clément-la-Rivière, 1993. – Engl. transl. by Jaakko Hämeen-Anttila, “Suhrawardī’s ‘Western exile’ as artistic prose.” *Ishraq* 2 (2011): 105–118. – Germ. transl. by J. Christoph Bürgel, in *Tausendundeine Welt*. Munich, 2007, 125–133. – Germ. transl. by Bettina Löber, in *Das Rauschen der Flügel Gabriels*. Birnbach, 2006, 128–133.

47 *Risāla fī Ḥālat al-ṭufūliyya*. OMM III [\*25: 251–266]. – Ed. by Naṣrallāh Pūrġawādī, “Taṣḥīḥ-i ġadidī az ‘Risāla fī ḥālat al-ṭufūliyya.’” In id., *Iṣrāq wa ʿirfān*. Tehran 1380/2001, 339–358. – French transl. with notes by Henry Corbin [\*26: 392–412].

48 *Risāla fī l’ṭiqād al-ḥukamāʾ*. OMM II [\*24: 261–272]. – French transl. with notes by Henry Corbin [\*26: 14–30].

49 *Risālat al-Ṭayr*. OMM III [\*25: 197–205]. – Ed. and transl. by Otto Spies and Sarfaraz Khan Khatak [\*21: 39–46 (Pers.), 45–51 (Engl.)]. – French transl. by Henry Corbin, *Avicenne et le récit visionnaire*. Tehran, 1954; Engl. *Avicenna and the Visionary Recital*. Transl. from French by Willard R. Trask. New York, 1960, further ed. 1980, 1990.

50 *Rūzī bā ġamāʿat-i šūfīyān*. OMM III [\*25: 241–250]. – French transl. with notes by Henry Corbin [\*26: 368–381].

51 *Šafīr-i Simurg*. OMM III [\*25: 313–332]. – Ed. and transl. by Otto Spies and Sarfaraz Khan Khatak [\*21:



13–38 (Pers.), 28–44 (Engl.)). – French transl. with notes by Henry Corbin [\*26: 449–469].

52 *al-Taḥwīḥāt al-lawḥiyya wa-l-ʿarṣiyya*. OMM I [\*23: 1–121]. – Ed. by Naḡafqulī Ḥabībī. Tehran, 1388/2009. – Partial ed. (only logic) by ʿAlī Akbar Fayyād, *Manṭiq al-Taḥwīḥāt*. Tehran, 1334/1955. – Engl. transl. by M.Y. Hairī, “Suhrawardī’s An episode and a trance. A philosophical dialogue in a mystical stage.” In *Islamic Philosophy and Mysticism*. Ed. by Parviz Morewedge. Delmar, New York, 1981, 177–189; after OMM I [\*23: 70–74].

#### *Commentaries on al-Suhrawardī’s Works*

60 Ibn Kammūna, Saʿd b. Maṣṣūr (d. 683/1284–1285). *al-Tanqīḥāt fī ṣarḥ al-Taḥwīḥāt: Refinement and commentary on Suhrawardī’s Intimations. A thirteenth century text on natural philosophy and psychology*. – Ed. by Hossein Ziai and Ahmed Alwishah. Costa Mesa, 2002. – Ed. by Naḡafqulī Ḥabībī, *Ibn Kammūna, Ṣarḥ al-Taḥwīḥāt al-lawḥiyya wa-l-ʿarṣiyya*, 3 vols. Tehran, 1388/2009.

61 al-Šāhrazūrī, Šams al-Dīn Muḥammad b. Maḥmūd (d. 687/1288 or later). *Šarḥ-i Ḥikmat al-išrāq*. – Ed. by Ḥusain Ḍiyāʾī [Ziai]. Tehran, 1993, 2001 (2nd ed.).

62 al-Šīrāzī, Quṭb al-Dīn (d. 710/1311 or 716/1316). *Šarḥ-i Ḥikmat al-išrāq*. – Ed. by ʿAbdallāh Nūrānī, Maḥdi Muḥaqqiq. Tehran, 2001. – Gloss by Šadr al-Dīn Muḥammad Ibn Ibrāhīm al-Šīrāzī (Mullā Šadrā, d. 1050/1640); ed. by Hossein Ziai, *Addenda on the commentary on the philosophy of illumination, 1: On the*

*rules of thought*. Costa Mesa, 2010. – New ed. by M. Mūsawī, with a preface by H. Naṣr. *Quṭb al-Dīn al-Šīrāzī: Šarḥ ḥikmat al-išrāq ba inḍimām-i Taʿlīqāt-i Šadr al-Mutaʿallihīn*. 2 vols. Tehran, 1388 h.š./1430 q./2009 and 1391 h.š./2012.

63 al-Dawānī, Muḥammad b. Asʿad Ġalāl al-Dīn (d. 908/1502–1503). *Šawākil al-ḥūr fī ṣarḥ Hayākil al-nūr*. – Crit. ed. by M. Abdul Haq and Muhammad Yousuf Kokan. Madras, 1953. – Regarding Naḡm al-Dīn Maḥmūd al-Nairīzī’s glosses on this commentary by al-Dawānī cf. Pourjavady 2011 [\*140: 136. 188 189].

64 al-Daštakī, Ġiyāṭ al-Dīn Maṣṣūr (d. 948/1542). *Išrāq Hayākil al-nūr li-kašf ḡulumāt šawākil al-ġarūr*. – Ed. by ʿAlī Awḡabī. Tehran, 2003.

65 Mīr Dāmād, Muḥammad Bāqir al-Astarābādī (d. 1040/1630). *al-Qabasāt*. – Ed. by Maḥdi Muḥaqqiq and Toshihiko Izutsu. Tehran, 1977; 1988 (2nd ed.).

66 Mīr Dāmād. *Ġaḍawāt wa-mawāqīt, bā ḥawāšī-yi ʿAlī Nūrī, taṣḥīḥ wa-taḥqīq-i ʿAlī Awḡabī*. Tehran, 2001.

67 Ismāʿīl ʿAnqarawī, Rusūḥ al-Dīn Ismāʿīl b. Aḥmad (d. 1041/1631–1632). – Bilal Kuşpınar, *Ismāʿīl Ankaravī on the illuminative philosophy. His İzāḥu’l Ḥikem; its edition and analysis in comparison with Dawwānī’s Shawākil al-Ḥūr; together with the translation of Suhrawardī’s Hayākil al-Nūr*. Kuala Lumpur, 1996.

68 al-Harawī, Muḥammad Šarīf Nīzām al-Dīn (11th/17th cent.). *Anwāriyya. Tarġuma wa-šarḥ-i Ḥikmat al-išrāq-i Suhrawardī*. – Ed. by Ḥusain Ḍiyāʾī [Ziai]. Tehran, 1358/1979.

## 2 Life

The philosopher, writer, and Sufi thinker Šihāb al-Dīn Abū l-Futūḥ Yaḥyā b. Ḥabāš b. Amīrak al-Suhrawardī, known as *šayḥ al-išrāq*, ‘master of illumination’, was born in 550/1155 or a few years earlier in Suhraward, accused of spreading un-Islamic ideas, and executed in or around 587/1191 in Aleppo on the orders of Sultan Saladin. Because of his violent death, he is frequently referred to as ‘the martyred [lit. ‘killed’] master’ (*šayḥ-i maqtūl*).

Šihāb al-Dīn Abū l-Futūḥ Yaḥyā shares the name (referring to the place of his birth) Suhrawardī with two famous Sufi contemporaries, with whom he must not be confused: with Šihāb al-Dīn Abū Ḥafṣ ‘Umar al-Suhrawardī (d. 632/1234) and the latter’s teacher and paternal uncle, Abū l-Naḡīb ‘Abd al-Qāhir Suhrawardī (d. 563/1168).

The trial of Suhrawardī is described in some detail in the near-contemporary *Bustān al-ġāmi‘* (*The Garden that Gathers [All Works of History of All Times]*), a Syrian chronicle composed in 592–593/1196–1197, apparently by a namesake of the historian ‘Imād al-Dīn al-Iṣfahānī [\*1: 150–151]. Suhrawardī’s execution is also mentioned briefly – and entirely approvingly, as an example of Saladin’s policy of implementing the *šarī‘a* – in the biography of Saladin by the *qāḍī* Ibn Šaddād (*al-Nawādir al-sultāniyya* [\*3: 10 ed. Šayyāl]). More detailed entries on Suhrawardī are found in biographical dictionaries composed few decades later, such as Yāqūt (*Iršād al-arīb* [\*2: vii 269–272]), Ibn Abi Uṣaybi‘a (*‘Uyūn al-anbā’* [\*5: ii 167–171 Müller, 641–646 Riḍā]), and Ibn Ḥallikān (*Wafayāt al-a‘yān* [\*6: vi 268–274]). The most extensive account was written by Suhrawardī’s later admirer, Šams al-Dīn al-Šahrazūrī (d. after 687/1288) in his *Nuzhat al-arwāḥ* (*Recuperation of the Animal Spirits*) [\*7: 119–143, Persian version by Maqṣūd ‘Alī Tabrizī 454–474]. While these sources convey a general image of Suhrawardī’s extraordinary personality, the information they provide is rather selective. Their frequently anecdotal and occasionally divergent accounts leave us with few certainties. For his execution, for instance, there are several dates ranging from ‘late 586’ (January 1191) to ‘588’ (1192–1193). Ibn Ḥallikān claims that 5 Raġab 587 (29 July 1191) is the only correct date, but he also quotes a statement by the *qāḍī* Ibn Šaddād transmitted by Sibṭ Ibn al-Ġawzī according to which it was at the end of Dū l-Ḥiġġa 587 (i.e. nearly six months later) that Suhrawardī’s ‘body was brought from the prison into the city, and his pupils dispersed’. The year of Suhrawardī’s birth is not certain, either, but 550/1155 or slightly earlier can be assumed as an approximation, in view of the estimates of his age at the time of his execution, on which the same sources are more or less agreed, stating 36, 38, or ‘almost 40’. One account, however, cited by Šahrazūrī as a further variant, claims that he was 50 at the time (OMM III [\*25 Persian intro. 19]; cf.

also Muğmal-i Faṣīḥī [\*9: 1 2. 269], where his ‘martyrdom’ is dated to 586 H at which time he was purportedly 50 years of age). The age of 88, given in Maqṣūd ‘Alī Tabrīzī’s Persian version of Šahrazūrī’s *Nuzha* [\*7: 463], is clearly wrong (cf. also OMM III [\*25 Persian intro. 30], where the text has been corrected to read ‘38 years’).

Suhrawardī, in the present day a village or hamlet in a mountain valley south of Zanḡān, was a fortified city on the Hamadan road in pre-Mongol times and, as Ibn Ḥawqal reports, inhabited mainly by Kurds (cf. OMM III, intro. [\*25: 144–145]). Suhrawardī himself indirectly confirms in his *Talwīḥāt* that he was born and grew up in this city, when he describes his own observations of seemingly petrified human figures ‘near our city (*madīnatunā*) Suhraward’ (cf. Ibn Kammūna, *al-Tanqīḥāt fī šarḥ al-Talwīḥāt* [\*60: 224 Ziai]). However, he must have left his home at an early age for Marāḡa, the former capital of Āḍarbāyḡān, which he was able to reach from Suhraward directly via Zanḡān and Miyāna. In the context of an argument in favour of the autonomous existence of the ‘world of images’ (*‘ālam al-miṭāl*, see below), Suhrawardī mentions that the inhabitants of Miyānaḡ and Darband (presumably not the famous port on the Caspian Sea but a different Darband between Miyāna and Marāḡa) frequently observed with their own eyes the apparition of immaterial beings that moved like bodies in a manner that left no doubt of their existence (*Ḥikmat al-išrāq* [\*39: § 246]). According to most biographical accounts, Suhrawardī’s early intellectual education took place in Marāḡa under Maḡd al-Dīn al-Ġilī, a theologian and philosopher also known as one of Faḥr al-Dīn al-Rāzī’s teachers. Certain accounts also hint that al-Rāzī and Suhrawardī knew and esteemed one another (cf. Landolt 1987 [\*90: 485]). The intellectual environment in which Suhrawardī moved in Marāḡa appears to have been characterised by a special combination of al-Ġazālī’s mysticism with Ibn Sīnā’s philosophy and logic, as suggested by a ‘philosophical anthology from Marāḡa’ (*Maḡmū‘a-yi falsafī-yi Marāḡa*, facs. ed. by N. Pourjavady, Tehran, 1380/2002). This anthology was collated in 597/1200–1201 and contains an abundant collection of treatises by Abū Ḥamid al-Ġazālī, ‘Ayn al-Quḍāt al-Hamadānī, Ibn Sīnā, ‘Umar b. Sahlān al-Sāwī, and Maḡd al-Dīn al-Ġilī himself. Among these authors, al-Sāwī (or Sāwaḡī) appears to have been the one for whom Suhrawardī felt the most pronounced interest. At least three times he refers to al-Sāwī’s *Kitāb al-Baṣā‘ir al-naṣīriyya* (*The Book of Insights for Naṣīr al-Dīn*), albeit only in order to criticise it (OMM I [\*23: 146. 278. 352]). He must also have been familiar with al-Sāwī’s translation of and commentary on Ibn Sīnā’s *Risālat al-Ṭayr* (*Epistle of the Birds*) (ed. by Spies, Khatak, in *Three Treatises* [\*21: 47–89]) when he wrote his own Persian translation of the same *Epistle of the Birds* (ibid. [\*21: 39–46]; ed. by Naṣr in OMM III [\*25: 198–205]).

Apparently, al-Sāwī's works were part of the philosophical curriculum in Marāḡa. This might throw doubt on an account related only by al-Šāhrazūrī, which al-Šāhrazūrī himself considered uncertain, namely that Suhrawardī later moved from Marāḡa to Isfahan in order to study the *Kitāb al-Baṣā'ir* under an otherwise unknown teacher named al-Ẓāhīr al-Fārisī. In fact, there is no evidence that al-Suhrawardī was ever in Isfahan at all. While one of the treatises attributed to him by al-Šāhrazūrī, *Bustān al-qulūb* (*The Garden of Hearts*), was indeed composed for a group of friends in Isfahan (cf. the text in OMM III [\*25: 334]), the authorship of the text in question is uncertain, as it was attributed to other writers as well. Moreover, its author mentions that he met a venerable *pīr* in Šan'ā (cf. the text in OMM III [\*25: 369–371]), meaning that Suhrawardī would have had to travel to distant Yemen even before reaching Isfahan. This is hardly possible, unless we interpret this journey as an 'imaginary' one. Suhrawardī does not appear to have been known in Baghdad during his lifetime, a conclusion drawn from the combination of information provided by two slightly differing versions of 'Abd al-Laṭīf al-Baḡdādī's autobiography: only after this famous scholar had travelled from Baghdad to Mosul in 585/1189–1190 did he hear of Suhrawardī for the first time, as a brilliant philosopher who had appeared in the region of Diyār Bakr (south-east Anatolia). However, when 'Abd al-Laṭīf al-Baḡdādī succeeded in laying hands on some of his writings, he found them but little to his taste (cf. Langermann 2007 [\*16]).

It is more probable that Suhrawardī travelled from Marāḡa directly to the region of upper Mesopotamia or south-east Anatolia, moving in regions mainly inhabited by Kurds, although the precise path he took is anything but clear. Al-Šāhrazūrī refers to Suhrawardī's preference for the region of Diyār Bakr in a general way, but also mentions that he occasionally spent time in Syria and in Rum (i.e. Seljuk Anatolia). He may have broken his journey at Mardin, where he is said to have studied under Šayḡ Faḡr al-Dīn Māridīnī (d. 594/1198 at the age of 82 in Āmid), to whom he was linked in lifelong friendship. Mardin enjoyed a reputation of philosophical and medical scholarship in the tradition of Ibn Sīnā, possessing an excellent library endowed by Mardin's Artuqid rulers, and Šayḡ Faḡr al-Dīn was an outstanding example of this scholarly tradition (al-Qiftī, *Tārīḡ al-ḡukamā'* [\*4: 290–291]; Ibn Abī Uṣaybi'a, *Uyūn al-anbā'* [\*5: I 299–301]). One of Faḡr al-Dīn's pupils, Ibn Raḡīqa, who accompanied him on his travels, also reports how Suhrawardī caused quite a stir in the chief mosque of Mayyāfāriqīn when he turned up in the garb of an exotic dervish, dressed like a shabby donkey drover (Ibn Abī Uṣaybi'a, *Uyūn al-anbā'* [\*5: II 169]). According to the *Durrat al-aḡbār* (*The Pearl of Information*, composed c.730/1339 by Munšī-i Yazdī), the Persian translation of Bayhaqī's *Tatimmat Šiwān al-ḡikma* (*Completion of the Treasury of Wisdom*),

he usually wore the patched coat (of a Sufi) and 'a red cap in the colours of Turkmens and Kurds' (*Durrat al-aḥbār* [\*8: 104]). He is said to have paid little attention to his appearance and indulged in extreme forms of asceticism. Some accounts attribute miracles to him or describe him as an expert in the magic art of conjuring up visual apparitions (*ʿilm al-simīyā*). Šahrazūrī persists in a spiritual interpretation of such reports, expressing the assumption that Suhrawardī would have learnt many things from Sufis he met on his travels, without, however, naming any one of these as his Sufi teacher. There can be no doubt that Suhrawardī was familiar with written Sufi tradition; he occasionally refers to classic Sufi sources, especially Abū Ṭālib al-Makkī's *Qūt al-qulūb* (*The Nourishment of the Hearts*) (cf. Pourjavady 2001 [\*56: 368–369]), but he does not appear to have been a pupil with a Sufi of his own time. This is borne out by one of his rare autobiographical remarks, also pointed out by Šahrazūrī, found at the end of his *Kitāb al-Mašārīʿ wa-l-muṭāraḥāt* (*Book of Approaches and of Exchange*): 'I am almost thirty years of age now, and have spent the greater part of my life searching for knowledge and for an intellectual equal, but I have found no-one who was familiar with the noble sciences, nor anyone who believed in them!' (OMM I [\*23: 505]). He emphasises frequently (e.g. OMM I [\*23: 70–74 and 500–505]) that in his opinion, classic Sufis such as Dū l-Nūn al-Miṣrī, Sahl-i Tustarī, and Bāyazīd-i Bastāmī were the true heirs of ancient hermetic, Platonic, and Zoroastrian wisdom or, in other words, the 'science of lights' (*ʿilm al-anwār*) or 'illumination' (*išrāq* – lit. illumination by the light of the rising sun, according to Corbin to be read as *cognitio matutina*). Suhrawardī resolved to 're-establish' this tradition against the vulgar peripatetic ideas of the *falāsifa*, drawing on a mysterious 'oriental' source (*al-aṣl al-mašriqī*, cf. also Corbin in: OMM I [\*23: XXXVII–LXII]). A remark in the *Kalimat al-ṭaṣawwuf* [\*27: §55 ed. by Nağafqulī Ḥabībī] makes clear that he was referring above all to the Persian doctrine of light. In it, he refers to the passage from the Quran that states 'of the people of Moses there is a nation that is guided by the truth' (Sura 7:159) and reinterprets it to mean the wise men of the ancient Persians, whose doctrine of light he 'revived' in his *Kitāb Ḥikmat al-išrāq* (*The Philosophy of Illumination*).

The *Kitāb al-Mašārīʿ wa-l-muṭāraḥāt* is the third of a series of philosophical works Suhrawardī regarded as the necessary propaedeutics for the correct understanding of his *magnum opus*, the *Kitāb Ḥikmat al-išrāq*. He completed the latter on 29 Ġumādā II 582/16 September 1186, 'when a conjunction of the seven planets occurred in Libra', addressing it solemnly as his spiritual testament to his 'brothers' (*Ḥikmat al-išrāq* [\*39: §§ 278–279]). The work is not dedicated to a king or prince, and we do not know where it was written.

Considering Suhrawardī's allegedly close relationship with al-Malik al-Zāhir, Sultan Saladin's third son (see below), it is remarkable that this date coincides almost exactly with the latter's return to Aleppo as the de facto ruler of the city in Ġumādā 11 582/August–September 1186. Immediately after Saladin's capture of Aleppo three years previously, in 579/1183, the boy (who was barely eleven years old at the time) had been appointed nominal ruler of the city, but been replaced soon after by another of Saladin's sons, al-Malik al-ʿĀdil, and returned to his father's court in Damascus.

According to Yāqūt and Ibn Abī Uṣaybiʿa, Suhrawardī reached Damascus in the same year of 579/1183–1184 and established himself at the (Ḥanafī) Madrasa al-Ḥallāwiyya in order to attend the lectures by its head at the time, Šayḥ Iftihār al-Dīn. He soon made a name for himself thanks to his brilliant performance in debates with the latter's students as well as other *fuqahāʾ*. This was the skill that is said to have first brought him to the attention of al-Malik al-Zāhir. Alarmed by the philosopher's influence on the young ruler, the *fuqahāʾ* finally demanded Suhrawardī's execution in a letter to Saladin. According to the oldest source, *Bustān al-ġāmiʿ*, they argued against Suhrawardī in a genuine court hearing, convicting him of denying Islam (*kufṛ*) after he declared that it was not absolutely impossible for God to create a further prophet after Muḥammad. Ibn Ḥallikān, on the other hand, emphasises that it was his profession of the faith of the ancient philosophers that was the reason for their *fatwā* against him. The other sources mention un-Islamic tenets and behaviours of which he was accused, but without providing more precise evidence. In any case, it seems that Saladin did not hesitate to act, commanding his son to carry out the execution order unconditionally. According to Ibn Šaddād, al-Malik al-Zāhir agreed without much demur, while the other sources, especially Šahrazūrī, stress that on the contrary, he obeyed only after several attempts at resistance. The sources also cite divergent accounts of how precisely Suhrawardī died: whether al-Malik al-Zāhir permitted him to starve himself to death in the citadel once it had become clear that the execution was inevitable, or whether he had him executed by strangulation or some other method.

However, the version of Suhrawardī's last years in Aleppo presented above, and to date widely received by scholarship, should be challenged for several reasons. Firstly, it is by no means certain that he spent the last seven or eight years of his life in Aleppo. If we believe Ibn Šaddād, Šayḥ Iftihār al-Dīn did not become professor at the Madrasa al-Ḥallāwiyya until 587/1191 (cf. Eddé 1995 [\*10: 237, n. 3]). For this reason alone, Suhrawardī's arrival in Aleppo would have to have taken place a very short time before his execution. In addition, as mentioned above, ʿAbd al-Laṭīf al-Baġdādī states that Suhrawardī 'appeared'

in the region of Diyār Bakr at the late date of 585/1189–1190, or possibly even a year later, which would place him in the Artuqid dominion rather than Ayyubid Aleppo. The *Durrat al-aḥbār*, too, emphasises Suhrawardī's close relations with the Artuqids, not mentioning the Ayyubids at all.

Secondly, there is no reference to al-Malik al-Zāhir in any of Suhrawardī's extant works, while at least two of his later works were demonstrably written for other rulers. These are the *Tablets for 'Imād al-Dīn* (*al-Atwāḥ al-'Imādiyya*) – listed in the *Bustān al-ḡāmi'* as being particularly outrageous – and the *Partaw-nāma* (*Book of Rays*). The *Tablets for 'Imād al-Dīn* were composed at the request of the Artuqid prince 'Imād al-Dīn Abū Bakr ibn Qarā Arslān, ruler of Ḥarpot (Hartpert) from 581/1185–1186 onwards. This suggests that he enjoyed the protection of the Artuqids *after* 582/1186, not least because the *Tablets* mention the *Kitāb Ḥikmat al-iṣrāq* as a publicly available work (cf. Pourjavady 2001 [\*56: 83–94]). It has also been possible to demonstrate that Suhrawardī's *Partaw-nāma* was written for the oldest son of the Seljuk Qilic Arslān II, Rukn al-Dīn Sulaymān Šāh, who had become *malik* of Tokat around ten years before 592/1196, when he succeeded to rule over the Seljuk sultanate of Rum. Rukn al-Dīn Sulaymān Šāh was known to be a prince with a marked interest in philosophy, and thus in opposition to the 'Islamic traditionalism' that was in the ascendancy and encouraged by Saladin as well as the caliph al-Nāṣir li-Dīn Allāh (cf. Pourjavady 2001 [\*56: 387–407]; Hartmann 1975 [\*8: 250–262]). Moreover, it is probably no coincidence that precisely these two works end with hints at a doctrine of light in the mythical style of the 'good' Iranian kings Farīdūn and Kay Ḥusraw. This might also be interpreted as a political statement. It seems reasonable to attach more importance to Suhrawardī's demonstrable connections to the Artuqids and Seljuks, with whom Saladin most certainly did not entertain friendly relations, during the last years of his life, than to the story of his 'seducing' the Ayyubid prince into philosophy, a story known only to biographical tradition.

Thirdly, we may assume that the similarity of Suhrawardī's ideas with Ismā'īlī doctrine would have given the conservative Sunni authorities sufficient cause for concern in any case. This is particularly true of the introduction to the *Ḥikmat al-iṣrāq* (*Philosophy of Illumination*), which takes as its leitmotif the *imām muta'allih*, the ideal ruler legitimised by divine inspiration, and God's representative on earth. This kind of background, even if it was based on a misunderstanding, might at least explain the concrete accusation mentioned above – that Suhrawardī denied that there could be no more prophets after Muhammad (cf. Landolt 1987 [\*90: 481–485] and 2003 [\*58: 16–21]).

### 3 Works

#### 3.1 Systematic Treatises – 3.2 Philosophical Didactic Narratives – 3.3 Other Texts

##### 3.1 *Systematic Treatises*

*Hikmat al-išrāq*

*The Philosophy of Illumination*

GAL [\*3: G I 565 (no. 1); S I 782]; OMM II [\*24: 19–79 (intro.)]; Walbridge, Ziai [\*39: xxx–xxxvii]; Sinai [\*39: 225–301]; Amin Razavi 1997 [\*52: 13–14]. – For textual editions and translations cf. [\*39].

Suhrawardī's *magnum opus*, completed at the end of Ġumādā II, 582 H (September 1186) with a solemn dedication to his 'brothers' (cf. § 279), is not dedicated to a temporal ruler. In the introduction (§ 1–6) the author explains his philosophical convictions and the purpose of the work. It is divided into two main parts of approximately equal length, consisting of I (§ 7–106), a detailed critique of current epistemology and the logic of the 'Peripatetics' (this is mainly aimed at Ibn Sīnā), and II (§ 107–281), an overview of the true 'philosophy of illumination', more precisely: his own doctrine of the 'illuminating' (*išrāq*) of the objective world of existence as well as the subjective cognition process by means of immaterial lights or radiations, ultimately the original 'light of lights', or God. The author himself sees his doctrine in the context of Platonic tradition as well as Zoroastrianism (cf. Macuch 1983 [\*45: 13–16], regarding Zoroastrian elements in Suhrawardī cf. also Corbin 1946 [\*83]).

Order of the parts (following the translation by Sinai): Part I (§ 7–106): On the rules of thought – Treatise 1 (§ 7–15): On knowledge and definition, arranged in 7 rules (*dābit*) with the following main topics: Relation between expression and meaning; quiddities; accidents; human knowledge; definitions and their preconditions. – Treatise 2 (§ 16–33): On causes and their principles, arranged in 7 rules with the following main topics: Definition

of propositions and syllogisms, classes, and modalities of propositions; contradiction; conversion; syllogistics, discussion of the three figures of conclusion; conditional sentences; conclusions by analogy; division of proof. – Treatise 3 (§ 34–106): On fallacies and a variety of arbitrations (*hukūmāt*) between theories of the philosophy of illumination and peripatetic theories, divided into different sections with the following main topics: Fallacies; resolution of doubts; the essence of accidentality; refutation of the peripatetic concept of form and prime matter; the essence of prime matter; refutation of atomism and the void; proof of the continued existence of the soul; on the Platonic ideas; that something simple can be generated by something composite; refutation of the idea that rays are physical; the essence of forms in mirrors; the objects of hearing (sounds and the letters of the alphabet); oneness and multiplicity.

Part II (§ 107–281): On the divine lights, the light of lights, and the principles of being and their order – Treatise 1 (§ 107–134): The essence of light; that which emerges first from the light of lights, divided into different sections with the following main topics: Light does not require a definition; on light and darkness; the body needs immaterial light in order to exist; the impossibility of indicating an immaterial light with the senses; everything that is light of itself as well as that which encompasses its essence is an immaterial light; the categories of light; the immaterial intellectual lights differ according to their perfection or imperfection and not according to their kind; that which causes the 'barriers' (*barāzih*) to exist, can grasp itself; the essence of the light of lights. – Treatise 2 (§ 134–176): On the order of Being, divided into different



sections with the following main topics: Of the truly One as such, only one generated existent emerges; the first entity that is generated by the light of lights is one single immaterial light; the purposes of the 'barriers'; the voluntary nature of the motion of the celestial spheres; how multiplicity is generated by the light of lights; the hierarchy of lights; the love (*maḥabba*) of the lower lights for the light of lights; how multiplicity is generated by the truly One; that something simple may emerge from something composite; the different classes of archetypes (*arbāb al-aṣnām*); infinite effects of the intellects, finite effects of the souls. – Treatise 3 (§ 177–193): The manner of activity of the light of lights and the ruling lights; more remarks on the motions of the heavens, divided into different sections with the following main topics: the eternal activity of the lights; the eternal duration of the world and circular motion of the celestial spheres; time has no beginning and no end; the objective of the motion of the spheres. – Treatise 4 (§ 194–228): On the classification of the barriers, their changing shapes (*hay'āt*), their composition and some of their capacities, divided into eight sections with the following main topics: (1) Classification of the barriers; (2) all motion ends with substantial or accidental lights; (3) changes of qualities; (4) the five external senses; (5) each mental quality has a physical counterpart; (6) the rational soul and the animal spirit in proportion; (7) there are more than five internal senses; (8) the true life of forms that are in mirrors and in the imagination. – Treatise 5 (§ 229–281): On the resurrection, prophecy, and dreams, divided into different sections with the following main topics: Transmigration of the soul; the redemption of the pure lights in the world of light; the conditions of human souls after separating from the body; evil and misery; how infinitely many existents are generated by the 'sublime existents' (*'uhwīyyāt*); causes of predictions and knowledge of hidden things; the classes of hidden inspirations; conditions of the 'wanderers' (*sālikīn*); concluding admonition of the author.

The first commentary on Suhrawardī's magnum opus was by Šams al-Dīn al-Šahrazūrī (d. 687/1288 or later). Shortly afterwards came a further commentary by Quṭb al-Dīn al-Širāzī (d. 710/1311 or 716/1316), on which Maḥmūd al-Nayrīzī (d. after 943/1536), Mīr Dāmād (d. 1041/1631–1632), and Mullā Šadrā (d. 1050/1640) would later write glosses (Pourjavady 2011 [\*140: 118–119]). This documents the lively interest later Iranian tradition took in Suhrawardī's thought from the 7th/13th century onwards (cf. Sinai [\*39: 296–297]; Schmidtke 2000 [\*134: 6–10]).

#### *Hayākil al-nūr*

##### *The Temples of Light*

GAL [\*3: G I 565 (no. 5); S I 782]; OMM III [\*25: 25–45 (Intro.)]; Corbin [\*26: 33–40]; Amin Razavi 1997 [\*52: 15]; van den Bergh 1916 [\*81]. – For textual editions and translations cf. [\*38].

Treatise in seven sections (each headed with the term *haykal*) on the body, soul, and intellect in their relations to each other, and about the Necessary Existent (God). The title of the treatise indicates the central importance of the doctrine of light. The term *haykal* is ambiguous. It was adopted into Arabic by way of Aramaic but goes back ultimately to the Sumerian language, in the first instance meaning 'temple'. In the Neo-Platonic context, *haykal* is understood to mean a 'receiving vessel' (sc. for the divine), and consequently also as 'body' (being the receiving vessel for the soul whose original home is in the vicinity of the divine). The elucidations by the commentator al-Dawānī show that the term required an explanation (reference in [\*26: 34]). Suhrawardī originally composed the work in Arabic, and appears to have translated it into Persian himself [\*26: 33]. In the Arabic version the seven chapters are preceded by a brief introduction. It is possible that the number of seven chapters indicates conceptual ties with the Ismā'īliyya.

1st temple (Ar. 47–48 Abū Rayyān/Pers. 84–85 OMM III): Definition of the body (*ġism*)

as something that possesses a dimension and that can be pointed to. Being a body (*ġismiyya*) is common to all bodies; what distinguishes them are their different forms (*hay'āt*, i.e. accidents). – The catalogue of qualities of an entity is either necessary and inseparably linked with it (such as e.g. being even with the number four, or corporeality with humans), or possible (e.g. a human standing up and sitting down), or impossible to link with it (e.g. being a horse, *farasiyya*, with a human). – That which is indivisible in the imagination (*wahm*) cannot be located in a dimension (*ġiha*), as it would lose its indivisibility in that case.

2nd temple (Ar. 49–56/Pers. 85–91): The individual always possesses awareness of its own essence (*dāt*), but not of the individual parts of its body. Personhood (*anta*, 'you' [sg.]) is thus not tied to the body but exists 'beyond' (*warā'a*) it and its parts. – Comprehending an entity occurs by means of an adequate image (*šūra*) generated in the imagination. This image has no spatial extension (*miqdār*), and neither does the place in which it resides, namely the rational soul. The latter is not corporeal, and has thus none of the qualities of the body; it is an indivisible substance (*ġawhar*) that cannot be grasped on the level of sensory perception. It governs the body, knows itself, and knows things. – The rational soul possesses external perceptive powers (the five senses) and five internal powers: the 'common sense' (*al-ḥiss al-muštarak*) that 'sees' dream visions and does not perceive them only by means of the (active) imagination (*taḥayyul*); the (passive) imagination (*hayāl*); the cogitative (capacity) (*quwwa fikriyya*), the estimative (capacity) (*wahm*) as opponent of the intellect (*aql*); and the retentive (capacity) (*ḥāfiẓa*). Each of these powers has its special place in the brain. – Animate beings possess a power of desire (*quwwa šawqiyya*), divided into concupiscence (*šahwāniyya*) and irascibility (*ġaḍabiyya*). Furthermore, they possess a motive power (*quwwa muḥarrika*). The bearer (*hāmil*) of all motive and perceptive capacities is the animal spirit (*rūḥ ḥayawānī*, pneuma). It is a subtle body (*ġism laṭīf*)

clothed in the light of the soul. The rational soul, on the other hand, is 'a light of the lights of God'. In contrast to the false belief of some, the rational soul is not God, for God is One, while the soul of each individual is distinct from that of the others, and thus lacks pure unity. The rational soul is not part of God either, and it is not pre-eternal. It is generated together with (*ma'a*) the body when its readiness to receive it is complete. Just as fire is not diminished when a wick is lit from it, the Giver (*wāhib*) does not change when the rational soul is generated.

3rd temple (Ar. 57–58/Pers. 91): There are three aspects (*ġihāt*) that concern the intellect: necessary (*wāġib*), possible (*mumkin*), and impossible (*mumtani*). The necessary is existent of necessity (*darūri l-wuġūd*), the impossible is non-existent of necessity, the possible is neither existent nor non-existent of necessity. The necessary exists essentially (*li-dātihi*), the possible requires something else, i.e. a 'cause' (*sabab*) in order to exist. Further remarks on the relation between cause and effect (*musabbab*).

4th temple (Ar. 59–67/Pers. 94–98), in five sections (*faṣl*). 1: There is only one Necessary Existent (*wāġib al-wuġūd*), everything else possesses only possible existence. The Necessary Existent is not composed out of parts (*lā yatarakkabu min al-aġzā*). The attribute (*ṣifa*) is not necessary in its essence, otherwise it would not require a substratum (*maḥall*). The Necessary Existent is not a place of attributes; attributes cannot exist in its essence. The Necessary Existent is located above the opposites, as the strongest light (*al-nūr al-ašadd*, 60 Ar.). The bodies, by contrast, are distinguished from each other by their varied forms. – 2 (Central part of the temple, *wāsiṭat al-haykal*): Bodies have corporeality in common, they differ in how they receive light (probably *istināra*, corrected from *istināda* in the Arabic text in accordance with the Persian version). Light is only accidental to bodies; its existence depends on something else, it does not appear on its own (read *ẓāhir<sup>an</sup> li-dātihi* for *ẓāhir al-dalāla*). The rational souls, on the other

hand, are independent lights (*anwār qā'ima*) that point to the eternally existing living one, the light of lights (*nūr al-anwār*). – 3: The action (*fi'l*) of the First One (i.e. God) must be one. The first thing that becomes necessary through the One is neither body nor form nor soul, but something enduring (*qā'im*) that comprehends itself and its creator (*bārī*). It is the first among the lights belonging with the created world, and in it, possible things find their end. This substance (*jawhar*) is possible of itself, and necessary through the First One. Its relation to the First One and its seeing of the First One's sublimeness generate a further sacred (*qudsī*) substance, and by contemplating (*naẓar*) its possibility (*imkān*) and its own imperfect essence compared to the glory (*kibriyā'*) of the First One, it generates a celestial body. This second sacred substance in turn generates a separate (*muğarrad*) substance by contemplating that which is above it, and by contemplating its own imperfection, a further celestial body. This process continues until the number of separate, sacred, spiritual substances, and the simple celestial and elementary bodies (*ağsām*) has multiplied. The spiritual substances, despite being active (*fa'āla*), are only intermediaries (*wasā'it*) of the generosity (*ğūd*) of the absolutely First One, namely God, who creates by means of them. Just as the strongest light does not empower (*yumakkinu*) the weakest light to illumine things independently, the over-coming, necessary power (*quwwa*) does not allow the intermediaries to be independent in their acting and generating (*igād*, according to the Persian text). – 4 (Concluding part of the section): The three worlds: (a) the world of the intellect; (b) the world of the soul; dividing the rational souls into two kinds: souls with authority over the celestial bodies (*samāwīyāt*) and souls belonging to the human species; and (c) the world of the body which is divided into an ethereal (*aṭīrī*) and an elemental (*'uṣūrī*) part. Among all the conquering lights (*anwār qā'hira*) there is one that is father to the humans, lord of the talisman (*tilasm*) of the human species, who makes their souls

emanate (*muftīd*) and perfects them. This is the spirit of the sacred (*rūḥ al-quds*) which the philosophers call the 'active intellect'. The First Intellect, on the other hand, is the first principle through which existence is generated, and the first upon which the light of the First One (i.e. the creator) shines. Correspondingly, the intellects multiply through the multitude of illuminations (*isrāqāt*) and their multiplication through the descent (*nuzūl*), that is, of light. Due to their intense manifestation (*šiddat al-zuhūr*), those intermediaries that are furthest away appear the closest; the closest of all is the 'light of lights'. Illustration by means of an example from physics: if white and black are found on a surface, white appears closer due to its presence (*zuhūr*). The First One is thus at the highest height and in the closest proximity at the same time (*fi l-'uluww al-a'lā wa-d-dunuww al-adnā*). – 5: The First One (God) is immutable (*laysa bi-mutağayyir*), does not change its will and decree, as opposed to the possible things generated by it (*mumkināt*), that owe their continued existence to it. Illustration by means of an example from physics: the ray (*šū'a*) comes from the sun, not the sun from the ray; the ray's continued existence is due to the sun, and does not harm the sun by diminishing its brilliance.

5th temple (Ar. 68–79/Pers. 99–105); with an introduction, in two sections. [Introduction:] Everything that is generated within time (*hādīt*) requires something generated within time; the cause of the things generated in time in the sublunar world is the motion (*ḥaraka*) of the spheres. As the first agent is immutable, it is not the cause of motions emerging within time; the motion of the spheres is not of nature but of volition (*irādīyya*); as everything that moves naturally will come to a halt when it has reached its goal. – 1: Further remarks on the motion of the spheres: the spheres do not require nourishment, nor growth, nor generation; they are free from passion (*lā šahwata lahā*). If even a human who cleanses himself of the distractions (*šawāğil*) of the body receives light visions of a variety of kinds, how much more must this be true of individuals

(*ašhāṣ*) of enduring form and not subject to destruction (*fasād*), i.e. the spheres. The brilliance of the sublime lights of God is not separate from them. The lights of the supernal world form a chain, with the higher shining upon the lower, and every illumination (*iṣrāq*) generates motion. The illuminations constantly renew themselves through the renewal of the motions, and from their concatenation (*tasalsul*) the things generated within time (*ḥawādīt*) are constantly generated in the sublunar world. If there were no illumination, the emanation would come to a halt, as there is no change in the essence of the First One (i.e. God). The motions of the spheres do not, however, generate things, but only effect their dispositions (*isti'dādāt*); it is God who gives to every thing that which suits its disposition. Change is caused by renewing the disposition of the respective recipient (*qābil*). Illustration of this process by means of a comparison: mirrors differ in size and degree of clearness, as do the forms (*ṣuwar*) that appear in them; but the difference is due to the recipients, i.e. the mirrors, not to the giver of forms. To ensure the continued existence of the emanation, God links constancy (*tabāt*) with constancy, and emergence (*ḥudūt*) with emergence, but He Himself is the beginning as well as the objective. – Further description of the Light of Lights. Incorrect understanding of the works of God. There is a world without illness to which the pure souls return; they are removed from evil actions; their only occupation is to look upon the lights of God; they move because of the eternal, divine light that falls on them and overcomes them. – Further remarks on the nature and motion of the celestial bodies; the reason why they do not consist of elements; their motion is cyclical (*dawriyya*); they are of a 'fifth nature' (*ṭab'ā ḥāmisa*). If the heavens did not encompass the earth, the sun would not return to the East after setting in the West. The heavens are concentric spheres, are living, possessed of reason (*nāṭiqa*), in a state of love for the lights of the sacred and obedient to their creator. The world of ether is deathless. – 2 (Concluding part of the temple):

The relation (*nisba*) that first entered into existence is the one between the enduring (*qā'im*) substance, i.e. the First Intellect, and the eternally existing (*qayyūm*), i.e. God. This relation incorporates two components: love (*maḥabba*) and force (*qahr*), reflecting the Empedoclean principles *φιλία* and *νεῖκος*, and reproduces all the way down to the division of substances into bodies and non-bodies. Among the immaterial substances there are high-ranking and low-ranking ones; bodies are divided into ethereal and elemental ones; pairings. As the light is the noblest of existent things, the noblest of the bodies is that which is most light-like (*anwar*). Definition of this noblest body, the sun (*hūrahš*, a Pers. word only in the Ar. text 78, penult.) as, among other things, the 'greatest example' (*miṭāl*) of God.

6th temple (Ar. 80–84/Pers. 105–107): On the soul: It does not end (*lā taḥṭulu*) because it has no location. It has no opposite, its creator is of eternal duration (*dā'im*), it endures through him. The link between it and the body consists of desire (*'alāqa ṣawqīyya*). On pleasure and pain; sensory perceptions; special position of the rational substance. The punishment of the souls of evildoers after their separation from the body consists of ignorance (*ḡahl*), a miserable condition of darkness and unfulfilled longing for the world of sensory perception. Negative affections linked to darkness such as fear (*faza'*) rule here. The honest, excellent souls, on the other hand, achieve in proximity to God that which no eye has ever seen, no ear heard, and no heart felt. They will see the lights of God and be immersed in the sea of light; they will return to their father, the holy spirit (*rūḥ al-quds*), like a piece of iron attracted by a magnet. To them will be revealed, once they are elevated from the darkness of the vessels (*zulmat al-hayākil*, i.e. the body, 83 Ar.) into the splendour of omnipotence (*sanā l-ḡabarūt*), things with which the physical seeing of sunlight cannot compare.

7th temple (Ar. 85–90/Pers. 107–108): The rational souls consist of the substance of the celestial world (*malakūt*); by weakening the body's strength through fasting and sleep

deprivation, they can travel there temporarily, unite with the souls of the spheres and receive hidden things from them, as from a mirror that shows the counterpart of the bearer of the image (*tantaqīšu bi-muqābalat dī naqšin*); imagination can translate something abstract (*amr<sup>an</sup> 'aqlīyy<sup>an</sup>*) into a suitable image which is then reflected in the world of sensory perception. In accordance with the emulation (*muḥākāt*), rising and falling shapes (*šabaḥ*) appear to the soul as bodily shadows (*ẓill ġismānī*); dreams, too, are the imagination's emulation of what the soul sees, but only prophetic dreams, not the confused phantasies (*adġāt*) that grow out of the tricks (*du'āba*) the devil plays on the imagination (*taḥayyul*). Heavenly pleasure of the rational souls when the light of God shines upon them. They begin to shine themselves. Reference to the chosen, whose eyes were opened and who have experienced God (*waḡadū*). Someone who wishes to gain insight must be convinced of the truth of the prophetic messages (*nubuwwāt*); the wording of the revelation (*tanzīl*) is entrusted to the prophets, their interpretation (*ta'wīl, bayān*) to the paraclete promised by Jesus (quoted after John 14:26, p. 88 Ar.), and to whom the Quran refers as well (75:19) (regarding the paraclete in Suhrawardī's work cf. Landolt 2003 [\*58: 23–24], Corbin 1971 [\*86]). The treatise ends with a prayer and the request to make 'illumination our path' (*wa-ġ'al ... al-iṣrāq sabīlanā*).

The *Hayākil* is among the works of Suhrawardī that enjoyed lasting influence. That it was regarded as a representative text is affirmed by Ḡalāl al-Dīn al-Dawānī's (d. 907/1501–02), commentary, completed on 11 Šawwāl 872/4 May 1468 (Pourjavady 2011 [\*140: 136]) and entitled *Šawākīl al-ḥūr*, and the counter-commentary by Ġiyāṭ al-Dīn al-Daštakī (d. 949/1542, on determining the year of death cf. Pourjavady 2011 [\*140: 28]) entitled *Iṣrāq Hayākīl al-nūr li-kašf ẓulumāt Šawākīl al-ġarūr* (Pourjavady 2011 [\*140: 25, 136]). The scholar Mīr Zāhid al-Harawī (d. 1101/1689), who served the Mughal emperors Šāh Ġahān and Aurangzēb, composed a gloss on

al-Dawānī's commentary (GAL I 565; one MS also Cat. Bankipore XXI no. 2355), which indicates that the *Hayākīl* were also studied in India.

#### *Partaw-nāma*

##### *Book of Rays*

GAL [\*3: S I 783 (no. 27)]; OMM III [\*25: 17–24 (Intro.)]; Corbin [\*26: 135–138]; Amin Razavi 1997 [\*52: 14–15]. – For textual editions and translations cf. [\*45]. – The arrangement of the text follows OMM III.

Treatise in ten chapters (*faṣl*), composed for the Seljuk Rukn al-Dīn Sulaymān Šāh. In the author's words, this is a synopsis (*muḥtaṣar*) presenting problems of the Peripatetics' (*maššā'īn*) terminology as well as a few 'points' of metaphysics [1].

Chap. 1: Knowledge of a thing requires an internal image (*šūrat*, lit. 'form', for εἶδος) of it that must correspond to it [2]. – Explanation of basic terms of logic: 'universal' and 'particular' [3]; 'necessary', 'possible', and 'impossible' [4]. A necessary feature (*waṣf*) of a reality (*ḥaqīqat*) is connected with it everywhere, such as the angle with the triangle and burning with fire [5]. – Induction (*istiqrā'*) [6]. – Attribute (*ṣifat*); substance (*ġawhar*), and accident (*araḍ*); the body (*ġism*) as that which is possessed of dimension [7]. – The universal concept does not exist outside of the intellect; bodies have being-a-body in common, the difference (*farq*) being found in the qualities [8]. – On the relation between body and quality [9]. – Refutation of the doctrine of the atoms. The body cannot be composed out of indivisible parts; the author explains this using several thought experiments; different sizes of infinity can be imagined, with the example of infinite sequences of tens or of hundreds [10].

Chap. 2: Infinity is unthinkable in the case of every number that is composed and arranged of units. The body is necessarily finite [11]. – Body and direction (*ġihat*), spatial order [12–13]. – Impossibility of the void (*ḥalā'*) [14–15]. – Motion as an accident for

which immobility cannot be imagined; temporal priority (*pīšī*); time is the measure of motion (*zamān miqdār-i ḥarakat ast*, p. 14); it is impossible that there was a time before time came into being; definition of 'natural' (*tabī*), 'voluntary' (*irādātī*), and 'externally commanded' (*qasrī*) motion [16]. – Definition of the 'simple' (*basīṭ*) body: there is no difference of powers within it; it does not take any shape other than the circle (*gird*) [17]. – Why a body cannot have two locations, i.e. be in two places at the same time [18]. – Bodies move in three ways: around a centre (*wasat*), away from the centre, towards the centre; the motion of the spheres, the elements; the elemental qualities; different weights of the elements [19]. – Why heavenly bodies are possessed of neither weight nor lightness [20]. – Merging of the elements into each other [21]. – Definition of matter (*hayūlā*); everlastingness of the ethereal bodies [22]. – Change (*istiḥālat*) in the elements as change in quality [23]. – Quick movement and friction generate heat in bodies, not heat and fire particles within them, as some believe. Rays (*šūʿā*), too, warm you, without fire particles being involved in any way; they are not subtle bodies either, as some falsely claim [24]. – Explanation of natural phenomena: smoke, steam, snow, thunder, lightning, comets (in Pers.: *gisūdār*, p. 22), earthquake [25]. – Three realms of nature are formed by the mixture of the four elements: mineral, vegetable, and animal [26].

Chap. 3: Personhood ('you-ness', *tuʿī*) or awareness of self is not tied to the body and the accident but is beyond it in the soul [27]. – Evidence of this [28–31]. – The soul was not created before the body, otherwise human individuality could not be explained; one soul cannot govern the bodies of all humans, as in that case everyone would know what one knows. Body and soul come into being together, and they are bonded by love and desire (*ʿišqī wa šawqī*) [32].

Chap. 4: The mixture (*mizāj*) of humans is nobler than that of the animals, consequently the human soul is nobler than the souls of animals. Animals have vegetative powers and

in addition sentience and motion. There are three vegetative powers: nourishing (*ǧādiyya*), growing (*nāmiya*), giving birth (*muwallida*). Four other powers serve the nourishing one: the attractive (*ǧādība*), the retaining (*māsika*), the digesting (*hāḍima*), and the excreting (*dāfiʿa*) powers. Animals have motive and motivational (*nuzūʿī*) powers; the latter is divided into the irascible (*ǧaḍabī*) and concupiscent (*šahwānī*) faculties [33]. – External and internal senses. The five external senses; discussion of the physiological process of hearing and seeing, with a report on Aristotle [34]. – The five internal senses: Common sense (*ḥiss-i muštarak*), passive imagination (*ḥayāl*), estimative power (*wahm*), active imagination (*mutaḥayyila*) – if used by the intellect, the latter is also called cogitative (capacity) (*mufakkira*) – and retentive (*ḥāfiẓa*) capacity; definition and location of the five internal senses in the brain [35]. – The bearer (*hāmil*) of all these powers is the animal pneuma (*rūḥ-i ḥayawānī*), a subtle warm body; the branch of it that moves towards the brain is called 'pneuma of the soul'; sensation and motion are generated by it; the branch that moves towards the liver is called 'pneuma of nature'. – Definition of the rational soul: It is a substance, not a body and not within the body, but it governs the body and is able to grasp the intelligibles [36].

Chap. 5: The Necessary Existent is that which cannot fail to be, and must be of necessity. The impossible existent, on the other hand, is that which cannot be, and the possible existent is that which can be or not be. – Further deliberations on the possible existent [37]. – The cause (*ʿillat*); definition and relation with that which is caused (*maʿlūl*); the possible existent requires a cause [38]. – Why there cannot be two necessary existent things; the Necessary Existent can be only one; cannot be composed out of parts, has no cause, is infinite, is God (*ǧalla ǧalāluhu*) [39]. – Further evidence of the oneness of the Necessary Existent [40–42]. – The Necessary Existent has no attribute (*ṣifat*) in addition to essence (*dāt*); explanation of this [43]. – Knowing oneself is

not achieved through the image (*ṣūrat*) one has within oneself: If one does not know that the image corresponds to the self, one has no knowledge of self; if one knows that the image corresponds to the self, knowledge of the self has already been achieved without the image; thus, the knowledge is not achieved by means of the image. One's own essence must of necessity consist in the self, separate from matter, not distant from itself (*ġāyib*). Followed by an account of the Necessary Existent as an essence separate from matter and not distant from itself. The attributes of the Necessary Existent are negative (*ṣalbī*, i.e. they can only be grasped via negation); thus e.g. a attribute such as *quddūs* (sacrosanct) only states that the Necessary Existent is without fault. The Necessary Existent can possess 'relative' (*idāfi*) attributes (e.g. being the creator, *ḥāliqī*), but cannot possibly possess 'positive' (*īḡābī*) attributes in addition to its essence (*zāyid bar dāt-i ū*) [44]. – The living (*ḥayy*) is cognitive and active; whatever has cognition of self is of necessity living. The Necessary Existent possesses knowledge of self; its knowledge is not something additional to its essence, just as its being living is something additional to its essence, and its omnipotence (*qudrat*) is its knowledge (*ʿilm*) [45]. – On the perfection and beauty of the Necessary Existent. It is the pure good (*ḥayr-i maḥḍ*), 'good' being understood as 'beneficent' (*nāfi*). – Just as the Necessary Existent has no Other, it has no opposite, either [46].

Chap. 6: Only one effect can come from one cause; proof of this. This one that is generated by the Necessary Existent is not a body; it is not a soul, either, as the soul requires a body over which it governs; rather, the Necessary Existent produces a substance that is independent of matter in every respect: the intellect (*ʿaql*) [47]. – Discussion of the theory that it is improper to believe that the Necessary Existent does not do something, and subsequently does it; on preponderation (*muraḡḡih*). – On priority; the cause has priority in essence over that which is caused, but not in time. Example: in the mind (*dar*

*ʿaql*) the movement of the finger precedes the movement of the ring on the finger – the movement of the ring is a consequence of the movement of the finger; so does breaking (*kasr*) precede being broken (*inkisār*) [48]. – A thing must be the cause of the existence of a thing, but the cause for the continued existence of the latter is usually a different one, just as the cause of the existence of an idol is the one who manufactures it (*butḡar*), while the cause of its continued existence (*tabāt*) is the dryness (*huṣkī*) of the substance that preserves the image and form of the idol. The cause of initial existence and the cause of continued existence can occasionally be the same, as when water in a vessel (*qālib*) is given shape by the vessel when first poured into it, and remains in that shape. The ultimate cause of the existence and the continued existence of all possible things is the Necessary Existent. Merely possible things at first lack any claim to existence, before they do have such a claim: this is an intellectual, non-temporal priority, and is called 'essential origination' (*hudūt-i dātī*) [49]. – Further consideration of the possible; the noble (*ṣarīf*) possible exists before the common (*ḥasīs*); noble is that which is separate from matter, and that is the soul as a substance. This substance – when understood more narrowly as the intellect – is the first thing to be generated by the Necessary Existent [50].

Chap. 7: Only the Necessary Existent is self-sufficient, as it requires no other; it gives without demanding anything in return, unlike commerce (*muʿāmala*). Its action is not directed towards an objective but is the 'pure good' (*ḥayr-i maḥḍ*) [51]. – Proof of why the Necessary Existent and the principles of the 'separate things' (*muḡarradāt*, i.e. the immaterial intelligences) do not act out of volition or towards a goal [52]. – On the motion of the spheres. It does not occur by nature, because every body that moves naturally has a goal (*maṭlūbī*) whose existence is more appropriate to it. Once the appropriate goal is reached, it comes to a halt. The never-ending planetary motion cannot have a goal and is thus not

natural [53]. – It is not intellect that causes the spheres to move, as it is separate from the bodies and their governance (*taṣarrufāt*) – rather, it is soul [54]. – The spheres feel neither desire (*ṣahwat*) nor anger (*ḡaḏab*); their motion does not serve the benefit of the lower (*sāfil*), i.e. sublunar, world, as the rank (*qadr*) of the latter compared to theirs is not such that they should move constantly because of it; explanation of the higher rank of celestial bodies with their size; the sun, for instance, is more than 160 times larger than the earth [55]. – The motion of the spheres takes place for the sake of a beloved object (*maʿšūqī*) that is neither body nor soul: it is the intellect (*ʿaql*). For love of the intellect, the soul sets the spheres in motion and receives from it, one after the other, eternally and inexhaustibly, perpetual (*muttaṣil*) lights, love, desire, and pleasure. The never-ending light of love generates never-ending motion. If a human experiences physical pleasure or thinks of the intelligibles, he recreates the light of love (*muḥākāt-i ān kunad*), and his body begins to move, recreating the motion generated by the light of love [56]. – Proof of the celestial body's not remaining in only one position (*waḍʿ*) [57]. – The beloved object of all the spheres cannot be one single intellect, but as they all take part in the circular motion, they all have a beloved object, which is the Necessary Existent. Their movements, however, are different, which is why each of them has a specific (*ḡāṣṣ*) beloved object in the spiritual world, which serves as an intermediary giving each of them the light of the Necessary Existent. Benefits and blessings for the lower world follow their movements, and so long this perfection and this light exist, this love and this desire exist, as do the motion and the emanation of good (*fayḍ-i ḡayrāt*) [58]. – Further remarks on the topic that the body cannot be the cause (*ʿillat*) of another body, just as something encompassed (*maḡwī*) by something else cannot be the cause of the encompassing entity (*ḡāwī*). Neither can the encompassing entity be the cause of the encompassed, as that would mean that the latter could potentially exist

or not exist, which in the second place would lead to the unacceptable assumption of void (*ḡalāʾ*) [59]. – Presentation of the chain of emanation of the ten celestial intelligences, following al-Fārābī and Ibn Sīnā; the last of these is the Active Intellect; through this, the human soul is granted knowledge; the relation between the two corresponds to that between the sun and the eye [60]. – The things conditioned by it are many, although this intellect and the other intelligences are immutable, and their knowledge is atemporal, as is the knowledge of the Necessary Existent. – The number of intelligences might be higher – the author points out that he presented this in other books (as indeed he did, cf. e.g. *Hikmat al-iṣrāq* [\*39 § 151], *al-Abwāḥ al-ʿImādiyya* [\*36 § 51 Ar.], *Tabwīḥāt* [\*23: 67–68]) – but it cannot be lower than the ten named above [61].

Chap. 8: Explanation of why each event that occurs (*ḡādīt*) has an infinite number of causes that are not arranged in a sequence, as in that case they would be finite [62]. – For movement to endure, renewal (*taḡaddud*) is necessary; every movement comes to a halt except the circular motion of the spheres; this occurs through a universal will that constantly causes a partial motion from one point (*nuḡṭa*) to the next [63]. – Further remarks on the phenomenon of motion, including that of the spheres and their configurations, and on the chain of events, in particular with regard to finiteness and infiniteness. Motion as the cause of coming-into-being (*ḡudūt*) [64–66]. – Definition of the divine decree (*qaḏā*) and of predestination (*qaḏar*). Evil (*ṣarr*) is not something that exists in its own right, but is rather the non-existence (*ʿadam*) of something or the non-existence of perfection (*kaṡāl*) in something. The Necessary Existent is the pure good, and through it, only pure good exists. If something evil affects the existence of a thing, good still prevails; the example of water and fire, the benefits of both outweigh the harm they can do. Evil is not more prevalent (*ḡālib*) than good. The question of why the creator did not create this or that species of creature in such a way that there was no evil in them,



is wrong; one might as well ask why the water was not created as being other than water (*ğayr-i āb*) and the fire as being other than fire (*ğayr-i ātaš*) [67]. – Response to a question of theodicy: why is the sinner punished if everything that happens rests on divine decree and predestination? It is not an external avenger who punishes a sin in anger, rather the soul itself is bearer of its own punishment [68]. – Divine providence (*‘ināyat-i ilāhī*) gave existence to all species (*naw’ī*) in accordance with the qualities inherent in them. The soul is the perfection of the body (*naḥs kamāl-i badan ast*) [69]. If the body of a gnat were disposed to receive a rational soul, the giver of forms would grant it one, as the principles (*mabādī*) are not miserly (*baḥīl*), and wherever one looks, the traces of God’s mercy and providence are visible. Thus, for instance the rays of the spheres would burn the earth if they were entirely made of light, and (cosmic) balance (*‘itidāl*) would be destroyed. If they were entirely without light, this world would remain in the dark, and no life could exist on it. The motion of the spheres, too, is a sign of divine providence [70]. – Further examples [71]. – In conclusion, the definition of the three worlds: of the intellect, the soul, and the corporeal world, with the latter divided into two parts, the ‘world of the ether’ (*‘ālam-i atīr*) – namely the spheres – and the ‘world of the elemental things’ (*‘ālam-i ‘unṣuriyyāt*); the latter are incomparably inferior to the spheres. The spheres are subject to the souls, the souls to the intellect, the intelligences to the First Caused (*ma’lūl-i awwal*), and the First Caused to the light and the power of God [72].

Chap. 9: On the imperishable nature of the soul; annihilation (*fanā*) is unimaginable in its case, as its cause, the Active Intellect, is of eternal duration (*dā’im*) – and due to this, that which is caused (by him) is also eternal. The soul has no location (*maḥall*), and is a substance distinct from the bodies, and is thus not subject to the corruptibility of the bodies. The (celestial) intelligences are also imperishable, as they have no bearer (*ḥāmīlī*) or connection with a bearer; and finally, the Necessary

Existent is also imperishable, and it is because of its existence that the world of the intellect is of eternal duration. Quoting Plato: the soul gives life to things, and insofar as this is its specific characteristic (*ḥāṣṣiyyat*), life is essentially a part of it; as a result, it never assumes death, which would be contrary to its essence and quality [73]. – Some believe that bliss and pleasure are found only in the satisfaction of bodily wants; in that case the animals would be happier than the angels [74]. – Definition of pleasure and pain: pleasure is being apportioned that which is good and perfect without obstacles, pain is being apportioned evil and unhappiness without obstacles [75]. – Each of the human faculties possesses pleasure and pain; the sense of smell, for instance, experiences pleasure when it smells fragrant scents, and pain when it smells a foul stench, while the ear experiences pleasure at beautiful and pain at repellent sounds. Perfection and pleasure of the soul (*rawān*) consist in its perceiving the order of being, from the cause of causes (*musabbib al-asbāb*) through the intelligences, the souls, the celestial bodies, to the elemental materials (*‘unṣuriyyāt*). As a result, the soul, if it is characterised by the intelligibles (*muntaqīš*), will be an actually intellectual world in every respect after its separation from the body [76]. – Justice (*‘adālat*) as a cardinal virtue on the part of the practical intellect; it consists in moderation (*‘iffāt*), courage (*šajā’at*), and wisdom (*ḥikmat*); each of the three qualities is at the centre between two censurable extremes [77]. – Virtues and vices emerge due to the establishment (*iṣlāḥ*) or disintegration (*ifsād*) of these three powers. Human perfection consists in separating oneself (*tağarrud*) from matter as much as possible and imitating (*taṣabbuh*) the principles [78]. – Intellectual pleasure is greater than sensory pleasure, as sensory perception grasps only the outward appearance of things, whereas the intellect comprehends internal and external aspects [79]. – Definition of infinite pleasure with recourse to various Quranic verses; it consists in, among other things, seeing the Necessary Existent; in this

way, God grants the perfect ones the spiritual drink of the lights of his sublimity [80]. Despite its intensity, someone lacking 'taste' (*dawq*) cannot experience this pleasure; in this respect he resembles an impotent man. Some wise people, on the other hand, have a share in this pleasure even while still in this world [81]. – The worst punishment awaits the ignorant: being fixated on the world of sensory perception, they remain in unhappiness after they are separated from it, as they have no knowledge of the supernal world. The souls of the simple and righteous humans (*ablahān wa šālīhān*), however, do find salvation. Every soul that separates from its body takes its part of the light of the spiritual world (*ġabarūt*); the souls reflect infinite lights back to it, like bright mirrors facing each other. The Necessary Existent as the most perfect object of the souls' desire (*šawq*). – Some remarks on the transmigration of souls (*tanāsuḥ*, cf. Schmidtke 1999 [\*101: 240, n. 12]); according to the consensus of the Peripatetics it is impossible because it would allow the possibility of a living being to have two souls, which is unthinkable (here, the author follows Ibn Sīnā's opinion). The moment (*waqt*) of one being coming into existence does not necessarily coincide with the moment of passing (*fasād*) of the other; neither does the number of becoming and perishing things correspond. This is the most unworthy of doctrines and complete nonsense (*hašw-i muṭlaq*) [82–85].

Chap. 10: As human beings depend on each other, they require rules for living together. These are decreed by a lawgiver who possesses excellent qualities and is supported (*mu'ayyad*) by the world of light and omnipotence (*ġabarūt*) [86]. – Preconditions for prophecy; qualities shared by prophets and saints (*awliyā*); examples of representatives of both categories [87]. – Discussion of the concept of intuition (*hads*), central in the context of great spiritual gifts. Explanation of why the prophets' miracles are not astonishing to the prophets themselves [88]. – Relevance in this context of the relation between the human soul and the omniscient souls of the

spheres [89]. – Dreams encourage contact with the spiritual world, as the distraction of the external senses is absent. By means of spiritual exercises and moral purification (*tahdīb al-aḥlāq*), prophets and some saints are able to bring their souls into complete harmony with the souls of the spheres; in this way, they are informed (*muntaqīš*) by the latter, like a mirror without an image (*bī naqš*) facing another mirror showing an image (*munaqqaš*), meaning that the second mirror is reflected in the first. As when a curtain rises, everything they wish becomes accessible to their imagination [90]. – Explanation of how seeing such images can be possible for all humans; the common sense influences the imagination (*taḥayyul*), the relation between the two is like that between two mirrors; there are two things that prevent the imagination from projecting images into the common sense: (a) the intellect that engages imagination through thought; and (b) the external senses that engage the common sense with sensory perception. Consequently, such images often occur during sleep or exceptional mental situations or illnesses; the *ġinn* and the *ġul* (demons in popular belief) are images of this kind that are generated in the common sense by the active imagination (*mutaḥayyila*) [91]. – Imagination moves constantly from one image to the next and never stands still; if this were not so, we would not be able to think (*fikrat natawānistamānī kardan*). – If a transcendental idea (*ma'nī-yi ġaybī*) appears in the soul as an image, it is possible for it to melt away quickly with no trace left behind, but it is also possible that it illumines the imagination (*išrāq kunad*), then finds the common sense, where the transcendental image becomes visible [93]. – Dream is an expression of outside enclosing (*inḥibās*) the pneuma (*rūḥ*) inside. Sleep deprivation and spiritual exercises can cause visions of light or lead to the soul breaking through (*ḥaṭṭa*) into the transcendental world, with the result that a light shines upon the common sense that is more brilliant than the sun. An adept may experience such a state outside of his spiritual exercises; he will

be able to rise into the world of light (*‘urūġ kunad*) whenever he wishes [93]. – Further definition and characterisation of this heavenly light, the ‘royal splendour’ (*hurra-yi kayāni*) and description of the elevated status of those in receipt of this divine grace [94].

*al-Abwāh al-‘Imādiyya*  
*The Tablets for ‘Imād al-Dīn*

GAL [\*3: G I 565 (no. 6); S I 782]; OMM III [\*25: 46–61 (Intro.)]; Corbin [\*26: 93–98]; Nasr, in [\*27: 1–2 Engl.]; Amin Razavi 1997 [\*52: 15–17]. – For textual editions and translations see [\*36].

Systematic compendium for the better understanding of fundamental ‘principles’ (*qā’ida*), each of which is substantiated in detail with rational arguments and then supported by Quranic verses. Deeply influenced by Ibn Sīnā’s philosophy, but pervaded by clear references to Suhrawardī’s own philosophy of light (*išrāq*), condensed in the end to become an ideal image of the illuminated ancient Persian kingship. Written at the request of the Artuqid prince ‘Imād al-Dīn [Abū Bakr b.] Qarā Arslān, probably *after* 582/1186, as § 98 refers to *Ḥikmat al-išrāq*; certainly not an early work (against the claim by Qutb Širāzī, which was adopted by older scholarship; cf. Pourjavady 2001 [\*56: 83–94]). According to *Bustān al-ġāmi‘*, it is one of the works that provoked the greatest outrage in Aleppo (cf. Landolt 1987 [\*90: 481]). Extant in an Arabic as well as an only slightly divergent Persian version; the Arabic version is also extant in Hebrew characters (cf. Steinschneider 1893 [\*1: 365–366]; the Berlin MS he mentions was not consulted for the existing editions).

The work consists of a foreword explaining the occasion and purpose of the text, an introduction, and four chapters or ‘tablets’ (*lawḥ*, pl. *abwāh*, hence the title). The ‘tablets’ as a whole consist of 22 ‘principles’, most of them without a specific title (and not explicitly listed here).

Introduction [Logic] (Ar. §§ 3–11, Pers. §§ 2–8): Brief explanation of basic concepts of

logic. At the end, refutation of atomism: Bodies (unlike soul and the intellect, see below) are always divisible, at least conceptually.

Tablet I (Physics, Ar. §§ 12–24, Pers. §§ 9–22): Definition of the body as mere extension in three dimensions, or as magnitude. Extension is always limited. Rejection of the idea of ‘empty space’ beyond the world. Aristotelian definitions of place, motion, time. Difference between the celestial bodies and the sublunar elements influenced by them; the latter are subject to becoming and perishing, and to changes in form. The effects of the celestial bodies on the sublunar world of the elements (light and heat radiation, motion) cannot be explained in an atomistic fashion, e.g. as an agglomeration of ‘fire atoms’. The fundamental substance behind everything is ‘matter’ (*hayūla*, also *mādda*). Matter is a relative term: From the point of view of extension, it is a ‘body’; as the bearer of accidents (*hay’a*; lit. ‘shape’) it is a ‘substratum’ (*maḥall*) (cf. *Ḥikmat al-išrāq* [\*39: § 72] and on the discussion Walbridge 2005 [\*107] and Pourjavady 2011 [\*140: 138–139]).

Tablet II (Psychology, Ar. §§ 25–36, Pers. §§ 23–31), sub-heading: On the soul and its powers. – Proof of the non-corporeality of the soul via the abstraction of the sensory through the imaginative to the intellectual perception of pure form, e.g. the term ‘animal’. The seat of this intellectual perception cannot be a corporeal organ, only the soul. The rational soul is non-corporeal, indivisible, one, a divine substance (*ġawhar ilāhī*), the spirit (*rūḥ*) instilled by God. It is the imperishable and immutable ‘I’ that perceives itself directly as a subject, not an object. – The five external and internal senses. The latter are the common sense (*ḥiss muštarak*), passive imagination (*hayāl*), the estimative power (*wahm*), active imagination (*mutaḥayyila*), and the retentive power (*ḥāfiẓa*). Difference between common sense and passive imagination: the common sense is the first receiver of all sensory impressions and enables us to distinguish between direct perception and imagination; the passive imagination preserves the forms

of everything perceived. In the case of animals, the estimative capacity anticipates what certain sensory perceptions 'mean'. Even so, it is merely a 'corporeal' organ and in the case of humans can work against reason. Active imagination, on the other hand, is employed by reason, in which case it is called the cognitive power (*mufakkira*). It combines images and judgment, is the source of science and art, also of imitation (*muḥākāt*, cf. Greek *mimesis*) in dreams. The retentive capacity collects all the judgments of the estimative capacity, the imagination, and other experiences. (Similar synopses of Peripatetic psychology are frequently found in other works by Suhrawardī. In *Ḥikmat al-iṣrāq* [\*39: § 224], on the other hand, he argues in favour of the unity of the estimative capacity, the passive and the active imagination, and against their physical localisation in certain parts of the brain). Further senses and powers of the soul: the motivational power, which includes concupiscence and irascibility, as well as others that concern the digestion of nourishment and growth. The pneuma (*rūḥ*) is the bearer of all the senses, a subtle body that moves from the heart in two directions. The part that rises into the brain acquires the power of light (*al-sulṭān al-nūrī*) from the soul there. It is the 'soul pneuma' (*rūḥ naḥsānī*) which perfects motion and perception. The other part is called 'nature pneuma' (*rūḥ tabīʿī*); it moves to the liver and animates all parts of the body. While the soul is a non-corporeal substance, it comes into being only with the body (Avicennan argument against the pre-existence of the individual soul, often reproduced by Suhrawardī).

Tablet III (Metaphysics and Cosmogony, Ar. §§ 37–63, Pers. §§ 32–60), sub-heading: Proof of the existence of that whose existence is necessary (*wāǧib al-wuǧūd*, i.e. God) and the qualities that are suited to him, i.e. majesty and perfection. – Introduction on the modes of being: necessary or possible. The 'possible' (*mumkin*) is in itself neutral with regard to existence, it is neither of necessity existent, nor of necessity non-existent; it becomes 'necessarily existent' in the presence of a cause

of being (or a complete chain of causation) or 'necessarily non-existent' in their absence (or due to an incomplete chain of causation). This gives rise to variants of ontological proofs of the existence of God and proof based on motion (Ar. §§39–43, Pers. §§35–39). – Proof based on the soul: the existence of the rational soul of humans is established. As it comes into being only with the body (*ḥādīṭ*), of itself it is only 'possible' and consequently requires a cause, but the cause of its existence is not the body, as something inferior cannot imbue the superior with existence. Thus, the cause of its existence is either God Himself or another possible existent (i.e. an intellect), with the same results for the argument. The soul is in itself alive, and recognises itself directly, not via a 'form' (which would be some other object), but because it is not alien to itself and is an immaterial substance, and thus intelligible. The same is *a fortiori* true of that which is Necessary Existent of itself, i.e. God. Only God's essence (*dāt*) is necessary of itself. His qualities are neither 'necessary' nor 'possible'; i.e. He has only negative and 'relational' qualities. His perfection is identical with Him; it is veiled precisely by the intensity of His luminosity (Ar. §§ 44–47, Pers. §§ 40–44). – Creation of the world: According to 'certain people' (i.e. theologians) the world is finite in time, it was created by God not in pre-eternity but after a certain period of inactivity; according to the philosophers, on the other hand (especially Aristotle), God has never ceased creating things, consequently, the world is equal with Him in [eternal] duration; He has priority over it only in essence (example: the movement of the finger precedes the movement of the ring on the finger not in time but in essence). According to a third opinion, the existential cause need not be identical with the cause of existence within time: The architect is the cause of the existence of the house, but not the cause of its continued existence. The philosophers contradict this with the argument that the 'possible' does not become 'necessary' of itself, but by definition always requires the effective cause. Furthermore, a

created thing is not linked to the creator by its previous non-existence (this being, of course, uncreated!), but by its very 'possible' existence (Ar. §§ 48–53, Pers. §§ 45–50).

Only one thing can be generated by the absolute One, namely the First Intellect. It is 'necessary' because of its origin, but 'possible' of itself. As a result, two acts of intellection occur within it. By the intellection of its 'nobler' side, a further intellectual substance is generated, namely the Second Intellect, while a body, in this case the outermost celestial sphere, is generated by the intellection of its mere 'possibility' (thus according to the Arabic version [§ 55], which corresponds to *Ḥikmat al-iṣrāq* [\*39: § 142] and is referred to as a 'peripatetic' doctrine in *Muṭārahāt* [\*42 § 184]). According to the Persian version [§ 52, l. 7–15] there is, however, another act of intellection in between these two, the intellection of its essence (*dāt*), which generates a soul that governs the body mentioned above. Criticism of the peripatetic doctrine of ten cosmic intellects: there are many more (here on the basis of the Quran; cf. also Nasr 1970 [\*131], Corbin 1971–1972 [\*37: 120], Davidson 1992 [\*49]). In any case, intellects and rational souls have in common that they are non-corporeal and indivisible (even conceptually) as they have no extension. Unlike the intellects, the souls are tied to bodies by their task of governing the latter. If the 'lower possible' (*al-mumkin al-aḥṣa*) exists, the 'nobler possible' (*al-mumkin al-aṣraf*) must have existed previously. It is impossible for existence to be more perfect than it is (cf. al-Ġazālī's and Leibniz' 'best of all possible worlds'). God is the absolute and original creator (*al-mubdi' al-muṭlaq*), while other causes are merely intermediaries (Ar. §§ 54–58, Pers. §§ 51–55). The circular motion of the celestial bodies is not a 'natural' movement directed towards a final location where it ends. Consequently, it must be based on the universal will (*irāda kullīyya*) of their rational souls. These are 'nobler' than our souls, just as their bodies are 'nobler' than our bodies. Despite our inclination to earthly pleasures,

we are still able to purify our souls and refine them by reflecting on the divine and the spiritual, with the result that we perceive phenomena of pure light which bestow incomparable pleasure on us. Thanks to this influence, the human soul can move its body (an allusion to the dance of the dervishes). The spherical souls are not distracted by earthly things at all. Immersed in the divine light they experience pure pleasure which generates their constant motion in a harmonious way, although their movements differ according to the respective intellect they aspire towards. The light generates a motive impulse which, in turn, generates another phenomenon of light, which gives rise to yet another motive impulse, with instances of light (*iṣrāqāt*) and motion following one another. As not all positions of the celestial bodies can be actualised at the same time, it is done in sequence (*ta'āqub*). Since everything generated within time (*ḥādīṭ*) requires one or more existential causes, and these, too, are generated within time, we must assume an infinite number of things being generated previous to everything that is generated; they succeed each other but do not perish – as is the case for the circular motion (cf. *Ḥikmat al-iṣrāq* [\*39: §§ 240 and 250]; and above all *Tabwīḥāt* [\*23: 76], cf. Landolt 1987 [\*90: 483]). The objection that the preceding unit of motion cannot be the cause of the following one, as they are not simultaneous, can be refuted by appealing to the activities of the souls of the spheres. They possess a universal will to constant motion towards a goal that is always reachable, as well as a particular will to move from one point to the next. Ultimately, their coming into being is not explained by a change in the active principle (as in that case, God Himself would also be changeable), but by a renewal of readiness on the part of the recipient, that is, love (Ar. §§ 59–63, Pers. §§ 56–60).

Tablet iv (Theology, World Order, and Eschatology. Ar. §§ 64–102, Pers. §§ 61–102, §§ 84–85 have been skipped in the numbering!), sub-heading: On the order, general and particular predestination (*qaḍā'/qadar*), the

continued existence of the souls, happiness/misery, pleasure, effects of the souls. – God's mercy cannot be limited. Consequently, nothing external can remain pure potentiality without coming into being. Thus matter (*hayūlā*) was brought into existence as an infinitely receptive potentiality, just as the active principle has infinite active potentiality. The constant renewal (*tağaddud*) of the emanation (*fayḍ*) corresponds to the constant renewal of something individual, namely the celestial individuals (*aṣḥāṣ falakiyya*), circling in search of higher goals. The gate of blessings from on high is always open, reaching the recipients according to their readiness. The noblest of the generated things that attaches itself to matter is the rational soul. As it cannot emerge in one fell swoop – independently of whether it has a body or not – an infinite number of souls arrive here over the course of time, pre-eternity being completed by post-eternity. The rational souls are the 'words of God'; only they return to be with God (Ar. § 64, Pers. § 61). Among the effects of divine mercy is also that the earth is at the centre, not too close to the spheres, to make sure it does not burn. If the spheres were of light only, that which is beneath them would burn; if they had no light, everything would be dark. If their lights were immobile, that which was opposite them would burn while everything else remained without light, and if they performed an even circular motion (without northerly and southerly deviation), their radiance would not reach as far as the peripheral regions. The lowest animate beings, i.e. the plants, have their head in the earth, animals without a rational soul have theirs halfway up; humans stand with their heads high. Humans are above all other animate beings, but not above the persons of the spheres (Ar. §§ 65–67, Pers. §§ 62–64). The First Reality, God, is subject to no compulsion from things. On the contrary: things are subject to compulsion because of Him. He is absolutely without needs, absolutely generous; His perfect being depends on nothing else. Everything else is needy: the human body

in relation to the elemental world, the latter in relation to the ether; the earth is smaller than the smallest fixed star. All celestial bodies are subject to the power of souls, the souls to the power of the radiance of the intellects, and the intellects to the power of the light from the First Intellect. The last-named subjects itself eternally 'at the sublime divine place' (*fī l-maḥall al-šāhiq al-ilāhī* Ar. § 69, *dar maḥall-i buland-i ilāhī* Pers. § 66; cf. *Ḥikmat al-iṣrāq* [\*39: §171: *al-mawḍi' al-šāhiq al-ilāhī*, quoted from the *Theology of Aristotle*, which has *al-mawḍi' al-šāmiḥ al-ilāhī*). The intellect and the soul are the 'two hands of God', the world of the intellect being 'that which shall be obeyed' (*muṭā'*) (cf. al-Ġazālī's 'vice-regent' in *Miškāt al-anwār*, Ar. §§ 68–71, Pers. §§ 65–69). Existence is *per se* good. Evil has no essence of its own; instead, it occurs as the result of accidental non-existence. Illness, for instance, is merely the absence of health (against the dualism of the 'mages'). The all-creator does not pursue a purpose; He is without needs and generous. His generosity (*ḡūd*) lacks the reciprocal demands found in commerce (*mu'āmala*). Existence, as it is, is the best of all possible worlds. What cannot be is not an object of predestination (*qadar*), either. Unfortunate events, however, are necessary consequences (*muqaddara*) of the motion of the celestial bodies or of the measured time (*aḡal*) which is the measure of motion. Punishment for sins is the consequence of bad qualities of the soul to which it was tempted by *qadar* (Ar. §§ 72–76, Pers. §§ 70–74). The continued existence of the soul (*baqā' al-naḥs*): the soul, which is in itself non-corporeal, is tied to the body by the pneuma (*rūḥ*, see above). It is dependent on the body because of its 'longing' (*šawq*), but this dependence is a mere 'relation' (*idāfa*), i.e. the weakest among all the accidents of the substance, which is not constitutive of the latter's essence in any way. The continued existence of the soul is thus not impeded by the separation from the body; and as its cause, namely the so-called Active Intellect, is completely separate from the physical world as well as permanent, the

soul continues to exist through its existence (Ar. §77, Pers. §75). Refutation of the transmigration of souls: this is impossible in the descending as well as the ascending sense, as it would entail a duplication of the soul of an animate being: that given by the giver (*dator formarum*, *wāḥib al-ṣuwar*, i.e. the aforementioned intellect) plus that which joined from the physical world (Ar. §78, Pers. §76).

On the pleasure (*ladḍa*) of the soul: in the opinion of the common people (*al-ʿamma*), there is only sensual pleasure, as they do not know that the pleasure of the angels (i.e. contemplating the majesty of God) is greater than that of the animals. Definition of pleasure: direct perception of perfection in grasping an object; definition of pain: direct perception of damage or harm in grasping an object. Each organ experiences its own appropriate specific pleasure or pain. The perfection of our 'thinking substance' consists in 'the impression of the true realities, the knowledge of the true God and the mirabilia of His heavenly (*malakūt*) and earthly (*mulk*) realms'. From the point of view of its dependence on the body, its pleasure consists in dominating the physical powers, in its harmonious ordering of the concupiscent, the irascible, and the cogitative aspects. Just as the soul is nobler than the body, so are the objects of its pleasure nobler. If someone lacks this pleasure despite having knowledge, or someone ignorant fails to feel pain, this is comparable to that of the drunk man who feels no desire near his beloved, and no pain from a beating at the hands of his enemy until he awakes. Those who do not know spiritual pleasure are like impotent men who are prevented from enjoyment; al-Ġazālī has a similar image. If physical obstacles are removed, the thinking soul will enjoy seeing the spiritual world (*malakūt*) and being illumined (*īṣrāq*) by the lights of God. It can clothe itself in divine glory, attain likeness to God (*taʿalluh*), approach its 'holy father' (*abihā al-muqaddas*, according to Ar.; *ḥaqq taʿālā* or 'God' in Pers.). However, it finds the true spirit of life only after its separation from the body, i.e. after death. In the afterlife the unfortunate suffer from double

ignorance, not only because they lack the true faith, but also because they believe its opposite, i.e. believe only the material world to be real. They suffer as they can neither satisfy their bodily desires nor see the First Light (Ar. §§79–83, Pers. §§77–81). The state of individual souls after the separation from the body is not the same as the original state one might imagine 'before' bodily individuation. (Suhrawardī rejects the pre-natal existence of the individual soul, see above.) They differ according to the qualities they acquired (in this life). All souls differ essentially from God and the intellects; they are neither tied to the world nor separate from it, as separation and ties are physical accidents (Ar. §84, Pers. §82). Human souls are rooted in the spiritual world (*malakūt*). Without material distractions, they would be influenced by its forms. The souls of the spheres know of the consequences of their motion, i.e. past and future events. Human souls are able to connect with the spiritual beings temporarily, e.g. while asleep, but as the active imagination (*al-mutaḥayyila*) exchanges the images, it is necessary to interpret dreams. The souls of prophets and godly persons (*mutaʿallihūn*) are as the purified mirrors of spiritual forms. Transcendent voices and forms can reach the common sense by means of the imagination (*taḥayyul*). However, the common sense is often distracted from this higher insight by external sensory impressions, and the imagination by the intellect. While one is asleep the external senses and the intellect do not get in the way, so the imagination can produce images in the common sense that are like true or false dreams (similar *Partaw-nāma* [\*45: 78] ed. by Corbin, *al-Maṣārīʿ wa-l-muʿāraḥāt* [\*42: 495], *Kalimat al-taṣawwuf* [\*40: 110]) (Ar. §§85–87, Pers. §§83, 86–87 [Pers. §§84–85 skipped in the numbering, but no missing text]). Our souls exist first potentially, then the primary insights (*al-awāʾil*) appear in them, taking them to secondary, derivative ones. That which brings them into existence, perfects them, and transforms them from potency to actuality is that which the philosophers call the agent intellect (*al-ʿaql al-faʿāl*) and

is named 'spirit of the sacred' (*rūḥ al-qudus*) in religious parlance. Its relation to our intellect is like that of the sun to our eyes. When we reach it, it imprints our souls, writing on them like a pen, our souls becoming its writing tablets [cf. the title!] (Ar., Pers. § 88). The resurrection (*qiyāma*) should not be understood physically, but refers to the soul. It is the return of the perceiving consciousness (Ar., Pers. § 89). The connection between soul and body is to be found in the subtle 'spirit' (*rūḥ, pneuma*) that is luminous (*nūrānī*) in the brain (see above). When the pneuma's luminosity is diminished, life is disturbed and melancholy sets in. It is the first connection between the soul, light, and life [the text is not quite clear here] (Ar., Pers. § 90). Physical light is accidental, i.e. it is not independent and appears for something other than itself. If it were independent, it would be 'light for its own sake', self-manifest and living. Everything that lives of itself is pure light, and all pure light lives of itself. The first one is the 'light of lights'; it gives all life and luminosity, is manifest in itself and causes other things to appear (cf. *Hikmat al-iṣrāq* [\*39 § 117], (Ar., Pers. § 91). The sun (*hūrahš*; Persian in the Arabic version as well, cf. Corbin [\*26: 109 and index s. v.]; *Hikmat al-iṣrāq* [\*39 § 159]; the image is both 'Persian' and Platonic, cf. Landolt 2008 [\*110: 246]) is the 'light of lights' in the physical realm, the 'highest likeness' (*al-maṭal al-a'lā*, Quran [sura 16:60]) or the 'highest direction of God' (*wiḡḥat Allāh al-'ulyā*, after the Quran [sura 2:148] in the parlance of the *Iṣrāq* (Ar., Pers. § 92).

On the *sakīna* (approx. 'peace in God'; cf. the still essential Goldziher 1896 [\*80]; as well as Corbin [\*26], Nasrollah Pourjavady 1998 [\*99], 2001 [\*103], Landolt 2003 [\*58]). When the soul is pure, it is illumined by the light of God. As a consequence, the 'holy *sakīna*' appears. It influences soul and body, as the proximity to fire warms the iron. This shows that prayer is heard, especially the prayer of a king reflecting on the divine signs. He will then be granted the qualities of justice and generosity, and be victorious over his enemies thanks to divine support (*ta'yīd*), as he is now

of the 'party of God' (*ḥizb Allāh*, Quran [sura 5:56]) and is granted the (same) light as the great ancient Persian kings before Guštāsp, who were not yet Dualist 'images'. The light that grants support is called *ḥurra* (= *xvarena*); the specific light for kings is called *kayān-ḥurra*, a strong radiation of light in the soul that overcomes enemies. Examples of kings of this kind, known from mythology and the national epic: Afrīdūn, who conducted a dialogue with the 'noble father' or 'spirit of the sacred' (Ar. *al-ab al-karīm* = Pers. *rūḥ al-qudus*) and had contact with him by means of imagining the likeness (*miṭāl*) as well as abstraction (of the material, *tagḥīd*). The same applies to Kay Ḥusraw, the victor over the 'Turkish denier of God' Afrāsiyāb. After his beneficial reign, Kay Ḥusraw turned his back on the world, followed the call of his 'father' and 'emigrated' to God (Ar., Pers. § 93–95).

The fire of the *sakīna*: when the cognitive capacity devotes itself to the spiritual things and true knowledge, it is like the blessed tree (Quran [sura 24:35]) or the tree on Mount Sinai that bears oil (Quran [sura 23:20]), that will light the lamp of certainty and cause the *sakīna* in the soul to catch fire. This tree is 'neither of the East nor of the West' (Quran 24:35), i.e. neither pure intellect [missing from Ar.] nor pure matter. It is the Burning Bush of Moses. The symbols of the prophets help us understand the spiritual world within ourselves. But when the imagination devotes itself to the material world and moves things from their place, it is like the 'corrupt tree' (Quran 14:26) that separates us from the spiritual world, or like the mountain that 'crumbled to dust' when God appeared to Moses (Quran 7:143). This is followed by a reference to the discussion of this topic in *Hikmat al-iṣrāq*, an invocation of God, a warning not to overestimate mere visions without refined reflection, and a final invocation of God (Ar., Pers. §§ 96–102).

Maḥmūd al-Nayrīzī (d. after 943/1536) composed a commentary on the *Ahwāḥ*, apparently the only commentary ever written on this work of Suhrawardī's (cf. Pourjavady 2011 [\*140: 131–136]).



*al-Talwihāt al-lawhiyya wa-l-ʿaršīyya*  
*Intimations of the (Preserved) Tablet and the*  
*Throne of God*

GAL [\*3: G I 565 (no. 2); S I 782]; OMM I [\*23: LXII–LXXIII (Intro.)]; Davidson 1992 [\*49: 164–169]; Amin Razavi 1997 [\*52: 9–10]. – For textual editions and transl. cf. [\*52].

Philosophical compendium divided into three parts: I. Logic, II. Physics, III. Metaphysics. – The title, pointing to the tablet preserved in Heaven which contains the ‘original Quran’ (cf. sura 85:22) and to the throne of God, refers to the sublime nature of the topic discussed especially at the end of the third part.

Part I (Logic) in six ‘observation places’ (*marṣad*, *mīrṣād*), sub-divided into ‘lookout points’ (*maṭlaʿ*, with the fifth *marṣad* only) and ‘intimations’ (*talwih*).

1st *marṣad*, on isagogics. – 1st *talwih*: Objective of Logic. Definition of *taṣawwur* and *taṣdīq* (conception and assent). – 2nd *talwih*: Linguistic expression (*lafẓ*) as a sign (*dalāla*) of that which is meant (*maʿnā*). – 3rd *talwih*: Simple and compound linguistic expression. Noun (*ism*). – 4th *talwih*: Universal and particular linguistic expression. – 5th *talwih*: On the relation between nouns and that which they denote. – 6th *talwih*: Subject (*mawḍūʿ*) and predicate (*maḥmūl*). – 7th *talwih*: Essential (*dātī*) and accidental (*ʿaraḍī*). – 8th *talwih*: What is said in response to the question ‘what is this?’ – 9th *talwih*: On the five simple predicables: genus (*ǧins*), species (*nawʿ*), difference (*faṣl*), proprium (*hāṣṣa*), accident (*ʿaraḍ*). – 10th *talwih*: Further remarks on the predicables.

2nd *marṣad*, on the declarative statement (*qawl ṣāriḥ*). – 1st *talwih*: Definition (*ḥadd*). – 2nd *talwih*: Paraphrase (*rasm*). – 3rd *talwih*: Further remarks on the ways of defining.

3rd *marṣad*, on predicative composition. – 1st *talwih*: Types of sentences (*qaḍāyā*). – 2nd *talwih*: Particularity (*ḥuṣūṣ*) and indefiniteness (*ihmāl*) of sentences and their quantifier (*ḥaṣr*). – 3rd *talwih*: On the ways of composing sentences. – 4th *talwih*: Further remarks

on syntax in the context of negation and affirmation.

4th *marṣad*, on the moods (*ǧihāt*) of sentences. – 1st *talwih*: Kinds of link between subject and predicate: necessary existent, necessary non-existent, possible existent or non-existent. – 2nd *talwih*: On the implication (*talāzum*) of modal sentences. – 3rd *talwih*: On the difference between absolute and modal sentences. – 4th *talwih*: Opposition (*tanāquḍ*). – 5th *talwih*: Inversion (*ʿaks*): The subject of the sentence becomes the predicate, and the predicate becomes the subject, while preserving the quality (*kayfiyya*) of the statement with equal truth or falsehood of the sentence.

5th *marṣad*, on composing arguments (*ḥuǧaǧ*). – 1st Lookout point (*maṭlaʿ*): The true nature (*ḥaqīqa*) of the argument, its classes, forms, etc. – 1st *talwih*: Introduction to syllogistics; the three figures of the syllogism. – 2nd *talwih*: Drawing conclusions with modal premises. – 3rd *talwih*: Syllogisms of conditional sentences (subjunctive and disjunctive). – 4th *talwih*: Exceptive propositions (*istiṭnāʿiyyāt*). – 5th *talwih*: More complex forms of syllogistic composition. – 6th *talwih*: Syllogism *per impossibile* (*qiyās al-ḥulf*); Inversion (*ʿaks*) of the syllogism. – 7th *talwih*: On the circular argument (*qiyās al-dawr*). – 8th *talwih*: Instructions for composing syllogisms. – 9th *talwih*: Under which conditions correct conclusions can be drawn from false premises. – 10th *talwih*: Syllogisms of contrary or contradictory sentences. – 2nd *maṭlaʿ*: Further forms of conclusion: induction (*istiqrāʾ*), analogy (*tamṭil*), enthymeme (*damīr*), sign-arguments. Special case of a syllogism whose middle term denotes a physical disposition from which a conclusion regarding the character is drawn (*firāsa*, i.e. physiognomy). – 3rd *maṭlaʿ*: On the modality of premises.

6th *marṣad*, on proof (*burhān*). – 1st *talwih*: Different kinds of enquiring. – 2nd *talwih*: On the proof of ‘that’ and the proof of ‘why’. – 3rd *talwih*: The parts of the sciences: subject matter (*mawḍūʿāt*), principles (*mabādīʾ*), questions (*masʾāl*). – 4th *talwih*: Definition is

not obtained through proof. What definition has in common with proof. – 5th *talwīḥ*: On sophistic (*muǧālīṭiyya*) syllogisms. – 6th *talwīḥ*: Concluding collection of fundamental rules (*ḍawābiṭ*), e.g. on concepts such as ‘general’ (*‘āmm*) and ‘thing’ (*šay*’).

Part II (Physics), in four ‘observation places’ sub-divided into ‘places of arrival’ (*mawrid*) and ‘intimations’ (*talwīḥ*).

1st *miršād*: General remarks on bodies (*aḡsām*). – 1st *mawrid* on the true nature (*ḥaqīqa*) of the body and its necessary circumstances. – 1st *talwīḥ*, including, among others: definition of the body, meaning of ‘length’, ‘width’, ‘depth’. Factors that determine the quality of a body. Refutation of the view that the body is composed of atoms. Refutation of the idea of the ‘leap’ (*tafra*) from one point in space to another (cf. PIW I § 7.2). Refutation of the idea that the body is composed of infinite (*ǧayr mutanāhiya*) parts. The body is composed out of matter (*hayūlā*) and form (*šūra*). – 2nd *talwīḥ*: Matter and form cannot exist without one another. Elaboration of their interrelation. – 3rd *talwīḥ*: On the finiteness (*tanāhi*) of extensions and distances (*ab‘ād*). – 4th *talwīḥ*: For its specification (*taḥaṣṣuṣ*) and existence, the body requires an external agent (*fā‘il ḥāriǧī*). Form cannot be the cause (*‘illa*) of matter or existentially precede it (in time). – 5th *talwīḥ*: The body is not constituted (*yataqawwam*) by limits (*niḥāyāt*). – 2nd *mawrid* on direction (*ǧiḥa*) and place (*makān*). – 1st *talwīḥ*: On that which limits direction (*muḥaddid*). – 2nd *talwīḥ*: On the relation between form (*šakl*) and measure (*miqdār*) and the body. Impetus (*mayl*). – 3rd *talwīḥ*: Place. The impossibility of void (*ḥalā*’). The world of bodies is one; there cannot be two. – 3rd *mawrid* on motion (*ḥaraka*) and time (*zamān*). – 1st *talwīḥ*: Definition of motion; its various types. – 2nd *talwīḥ*: Motion is not caused by the existence of a body; ‘nature’ (*ṭabī‘a*) does not cause it, either. – 3rd *talwīḥ*: Remarks on the phenomenon of time, such as: Time is the measure of motion. The instant (*al-‘ān*). Time and motion are not composed of atoms. Time has neither beginning

nor end. Refutation of the view that time is the Necessary Existent. Polemic against a theory proposed by Abū l-Barakāt. – 4th *talwīḥ*: Further remarks on motion, especially opposing motion (*taḍādd*), e.g. upwards and downwards, right and left. Circular motion has no opposite, as it has no direction (*ǧiḥa*).

2nd *miršād*: On the basic matter (*basā‘it*) of bodies. – 1st *talwīḥ*: Classes (*aḡsām*) of bodies. The four elements. – 2. *talwīḥ*: The layers (*ṭabaqāt*) of the elements. – 3. *talwīḥ*: Ways in which bodies influence one another; warmth and cold. Influence of the ethereal bodies (*aṭiriyyāt*).

3rd *miršād*: On mixture (*mizāǧ*) and composition (*tarkīb*). Supralunar influences (*ātār ‘uhwiyya*). – 1st *talwīḥ*: The true nature of mixture. On the mutual influences of elementary qualities. – 2nd *talwīḥ*: On supralunar influences. Meteorological phenomena and their influence on processes on earth, e.g. the occurrence of earthquakes. How the three realms of nature (vegetable, animal, mineral) are formed from the four elements. – 3rd *talwīḥ*: On minerals. Causes for the existence of mountains.

4th *miršād*: On the souls. – 1st *mawrid*: The vegetable soul and its powers. – 2nd *mawrid*: The animal soul and its powers. The five external senses; in the context of hearing, remarks on the echo (*ṣadā*). The five internal senses. The *pneuma* (*rūḥ*). – 3rd *mawrid*: The rational soul. – 1st *talwīḥ*: Definition of the rational soul. Division of its powers into theoretical (*naẓarī*) and practical (*‘amalī*) ones, both are intellect (*‘aql*). The soul absorbs meaning virtually and actually. – 2nd *talwīḥ*: Definition of the concept of ‘comprehension’ (*idrāk*); mention of the Platonic ‘images’ (*muṭul*, ideas). Polemic against Abū l-Barakāt’s theory that ‘comprehension’ consists in the essence (*ḡāt*) of that which comprehends, grasping the essence of that which it comprehends, rather than its image (*šūra*). On the process of ‘abstraction’ (*taǧrīd*) by the external senses, the passive imagination (*ḥayāl*) and the intellect. – 3rd *talwīḥ*: Further remarks on the rational soul. It does not exist before the

body. On the kind of its connection (*‘alāqa*) with the body. Further remarks on the passive imagination. – 4th *tabwīḥ*: The soul makes use of the will (*irāda*), in order to move towards a goal. The motion of the spheres is voluntary. Concluding remarks on intuition (*ḥads*).

Part III (Metaphysics): Introduction. – 1st *tabwīḥ*: Primarily on the doctrine of categories. – 2nd *tabwīḥ*: On the universal and the particular, the end and the infinite, as well as material (*‘ayniyya*) and conceptual (*dihniyya*) concerns (*i’tibārāt*). – 3rd *tabwīḥ*: On the remaining divisions (*taqāsīm*) of being. – 1st place of arrival (*mawrid*): On the Necessary Existent, in five intimations: 1st *tabwīḥ*: On its essence (*dāt*). – 2nd *tabwīḥ*: On its qualities (*ṣifāt*). – 3rd *tabwīḥ*: On action (*fi‘l*) and generation (*ibdā‘*). – 4th *tabwīḥ*: That the cause results in the effect. – 5th *tabwīḥ*: What is One in all respects generates only one thing. – 2nd *mawrid*: On the beginnings and the ends, the order (*tartīb*) and the conditions of all existent things, in three intimations: 1st *tabwīḥ*: On that which is self-sufficient (*ḡaniyy*). – 2nd *tabwīḥ*: On the celestial motions. – 3rd *tabwīḥ*: On the order of being. – 3rd *mawrid*: On the independence (*taḡarrud*) from matter, perception (*idrāk*), divine providence, the divine decree, predestination and happiness, in several sections (*fuṣūl*); description of a dream in which Aristotle (p. 70, 5; the ‘First Teacher’) appears and answers the first-person narrator’s questions, such as, ‘what is knowledge?’ It is not the Islamic philosophers (*falāsifa*), but mystics such as Abū Yazīd al-Baṣṭāmī and Sahl b. ‘Abdallāh al-Tustarī, who are exemplary; cf. Landolt 2008 [\*110: 241–242], 1987 [\*90: 480]. – The impossibility of the transmigration of souls. – 4th *mawrid*: On prophecy, signs (*āyāt*), dreams, etc., in three intimations: 1st *tabwīḥ*: On prophecy. – 2nd *tabwīḥ*: On actions that transcend habit (*af‘āl ḥāriqa li-l-‘āda*, i.e. miracles). – 3rd *tabwīḥ*: On the reason (*sabab*) for (prophetic) announcements (*indārāt*). – Concluding chapter entitled: Observation point of the throne of God (*mirṣād ‘arṣī*), in several sections; including treatment of the *sakīna* and various phenomena of the

supernal world of light; words by ‘Hermes’; mention of further Greek sages in addition to Hermes, namely Agathodaemon, Pythagoras, Empedocles, and Plato, who ranked higher and were more important than any one among the Muslims (*islāmīyyīn*) who excelled in demonstrations (*burhāniyyāt*); Hermes in particular is believed to have ascended to the highest world of light; not the materialist philosophers (*mutaṣabbīḥa bi-l-falāsifa*), but the Sufis and those among the Muslims who have been freed (*muḡarradūn*) from attachment to material things, will reach the source of light. – Deliberations on Sufi practice and explanation of central concepts of Sufism, such as ‘annihilation’ (*fanā*).

Ibn Kammūna (d. 683/1284) and Šams al-Dīn al-Šahrazūrī (d. 687/1288 or later) wrote commentaries on the *Tabwīḥāt*. Passages of the part of the *Tabwīḥāt* devoted to metaphysics were paraphrased by Ismā‘īl b. Muḥammad al-Rīzī (fl. c. 679/1280) in his *Ḥayāt al-nufūs* (cf. Marcotte 2004 [\*137: 214]).

*al-Mašārī‘ wa-l-muṭāraḥāt*

*The Book of Approaches and Exchanges*  
(Arnzen)

GAL [\*3: 565 (no. 3); S I 782]; OMM I [\*23: LXXVI–LXXXI (Intro.)]; Amin Razavi 1997 [\*52: 11–12]. – For textual editions cf. [\*42].

Suhrawardī’s most extensive philosophical treatise, divided into seven parts (*mašra‘*, approach). Probably composed after *Ḥikmat al-iṣrāq*, as this work is mentioned in the introduction to the third part and at the end of the treatise [\*42: 194. 505].

Only the third part has been edited; the following analysis follows OMM I: Foreword and Introduction, on the different disciplines of the sciences, their subject matter and their rank. – 1st *mašra‘*, on basic concepts, in three sections (*faṣl*): (1) Existence, materiality, necessity, possibility, impossibility, true and false etc. – (2) Summary (*iḡmālī*) remarks on existence and non-existence – (3) Substance and accident. – 2nd *mašra‘*, on the categories, especially the question of which among

them are substantial and which accidental, in six sections: (1) Objects of investigation (*mabāḥiṭ*) that are connected with substance. – (2) Accidental nature of 'how much'/quantity (*kam*). – (3) Accidental nature of 'of what kind'/quality (*kayfa*). – (4) That which is relative (*muḍāf*). – (5) The remaining categories. – (6) Intensity (*šidda*) and weakness (*duf*). – 3rd *mašra'*, on the divisions (*taqāsim*) of being, in fifteen sections: (1) The preceding and the subsequent. – (2) Unity and multiplicity and their concomitants (*lawāḥiq*). – (3) The types of otherness (*ḡayrīyya*), i.e. correspondence, non-contrary contradiction, opposite. – (4) Potentiality (*quwwa*) and action (*fi'l*), division of existents into things generated within time (*ḥādīt*) and non-generated things. – (5) The universal and the particular. – (6) Rational reflexions (*i'tibārāt*). – (7) Continuation of the remarks on the *i'tibārāt* and the spiritual (*dīhnīyya*) things. – (8) That which is essentially (*bi-dātihi*) at rest (*qārr*), and that which is not at rest. – (9) That which may be limited and that which is not limited. – (10) That which can be divisible and that which is not. – (11) That which is part of a different reality, and that which is not. – (12) That which is motion and that which is not. – (13) Cause and effect. – (14) Final end (*ḡāya*). – (15) The trace of the only thing (*aṭar al-amr al-wahdānī*). – 4th *mašra'*, on the Necessary Existent, in one section: (1) The difference between the necessary and the potentially existent; definition and characterisation of the Necessary Existent. – 5th *mašra'*, on its actions and the meaning of 'generation' (*ibdā'*), in four sections: (1) The 'caused' (*ma'lūl*), both that which has and does not have continued duration; caused and uncaused everlasting things. – (2) The reasons for the things generated within time (*ḥawādīt*), coincidence, will, and further remarks on duration (*dawām*). Reply to the question of whether the motion of the celestial bodies was generated within time. – (3) The intellect sets the spheres in motion by inciting desire (*tašwīq*). – (4) On the essential and the temporal coming-into-being/createdness (*ḥudūt*),

such as the createdness of the world. – 6th *mašra'*, on being self-sufficient, the principles of being, the motions of the spheres, the order of existence (*tartīb al-wuḡūd*), good and evil, in eleven sections: (1) No final cause (*'illa ḡā'īyya*) for the actions of the Necessary Existent. General remarks on the concept of 'end' (*ḡāya*). Empedocles is wrongly said to have professed coincidence and destiny, and not believed in final ends. – (2) The Necessary Existent as the end of all beings. – (3) Ranking order of that which exists based on its nobility, with reference to what Aristotle, the 'imam of scholars' (*imām al-bāḥiṭīn*), said in *al-Samā' wa-l-'ālam*. – (4) Refutation of an erroneous opinion held by Abū l-Barakāt, who ascribed to the Necessary Existent innumerable, constantly renewing (*mutaḡāddida*), preceding (*sābiqa*), and subsequent (*lāḥiqa*) wills (*irādāt*). – (5) How the spheres are set in motion; on the modality of their 'souls' (*nufūs*). The connection between the motions of the spheres and their illumination (*išrāq*). Motion generated by illumination continues even into humans. – (6) The motions of the spheres are supported by a rational substance (*ḡawhar 'aqlī*). – (7) One body cannot be the cause of another. – (8) On the emergence (*šudūr*) of multiplicity out of the one, according to the Peripatetics and the philosophers of illumination (*išrāḡīyyūn*); interpretation of a quote by Pythagoras: number (*'adad*) is the basis of existing things. – (9) The intellects as the masters (*arbāb*) of the species (*anwā'*); reference to the teachings of Empedocles and Agathodaemon (cf. Landolt 2008 [\*110: 249]). – (10) All existence is enclosed (*inṭiwā'*) within the power (*qahr*) of the light of lights. – (11) Evil. How action is generated by the cause. – 7th *mašra'*, on the perception (*idrāk*) etc., in seven sections: (1) Perception and knowledge. – (2) The perception of the celestial souls and other perceptions. – (3) How the transcendental things (*muḡayyabāt*) appear. – (4) On the continued existence of the soul. – (5) On the impossibility of the transmigration of souls. – (6) The path (*sulūk*) of the 'godlike sages' (*ḥukamā' muta'allihīn*);

two traditions of wisdom, metaphorically described as 'heaven' (*ḥamīra*); the 'heaven of the Pythagoreans, represented by Hermes and Plato, and the 'heaven of the Ḥusrawāniyyūn, represented by the Iranian kings Farīdūn and Kay Ḥusraw (regarding the attendant affiliations cf. Landolt 2008 [\*110: 241]). – (7) The author's spiritual testament (*waṣīyya*).

*Al-Muqāwamāt*  
*The Opposites/Objections*

GAL [\*3: S I 782]; OMM I [\*23: LXXIII–LXXVI (Intro.)]; Amin Razavi 1997 [\*52: 10–11]. – For textual editions cf. [\*44].

According to the author [\*44: 124], this is an abridged (*muḥtaṣar*) revision (*iṣlāḥ*) of his *Talwīḥāt*, in the form of 'annotations' (*lawāḥiq*). The treatise is arranged dialectically, often in the form of questions and answers, the questions expressing the theories of hypothetical opponents, while the answers represent the author's opinion. Not laid out in chapters.

Only the third part has been edited; topics (selection): 'Concreteness' (*ṣay'yya*) and existence. – Substance and accident. – Divisibility (*taḡazzī*). Non-existence (*adam*). The number one; even and odd number. – Form (*ṣakl*). – Heaviness and lightness. – The measure of time (*zamān*). – Relation (*nisba*) and connection (*idāfa*). – Place (the 'where'). – Position (*waḍ'*) as one of the categories. – Mention of the *ṣāhib al-Baṣā'ir* (i.e. 'Umar b. Sahlān al-Sāwī) who limited the categories to four: substance, quantity, quality, relation (*nisba*), i.e. without 'motion' as it is neither quantity nor relation; the author himself

limits them to five, 'as we explained in the *Talwīḥāt* and expounded in detail (*faṣṣalnā*) in the *Muṭāraḥāt*'; Where, When, Position, and Possession can be reduced to Relation. Further remarks on the categories, interrupted by the critical remark that if God wanted to benefit the 'sons of wisdom' (*abnā' al-ḥikma*), He would allow them to return to the ways of their ancestors as regards seeing the lights etc., and reduce their talk about the categories. – Debate on five theories (*mawāqif*) on substance. – Intensification (*iṣtidād*). – Priority and posteriority. – Concomitants (*lawāḥiq*) of multiplicity (*kaṭra*). – The universal and the particular. – Concomitants of the logic of propositions (*lawāḥiq al-qustās*). – Regress arguments (*salāsīl*). – Reference to 'Umar b. Sahlān al-Sāwī in the context of the question of whether existence (*wuḡūd*) is existent (*mawḡūd*). – Quiddity (*māhiyya*) and reality (*ḥaqīqa*); renewed reference to the *Muṭāraḥāt*. – The cause (*'illa*). – That which is coincidental (*ittifāqī*). – The cause precedes the essence (*dāt*) as the sun precedes the ray. In the instance of the finger and the ring, the inclination (*mayl*) of the finger precedes that of the ring, but conversely the motion (*ḥaraka*) of the ring that of the finger. – Proof of the existence of the Necessary Existent. – Impossibility of the transmigration of souls. – Celestial motion is not natural and not subject to compulsion (*qasr'yya*). Bliss of the one who can rise to the highest divine light, which is described using, among others, the Persian word for 'sun' (*hūrahš*). – Reference to the 'sublime secret' (*al-sirr al-'azīm*) and to his book *Ḥikmat al-iṣrāq*.

### 3.2 *Philosophical Didactic Narratives*

*Aql-i surḥ*  
*The Red Intellect*

OMM III [\*25: 78–81 (Intro.)]; Corbin, in [\*26: 195–200]; Amin Razavi 1997 [\*52: 21–22]. – For textual editions and transl. cf. [\*35].

Persian treatise on the creation of the soul, its imprisonment in the body, and ultimate

return from exile, in the form of an allegorical dialogue. The protagonists are the first-person narrator and a wise master who answers the narrator's questions concerning the essence of the transcendental and the material world. The treatise demonstrates particularly clearly Suhrawardī's use of symbolism. The 'jewel illumining the night' (*gawhar-i ṣab-afrūz*), for

instance, appears as a metaphor of the moon, but is located on the mythical mountain Qāf [\*35: 230]. An important role is also played by the image of the bird, on the one hand as a symbol of the soul, and on the other in interpretation of the Iranian myth of Šimurg, who is responsible for the continued existence of life on earth. The title of the treatise points to the great importance colour symbolism had in Suhrawardī's thought. The colour red symbolises proximity to the material world. Even the (Active?) Intellect, who plays the part of the wise master in this dialogue, does not appear in his original luminous essence (pure white) but has been sullied by his connection with the material world, expressed by the image of the well. The narrator misinterprets the wise man's red complexion as a sign of youthfulness, but is enlightened as to the true reason by the wise man himself, 'the first child of creation' (*awwalīn farzand-i āfarīnīš*).

*Āwāz-i par-i Ġabrā'īl*  
*The Sound of Gabriel's Wings*

GAL [\*3: S I 783 (no. 20)]; OMM III [\*25: 72–77]; Corbin [\*26: 223–226]; Davidson 1992 [\*49: 161–163], Amin Razavi 1997 [\*52: 20–21]; Tuft 1981 [\*89: 211–220]. – For textual editions and transl. cf. [\*37].

The title of the treatise alludes to a question asked of the Sufi Abū 'Alī-i Fārmadī: why do those dressed in blue, i.e. the mystics, call some sounds (*aṣwāt*) 'the sound of Gabriel's wings'? Fārmadī replied that most things the enquirer perceived with his senses were in fact produced by the sound of Gabriel's wings. He himself is among these sounds. Elucidating this symbolism is one of the objectives of the treatise.

The text describes the encounter between a first-person narrator, who represents the rational soul and appears in the role of a Sufi student, and a mystical master in a night-time vision. The narrator sets out for his father's convent (*ḥānqāh*). On arrival he finds that one of the two doors, the one leading towards the city, is closed, and so opens the other one that

faces the uncultivated land (*ṣaḥrā*). Behind this door he sees ten masters (*pīr*; they represent the ten intellects) sitting in a shady bower. From the master closest to him (i.e. the Active Intellect), he learns that the ten have come from 'Nowhere' (*nākuḡā-ābād*). Then the narrator sees the entire cosmos, including the sublunar world, before him as a kind of model and learns from the master that humans are his children, that they were sent into the sublunar world and will be called back once they have fulfilled their tasks, never again to be separated from their father. At the student's request to be taught the 'language of God' (*kalām-i ḥudā*), the master teaches him as much as possible (*muyassar*). Although this is only a fraction of the whole, it enables the student to perceive more miracles (*aḡā'ib*) than he can describe. In this context, the master mentions the holy spirit (*rūḡ al-quds*). The fact that the latter is identified with the archangel Gabriel in Islamic tradition leads to the statement that everything existing in the sublunar world emerges from Gabriel's wing. Subsequently, the master calls Gabriel the last of God's greatest (*kubrā*) words (*kalimāt*). The souls (*arwāḥ*) of humans consist of this last word, and consequently have a part in God's spirit (*rūḡ*). Gabriel as the mediator between God and humans has two wings; the right one is pure light, while the left one has some dark spots, similar to those that can be seen on the moon. The darker hue is a sign that one side of his being (*būd*) is facing the non-being (*nābūd*): the left wing is the connection with the merely potential being of humans, the right one with the absolute being of God. The material world – as the world of delusion (*ḡurūr*) – is the echo (*ṣadā*) and the shadow (*ẓill*) of Gabriel's left wing; the luminous souls (*rawānhā-yi rawšan*, i.e. the immaterial entities), emanate from Gabriel's right wing [\*37: 222]. The student's request to be told what Gabriel's wings look like, earns him reproach: does he not know that these are all symbols (*rumūz*)? The night vision ends with the door to the outside (*dar-i bīrūnī*, i.e. the door to the uncultivated land) being closed and the door

leading to the city being opened; the material world comes to the fore once again, represented by the image of the arriving merchants. The masters vanish in front of the student's eyes, leaving him behind in dejection. This indicates the gnostic longing of the soul for its spiritual home, the transcendental world; it cannot find lasting fulfilment while the soul is held by material ties.

*Luḡat-i mūrān*  
*The Language of the Ants*

GAL [\*3: S I 783 (no. 22); OMM III [\*25: 94–96]; Corbin [\*26: 415–419]. – For textual editions and transl. cf. [\*41].

Persian mystical allegorical treatise, divided into an introduction and twelve chapters. The central topic is the true celestial origin of the soul, its relationship with the material world, and the necessity for it to separate from the body in order to gain access to the divine light. Other topics are the different levels of knowledge and the types of expression possible through language. The author explains these topics by means of several narratives, mostly drawn from the imagery of the animal kingdom. The stylistic device of 'Socratic irony' is employed here, for instance in the narrative of the owls and the hoopoe. The title of the treatise alludes to the story of the first chapter, which records a conversation among ants concerning the origin of things.

*Mu'nis al-ʿuṣṣāq*  
*The Lovers' Companion*

GAL [\*3: S I 783 (no. 17)]; OMM III [\*25: 90–93]; Corbin [\*26: 291–301]; Amin Razavi 1997 [\*52: 24–25]; Landolt 1987 [\*90: 478–479]. – Also known under the title *Ḥaqīqat al-ʿiṣq* (*On the Reality of Love*). – For textual editions and transl. cf. [\*43].

Persian allegorical treatise on the triad 'beauty', 'love', and 'sorrow'. The brief introduction quotes sura 12:3 as an epigraph, emphasising the close connection between the subject and the Quranic narrative of Joseph.

Twelve sections (*faṣl*): (1) Sketch of a cosmogony: The intellect, a luminous (*tābnāk*) substance, was created first, endowed with three qualities (*ṣifat*) which generated three brothers: (a) knowledge of God, from which was generated beauty (*ḥusn, nikūʿ*); (b) knowledge of self, from which was generated love (*ʿiṣq, mihr*); and (c) knowledge of that which was not and then was (*šināht-i ān ki nabūd pas bi-būd*), from which was generated sorrow (*ḥuzn, andūh*). With his smile the eldest brother, beauty, brings forth the angels; love, as the middle brother, serves the eldest and is excited by his smile. As he is about to move, the youngest brother, sorrow, clings to him. This generates heaven and earth. – (2) The four elements are subject to the seven planets in order to be incarcerated in the prison of the six directions. Adam is created. The inhabitants of the supernal world (*malakūt*) wish to see him. King 'Beauty' sets out to occupy the place of honour with him; 'Love' and 'Sorrow' follow him. – (3) King 'Beauty' returns to the supernal world and waits for someone who could represent him on earth. He is notified when Joseph's turn comes. He goes to find Joseph, with 'Love' and 'Sorrow' following him. 'Love' addresses in the 'language of state (*ḥāl*)' verses to 'Beauty', 'Beauty' replies in the negative. The two younger brothers 'Love' and 'Sorrow' separate from 'Beauty' and turn towards the 'Desert of Confusion'. The youngest brother, 'Sorrow', calls 'Beauty', the eldest, their master (*pīr*) who gave them the patched garment, and suggests that they should go their separate ways, he going to Canaan and 'Love' to Egypt. – (4) 'Sorrow' goes to find Jacob in Canaan, answering his question of where he came from with 'from the land Nowhere (*nākuḡā-ābād*)'. He and Jacob become friends. – (5) The middle brother 'Love' passes through Egypt 'in the way of Qalandar' (*qalandar-wār*), and is asked by Zulayḥā whence he came and whither he goes. From Jerusalem, he says, from the quarter Rūḡābād ('Spiritland') and the lane of 'Beauty'; his profession is wandering around (*siyāḡat*); the heavens know him as 'mover' (*muḥarrik*), the

earth as 'calmer' (*musakkin*). Someone who knows the way could travel from the earth to the last (*āhīrtarīn*, i.e. lowest) of his provinces (*wilāyat*) in nine stages. He proceeds to tell the story of this province. – (6) Above the pavilion with nine levels (i.e. the cosmos consisting of nine spheres) rises a cupola named 'land of the spirit' (*šahristān-i ġān* = Rūhābād). It is managed by a 'young old man' (*pīrī ġawān*) named 'eternal spirit' (*ġawīd hīrad*). Whoever reaches this city will see a pavilion with three levels, various rooms and gates (or squares, *darwāza*). A detailed description of this locality follows, of the thrones found there and of the persons sitting on the thrones. There are further cities above this one, but to tell their stories would go beyond the human capacity of comprehension. – (7) Zulayhā asks the brother 'Love' why he came here from his province. He tells her that they were three brothers, once again mentioning Joseph (summarising the events described in sections 1–3). Zulayhā keeps 'Love' with her as an honoured guest until Joseph arrives in Egypt. After his arrival, they go to see him. Zulayhā loses her mind. – (8) The news of Joseph's high rank in Egypt reaches Canaan. 'Sorrow' advises Jacob to travel to Egypt. When Jacob arrives, he sees Joseph and Zulayhā sitting on the throne. 'Sorrow' kneels as he sees 'Love' in the service of 'Beauty' (i.e. Joseph). Joseph notices his father and refers to the dream he had. – Here ends the narrative part of the treatise. – (9) Remarks on *ġamāl* and *kamāl* as names of 'Beauty'; everything that exists, spiritual and physical, aspires to *kamāl* (perfection). Beauty can only be reached through love. – (10) On the difference between *maḥabbat* and *'išq* as two kinds of 'Love'; the relation between *maḥabbat* and *ma'rīfat* (cognition). Cognition can generate two opposite things: love and hatred (*'adāwat*). Pure good (*ḥayr-i maḥḍ*) and pure evil (*šarr-i maḥḍ*). – (11) Derivation of the word *'išq* from *'ašqa* ('ivy'); the nature of this plant to climb up a tree and rob it of nourishment until it dries out. Explanations of the 'grain of the heart' (*ḥabbat al-qalb*). – (12) Concluding remarks on love, and comparison of the

human body with a city (cf. the *Rasā'il Iḥwān al-Šafā'*); characterisation of the animal soul (*naḥs*).

*Qiṣṣat al-ġurba al-ġarbiyya*

*The Narrative of the Western Exile*

GAL [\*3; S I 783 (no. 16)]; OMM II [\*24; 85–99]; Corbin [\*26; 267–272]. – For textual editions and transl. cf. [\*46].

Philosophical allegory on the descent of the human soul into the material world, and its renewed ascent into the spiritual realm and ultimately to God. As the author states in a brief foreword, he wrote this text because he was missing references (*tabwīḥāt*) to the highest frontier (*al-tawr al-a'zam*), i.e. 'the great inundation' (*al-tamma al-kubrā*, Quran 79:34, where it is a metaphor for the last judgment) in Ibn Sinā's *Ḥayy b. Yaḡzān*. These, he says, are hidden in another treatise by that author, *Salāmān wa-Absāl*. His intention is to elucidate some of this secret (*sirr*) in the form of a narrative (*qiṣṣa*).

The first-person narrator, symbolising the soul, travels in the company of his brother Āšim ('protector') from Transoxania (the realm of light) to the West, the Maghreb (the realm of darkness, also a symbol of the material world). Near the city of Qayrawān (culmination and centre of this Western realm; cf. Hamori 1971 [\*132: 18, n. 32]) they are captured and imprisoned at the bottom of an infinitely deep well. Above them is a towering palace. Every evening, the travellers climb up into the palace and look out of a window over the free country outside. They are homesick for their country, Yemen. One night the hoopoe brings them a message from their father, the 'rightly-guiding one' (*al-hādī*) (regarding this authority cf. Landolt 1987 [\*90: 479]). It tells them how they can free themselves from captivity, names the stations of the path they should take and provides instructions on how to behave at these stations. Guided by the hoopoe, the two embark on a journey that takes them on a ship across the sea up to the sky, past the constellations to the celestial



bodies. The narrator perceives the harmony of the spheres and experiences the most sublime pleasure (*ladḍa*). Finally, he reaches the source of life and a vast mountain on which his father lives. He climbs the mountain and sees his father as a venerable old man (*šayḥ kabīr*). The narrator complains of his imprisonment in Qayrawān and learns from the old man that he must return there. However, even after his return to prison, he will be able to ascend to this paradise as often as he wishes. This alludes to the Gnostic idea of the soul's ability to be aware of its celestial home despite being tied to a material body, or to Ibn Sīnā's idea that the potential intellect can always return to the Active Intellect once it has found the way. 'In the end' (*fī l-aḥīr*), the old man concludes, he will be able to leave the western region forever. The narrative ends with the narrator returning to prison. He laments being separated from his father. While he still feels inexpressible pleasure when recollecting his journey to the transcendental world, the pleasure passes quickly, like a dream: 'May God redeem us from the prison of nature and the shackles of matter!' (*wa-naḡḡānā llāhu min asr al-ṭabī'a wa-qayd al-hayūlā*).

The link with the Quran is stronger in *The Narrative of the Western Exile* than in Suhrawardī's other allegories. The work is permeated with Quranic quotations which form its true framework (cf. Hāmeen-Anttila 2011 [\*114: 113], also regarding the allusions to Solomon and other prophets). One Quranic motif is the hoopoe (cf. sura 27:20), which also appears in some other allegorical treatises by Suhrawardī (*Šafīr-i Šimurḡ*, *Luḡat-i mūrān*), while some of the stations of the ascent are places mentioned in the Quran (e.g. the mountain Ġūdī, the metal well). It is impossible to overlook references to the Prophet's journey to Heaven (*mī'rāḡ*). The father to whom the narrator ascends is not, in fact, God, but the authoritative teacher who states explicitly that he is descended from someone higher, from the king, the most august ancestor who has no ancestors and no father (*al-malik allāḡī huwa l-ḡadd al-a'zam allāḡī lā ḡadda lahu wa-lā aba*). As Hāmeen-Anttila was able to demonstrate [\*114: 112–113], the

structure of the narrative shows the influence of the model of the tripartite Arabic qasida. As for the storyline, the dualist understanding of light and darkness that defines the work indicates Iranian Manichaean ideas.

*Risāla fī Ḥālat al-ṭufūliyya*

*Epistle on the State of Childhood*

OMM 111 [\*25: 86–89], Corbin [\*26: 383–412]; Amin Razavi 1997 [\*52: 23–24]. – The treatise has also been transmitted under the title *Risālat al-maktab* (cf. Pourjavady 2001 [\*56: 341]. – For textual editions and transl. cf. [\*47].

Treatise on the concept of 'knowledge' and the question of how it is acquired. Central significance is accorded to the figure of the 'teacher' (a topic discussed under a similar aspect in the *Talwīḡāt*, where Aristotle is the teacher [\*23: 70–74]). The key word of the title is emphasised at the very beginning: The first-person narrator describes how, when playing in the street 'in childhood' (*dar ṭufūliyyat*), he met other children. They were on their way to school in order to acquire knowledge, which prompted the narrator to ask: 'What is knowledge?' (*ilm čī bāšad*). They replied that they would have to ask their teacher (*ustād*), and left him. – After this prologue, the main part of the treatise describes how the narrator, or pupil, embarks upon the path of acquiring knowledge with the help of a teacher (*šayḥ*) – who claims to be the other children's teacher, and may be a personification of the Active Intellect. The mediating factor appears in the form of a tablet (*lawḥi*) on which an 'alphabet' is inscribed. One day, the pupil divulges to someone 'unworthy' something he learnt from the tablet, and afterwards can no longer find his teacher. While searching for him, he arrives at a Sufi convent (*ḡānqāh*) where he meets a master (*pīr*) wearing a patched garment, half black and half white. The *pīr* guides the pupil back to his first master, a reference to the propaedeutic role of Sufism. In a parable the teacher explains to him how a lack of harmony between characters and too great a difference in social background may prevent communication. In this story, a salamander and a duck meet in autumn. The salamander

is cold, but the duck has no understanding of what it means to feel cold. In keeping with its own way of life, the duck praises the cold water in winter. The salamander is annoyed and leaves. Similarly among humans, misunderstandings arise thanks to inadequate use of language as a result of ignorance (in philosophical terms: excessive 'hermeneutical difference'). The heart of the ignorant person is like a wick in contact with water rather than oil; the heart of the knowing person (*āšnā*), on the other hand, is like a candle that attracts fire from a long way away. Once an ignorant person is aware that his heart is sick, he can recover from the sickness, rather like someone suffering from the brain disease *sirsām* can recover his mind. The illnesses of the body and those of the heart are treated by the respective doctors. Treatment in both cases progresses through three stations (*maqām*). In the case of bodily illnesses, it consists in administering specific nourishment. In the case of the illnesses of the heart, the *šayḥ* gives the example of the glow-worm, who believes its nightly glow to come entirely from itself. During the day it does not emerge, so as not to be at the mercy of the sun and its radiance, yet the glow of its own breath ultimately comes from the sun. Someone suffering from illness of the heart seeks to have some of the special nourishment that causes the glowing of the worm, in order to acquire its qualities. In explanation of the second stage, the *šayḥ* cites the well-known myth of the sea-cow (or sea-bull) that emerges from the sea at night in order to graze by the light of the jewel that brightens the night (*gawhar-i šab-afrūz*, i.e. the moon; cf. also *Aql-i surḥ* [\*35: 229–230]). The sea-cow is hostile to the sun because the latter takes the jewel away during the day, destroying its light – the sea-cow being ignorant of the fact that all light is supported by the sun. In the same way someone suffering from illness of the heart seeks to find the herb that the sea-cow eats by the light of the jewel that brightens the night and eat it himself, so that love for the jewel that brightens the night may grow in his heart, too. The third station consists in an allegorical journey to Mount Qāf, where the bird Sīmurḡ has made its nest

in a tree whose fruit the seeker must pick (an ancient Iranian myth: the 'Tree of All Seeds'). – The *šayḥ* provides further explanations of the power of the sun. – Presentation of a cosmological model in the context of eclipses of sun and moon and the 'covering of the light' (*ḥiḡāb-i nūr*). – Someone aspiring to glory and wealth still has the path to the world of purity (*'ālam-i šafā*) before himself; it consists in abandoning material things and in trust in God (*tawakkul*). – Parable of the rich man who wants to build a castle the like of which has never been seen before, but who is called by the angel of death before its completion. – Another parable, about a merchant who sets sail on a ship carrying all his goods. The ship finds itself in distress, and the sailors turn on the merchant, threatening to throw the jewels overboard. The wind abates, the ship reaches the shore safely, at which point the merchant throws all his possessions into the sea. Asked for the reason for this bizarre action, he replies that he has found serenity; life, in fact, is worth more than wealth. As he now has no possessions anymore, he need no longer set foot on ships and trade in goods. – More on turning one's back on the world and on the Sufi concept of 'taste' (*dawq*), in order that 'the other world' can be experienced. Someone immature is not able to perceive the 'taste'; he is similar to an impotent man (*'innn*) who cannot have sexual pleasure. – Comments on the Sufi way of life and on the influence of the soul of listening to music (*samā'*) and of dance (*raqs*), and how it is expressed in the mystic's outward demeanour. In this context – as well as in some other works – the author adduces the image of the soul bird (*murḡ-i ḡān*) that carries its cage (the body) with it.

It is possible that this treatise by Suhrawardī influenced Bar Hebraeus' brief mystical treatise *Ṭalyuṭ hawna*, the beginning of which displays great similarity with that of the *Risāla fī ḥālat al-ṭufūliyya* (Takahashi 2014 [\*61]).

*Risālat al-Ṭayr*  
Epistle on the Birds

GAL [\*3: S I 783 (no. 23); 819<sub>44</sub>]; OMM III [\*25: 62–71 (Intro.); Amin Razavi 1997 [\*52:

17–20]. – For textual editions and transl. cf. [\*49].

Persian translation of Ibn Sinā's Arabic treatise of the same name, which not only gave rise to this translation by Suhrawardī but is also the source of further reworkings, by Abū Ḥāmid al-Ġazālī and the mystic poet Farīd al-Dīn 'Aṭṭār among others. A Persian commentary on Ibn Sinā's epistle was composed by 'Umar b. Sahlān al-Sāwī.

The text, which is described as 'translation from the language of reality' (*tarjuma-yi lisān al-ḥaqq*) at the beginning, starts with a lament by the first-person narrator, who has no true friend with whom he could share his worries and thoughts. Subsequently, the narrator addresses instructions for correct behaviour to the 'brothers of reality' (*barādarān-i ḥaqīqat*), elucidating these with examples of various animals (hedgehog, snake, ant, scorpion, birds, ostrich, vulture, salamander, bat). He also explains that unlike angels and animals, humans have the choice of following their desires or resisting them. By resisting them the humans outdo the angels, who know no desires; but when they give in to them, they are inferior to irrational animals.

This introduction is followed by a narrative on the endeavour of the soul (represented by the metaphor of the bird) to return to its home (the intelligible world). Among a flock of birds, the first-person narrator arrives at a spot where hunters have laid nets. As the hunters spot the birds, they start singing a cheerful tune (*ṣafīr-i ḥwaš*) in order to beguile them. Although the birds can see the net, they become entangled in it. All attempts at escape fail, and the birds become resigned to their fate. One day they see a group of friends (*yārān*) who are free, but bear the marks of former captivity in the form of remnants of shackles. Upon seeing them, the narrator becomes aware of having forgotten himself (*nasy-i ḥwiš az ḥwad*). He laments his fate and asks the friendly birds to show him the way to liberation and to empathise with his suffering. The birds fear the hunters' tricks and flee, but return at the narrator's request. He asks

how they were able to escape, and they help him by employing the same trick that helped them, too. He asks them to remove the shackles from his feet, but they reply that if they were able to do this, they would have removed their own shackles first. The narrator sets out together with them on a long and arduous and also dangerous journey over high mountains. They land on the seventh mountain where they find fields of green. After a period of rest, a warning voice encourages them to continue on their way. They reach the eighth mountain, hear birdsong of unmatched loveliness and see colours and images (*šurathā*) they cannot take their eyes off. They land and are received graciously. The governor (*wālī*) informs them that the king lives in a city at the top of the mountain. They set off towards the city, and the palace issues the instruction to admit them. Finally, they reach a room in which they can see from afar the light (*nūr*) that emanates from the king. They faint, but are reawakened by the king's benevolence. They tell their story and lament their fate, begging to have the remains of the shackles taken off their feet, but are told that only he who tied them can remove the shackles. The king sends them a messenger (*rasūl*) who will arrange for the shackles to be removed; then the call to return is sounded. The birds return, 'and now we are on the way [and] are coming with the king's messenger'. Here ends the narrative. When his friends ask him to describe the king's splendour, the narrator replies that it is found everywhere where pure beauty and perfection are found. His friends, who cannot understand the story (*qīṣṣa*), accuse the narrator of having lost his mind and recommend various therapies by means of which he can recover his health. The narrator in turn accuses them of ignorance.

*Rūzī bā ḡamā'at-i šūfiyān*

*A Day in the Company of Sufis*

OMM III [\*25: 82–85 (Intro.)]; Corbin [\*26: 363–367]; Amin Razavi 1997 [\*52: 22–23]. – For textual editions and transl. cf. [\*50].

Dialogue in question-and-answer style between a student and his teacher, reported to other mystics by the student (and first-person narrator) looking back at events. While it is impossible to overlook the Sufi tone of the treatise, topics of specifically philosophical interest are also included, especially concerning the doctrine of motion and cosmology. The author once again implements the method of illustrating his theories by means of parables, for instance in the story of the lapidary (*ḥak-kāk*) who produces nine vessels out of one single precious stone, combining them into a jewel that resembles a model of the spheres. The text also describes how God, the creator, sent the first light, and how it descended through the spheres, during the course of which the stars and planets were created by splitting the light and by its 'remains' (*faḍla*).

*Šaḡīr-i Sīmurǧ*  
*Sīmurǧ's Tune*

GAL [\*3: S I 783 (no. 21)]; OMM III [\*25: 97–101]; Corbin [\*26: 443–448]. – For textual editions and transl. cf. [\*51].

Mystical philosophical treatise, divided into an introduction, two parts (*qism*) each of which comprises three sections (*faṣl*), and an epilogue. Subject of the introduction: the (Iranian) mythical bird Sīmurǧ represents the original source of the 'music' of all cognition and knowledge; after leaving its nest in order to fly to the cosmic mountain Qāf, the (Quranic Solomon) hoopoe (*hudhud*) becomes a Sīmurǧ itself, waking the sleepers with its call. – 1st part: On the foundations (*mabādī*); 1st section: On the precedence of this science (*ilm*; i.e. the mystics' knowledge of God) above all other sciences; its subject is truth or God (*ḥaqq*) and it is based on immediate beholding (*mušāhada*), not on indirect conclusions (*istidlāl*); 2nd section: On momentary phenomena of light that may help the beginners among those seeking God on their path. These kinds of 'phenomena', also called *išrāq* and identical with the so-called 'instant' (*waqt*) of the Sufis, do not require any particular

spiritual exercises, but may be intensified by these, as well as by listening to music; 3rd section: On the *sakīna*. Definition of *sakīna* as the utmost intensification and permanence of the 'lights of the secret' (*anwār-i sirr*); rootedness of the *sakīna* in the Quran and in *ḥadīṭ*; mental processes linked to the phenomenon of *sakīna*, especially the experience of bliss and pleasure. Warning against false imaginary visions that occur in secluded exercises. – 2nd part: On objectives (*maqāṣid*); 1st section: On annihilation (*fanā*). The elation of the ego linked to the *sakīna* must be overcome by effacement in the profession of the unity of remembering God, and that by means of gradual deconstruction of the concepts 'Allah', 'He', 'You', and 'Me'. This annihilation ends in the infinite (*lā nihāya*). 2nd section: On insight. The more insight a human possesses, the more perfect he becomes; the highest form is the revelation (*kašf*) of the divine qualities and the hidden world order. There is a single point within a human (namely the soul) that is capable of such exaltation, even if the human is only a donkey drover. Ultimate perfection (*kamāl*) of humans consists in becoming (more) similar (*tašabbuh*) to God. 3rd section: Love (*maḥabbat*) as the principle of the knowledge of God, as opposed to the view of the theologians and jurists. Love for God has nothing to do with likeness and sensuality but rests on the divine point within humans; it means exultation of the being by imagining the presence of another being, and is simultaneously finding and searching. The meaning of pleasure (*laḍḍat*) in this concept of love. In analogy with sensual pleasure, the knowledge of God is consciously experienced as pleasure in its object, in fact as the 'illumination' (*išrāq*) of the rational soul (*rawān-i gūyā*) by the light of God. – Epilogue: A divided being (*dāt-i munqasim*) cannot recognise that which is undivided; the necessity of freeing oneself from ties to the material world, expressed once again in allegorical terms (hindrance by the legendary strap-legged demons [*duwāl-pāyān*]).

### 3.3 Other Texts

#### *Kalimat al-taṣawwuf* *The Word of Sufism*

GAL [\*3: S I 783 (no. 25)]; Nasr [\*27: 2 Engl.]; Corbin [\*26: 155–160]; Landolt 1987 [\*90: 477]; 2003 [\*58: 21]. – For textual editions and transl. cf. [\*40].

Treatise on the basic philosophical concepts, according to the author's introductory information written at the request of a fellow brother. The arrangement of the sections (*faṣl*) follows Naḡafqulī's edition.

(1) On the necessity of adhering to the book (Quran) and the Sunna and on the fact that reality (*ḥaqīqa*) is one. – (2) On things such as the universal and the particular, induction (*istiqrāʾ*), substance, form (*ḥayʾa*), the refutation of atomism, finiteness. By what means directions (*ḡihāt*), elements (*ʿanāšir*), and place are defined. Impossibility of void. – (3) Proof of the separateness (*taḡarrud*) of the soul. – (4) On the external and internal senses. – (5) On the modes of thought (*ḡihāt ʿaqliyya*), i.e. necessary, possible, impossible; unity and knowledge of the necessary; the foundation of the One. – (6) On the lesser (*aḥass*) and the nobler (*aṣraf*) possible. – (7) On the first generated (*ṣādīr awwal*). – (8) On the generosity (*ḡūd*) and autarchy (*ḡinā*) of the Necessary Existent. The motions of the spheres. The three worlds: world of the intellect, *al-ḡabarūt*; the world of souls, *al-malakūt*; the world of bodies, *al-mulk*. – (9) How the intellects and the spheres are generated. – (10) On the spheres and their motions and on the intellects being immutable (*lā tataḡayyar*). – (11) On the continued existence of the soul, the transmigration of souls, pleasure and pain, the kind of punishment awaiting the damned and the necessity of sending messengers. – (12) How knowledge regarding transcendental things and dreams is acquired. – (13) On the wisdom (*ḥikma*) of the creation (*ḥalq*) of matter, the spheres, and their motions; the wisdom of the elements and what their places are like. – (14) On the wisdom of the powers and how they are arranged. – (15) Against the doctrine of the 'naturalists' (*ṭabāʾiʿiyya*) and the lies

of Galen. – (16) Untenability of the doctrine that the world is eternal. – (17) The Christians' false understanding of 'father' and 'son'. – (18) The Jews' error when rejecting abrogation (*nash*). – (19) Expounding the error of the Dualists and explanation that there are fewer evil things (*ṣurūr*) than good. – (20) Reference to the wise men of the Persians and the revival (*ihyāʾ*) of their philosophy of light (*ḥikma nūrīyya*). – (21) The conditions for the occurrence of 'abductions' (*ḥulsāt*). – (22) On morality (*ḥulq*) and justice (*ʿadāla*), their classes and branches. Definition of various virtues. – (23) Explanation of Sufi terms, with recourse to al-Ḡunayd. Among the terms is *sakīna*, it is defined as a delectable *ḥulsa* that endures for a time, or as consecutive uninterrupted *ḥulsāt*.

#### *Risāla fī lʿitqād al-ḥukamāʾ*

#### *Epistle on the Religious Beliefs of the Wise Men*

GAL [\*3: S I 783 (no. 15)]; OMM II [\*24: 79–85], Corbin [\*26: 11–13]; Landolt 1987 [\*90: 476]. – For textual editions and transl. cf. [\*48].

No arrangement into chapters; the structure follows that used by Corbin.

Arabic treatise on various philosophical topics, among others the creation of the world, physical phenomena, and the human soul. – (1) According to the author it was composed because people believe the 'god-like wise men' (*al-ḥukamāʾ al-mutaʿallīha*) to be Dahrites who believe neither in a creator, nor in prophets, nor in the resurrection etc., and thus give them a bad name. – (2) The wise men profess (*yaʿtaqīdūna*) that the world has a creator who is unique, has neither taken a companion nor a son, etc., that the prophets are commanded by God to convey such necessary messages as that the punishment of the grave is real, and that the world possesses only possible existence which derives from something else, i.e. the Necessary Existent. – (3) Why the world possesses only possible existence. It is not the accidents that generate the bodies (*mubdīʾāt*), for two reasons: (a) if this were the case, the bodies would have to differ as regards their corporeality (*ḡismiyya*); (b) accidents need the body

in order to exist – how could they generate what they need in order to exist? Neither the body nor the accident can generate essence, consequently there must be a generator who is neither body nor accident – the Necessary Existent, God. – (4) God first created ‘an intelligent, living, knowing entity’, the intellect, possessed of three different aspects (*ġihāt*): (a) as regards its beholding the creator and its intellection (*taʿalluq*) of Him, (b) as regards its beholding its own merely possible being (*imkān*) and its intellection of the latter, (c) as regards its intellectual grasp of its own essence (*dāt*). Aspect (a) generated a further intellect, (b) a sphere (*falak*), and (c) the soul of the sphere. In this way, ten intellects, spheres, and souls of spheres are generated one after the other. The tenth intellect generates the world of the elements (*ʿunṣuriyyāt*) and the human souls; it is the *dator formarum*, holy spirit, Gabriel. – (5) The posteriority (*taʾaḥḥur*) of the generated with respect to the generator is essential, not temporal. – (6) Why God did not generate the world because of His will. Will is linked to an objective one wishes to achieve; God, however, is above objectives and His actions are not linked to them. Furthermore, His will is eternal (*qadīma*). – (7) Humans are the noblest of the living beings on earth. Their rational souls are the expression (*ibāra*) of an intelligent, undivided substance that belongs neither to the elemental world nor to the ethereal world, but to the world of the heavens. A saying from al-Ḥallāḡ. – The human spirit (*rūḥ*) is a divine (*ilāhī*) spirit, but has a connection with the body as a king has with his kingdom; identification of this divine spirit with the rational soul. – (8) The motions generate the dispositions (*istīʿdādāt*) and the *dator formarum* gives existence; comparison with water whose matter is disposed, when the water gets very hot, to adopt ‘airiness’, i.e. to evaporate. Intellects and spheres are of eternal duration (*dāʾima*) because of the duration of their cause. Everything that is renewed in the world of generation and corruption is generated within time (*hādīt*) because the cause is generated within time. – (9) Remarks on matter (*hayūlā*) and on the elements; fire

is furthest distant from the centre (*markaz*) and the earth from the periphery (*muḥīt*). – (10) The three natural realms (mineral, vegetable, and animal) are generated by a mixture of the elements. Plants and animals have nutritive (*ġāḍiya*), growth (*nāmiya*), and reproductive (*muwallida*) powers in common, as well as that which is necessary for processing nourishment, namely attractive (*ġāḍiba*), retentive (*māsika*), digestive (*hāḍima*), and excretive (*dāfiʿa*) powers. Animals also possess the perceptive (*mudrika*) power, i.e. five external and five internal senses. – Humans as the noblest of animals are distinguished by something separate (*mufāriq*) from the other powers: the rational soul. It is subsistent in itself, not located in a ‘where’, living, knowing, governing the body. The spheres, too, have rational souls. They love their creator, are constantly in rapture (*waġd*) and in enduring pleasure (*laḍḍa*), and this is transferred onto their bodies with the result that they move (comparison with Sufi dance). As a result of their motions, the ‘enduring good’ (*al-ḥayr al-dāʾim*) exists in this world. – (12) Three worlds: (a) the world of the intellects, i.e. the *ġabarūt* world; (b) the world of the souls, i.e. the *malakūt* world; and (c) the world of the kingdom, i.e. the world of the bodies. – (13) The human soul is everlasting if it knows God and His angels, and the ‘realities’ have been inscribed (*munaqqaṣa*) into it. The fate of the human souls that do not achieve this goal. – (14) According to the conviction of the wise men, the prophets (*anbiyāʾ*) have been sent with the truth (*ḥaqq*) for the benefit of the order of the world (*niẓām al-ʿālam*); the particular nobility of their souls; their rank is higher than that of the saints (*auliyyāʾ*). – (15) Exercises such as fasting may result in the student being granted lights located on the level of the spirit (*anwār rūḥāniyya*) until this becomes a part of their nature (*malaka*) and *sakīna*. Transcendental things will be revealed to them, and spiritual formations (*aṣbāḥ*) as beautiful as anything one could imagine. They will hear sweet (*ʿaḍb*) words from the supernal world, acquire knowledge and behold hidden things.

## 4 Doctrine

4.1 – Introduction – 4.2 Basic Theories and Positions – 4.3 His Place in the History of Philosophy – 4.4 The Use of Images in Imparting Philosophical Topics

### 4.1 Introduction

Suhrawardī's doctrine may be called a philosophy of illumination (*išrāq*) insofar as it derives the cognition of reality not from the concept of being but from the phenomenon of light. Light, however, must not be understood as either material visibility nor as mere appearance, but as that which is evident in the broadest possible sense. The evident or 'apparent' in the literal sense is to Suhrawardī only that which is 'opposite' to the eye, or 'appears in the light' (*muqābalat al-mustanīr*) to the perceiving viewer. The beholder is not just the physical eye but the imagining and genuinely beholding soul, and ultimately God Himself. The One multiplies in a geometric (not arithmetical) progression, the image of reflection being fundamental. General terms existing only in the mind, abstracted from reality, are not evident or 'apparent' in this sense. This doctrine of the so-called 'knowledge by presence' (*ilm ḥuḍūrī*) is regarded as Suhrawardī's major contribution in the context of the history of Islamic philosophy, even though the term is not used exclusively by him.

These assumptions should not lead us to conclude that Suhrawardī occupied a 'nominalist' position in the debate on the problem of universals among medieval scholastics. Suhrawardī distinguishes clearly between (a) the universals *post rem*, i.e. the general terms abstracted from the multitude of things, and (b) individual spiritual beings or angels in the Persian or Islamic tradition, which he understands as Platonic ideas, and to which, as the epitome and origin of the essential dispositions, he accords the status of universals *ante rem*. He defends the Platonic doctrine of ideas against Ibn Sīnā's rejection of it, describing the latter as 'confusing the image with that which the image shows' (cf. Landolt 2008 [\*110: 236–237]). Again, unlike Ibn Sīnā he explains God's knowledge of the particulars not 'universally' but as the concrete relation between the subject and the object through an 'illuminative relation' (*idāfa iṣrāqīyya*), as this does not imply multiplicity of the essence of God (cf. also Sinai 2016 [\*62: 289–290]).

### 4.2 Basic Theories and Positions

In explanation of his 'own proper' doctrine, Suhrawardī formulated a few tenets at the very beginning of the second part of his magnum opus *Ḥikmat al-iṣrāq* (the first part is dedicated to deconstructing traditional peripatetic philosophy) to which he recurs repeatedly, and which are apparently meant

to support his own position opposing traditional peripatetic philosophy. These tenets, which he formulated with clear reference to Quranic usage, can be explained only briefly in the present context:

1. If there is one thing that does not require explanation, it is that which is apparent, and nothing is more apparent than light, and consequently less in need of explanation. That which is not dependent on anything else, neither as to its essence nor with regard to the perfection due to it, is 'free from need' in every respect. 'Needy', on the other hand, is that which is dependent on something else, with regard to both its essence and its perfection (*Hikmat al-iṣrāq* [\*39: §§ 107–108]). The light that is entirely 'free from need', perfect, or pure, is the 'light of lights' (*nūr al-anwār*), i.e. the Neo-Platonic God symbolised by the sun, and corresponds to the 'Necessary Existent' in Ibn Sīnā's ontological terminology. Suhrawardī goes on to explain the difference between 'light and darkness' in the following gradations:

2. There is something that is in itself Light, like the 'Light in and for itself', yet it is not for itself but for another (*li-ḡayrihi*). While this secondary light is 'needy' in its essence (*māhiyya*) and in reality (*taḥaqquq*), it does not require the 'dark substance' [\*39: §§121 and 129]. Arguments against its dependence on 'dark substance', i.e. matter, include the ultimate and absolute 'generosity' (*ḡūd*) of the original light ([\*39: § 144], cf. also *al-Ahwāḥ* [\*36: §§91–92]). Suhrawardī also argued that simple occurrences of light may be caused by more than one source [\*39: §§ 96 and 172]. Finally, there is the concept of 'higher' or 'nobler' contingency or 'possibility of being' (*al-imkān al-ašraf*, [\*39: §§ 153, 164, 258]) that Suhrawardī appears to have introduced himself. This refers to immaterial substances or pure intellects, the so-called 'overpowering lights' (*al-anwār al-qāhira*) that emerge in geometric progression with a factor of two [\*39: § 151] from the 'light of lights' and the 'closest light' (*al-nūr al-aqrab*). Suhrawardī occasionally mentions [\*39: §138] the second highest Zoroastrian deity Bahman (= Vohu Mana, the 'good spirit') as equivalent to the 'closest light'. Besides this infinitely 'descending' series of emanations of light (or 'radiations', Pers. *partaw*), we first find the 'horizontal' lights, the so-called 'lords of the kinds' (*arbāb al-anwā'*), i.e. the aforementioned Platonic ideas as the epitome of essentially differing, biological 'kinds', and then the 'ruling lights' (*al-anwār al-mudabbira*), i.e. the 'ruling' souls linked to a celestial or terrestrial body.

3. 'Dark substance' (*al-ḡawhar al-ḡāsiq*), i.e. matter, exists. Like all peripatetic 'substances', matter is an abstract entity that is not inherent in a substratum and is consequently negative. Suhrawardī is, however, also familiar with a different, positive definition of substantiality, the 'perfection of essence' (*kamāl al-māhiyya*, *Hikmat al-iṣrāq* [\*39: § 116]), which he appears to favour



[\*39: § 67]. In any case, matter is ruled out as the cause of existence or bearer of knowledge, not least because unlike the soul it lacks life, and is not ‘apparent to itself’ and for this very reason ‘dark’.

4. The ‘barrier’ (*barzah*, the Quranic term for the realm of the afterlife), i.e. the body. It is not mere matter but delimited by measure (*miqdār*), a purely quantitative extension (cf. Walbridge 2005 [\*107]), and by the fact that it can be indicated. This refers to the subtle celestial bodies or spheres on the one hand, and to the terrestrial bodies on the other.

5. The ‘configurations’ (*hayʾa*), i.e. changing states that are accidents (*ʿarīḍ*) and as such ‘join’ the luminous substances as well as the dark substance, and are consequently called ‘luminous’ or ‘dark’ forms, but that are also able to withdraw again, as darkness is not something that possesses the *inherent* possibility of becoming ‘light’, but rather the ‘absence of light’ (*Ḥikmat al-iṣrāq* [\*39: § 109]).

6. In this context, it is also relevant that Suhrawardī does not simply adopt the Aristotelian doctrine of the categories. While he quotes it in the version of ʿUmar b. Sahlān al-Sāwī’s commentary on Ibn Sīnā (for his familiarity with al-Sāwī see ‘Life’ above), he modifies it by adding motion to substance and the three accidental categories, namely quality, quantity, and relation (cf. *Kitāb al-Maṣāriʿ wa-l-muṭārahāt* [\*23: 278]) – possibly a reminiscence of Plotinus’ *five* categories. According to Suhrawardī, the circular motion of the celestial bodies can be explained through their eternal ‘illumination’ (e.g. *Ḥikmat al-iṣrāq* [\*39: §§ 204–206. 250–251]; *al-Ahwāḥ* [\*36: Ar. §§ 59–63 = Pers. §§ 56–60]), which appears to mean eternal emanation (*ḥayḍ*) of the active intellectual principle onto the eternally receptive matter, and that in successive cycles, as Suhrawardī describes in two almost identical passages in *Talwihāt* [\*23: 76 = § 57] and *Alwāḥ* [\*36: Ar. § 64 = Pers. § 61] (cf. Landolt 1987 [\*90: 483]).

7. The mixture of light and darkness generates the postulate of a ‘fourth world’ besides intellect, soul, and body, which Suhrawardī explicitly highlights in his *magnum opus* (and only there, *Ḥikmat al-iṣrāq* [\*39: § 247]) as his own postulate. This is a world of shadow images, of so-called ‘suspended images’ (*al-muṭul al-muʿallaqa*) or ‘immaterial shapes’ (*al-aṣbāḥ al-muḡarrada*), regarded as an independent ‘world of images’ (*ʿālam al-miṭāl*) by early commentators, and correspondingly called an independent *mundus imaginalis* by Corbin. This realm is not identical with the world of Platonic ideas, but points towards it, as it contains copies of ‘substantial essences’ that manifest themselves like mirror images but do not exist within the mirror itself (cf. esp. the discussion in Arnzen 2011 [\*112] and Sinai 2015 [\*117]).

8. The Suhrawardian concept that is probably the most difficult to grasp analytically, and at the same time has been received the most scholarly

discussion, is the conscious 'I' (*anā'īyya*), at one and the same time subject and object of cognition – above all cognition of self (cf. most recently Kaukua 2011 [\*115]). Similar to Ibn Sīnā's *anā'īyya*, it cannot be defined by means of the body or its parts, but is that which is apparent to itself as such, namely, pure light. We must also point out that Suhrawardī in this instance (*Hikmat al-iṣrāq* [\*39: § 222]) explicitly rejects (despite usually accepting elsewhere) the location of the internal senses within certain parts of the brain, not recognising it as a material organ. On the other hand, the knowing 'I' is defined by its position in the 'most perfect mixture', the human species as the permanent representative of the 'lord' of this particular kind, i.e. the angel Gabriel who gives the revelation and life (*Hikmat al-iṣrāq* [\*39 § 210]). This representative 'I' of humanity can also fall prey to darkness, in which case knowledge turns out to be pure delusion (*wahm*, *Hikmat al-iṣrāq* [\*39: § 224]).

With these principles, Suhrawardī places his 'doctrine of lights' (*ilm al-anwār*) as a kind of empirical science into a fundamental opposition to the traditional division of philosophy into physics and metaphysics. In support of this approach, he favours the recourse to ancient oriental sources of wisdom, first and foremost the 'father of the philosophers' Hermes the Egyptian (meaning late ancient 'Hermetics'), but also the ancient Persian belief concerning light and darkness (in its 'true', non-dualistic, form). This, he understands as a tradition of wisdom that Plato, unlike Aristotle, continued to uphold. However, it is Aristotle of all people who appears as the great teacher of 'knowledge as such' in a dream presented by Suhrawardī as the experience that called him to true philosophy (*Kitāb al-Talwihāt* [\*23: § 55 ed. Corbin]).

While Suhrawardī does not reject the doctrine of the Islamic Peripatetics entirely, he regards it as inferior throughout, endeavouring in the first part of his *magnum opus* (the 'Propaedeutics', according to Corbin) to demonstrate that their logic and epistemology are insufficient and contradictory. He also declares repeatedly that the 'true' philosophy in the world of Islam is represented not by professional 'philosophers', but by the Sufi tradition, deriving the 'ancient' wisdom of Egyptians and Persians through 'esoteric' channels which, although some of them bear famous Sufi names, are barely historically verifiable. According to him, the perfect wise man is someone who has mastered the art of argumentation as well as 'divine' wisdom; if such an individual cannot be found, someone endeavouring to become more like God (*ta'alluh*) or who is called 'the pole' (*al-quṭb*) by the Sufi 'community' and 'the godlike imam' (*imām muta'allih*) by him, will take precedence. This remark in the preface of his *magnum opus*, which must be understood with reference to al-Fārābī's Platonic philosopher-king who was also called an imam, involves a political aspect as well. Suhrawardī states explicitly that one lives in luminous times

only for as long as the public order is held in the hands of this ‘pole’, but that without divine order, darkness would hold sway. Suhrawardī’s opponents in Ayyubid Aleppo probably understood this as an unfriendly gesture at least, and possibly as a reference to Ismā’īlī imam doctrine, and would have responded appropriately. The ideal of the illuminated that Suhrawardī refers to is not, however, a contemporary sovereign, but the ‘good’ kings of Persian mythology (above all in texts such as *al-Ahwāḥ al-‘Imādiyya* and *Partaw-nāma*).

### 4.3 *His Place in the History of Philosophy*

Answers to the question of whether Suhrawardī does indeed differ from traditional philosophy vary greatly among scholars. Corbin’s phenomenology of religion emphasised above all the ‘wholeness’ of Suhrawardī’s personality and the ‘Iranian’ character of his reception of Plato (similar to the attitude he ascribed to the Byzantine Gemistos Plethon), an approach nowadays regarded not without justification as a kind of ‘essentialism’ (or even as exaltation of Iran and Plato). Modern scholarship prefers to use the term ‘post-Avicennan’ philosophy, focussing on his dependence on historical predecessors and contemporaries. This is in turn linked to the perspective taken on Suhrawardī’s works and, not least, the works chosen for scholarly attention. Thus Nasr 1996 [\*97] and Razavi 1989 [\*133] and 1997 [\*52] include the Sufi component, while Ziai 1990 [\*91] and [\*92], 1993 [\*95], 2004/2006 [\*15] regards Suhrawardī as the founder of an original and systematic philosophy. In his view, the core of this philosophy is not the doctrine of illumination as such, but rather the criticism of peripatetic logic and epistemology, above all the rejection of the essential definition by means of genus and proprium. Street [\*139] argues that on the contrary, Suhrawardī’s logic is really no different from Ibn Sīnā’s. Drawing a contrast between Suhrawardī’s emphasis on the concrete, and the continuist metaphysics of the later Mullā Ṣadrā, Walbridge 1996 [\*98] ascribes to the former a kind of Neo-Stoicism (regarding Ṣadrā’s criticism of Suhrawardī cf. Landolt 2017 [\*141]). Mullā Ṣadrā clearly adopted the idea of a continuum of existence, along with a metaphysics of the imagination, from al-Ġazālī and above all from the ‘greatest Master’ (*al-ṣayḥ al-akbar*) of Islam, Ibn ‘Arabī; while degrading Suhrawardī, rather strangely, as a ‘Stoic’ (*riwāqī*). With regard to Suhrawardī’s position, one might as well speak of Neo-Pythagoreanism, or indeed call him a ‘Neo-Empedocles’ of the Arabic tradition. Suhrawardī himself mentions Empedocles frequently as one of the true ‘teachers’ of ‘ancient’ philosophy, appearing – as, indeed, did the Ismā’īliyya – to have adopted his well-known doctrine of ‘strife and love’ (re-interpreted as ‘dominion and love’) as the basis for the relationship between the superior and inferior ‘lights’ (cf. Landolt 2008 [\*110]). Important direct predecessors are indisputably Ibn Sīnā (as Marcotte 200 [\*102] showed on the basis of textual comparisons), and

al-Ġazālī's famous doctrine of light (most recently Sinai 2016 [\*62]), which itself also depends on 'Iranian' ideas of light, and cannot be explained as mere interpretation of Aristotelian physics (cf. Landolt 1991 [\*93]). Contemporaries, too, must be taken into consideration, first and foremost the famous theologian Faḥr al-Dīn al-Rāzī (possibly an older school-fellow from Suhrawardī's Marāğa days, cf. 'Life', above). Regarding the Mu'tazilī roots of al-Rāzī's 'doctrine of light', see Jaffer 2005 [\*116] and the detailed review of Sinai 2017 (noted at [\*116]). Eichner 2011 [\*113] shows a remarkable parallel between the accounts of knowledge in Suhrawardī and al-Rāzī. One might also draw comparisons with the ambivalent position of the 'luminous self' and the corresponding colour symbolism in the Sufi Nağm al-Dīn Kubrā (cf. Meier 1957 [\*84] and Corbin 1971 [\*85]). Some have argued for significant influence from the 'anti-Peripatetic' and physician Abū l-Barakāt al-Bağdādī. Suhrawardī does indeed quote his works from time to time, rarely, however, without adding a comment calling him names such as 'pseudo-philosopher' or the like (cf. esp. Samad Movahhed 2008 [\*60]). Influence of the 'Western' Aristotelian Ibn Rušd (Averroes), on the other hand, would be virtually unthinkable, at least according to Corbin's 'emblematic' interpretation of history. Ibn Rušd's rational approach did away with the intermediate position of the Avicennan celestial souls, preparing the way for a later reduction of the spiritual realm to the Cartesian *res cogitans*. It is important to bear in mind, however, that Ibn Rušd was by no means unknown in the East (Isfahan, 17th cent.; see Endress 1995 [\*96]). His, and it must be said al-Ġazālī's, Islamo-Aristotelian interpretation of celestial motion, in the sense of an 'ever new creation' (*ḥudūt dā'im*), cannot be excluded entirely from Suhrawardī's thoughtworld (cf. al-Ġazālī, *Tahāfut al-falāsifa*, ed. and transl. by Michael E. Marmura [Provo, 1997] 31–39, cf. also 64; Ibn Rušd, *Tahāfut al-tahāfut*, ed. by Bouyges [Beirut, 1930] 168; on the question of the 'emblematic' interpretation of history cf. Landolt 2003 [\*106]). On the other hand, Suhrawardī's 'doctrine of lights' was still known as a doctrine apart – neither Greek philosophy nor Sufi mysticism – in Islamic Spain during the 14th century (see below).

#### 4.4 *The Use of Images in Imparting Philosophical Topics*

Suhrawardī presents a singular case in the history of philosophy in the Islamic world by virtue of the fact that in order to convey philosophical content, he made extensive use not only of the genre of philosophical treatises, but also – in his didactical philosophical narratives – of allegory and symbol, myth and parable. He continued a tradition ultimately inherited from antiquity, employed already with an impressive and lasting effect in Plato's writings. Plato had made use of myth as well as allegory or parable (cf. Erler 2007 [\*109: 89–90]). While for Plato *mythos* is contrasted to *logos*, it is a means for discovering truth

that is of equivalent value, as its 'deficit of precise justification is balanced by its greater psychagogic power' (Erler 2007 [\*109: 91]). The level of 'image' is also indicated by the Platonic 'ideas', which were adopted into Arabic tradition under the name *muṭul* (or *ṣuwar*) *aflāṭūniyya* (cf. Amzen 2011 [\*112], regarding Suhrawardī in particular cf. Landolt 2008 [\*110]). The important term ὑπόνοια already appears in Plato; it not only denotes 'underlying meaning' but was the original word for allegorical meaning (cf. Gadamer 1974 [\*87: 1062]); ἀλληγορία appeared only in the 1st century BCE. An actual allegorical *method* of interpretation was first developed by Philo of Alexandria (1st half 1st cent. CE); the theory of the four-fold meaning of scripture (*historia, aetiologia, analogia, allegoria*) gradually emerged in the Christian context, until it was fully formed in the 4th century CE (cf. Dobschütz 1921 [\*82: 2–3]).

From late antiquity onwards, Neo-Platonic sources in particular acquired central relevance in the application of allegory and the allegorisation of traditional texts. The fundamental Neo-Platonic concept that the material world emanates from the One and in a certain fashion reflects His perfection could easily be translated into the concept of allegory, that things may represent something else. The Neo-Platonic ideas of the ascent of the soul and the structure of the cosmos (grades of emanation and return to the One) were among the ones most thoroughly adopted by Islamic thinkers (Sweeney 2002 [\*105]). Further important sources in the Jewish and Christian environments include the Bible commentary; in the context of Islam, the Quran as well as Islamic mysticism (Sufism), which provided an important frame of reference for the application of allegory (cf. Heath 2010 [\*111: 86–87]). Even before Suhrawardī, symbol and allegory had been used in philosophical texts of the Islamic tradition. Worth mentioning are above all the *Rasā'il Iḥwān al-Ṣafā'* (regarding which cf. PIW 1 § 9.4.2), which refer to a metaphorical level of interpretation a number of times, e.g. when comparing the human body with a city, a house, etc., and in the narrative of the animals and humans before the king of the jinn (cf. Heath 2010 [\*111: 88]). The most influential examples for Suhrawardī, however, were Ibn Sīnā's three allegorical narratives, *Risālat al-Ṭayr* (*Epistle on the Birds*) (which Suhrawardī translated into Persian [\*49]), *Ḥayy b. Yaqẓān* and *Salāmān und Absāl* (to which he refers explicitly in the *Qiṣṣat al-ġurba al-ġarbiyya*).

Whether Suhrawardī's philosophical narratives are to be regarded as symbolic or allegorical has been the subject of scholarly debate. In Henry Corbin's opinion, Suhrawardī employed only symbols, no allegories. Corbin coined the term 'récits d'initiation' for the narratives, as he did not wish to have them understood as popular versions of 'systematic philosophy' that were easy to decode (cf. Landolt 1999 [\*100: 487]). In more recent research, however, Suhrawardī's didactic narratives are usually called 'allegorical' (and also

‘mystical’ and ‘visionary’; Ziai 1997 [\*12], Marcotte 2012 [\*18], Heath 2010 [\*111: 91]). This seems plausible if we go back to the original meaning of the concept of allegory, i.e. that the thing denoted refers ‘to something else’. With the exception of the *Narrative of the Western Exile* (*Qiṣṣat al-ġurba al-ġarbiyya*), all these texts by Suhrawardī were composed in Persian, while he wrote his systematic treatises in Arabic.

On the formal as well as the subject level, Suhrawardī’s allegorical narratives display many similarities. In most cases, there is a first-person narrator, a student who encounters a teacher. The latter may be a venerable old man who informs the narrator that he must return to exile (*Qiṣṣa* [\*46]); a Sufi master (*Āwāz* [\*37]), *Rūzī* [\*50]); or a wise man, who may be identified with the Active Intellect (*ʿAql* [\*35]). In one of the narratives (*Risāla fī Ḥālat al-ṭufūliyya* [\*47]), there are even two teachers, one possibly a personification of the Active Intellect, while the other one, as a Sufi master, has a propaedeutic function (cf. also Tehrani 1981 [\*88]). Suhrawardī’s central figure of the teacher also appears in his systematic treatises, e.g. Aristotle in the third, metaphysical section of the *Talwihāt*, where the same question – what is knowledge? – is asked as in the *Risāla fī Ḥālat al-ṭufūliyya*. It is the interaction between a student and a teacher, constitutive of almost all of Suhrawardī’s allegorical narratives, that justifies their classification as ‘récits d’initiation’.

They usually tell a continuous story; only *Luġat-i mūrān* [\*41] features several independent narratives. Suhrawardī frequently employs animal imagery. Examples include the bird, as a general metaphor for the soul (linked to it are hunters, nets, and the cage in several instances); the hoopoe as a messenger and guide (*Qiṣṣa* [\*46]), as an illuminated sage misunderstood by the ignoramuses (represented metaphorically by owls: *Luġat-i mūrān* [\*41]), and also as a Quranic-Islamic equivalent of the Iranian Šimurġ (*Šafīr* [\*51]); hedgehog, snake, ant, scorpion, birds, ostrich, vulture, salamander, bat (*Risālat al-Ṭayr* [\*49]; adopted from Ibn Sīnā, and exemplifying correct behaviour); salamander and duck (*Risāla fī Ḥālat al-ṭufūliyya* [\*47], elucidating misunderstandings that arise when language is not employed adequately); the glow-worm [\*47] as a secondary source of light fed by the primary one, the sun. Particular significance is accorded to the myth of the cosmic bird Šimurġ (*Aql* [\*35], *Šafīr* [\*51]), to which Suhrawardī recurs within his Iranian frame of reference. A further Iranian myth appears in the context of his light symbolism: the ‘jewel illuminating the night’ (*šabčīrāg*, [\*35] and [\*47]).

Important elements in Suhrawardī’s language of symbols are furthermore the West for the material world and the East for the world of light (*Qiṣṣa* [\*46]); the symbol of the well is also used for the former (*Qiṣṣa* [\*46], *Aql* [\*35]). The boundary between the two worlds is represented by the cosmic mountain Qāf (*Šafīr* [\*51], *Risāla fī Ḥālat al-ṭufūliyya* [\*47]). The medium of

imparting knowledge is the tablet (*lawḥ*, [\*47]), a term of some significance for Suhrawardī overall, as demonstrated by the titles of two of his systematic treatises (*al-Aḥwāl al-ʿimādiyya*, *al-Talwīḥāt*). Colours, too, possess symbolic significance; white (i.e. pure light) characterises the transcendental world, red or black the material world. Instances are Gabriel's wings (*Āwāz* [\*37], the right one is white, while the left one displays dark spots), the complexion of the 'Red Intellect' (*Aql* [\*35]), and the Sufi master wearing a patched garment, half black and half white (*Risāla fi Ḥālat al-ṭufūliyya* [\*47]). Besides the visual level, there is also auditory symbolism (*Qīṣṣa* [\*46]) like the music of the spheres and *ṣafīr*, literally 'whistling', to describe the specific sound made by Sīmurǧ (*Ṣafīr* [\*51]) and the call of the hunters who catch the bird representing the soul (*Risālat al-Ṭayr* [\*49]).

The main topic of Suhrawardī's allegorical narratives is the rational soul, its descent and ascent (*Qīṣṣa* [\*46]), its heavenly home (*Luḡat-i mūrān* [\*41]), its sorrow about being tied to the material world (*Āwāz* [\*37]), its creation, imprisonment in the body and ultimate return from exile (*Aql* [\*35]), its imprisonment and liberation (*Risālat al-Ṭayr* [\*49]), its tie to the material world, represented metaphorically in the hindrance presented by the strap-legged demons known from the literature of *mirabilia* (*Ṣafīr* [\*51]).

Suhrawardī's allegorical narratives also focus on the concepts of 'knowledge' (*Risāla fi Ḥālat al-ṭufūliyya* [\*47]) and of 'language' – in the case of the latter with particular reference to the hermeneutical problem of misunderstanding ([\*47], *Luḡat-i mūrān* [\*41]). Finally, the stories also feature elements of Suhrawardī's Illuminationism – often translated symbolically, e.g. through the image of the sun ([\*41], [\*47]). The focus is on the overwhelming power of light (*Ṣafīr* [\*51]), the hierarchy of lights, e.g. in the definition of *sakīna* as the most extreme intensification and permanence of the 'lights of the mystery' (*Ṣafīr* [\*51]), and the descent of the light (tied to the origin of the celestial bodies, *Rūzī* [\*50]).

An important characteristic of Suhrawardī's allegorical narratives, finally, is their frequent recourse to the Quran and to Islamic tradition. The *Qīṣṣat al-ǧurba al-ǧarbīyya* [\*46] in particular contains numerous Quranic quotations that are skilfully woven into the plot of the narrative – the journey of the soul. Another unmissable reference in this text is to the Prophet's journey to heaven (*mi'rāǧ*). Many Quranic quotations also feature in the treatise *Luḡat-i mūrān* [\*41], whose title may perhaps be understood as an analogy with the Quranic phrase *manṭiq al-ṭayr* (the language of birds; cf. sura 27:16). In *Mu'nis al-ʿuṣṣāq*, finally, elements of the Quranic story of Joseph are linked with a mythical-allegorical cosmogony.

Suhrawardī's allegorical treatises are often described as 'mystical'. This is due to the fact that the stories are often introduced with a question addressed to the first-person narrator by a 'brother' (*Luġat-i mūrān* [\*47], *Aql* [\*35]), or asked of a Sufi master (*Āwāz* [\*37]). The text may also refer to 'brothers' in general (*Risālat al-Ṭayr* [\*49], (*Ṣafīr* [\*57]), or indeed the entire plot may be set in a Sufi environment (*Risāla fī Ḥālat al-ṭufūliyya* [\*47], *Rūzī* [\*50]). The setting of the stories also suggests that Suhrawardī's use of symbols and allegories was primarily intended to convey abstract philosophical concepts to addressees without higher philosophical education (for additional reasons for choosing allegories in philosophical texts cf. Sweeney 2002 [\*105]). Ibn Sīnā had already given similar reasons for the use of allegory (cf. Heath 1992 [\*94: 150–153]).

## 5 Influence

It was particularly in the eastern regions of the Islamic world that Suhrawardī's philosophy enjoyed long-term influence. More widespread reception of his ideas only began one to two generations after his death (cf. Landolt 2006 [\*108]). Ibn Kammūna (d. 683/1284), Šams al-Dīn Muḥammad al-Šahrazūrī (d. after 687/1288), and Quṭb al-Dīn al-Šīrāzī (d. 710/1311 or 716/1316) occupied themselves with Suhrawardī's philosophy. The first commentary on a work by Suhrawardī – the *Talwīḥāt* – appears to have been composed by Ibn Kammūna, who followed Suhrawardī in, for instance, his reticent position regarding the transmigration of souls (Schmidtke, Pourjavady 2006 [\*138: 25–26]). Al-Šahrazūrī's philosophical anthropology proves to be dependent on Suhrawardī, especially where the theory of the internal senses is concerned (cf. Marcotte 2001 [\*135], 2002 [\*136]). Ismā'īl b. Muḥammad al-Rīzī (c. 679/1280, cf. Marcotte 2004 [\*137]) also absorbed Suhrawardī's ideas. Suhrawardī had considerable influence on later intellectual traditions in Iran, especially the philosophical schools of Šīrāz (15th and 16th cent.) and Isfahan (17th cent.). Important exponents are Ġalāl al-Dīn al-Dawānī (d. 907/1501–02), Maḥmūd al-Nayrīzī (d. after 943/1536), Ġiyāṭ al-Dīn al-Daštakī (d. 949/1542), Mīr Dāmād (d. 1041/1631–1632), and Mullā Šadrā (d. 1050/1640), all of whom explored specific texts of Suhrawardī's (for details see the descriptions of the works, above). The attitude of the last-named, the most influential thinker of Safavid Iran, towards Suhrawardī – whom he considered a Stoic (*riwāqī*) – was critical, especially regarding the concept of the transfer of light. In Suhrawardī's view, the life-giving light descended from the supernal lights onto the humans, and spread out from them onto the lower animate beings. Mullā Šadrā, by contrast,



believed that existence began in a radically weakened form in its lowest mode, matter, intensifying afterwards and ascending through the grades of nature until it reaches humans, and continuing upwards through them (cf. Landolt 2017 [\*141: 502–503]). Mullā Ṣadrā also rejected Suhrawardī's idea of the world of images as a fourth world separate from the worlds of the body, the soul, and the intellects ([\*141: 509]).

Suhrawardī's thought was also influential in India during the Mughal period (especially in the Sufi Zoroastrian atmosphere of the court of Emperor Akbar) and in the Ottoman Empire, where it appears to have found its way into more orthodox Sufi circles, too (e.g. with Ismā'īl 'Anqarawī, d. 1041/1631–1632, cf. [\*67]). Even so, it is important to bear in mind that the term *īshrāq* in Sufi texts is not necessarily an allusion to Illuminationism as understood by Suhrawardī. The Sufi treatise *Qawānīn ḥikam al-īshrāq* (Engl. transl. by Edward J. Jurji, *Illumination in Islamic Mysticism*. London, 1938) by Abū l-Mawāhib al-Tūnisī al-Šādīlī (d. 882 /1477), composed in North Africa, has little in common with Suhrawardī's *magnum opus* beyond the title.

On the other hand, Suhrawardī's *Īshrāqīyyūn* (followers of the doctrine of 'illumination') were regarded as an independent tradition in Muslim Spain in the 14th century. This is made clear in the splendid summary of the 'opinions of the followers [of the doctrine] of lights among the ancients' by Lisān al-Dīn Ibn al-Ḥaṭīb al-Ġarnāṭī (d. 776/1374) (*Rawḍat al-ta'rīf bi-l-ḥubb al-šarīf*, ed. by M. al-Kattānī, Beirut 1970, II 564–574). Interestingly, Ibn al-Ḥaṭīb delimits these clearly from the 'views held by the philosophers among the Muslims', i.e. the Aristotelian tradition that found its climax in Ibn Rušd, as well as from Sufism (cf. Landolt 2006 [\*108]).

## 6 Secondary Literature

Bibliography and Biography. Collections [\*1–\*18] – Suhrawardī in the Context of the History of Philosophy [\*31–\*62] – Individual Works and Topics [\*80–\*117] – Influence [\*131–\*141]

### *Bibliography and Biography.*

#### *Collections*

1 Steinschneider, Moritz.

"Schriften der Araber in hebräischen Handschriften." *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 47 (1893): 335–384.

2 Ritter, Hellmut. "Philologika IX. Die vier Suhrawardī." *Der Islam* 24 (1937): 270–286; 25 (1938): 35–86.

3 GAL = Brockelmann, Carl. *Geschichte der arabischen Litteratur*, vol. 1. Leiden, 1937–1949 (2nd ed.), 564–566; S I 781–783; 819<sub>44</sub>.

- 4 al-Kayyālī, Sāmī. *Al-Suhrawardī*. (Cairo 1955).
- 5 Nasr, Seyyed Hossein. "Shihāb al-Dīn Suhrawardī Maqtūl." In *A History of Muslim Philosophy*. Ed. by M.M. Sharif. Wiesbaden, 1963, 372–398. – Repr. in Nasr. *The Islamic Intellectual Tradition in Persia*. Richmond, 1996, 125–153.
- 6 Nasr, Seyyed Hossein. "Suhrawardī. The master of illumination, gnostic and martyr." *Journal of the Regional Cultural Institute* 2 (Tehran 1969): 209–225.
- 7 Madkūr, Ibrāhīm (ed.). *Memorial Shihāb al-Dīn al-Suhrawardī (Maître de l-ishrāq) à l'occasion du huitième centenaire de sa mort (587 H./1190). Al-Kitāb al-tiḍkāri. Šayḥ al-īshrāq Šihāb al-Dīn-al-Suhrawardī fī ḍ-ḍikrā al-mi'awīyya al-tāmina li-wafātih*. Cairo, 1974.
- 8 Hartmann, Angelika. *an-Nāṣir li-Dīn Allāh (1180–1225). Politik, Religion, Kultur in der späten Abbāsidenzeit*. Berlin etc., 1975.
- 9 Abū Rayyān, Muḥammad 'Alī. "Šihāb al-Dīn al-Suhrawardī al-Maqtūl." In Abū Rayyān. *Ta'rīḥ al-fikr al-falsafī fī l-islām*. Beirut, 1976, 428–433.
- 10 Eddé, Anne-Marie. "Hérésie et pouvoir politique en Syrie au XI<sup>e</sup> siècle. L'exécution d'al-Suhrawardi en 1191." In *La religion civique à l'époque médiévale et moderne (chrétienté et islam)*. Rome, 1995, 235–244.
- 11 Marcotte, Roxanne D. "Philosophical reason versus mystical intuition. Shihāb al-Dīn Suhrawardī (d. 1191)." *Anaquel de Estudios Árabes* 7 (1996): 109–126.
- 12 Ziai, Hossein. "al-Suhrawardī," "Shihāb al-Dīn Yahyā b. Ḥabash b.

- Amīrak," "Abū'l-Futūḥ." In EI<sup>2</sup> IX (1997) 782–784.
- 13 Marcotte, Roxanne D. "Suhrawardī al-Maqtul, the martyr of Aleppo." *Al-Qantara* 22/2 (2001): 395–419.
- 14 Ziai, Hossein. "Shihāb al-Dīn Suhrawardī. Founder of the illuminationist school." In *History of Islamic Philosophy*. Ed. by Seyyed Hossein Nasr and Oliver Leaman. London, 1996; 2003 434–464.
- 15 Ziai, Hossein. "Illuminationism." In *Encyclopaedia Iranica*. Ed. by Ehsan Yarshater, vol. 12, London, 2004, 670–672; vol. 13, London, 2006, 1–2.
- 16 Langermann, Y. Tzvi. "Ibn Kammūna at Aleppo." *Journal of the Royal Asiatic Society*. Third Series, 17/1 (2007): 1–19.
- 17 Eshots, Yanis (ed.). *Ishraq. Islamic Philosophy Yearbook* 2 (Moscow, 2011). – Contains several contributions dedicated to al-Suhrawardī.
- 18 Marcotte, Roxanne D. "Suhrawardī." In *Stanford Encyclopedia of Philosophy*, online (2007, rev. 2019) at <https://plato.stanford.edu/entries/suhrawardi>.

### *Suhrawardī in the Context of the History of Philosophy*

- 31 Carra de Vaux, Bernhard. "La philosophie illuminative d'après Suhrawardi Meqtoul." *Journal Asiatique*. Sér. 19, vol. 19 (1902): 63–94.
- 32 Horten, Max. *Die Philosophie der Erleuchtung nach Suhrawardī (1191)*. Halle, 1912. – Repr. Hildesheim, 1981.
- 33 Corbin, Henry. *Suhrawardī d'Alep (†1191), fondateur de la doctrine illuminative (ishrāqī)*. Paris, 1939.

- 34 Abou Rayan, Mohamed Aly [Muḥammad 'Alī Abū Rayyān]. *Essai d'un platonisme musulman ou «transmission de la théorie des idées platoniciennes dans l'école de l'Išraq – chez Suhrawardī Maqtul*. Ph. D. dissertation. Paris, 195
- 35 Abū Rayyān, Muḥammad 'Alī. *Uṣūl al-falsafa al-išrāqīyya 'inda Šihāb al-Dīn al-Suhrawardī*. Cairo, 1959; Beirut, 1969.
- 36 Nasr, Seyyed Hossein. *Three Muslim sages. Avicenna – Suhrawardī – Ibn 'Arabī*. Cambridge/Mass., 1964.
- 37 Corbin, Henry. *Sohrawardī et les platoniciens de Perse*. Paris, 1971. – Vol. 2 of Corbin. *En Islam iranien*, 4 vols. Paris, 1971–1972.
- 38 Šaraf, Muḥammad Ġalāl Abū l-Futūḥ. *al-Madḥab al-išrāqī bayn al-falsafa wa-l-dīn fī l-fikr al-islāmī*. Alexandria, 1972.
- 39 Gardet, Louis. "Suhrawardī, Shaykh al-išhrāq et la culture musulmane." In *Dirāsāt falsafīyya muḥdāt ilā d-duktūr Ibrāhīm Madkūr*. Ed. by 'Uṭmān Amīn. Cairo, 1974. 75–89.
- 40 Nogales, Salvador Gómez. "Suhrawardī et sa signification dans le domaine de la philosophie." In *Mélanges d'islamologie. Volume dédié à la mémoire de Armand Abel*. Ed. by Pierre Salmon. Leiden, 1974, 150–171.
- 41 Saḡḡādī, Sayyid Ġa'far. "Ḥikmat-i Suhrawardī." *Revue de la Faculté des lettres et sciences humaines*. Supplément 4 (Téhéran, 1977): 37–41.
- 42 Corbin, Henry. *Philosophie iranienne et philosophie comparée*. Tehran, 1977.
- 43 Saḡḡādī, Sayyid Ġa'far. "Šihābuddīn Suhrawardī wa-falsafa-yi išrāq." In *Mélanges offerts à Henry Corbin*. Tehran, 1977, 63–126.
- 44 al-Mūsawī, Mūsā. *Min al-Suhrawardī ilā l-Širāzī*. Beirut, 1979.
- 45 Macuch, Rudolf. "Greek and Oriental sources of Avicenna's and Sohrawardī's theosophies." *Graeco-Arabica* 2 (1983): 9–21.
- 46 Saḡḡādī, Sayyid Ġa'far. *Šihābuddīn Suhrawardī wa-sayrī dar falsafa-yi išrāq*. Tehran, 1984.
- 47 Ibrāhīmī Dīnānī, Ġulām-Ḥusain. *Šu'ā'-yi andīša wa šuhūd dar falsafa-yi Suhrawardī*. Tehran, 1364/1985.
- 48 Hernández, Miguel Cruz. "Simbolismo y esoterismo en la filosofía islamica. Ibn Sīnā y Sohrawardī." In *Literatura y fantasía en la Edad Media*. Ed. by Juan Paredes Núñez. Granada, 1989, 179–191.
- 49 Davidson, Herbert Alan. *Alfarabi, Avicenna, and Averroes, on Intellect. Their Cosmologies, Theories of the Active Intellect, and Theories of Human Intellect*. New York, 1992.
- 50 Ghani, Rashida. *Shaikh Shihab-ud-Din Suhrawardī Maqtul*. Lahore, 1991.
- 51 Ziai, Hossein. "The illuminationist tradition." In *History of Islamic Philosophy*. Ed. by Seyyed Hossein Nasr and Oliver Leaman. London, 1996; 2003, 465–496.
- 52 Razavi, Mehdi Amin. *Suhrawardī and the School of Illumination*. London, 1997.
- 53 Kaviani, Shiva. "Suhrawardī, philosopher or mystic?" In *Consciousness and Reality. Studies in Memory of Toshihiko*

*Izutsu*. Ed. by Sayyid Jalāl al-Dīn Āshtiyānī et al. Tokyo, 1998, 423–437.

54 Rizvi, Sajjad H. “Roots of an aporia in later Islamic philosophy. The existence – essence distinction in the philosophies of Avicenna and Suhrawardi.” *Studia Iranica* 29 (2000): 61–108.

55 Walbridge, John. *The Leaven of the Ancients. Suhrawardī and the Heritage of the Greeks*. Albany, 2000.

56 Pūrḡawādī [Pourjavady], Naṣrallāh. *Īsrāq wa ‘irfān*. Tehran, 1380/2001.

57 Walbridge, John. *The Wisdom of the Mystic East. Suhrawardī and Platonic Orientalism*. Albany, 2001.

58 Landolt, Hermann. “Suhrawardī between philosophy, sufism and Ismailism. A re-appraisal.” *Dānesh-nāmeḥ* 1 (2003): 13–29. – Repr. in Landolt, Hermann. *Recherches en spiritualité iranienne*. Tehran, 2005, 107–118.

59 Marcotte, Roxanne D. “L’aperception de soi chez Shihab al-Din al-Suhrawardi et l’héritage avicennien.” *Laval théologique et philosophique* 62/3 (2006): 529–551.

60 Movahhed, Samad. “Abū al-Barakāt.” In *Encyclopaedia Islamica*. Ed. by Wilferd Madelung and Farhad Daftary. Leiden, 2008.

61 Takahashi, Hidemi. “Barhebraeus.” In *Encyclopaedia of Islam*, THREE online (first published 2014) at [http://referenceworks.brillonline.com/entries/encyclopaedia-of-islam-3/barhebraeus-COM\\_25224?s.num=4&s.q=barhebraeus](http://referenceworks.brillonline.com/entries/encyclopaedia-of-islam-3/barhebraeus-COM_25224?s.num=4&s.q=barhebraeus).

62 Sinai, Nicolai. “Al-Suhrawardī’s Philosophy of illumination and

al-Ghazālī.” *Archiv für Geschichte der Philosophie* 98/3 (2016): 272–301.

### *Individual Works and Topics*

80 Goldziher, Ignaz. “Ueber den Ausdruck «Sakīna».” In Goldziher, Ignaz. *Abhandlungen zur arabischen Philologie* 1. Leiden, 1896, 177–204.

81 van den Bergh, Simon. “De tempels van het licht door Soehrawardi.” *Tijdschrift voor wijsbegeerte* 10 (Haarlem 1916): 30–59.

82 von Dobschütz, Ernst. “Vom vierfachen Schriftsinn. Die Geschichte einer Theorie.” In *Harnack-Ehrung. Beiträge zur Kirchengeschichte [...]* Adolf von Harnack [...] dargebracht. Leipzig, 1921, 1–13.

83 Corbin, Henry. *Les motifs zoroastriens dans la philosophie de Sohrawardi*. Tehran, 1946.

84 Meier, Fritz. *Die Fawā’ih al-ḡamāl wa-fawā’iḥ al-ḡalāl des Naḡm ad-Dīn al-Kubrā. Eine Darstellung mystischer Erfahrungen im Islam aus der Zeit um 1200 n. Chr.* Wiesbaden, 1957.

85 Corbin, Henry. *L’homme de lumière dans le soufisme iranien*. Paris, 1971. – Engl. transl. by Nancy Pearson, *The Man of Light in Iranian Sufism*. Boulder, London, 1978. – Ital. transl. by F. Pregadio, *L’uomo di luce nel sufismo iraniano*. Rome, 1988. – Germ. transl. by Annemarie Schimmel, *Die smaragdene Vision. Der Licht-Mensch im persischen Sufismus*. Munich, 1989.

86 Corbin, Henry. “L’idée du paraclet en philosophie iranienne.” In *La Persia nel medioevo* (Roma, 31 marzo – 5 aprile 1970). *Accademia Nazionale di Lincei* 368

- (1971): 37–68. – Repr. in Corbin, H. *Face de dieu, face de l'homme*. Paris, 1983. 311–358.
- 87 Gadamer, Hans-Georg. “Hermeneutik.” In *Historisches Wörterbuch der Philosophie*. Ed. by Joachim Ritter and Karlfried Gründer, vol. 3. Basel, 1974, 1061–1073.
- 88 Tehrani, Kazem. “The role of the sage in the works of Suhrawardī.” In *Islamic Philosophy and Mysticism*. Ed. by Parviz Morewedge. Delmar, New York, 1981, 191–205.
- 89 Tuft, Anthony K. “Symbolism and speculation in Suhrawardī’s The Song of Gabriel’s Wing.” In *Islamic Philosophy and Mysticism*. Ed. by Parviz Morewedge. Delmar, New York, 1981, 207–221.
- 90 Landolt, Hermann. “Suhrawardī’s tales of initiation.” *Journal of the American Oriental Society* 107 (1987): 475–486. – Review of Thackston 1982 [\*28].
- 91 Ziai, Hossein. “Beyond philosophy. Suhrawardī’s illuminationist path to wisdom.” In *Myth and Philosophy*. Ed. by Frank E. Reynolds, David Tracy. Albany, 1990, 215–243.
- 92 Ziai, Hossein. *Knowledge and illumination. A study of Suhrawardī’s Ḥikmat al-Ishrāq*. Atlanta, 1990.
- 93 Landolt, Hermann. “Ghazālī and ‘Religionswissenschaft’. Some notes on the Mishkāt al-anwār.” *Asiatische Studien* 45/1 (1991): 19–72.
- 94 Heath, Peter. *Allegory and Philosophy in Avicenna (Ibn Sīnā)*. Philadelphia, 1992.
- 95 Ziai, Hossein. “Definition and the foundations of knowledge in illuminationist philosophy. Section on expository propositions, of the [unpublished] text al-Mashārī‘ wa al-Muṭāraḥāt,” In *Papers in Honor of ‘Ostād’ Javad Mosleh*. Ed. by Borhan Ibneh Yousef. Los Angeles, 1993, 108–130.
- 96 Endress, Gerhard. “Averroes’ De caelo. Ibn Rushd’s cosmology in his commentaries on Aristotle’s On the heavens.” *Arabic Sciences and Philosophy* 5 (1995): 9–49.
- 97 Nasr, Seyyed Hossein. *The Islamic Intellectual Tradition in Persia*. Richmond, 1996.
- 98 Walbridge, John. “Suhrawardī, a twelfth-century Muslim neo-stoic?” *Journal of the History of Philosophy* 34 (1996): 515–533.
- 99 Pourjavady, Nasrollah. *The Light of Sakina in Suhrawardī’s Philosophy of Illumination*. New York, 1998.
- 100 Landolt, Hermann. “Henry Corbin, 1903–1978. Between philosophy and orientalism.” *Journal of the American Oriental Society* 119/3 (1999): 484–490.
- 101 Schmidtke, Sabine. “The doctrine of transmigration of the soul according to Shihāb al-Dīn al-Suhrawardī (killed 587/1191) and his followers.” *Studia Iranica* 28 (1999): 237–254.
- 102 Marcotte, Roxanne D. *Suhrawardī (d. 1191) and his Interpretation of Avicenna’s (d. 1037) Philosophical Anthropology*. (Ph. D. Diss. McGill Univ., 2000).
- 103 Pūrḡawādī [Pourjavady], Naṣrallāh. “Anwār-i darūnī az naẓar-i Suhrawardī wa Ibn-i Sīnā.” In Pūrḡawādī, N. *Iṣrāq wa ‘irfān*. Tehran, 1380/2001, 3–31. – Concerning, among other things, the *sakīna*.

- 104 Pūrḡawādī [Pourjavady], Naṣrallāh: “Taṣḥīḥ-i ḡadīdī az ‘Risāla fi ḥālat al-ṭufūliyya.” In Pūrḡawādī, N. *Iṣrāq wa ‘irfān*. Tehran, 1380/2001, 339–358.
- 105 Sweeney, Eileen C. “Literary forms of Medieval philosophy.” In *Stanford Encyclopedia of Philosophy*, online (2002, rev. 2019) at <https://plato.stanford.edu/entries/medieval-literary>.
- 106 Landolt, Hermann. “Henry Corbin et la question de l’avicennisme.” In *Henry Corbin. Philosophies et sagesses des religions du livre*. Ed. by M. A. Amir-Moezzi et al. Turnhout, 2003, 143–148).
- 107 Walbridge, John. “Al-Suhrawardī on body as extension. An alternative to hylomorphism from Plato to Leibniz.” In *Reason and Inspiration in Islam. Theology, Philosophy and Mysticism in Muslim Thought. Essays in Honour of Hermann Landolt*. London, New York, 2005, 235–247.
- 108 Landolt, Hermann. “Illuminationism.” In *Medieval Islamic Civilization. An Encyclopaedia*. Ed. by Josef W. Meri. New York, London, 2006, 384–385.
- 109 Erler, Michael. *Platon*. Basel, 2007.
- 110 Landolt, Hermann. “Les idées platoniciennes et le monde de l’image dans la pensée du Shaykh al-ishrāq Yaḥyā al-Suhrawardī (ca. 1155–1191).” In *Miroir et savoir. La transmission d’un thème platonicien, des Alexandrins à la philosophie arabo-musulmane*. Ed. by Daniel de Smet and Meryem Sebti. Leuven, 2008, 233–250.
- 111 Heath, Peter. “Allegory in Islamic literatures.” In *The Cambridge Companion to Allegory*. Ed. by Rita Copeland and Peter T. Struck. Cambridge, 2010, 83–100.
- 112 Arnzen, Rüdiger. *Platonische Ideen in der arabischen Philosophie: Texte und Materialien zur Begriffsgeschichte von ‘ṣuwar aflātūniyya’ und ‘muthul aflātūniyya’*. Berlin, Boston, 2011. – Chap. 11: Platonische Formen und Urbilder in der Philosophie Shihāb al-Dīn al-Suhrawardī, 119–150.
- 113 Eichner, Heidrun. “Knowledge by Presence’. Apperception and the mind-body relationship. Fakhr al-Dīn al-Rāzī and al-Suhrawardī as representatives and precursors of a thirteenth-century discussion.” In *In the Age of Averroes*. Ed. by Peter Adamson. London, 2011, 117–140.
- 114 Hämeen-Anttila, Jaakko. “Suhrawardī’s Western exile as artistic prose.” In *Ishraq* [\*17: 105–118].
- 115 Kaukua, Jari. “I in the light of God. Selfhood and self-awareness in Suhrawardī’s Ḥikmat al-ishrāq.” In *In the Age of Averroes*. Ed. by Peter Adamson. London, 2011, 141–157.
- 116 Jaffer, Tariq. *Rāzī. Master of Qur’ānic interpretation and theological reasoning*. New York, 2015. – Review by Nicolai Sinai. *Journal of Islamic Studies* 28/3 (2017): 369–428.
- 117 Sinai, Nicolai. “Al-Suhrawardī on mirror vision and suspended images (muthul mu‘allaqa).” *Arabic Sciences and Philosophy* 25 (2015): 279–297.
- 118 Gheissari, Ali, John Walbridge and Ahmed Alwishah, eds. *Illuminationist texts and textual studies. Essays in memory of Hossein Ziai*. Leiden, Boston, 2018.

### *Influence*

- 131 Nasr, Seyyed Hossein. "The spread of the illuminationist school of Suhrawardī." *Islamic Quarterly* 14 (1970): 111–121.
- 132 Hamori, Andras. "An allegory from the Arabian Nights. The city of brass." *Bulletin of the School of Oriental and African Studies* 34 (1971): 9–19. – On the connection between 'West' and 'matter'.
- 133 Razavi, Mehdi Amin. "Influence of Suhrawardī on Islamic philosophy." *Islamic Culture* 63/4 (1989): 1–31.
- 134 Schmidtke, Sabine. *Theologie, Philosophie und Mystik im zwölfer-schittischen Islam des 9./15. Jahrhunderts. Die Gedankenwelten des Ibn Abī Ġumhūr al-Aḥsāʾī (um 838/1434–35 – nach 905/1501)*. Leiden, 2000.
- 135 Marcotte, Roxanne D. "L'anthropologie philosophique de Shams al-Dīn Shahrāzūrī et ses racines suhrawardiennes – les facultés internes." *Quaderni di Studi Arabi* 19 (2001): 135–146.
- 136 Marcotte, Roxanne D. "Les facultés internes selon le commentaire de Shahrāzūrī (m. ca. 1288) du Hikmat al-ishraq de Suhrawardī (m. 1191) – notes préliminaires." In *Iran. Questions et connaissances*. Ed. by Maria Szuppe, vol. 2. Leuven, 2002, 411–425.
- 137 Marcotte, Roxanne D. "Resurrection (*ma'ād*) in the Persian Ḥayāt al-nufūs of Ismāʿīl Muḥammad Ibn Rīzī (fl. ca 679/1280). The Avicennan background." In *Interpreting Avicenna. Science and Philosophy in Medieval Islam*. Ed. by Jon McGinnis and David Reisman. Leiden, 2004, 213–235.
- 138 Pourjavady, Reza and Sabine Schmidtke. *A Jewish philosopher of Baghdad. ʿIzz al-Dawla Ibn Kammūna (d. 683/1284) and his writings*. Leiden, 2006.
- 139 Street, Tony. "Suhrawardī on modal syllogisms." In *Islamic Thought in the Middle Ages. Studies in Text, Transmission and Translation*. In *Honour of Hans Daiber*. Ed. by Anna Akasoy. Leiden, 2008, 163–180.
- 140 Pourjavady, Reza. *Philosophy in Early Safavid Iran. Najm al-Dīn Maḥmūd al-Nayrīzī and his Writings*. Leiden, Boston, 2011.
- 141 Landolt, Hermann. "Being-towards resurrection! Mullā Ṣadrā's critique of Suhrawardī's eschatology." In *Roads to Paradise. Eschatology and Concepts of the Hereafter in Islam*. Ed. by Sebastian Günther, Todd Lawson, vol. 2. Leiden, Boston, 2017, 487–533.

# Faḥr al-Dīn al-Rāzī

Frank Griffel

1 Primary Sources – 2 Life – 3 Works – 4 Doctrine – 5 Influence – 6 Secondary Literature

## 1 Primary Sources

Testimonies on his Life, Works, and Influence [\*1–\*23] – Works and Editions [\*24–\*68]

*Testimonies on his Life, Works, and Influence*

1 Abū l-Barakāt al-Bağdādī. *Kitāb al-Mu'tabar*, 3 vols. Hyderabad, 1357–1358 [1938–1939]). – Repr. Isfahan, 1415 H [1994], Ġubayl, Paris 2012.

2 Ḍiyā' al-Dīn al-Makkī, Abū l-Qāsim 'Umar b. al-Ḥusayn (d. 559/1163–64). *Nihāyat al-marām fī dirāyat al-kalām*. – Ed. by A. Šihāda [Ayman Shihadeh]. Tehran, 2013.

3 al-Waṭwāt, Rašīd al-Dīn Muḥammad b. Muḥammad (d. 573/1177–1178 or 578/1182–1183). *Mağmū'at rasā'il Rašīd al-Dīn al-Waṭwāt*. – Ed. by M. Fahmī, 2 vols. Mišr [Cairo], 1315 H. [1897–1898].

4 al-Mas'ūdī, Šaraf al-Dīn Muḥammad b. Mas'ūd (d. c. 585/1190). *Kitāb al-Mabāḥiṭ wa-l-šukūk 'alā l-Išārāt*. – Ed. by Ayman Shihadeh, *Doubts on Avicenna. A study and edition of Sharaf al-Dīn al-Mas'ūdī's commentary on the Ishārāt*. Leiden, 2016.

5 Yāqūt al-Ḥamawī al-Rūmī (d. 626/1229). *Mu'ğam al-udabā'. Iršād*

*al-arīb ilā ma'rifat al-adīb*. – Ed. by I. 'Abbās, 7 vols. Beirut, 1993.

6 Ibn al-Aṭīr, 'Izz al-Dīn 'Alī b. Muḥammad (d. 630/1233). *Al-Kāmil fī l-ta'rīḥ = Chronicon quod perfectissimum inscribitur*. – Ed. by C.J. Tornberg, 14 vols. Leiden and Uppsala, 1851–1876.

7 al-Qifṭī, 'Alī b. Yūsuf (d. 646/1248). *Ta'rīḥ al-ḥukamā' [Iḥbār al-'ulamā' bi-aḥbār al-ḥukamā', Epitome des Muḥammad ibn 'Alī az-Zawzanī]*. – Ed. by J. Lippert. Leipzig, 1903. – Repr. Frankfurt a.M., 1999.

8 Ibn al-Ša'ār, al-Mubārak b. Aḥmad (d. 644/1256–57). *'Uqūd al-ğumān fī farā'id šu'arā' hāḍā al-zamān = Qalā'id al-ğumān fī farā'id šu'arā' hāḍā al-zamān*. – Ed. by F. Sezgin, 9 vols. Frankfurt a.M., 1990.

9 al-Mundirī, Zakī al-Dīn 'Abd al-'Aẓīm b. 'Abd al-Qawī (d. 656/1258). *Al-Takmila li-wafayāt al-naqala*. – Ed. by B.'A. Ma'rūf, 4 vols. Beirut, 1981.

10 al-Ğüzğānī, Abū 'Umar Minhāğ al-Dīn 'Uṭmān b. Sirāğ al-Dīn



(d. c. 664/1265). *Ṭabaqāt-i Nāširī* = *Ṭabaqāt-i-nāsirī. A General History of the Muhammadan Dynasties of Asia, Including Hindustān, from A.H. 194 (810 A.D.) to A.H. 658 (1260 A.D.)*. – Engl. transl. by H.G. Raverty, 2 vols. London, 1881. – Repr. Delhi, 1970.

11 Ibn Abī Uṣaybi'a, Muwaffaq al-Dīn Aḥmad b. al-Qāsim (d. 668/1270). *ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ*. – Ed. by A. Müller, 2 vols. Cairo/Königsberg 1299/1882. – Ed. and Engl. transl. by Emily Smith-Savage, Simon Swain and Geert van Gelder, *A Literary History of Medicine. The ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ of Ibn Abī Uṣaybi'a*, 3 vols. Leiden, 2020 [The page numbers of Müller's edition are included in the Arabic text in square brackets].

12 Naṣīr al-Dīn al-Ṭūsī, Muḥammad b. Muḥammad (d. 672/1274). *Ḥall muškilāt al-Iṣārāt*. In: Ibn Sinā. *al-Iṣārāt wa-l-tanbīhāt*. – Ed. by Sulaymān Dunyā, 4 vols. Cairo 1968–1971 (2nd ed.); repr. 1983.

13 Ibn Ḥallikān, Šams al-Dīn Aḥmad b. Muḥammad (d. 681/1282). *Wafayāt al-a'yān wa-anbāʾ abnāʾ al-zamān*. – Ed. by I. ʿAbbās, 8 vols. Beirut, 1968–1977.

14 Ibn al-ʿIbrī, Abū l-Farağ Gregorios [Bar Hebraeus] (d. 685/1286). *Taʾrīḥ muḥtaṣar al-duwal*. – Ed. by A. Šāliḥānī. Beirut 1890, 1958 (2nd ed.).

15 Ibn al-ʿIbrī. *Maktebānūt zaḥnē*. – Engl. transl.: *The Chronography of Gregory of Abū'l Faraj ... Bar Hebraeus being the first part of his political history of the world*, transl. from Syriac by E.A.W. Budge, 2 vols. Oxford, 1932.

16 al-Šahrazūrī, Šams al-Dīn Muḥammad b. Maḥmūd (d. after 687/1288). *Nuzhat al-arwāḥ wa-rawḍat al-afrāḥ fī taʾrīḥ al-ḥukamāʾ wa-l-falāsifa*. – Ed. by S.Ḥ. Aḥmad, 2 vols. Hyderabad, 1396/1976.

17 Ibn al-Fuwaṭī, ʿAbd al-Razzāq b. Aḥmad (d. 723/1323). *Mağmaʾ al-ādāb fī muʿjam al-alqāb*. – Ed. by M. al-Kāzim, 4 vols. Tehran, 1374/1416 [1995].

18 al-Šafadī, Šalāḥ al-Dīn Ḥalīl b. Aybak (d. 764/1363). *al-Wāfi bi l-wafayāt*. – Ed. by H. Ritter et al., 32 vols. Istanbul, Beirut, 1929–2013.

19 al-Subkī, Tāğ al-Dīn ʿAbd al-Wahhāb b. ʿAlī (d. 771/1370). *Ṭabaqāt al-šāfiʿiyya al-kubrā*. – Ed. by M.M. al-Ṭanāḥī and ʿA. M. al-Ḥilw, 10 vols. Cairo, 1964–1976.

20 Ibn Ḥaldūn, ʿAbd al-Raḥmān b. Muḥammad (d. 808/1406). *al-Muqaddima*. – Ed. by ʿAbd al-Salām al-Šaddādī, 3 vols. Casablanca, 2005. – Engl. transl. by Franz Rosenthal, *Ibn Khaldūn. The Muqaddimah. An Introduction to History*, 3 vols. Princeton, 1958, 1967 (2nd ed.).

21 Ṭāšköprüzāde, ʿİsām al-Dīn Aḥmad b. Muṣṭafā (d. 968/1561). *Miftāḥ al-saʿāda wa-miṣbāḥ al-sīyāda*, 3 vols. Hyderabad, 1326–1356 H [1910–1937].

22 Ḥāğğī Ḥalīfa, Kātib Çelebī, Muṣṭafā b. ʿAbdallāh (d. 1067/1657). *Kaṣf al-zunūn ʿan asāmī l-kutub wa-l-funūn*. – Ed. by Ş. Yaltkaya and R. Bilge, 2 vols. Istanbul, 1941–1943). – Previous edition: *Lexicon bibliographicum et encyclopaedicum (...) ad codicum vindobonensium parisiensium et berolinensis fidem primum edidit latine vertit et commentario indicibusque*

*instruxit Gustavus Fluegel*, 7 vols. Leipzig, London, 1835–1858.

23 Bağdatlı Paşa, İsmā'īl b. Muḥammad (d. 1339/1920). *Hadīyyat al-ʿarīfīn. Asmā' al-muʿallifīn wa-aʿtār al-muṣannifīn min Kašf al-ẓunūn*. – Ed. by M.K. Inal and A. Aktuç, 2 vols. Istanbul, 1951–1955).

### Works

The following list of philosophical works reflects the current state of research, which pays barely any attention to Faḥr al-Dīn's shorter philosophical texts, with very few exceptions. Further short philosophical texts may well be found in manuscripts in the libraries of Iran, Egypt, or Turkey. In addition, Faḥr al-Dīn al-Rāzī was a very productive author on other fields of knowledge, especially Islamic theology, Quranic exegesis, Islamic law, natural sciences, medicine, and the occult sciences (astronomy, geomancy, physiognomy). For these works cf. the lists of works mentioned below as well as Suter 1900 [\*1: 132–133 no. 328], Krause 1936 [\*28: 489 no. 328], Storey 1927–1997 [\*2: II 49–50. 351–353. 496], Şeşen et al. 1984 [\*37: 311 no. 327]. Unless otherwise marked, the works are composed in Arabic.

### Philosophical Compendia

24 *Ġāmiʿ* (also: *Ġawāmiʿ*) *al-ʿulūm* (Pers.). – Ed. by ʿAlī Āl Dawūd. Tehran, 1382 h.š. [2003]. – Parallel title: *Ḥadāʾiq al-anwār fī ḥaqāʾiq al-asrār*, also known as *Sittīnī*, because it discusses sixty sciences. – First printed in lithograph, ed. by Mīrzā Muḥammad Ḥān. Bombay,

1323 H. [1905–06]. – Repr. by Muḥammad Ḥuşayn Tasbiḥī. Tehran, 1346 h.š. [1967].

25 *al-Mabāḥiṭ al-mašriqīyya*. – Ed. by Muḥammad al-M. al-Bağdādī, 2 vols. Beirut, 1410/1990. – First printed in 2 vols. Hyderabad, 1343 H [1924–1925], repr. Tehran, 1966.

26 *al-Mulaḥḥaṣ fī l-ḥikma wa-l-mantiq*. – Ed. by ʿAbdallāh M. İsmā'īl, Aḥmad Ş. Muştafā and Rājīḥ Hilāl, 3 vols. Cairo, 1442/2021 – Ed. by İsmā'īl Ḥān-Üğlū [İsmail Hanoğlu], 2 vols. w. p. [Amman], 1441/2021. – Partial edition of the first part on logic: *Mantiq al-Mulaḥḥaṣ*. Ed. by Aḥad F. Qarāmalikī and Ādina Aşğariniżād. Tehran, 1381 h.š. [2002]. – Incomplete MS Berlin, Staatsbibliothek Preußischer Kulturbesitz, Or. oct. 623, 258 fol., described in Sellheim (1976 [\*35: 140–147 no. 41]). Accessible online at <http://resolver.staatsbibliothek-berlin.de/SBB0000440400000000>. – For additional MSS cf. GAL [\*3: I 507 no. 24; S I 923], Karabulut 2005 [\*41: III 1306], Dirāyatī 2010 [\*42: IX 1256].

27 *al-Risāla al-kamālīyya fī l-ḥaqāʾiq al-ilāhiyya* (Pers.). – Ed. by Muḥammad Bāqir Sabzawārī. Tehran, 1335 h.š. [1956]. – Mentioned by Ḥāğğī Ḥalīfa (only in Flügel's edition [\*22: III 434 no. 6307]) and described as a 'brief Persian treatise (muḥtaṣar) on logic and philosophy'. For MSS cf. Storey [\*21: II 352–353]. – According to Ibn Abī Uşaybi'a [\*11: II 30] dedicated to one Kamāl al-Dīn Muḥammad b. Mikā'īl and translated into Arabic by Tāğ al-Dīn al-Urmawī (d. c. 655/1257–1258) in

625/1227–1228. – Edition of an Arabic version (together with *Kitāb al-Mašā'ir* by Mullā Šadrā) by 'Alī Muḥyī al-Dīn. Beirut, 1423/2002.

28 *Manzūma-yi manṭiq wa-falsafa* (Pers.). Ed. in Pūrğawādī 2001 [\*124] and Pūrğawādī 2002 [\*126: 551–564]. – The text is also available as facsimile edition of the MS on which the preceding ed. is based. *Safīna-yi Tabrīz. Girdāwarī wa bih ḥaṭṭ-i Abū al-Mağd Muḥammad b. Mas'ūd Tabrīzī*. Tehran, 1381 h.š. [2002], 304–305. – A brief didactic poem in four parts (logic, natural sciences, metaphysics, and praise of the sultan) dedicated to Našīr al-Dīn Malik-Šāh (d. 593/1197), a son of the Ḥwārazm-Šāh Tekiś b. İl Arslan (r. 567–596/1172–1200), who died at a young age.

*Commentaries on works by Ibn Sīnā*

29 *Šarḥ al-Išārāt wa-l-tanbihāt*. – Ed. by 'Alī Riḍā Nağafzāda, 2 vols. Tehran, 1384/2005. – 1st vol. on logic, 2nd vol. on natural sciences and metaphysics. – Repr. of the part on logic in *al-Išārāt wa-l-tanbihāt. al-ḥakīm Abū 'Alī Ibn Sīnā, al-manṭiq, al-ğuz' al-awwal, šarḥ Našīr al-Dīn Tūsī, Faḥr al-Dīn Rāzī, Quṭb al-Dīn Rāzī*. Ed. by Wisām al-Ḥaṭāwī. Qum, 1392 h.š. [2013]. – First printed together with Našīr al-Dīn al-Ṭūsī's *Ḥall muškilāt al-Išārāt*. Constantinople, 1290 H [1873–1874]. – Edition of the parts on natural sciences and metaphysics (once again with Našīr al-Dīn al-Ṭūsī's *Ḥall muškilāt al-Išārāt*). Cairo, 1325 H [1907]. – Repr. Qum, 1404 (1983–1984). – Facsimile edition of MS Tehran, Kitābḥāna-yi Mağlis-i Šūrā-yi Islāmī 10609 (copy

dated 614/1217–1218), by Muḥammad 'Imādī Ḥā'irī. Tehran, 1391 h.š. [2012]. – Partial Engl. transl. of the fourth *namaṭ* by Robert Wisnovsky in: S.H. Nasr, M. Aminrazavi 2010 [\*64: 189–202].

30 *Ğawābāt al-masā'il al-buḥārīyya*. – Ed. in: A. Shihadeh 2014 [\*145: 11–61]. – Response to Šaraf al-Dīn al-Mas'ūdī's (d. c. 585/1190) *al-Masā'il wa-l-shukūk*, a commentary on Ibn Sīnā's *al-Išārāt wa-l-tanbihāt*.

31 *Lubāb al-Išārāt wa-l-tanbihāt*. – Ed. by Aḥmad Ḥiğāzī al-Saqqā. Cairo, 1986. – First printed Cairo, 1326 H [1908–1909]. – Ed. by 'Abd al-Ḥafīz Sa'd 'Aṭīyya. Mişr [Cairo], 1355 H [1936–1937]. – Ed. by Muḥammad Šihābī. Tehran, 1339 h.š. [1960].

32 *Šarḥ Uyūn al-ḥikma*. – Ed. by Aḥmad Ḥiğāzī al-Saqqā, 3 vols. Cairo, 1986. – Repr. Tehran, 1373/1415 [1994]. – Partial edition of the section on poetics in Margoliouth 1887 [\*100: 113].

*Logic and Theory of Science*

33 *al-Manṭiq al-kabīr*. Ed. by Türgūd Āq-Yüz [Turgut Akyüz] and 'Alī Dürūsawī [Ali Durusoy]. 2 vols. Riyadh, 1443/2022, based on the unique MS Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, III Ahmet 3401, 371 fol. – Described in Karatay 1962–1969 [\*30: III 663 no. 6782], although the attribution to Faḥr al-Dīn remains uncertain. A later entry on the title page of the MS attributes the text, presumably incorrectly, to Nağm al-Dīn al-Kātibī al-Qazwīnī (d. c. 675/1276). Knobel 2015 [\*152] argues in favour of al-Rāzī as the author. Ahlwardt 1887–1899 [\*25: IV 467–468 no. 5165] claims to have

discovered fragments of this book in two Berlin MSS. One of these (MS Berlin, Wetzstein II 1251, fol.17<sup>r</sup>–18<sup>r</sup>) states at the end that the brief excerpt is taken from a commentary on the *Great Book of Logic* (*min šarḥ al-manṭiq al-kabūr*).

**34** *al-Āyāt al-bayyināt fī ʿilm al-manṭiq*. – MS Leiden, University Library, Or. 2917, 22 p. (cf. Voorhoeve 1980 [\*36: 32]). – MS Escorial 650, fol. 30<sup>r</sup>–34<sup>r</sup> (described in Derenbourg et al. 1884 [\*24: I 458]). – Three commentaries on this text have been transmitted. The commentary by Ibn Abī l-Ḥadīd (d. 656/1258; regarding him cf. L. Veccia Vaglieri in EI<sup>2</sup> [\*4: III 684–686]) has been printed and also provides the *editio princeps* of the original text which it contains almost in its entirety: *Šarḥ al-Āyāt al-bayyināt li-Ibn Abī l-Ḥadīd al-Madāʾinī*, ed. by Muḥtār Ḡablī. Beirut, 1996. A second commentary, by Sirāḡ al-Dīn al-Urmawī (d. 682/1283), entitled *Ġāyāt al-āyāt* is extant in the MS Alexandria (Egypt), Baladiyya Collection, manṭiq 1957d, 77 fol. (described in Zaydān's catalogue [\*39: IV 161]), as well as a third, anonymous one in Cairo: Dār al-Kutub al-Miṣriyya, manṭiq 98 (described in [\*22: VI 60] and in al-Zarkān 1963 [\*78: 77–78 no. 30]).

**35** *al-Taḥṣira fī l-manṭiq*. – MS Istanbul Köprülü Kütüphanesi I 793, fol. 92<sup>r</sup>–116<sup>v</sup>. – Described in Şeşen et al. 1986 [\*38: I 386], Şeşen 1975–1982 [\*34: II 285], and Şeşen 1997 [\*40: 652]. – The attribution to Faḥr al-Dīn al-Rāzī is doubtful.

**36** *al-Kāšif fī uṣūl al-dalāʾil wa-fuṣūl al-ʿilal*. – Ed. by Aḥmad Ḥiğāzī al-Saqqā. Beirut, 1413/1992.

**37** *Kitāb al-Ġadal*. – MS Istanbul, Köprülü Kütüphanesi I 519, fol. 123<sup>r</sup>–155<sup>v</sup>; described in Şeşen et al. 1986 [\*38: I 259].

**38** *Taḥqīq maʾnā l-taṣawwur wa-l-taṣdīq*. – MS Damascus, Zāhiriyya 10499, 8 fol.

### *Psychology*

**39** *Risāla fī l-Nafs al-nātiqa wa-kayfiyyat aḥwālīhā*. – MS Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, III Ahmet 1302, fol. 91<sup>v</sup>–99<sup>r</sup>; described in Şeşen 1997 [\*40: 653]) and mentioned in Karatay 1962–69 [\*30: III 37 no. 4788].

**40** *Risāla fī l-ṭibāt al-naḥs wa-baqāʾihā wa-fāʾidat al-ziyāra*. – MS Istanbul, Nuruosmaniye Kütüphanesi 2764, fol. 128<sup>v</sup>–129<sup>v</sup>; described in Şeşen 1975–82 [\*34: II 286] and Şeşen 1997 [\*40: 652]). – Probably identical with *Barāhīn ṭibāt al-naḥs*, MS Tehran, Kitābhāna-yi Millī 1929, fol. 220<sup>r</sup>–221<sup>v</sup>; described in: Anwār [\*32: X 601]).

**41** *Risāla fī l-Arwāḥ wa-l-nuḥūs* (Pers.). – Ed. by Māyil Harawī, in *Āryānā* 23 (Kābul 1345 H [1966]): 510–519. – First edited under the title *Ġawābnāma-yi taʿziyat*. In *Čahārdah risāla. Taʿlīf wa-tarğuma-yi Faḥr al-Dīn-i Rāzī, Šihāb al-Dīn Suhrawardī, Aṭīr al-Dīn Abharī ... wa-dīgarān*. Ed. by Muḥammad Bāqir Sabzawārī. Tehran, 1340 h.š. [1961], 79–97. – Repr. Tehran, n.d. [c.2010].

**42** *Risāla fī ʿilm al-naḥs*. – MS Paris, BnF, fonds arabe 4187, fol. 96<sup>r</sup>–101<sup>r</sup>.

### *Metaphysics and Cosmology*

**43** *Risāla fī l-Ḥalq wa-l-baʿt*. – MS Istanbul, Köprülü Kütüphanesi I 816, 111 fol., and MS Istanbul, Ayasofya 2257, 69 fol. – A work in eight chapters

(*abwāb*), combining the traditional Aš'arī proof of the existence of God with the proof by Ibn Sīnā. – Described in Şeşen et al. 1986 [\*38: I 397], Şeşen 1975–1982 [\*34: II 288], and Şeşen 1997 [\*40: 655].

44 *al-Ğawhar al-fard*. – Ed. in Altaş 2015 [\*153: 117–178]. – The text is mentioned in Faḥr al-Dīn's own works (e.g. in *al-Maṭālib* [\*60: XI 32] or *al-Arbaʿīn* [\*55: 256]) and in lists of works compiled by his biographers (cf. al-Zarkān 1963 [\*78: 70 no. 15]) as well as in Naşīr al-Dīn al-Ṭūsī's super-commentary on Ibn Sīnā's *al-Işārāt* [\*12: II 151]. – Parallel title: *Itbāt al-ğuz' alladī lā yatağazza'*; cf. e.g. MS Tehran, Kitābhāna-yi Mağlis-i Şūrā-yi Islāmī 3932, p. 2–106, described in Şirāzī et al. [\*33: X 2033–2036].

45 *al-Hayūlā wa-l-şūra. Taḥqīq ḥaqīqat al-ğism wa-ḥaddihi*. – Ed. in Altaş 2014 [\*147: 89–107]. – Other titles of this text are *Risāla fī bayān nafy al-hayūlā* and *Risāla fī anna l-ğism murakkab min al-hayūlā wa-l-şūra aw lā*. The last-named is found in Dānişpażūh 1967–1984 [\*31: II 92].

### *Ethics and Sufism*

46 *al-Nafs wa-l-rūḥ wa-şarḥ quwāhumā*. – Ed. by Muḥammad Şağır Ḥasan al-Ma'şūmī. Islamabad, n.d. [1968]. – Repr. Tehran, 1364/1406 [1985]. – Ed. by Sulaymān Salīm al-Bawwāb. Damascus, Beirut, 1407/1987. – Engl. transl. by M. Şağır Ḥasan al-Ma'şūmī, *Imām Rāzī's 'Ilm al-Aḥlāq. English translation of his Kitāb al-nafs wa'l-rūḥ wa-şarḥ quwāhumā*. (Islamabad, n.d. [1969]).

47 *Damm laḍḍāt al-dunyā*. – Ed. in A. Shihadeh 2006 [\*61: 206–265].

48 *Muḥtār al-taḥbūr*. – MS Paris, BnF, fonds arabe 1383. Epitome of al-Quşayrī's (d. 465/1072) *al-Taḥbūr fī l-taḍkīr*.

49 *al-Aḥlāq wa-maqāmāt al-ʿarīfīn*. – MS Istanbul, Topkapı Sarayı Müzesi Kütüphanesi, Emanet Hazinesi 1296, 88 fol. – Described in Karatay 1962–1969 [\*30: III 130 no. 5069]. This text is attributed to Faḥr al-Dīn al-Rāzī at the beginning and end (fol. 2<sup>r</sup> and 88<sup>v</sup>), although many questions concerning its authenticity remain unanswered. It was probably composed later.

50 *Risāla-yi Sayr-i nafs* (Pers.). – In *Risāla-yi Sayr-i nafs-i Faḥr al-Dīn-i Rāzī, wa-Sayr al-ibād ilā l-maʿād-i Ḥakīm Sanaʿī-yi Ğaznawī*. Ed. by Māyil Harawī. Kabul, 1344 H [1965]. – 2nd part (9 p.) also in *Čahārdah risāla. Taʿlīf wa-tarğuma-yi Faḥr al-Dīn-i Rāzī, Şihāb al-Dīn Suhrawardī, Aṭīr al-Dīn Abharī ... wa-dīgarān*. Ed. by Muḥammad Bāqir Sabzawārī. Tehran, 1340 [1961], 98–105. – Repr. Tehran, 1383/2005.

### *Kalām, Fiqh and Quranic Exegesis (Taḥsīr)*

51 *al-Işāra fī ʿilm al-kalām*. – Ed. by Hānī Muḥammad Ḥamid Muḥammad. Cairo, 2009. – Identical with *Işārāt al-nuẓẓār ilā laṭāʿif al-asrār*, mentioned in his own works (e.g. *Taḥṣīl al-ḥaqq* [\*65: 322] or *Iʿtiqādāt* [\*66: 92]) and in lists of works compiled by Faḥr al-Dīn's biographers; cf. Altaş 2013 [\*89: 97].

52 *Nihāyat al-ʿuqūl fī dirāyat al-uşūl*. – Ed. by Saʿīd ʿAbd al-Laṭīf Fūda, 4 vols.

Beirut, 1432/2015. – The theological magnum opus from Faḥr al-Dīn's early period. For manuscripts cf. al-Zarkān 1963 [\*78: 76 no. 28]), Şeşen 1975–1982 [\*34: 11 292f.], Şeşen 1997 [\*40: 658], Karabulut 2005 [\*41: 111 1306], and Dirāyatī [\*42: X, 571–572]. – Partial edition of the first four (of 20) *uṣūl*, by Muḥammad Bāqir [Mehmet Baktır] and 'Abdallāh Damīr [Abdullah Demir]. Sivas, 1434/2013.

53 *al-Maḥṣūl fī 'ilm uṣūl al-fiqh*, also: *al-Maḥṣūl min 'ilm al-uṣūl*. – Ed. by Ṭahā Ġābir al-'Alwānī, 2 vols. Riyadh, 1979–1981. – Repr. Beirut, 1988, 1992 (in 6 vols); repr. Cairo, 2011 (in 3 vols). – Ed. by M.'A. 'Aṭā, 2 vols. Beirut, 1999. – Ed. by 'Ā.A. 'Abd al-Mawḡūd and 'A.M. Mu'awwaḍ, 4 vols. Sidon, 1999. – Al-Rāzī's magnum opus in Islamic jurisprudence, used widely as a textbook in madrasa education, often studied in an abridged version (cf. GAL [\*3: I 506; S I 921]).

54 *Muḥaṣṣal afkār al-mutaqaddimīn wa-l-muta'aḥḥirīn min al-'ulama' wa-l-ḥukamā' wa-l-mutakallimīn*. – Ed. by Ḥusayn Atā'ī [Hüseyin Atay]. Cairo, 1411/1991. First printed ed. Mişr [Cairo], 1323 H [1905] together with *Talḥiṣ al-Mulaḥḥaṣ* by Naṣīr al-Dīn al-Ṭūsī and *al-Ma'ālim fī uṣūl al-dīn* by Faḥr al-Dīn al-Rāzī [\*58]. Cf. the book-review by A.S. Tritton [\*107] which includes the varia lectiones of ms London, British Library, Or. 3753. – Ed. (together with *Talḥiṣ al-Mulaḥḥaṣ* by Naṣīr al-Dīn al-Ṭūsī) by Ṭahā 'Abd al-Ra'ūf Sa'd. Cairo, n.d. [1978]. – Ed. by 'Abdallāh

Nūrānī. In *Naṣīr al-Dīn al-Ṭūsī: Talḥiṣ al-Muḥaṣṣal*. Tehran, 1359/1980; repr. Beirut, 1985. – Ed. by Samīḥ Duḡaym. Beirut, 1992. – Ed. and Turk. transl. by Eşref Altaş. Istanbul, 2019. – Partial German transl. of part 2 (*rukn* 3 and 4) on *ilāhiyyāt* (speculative theology) and *sam'iyāt* (positive theology) in Horten 1912 [\*102]. – Analytical German paraphrase of the entire work in Horten 1910 [\*101: 3–157]. – Commentaries on this work and abridged versions by Naṣīr al-Dīn al-Ṭūsī (d. 672/1274), Nağm al-Dīn al-Kātibī al-Qazwīnī (d. c. 675/1276), Ibn Ḥaldūn (d. 808/1406) are known (listed in Badawī 1979 [\*112: 34–35]).

55 *Kitāb al-Arba'in fī uṣūl al-dīn*. – Ed. by Aḥmad Ḥiğāzī al-Saqqā, 2 vols. Cairo, 1986; repr. Beirut, 1424/2004. – First printed Hyderabad, 1353 H [1934–35]. – A textbook on the Aṣ'arī school of Islamic theology completed in 595/1198–1199, dedicated to al-Rāzī's oldest son Muḥammad (regarding the date cf. Altaş 2013 [\*89: 126]).

56 *al-Barāhīn al-bah'īyya* (Pers.) = *al-Barāhīn dar 'ilm al-kalām*. – Ed. by Muḥammad Bāqir Sabzawārī, 2 vols. Tehran, 1341–1342 h.š. [1962–1963]. – Composed 602/1205–1206 (cf. Širāzī et al. [\*33: VI 51–52]). – Mentioned in al-Zarkān 1963 [\*78: 99 no. 55], without reference to manuscripts. Regarding manuscripts cf. Dirāyatī 2010 [\*42: 11 469].

57 *Laṭā'if-i ḡiyāṭī*, also: *al-Laṭā'if al-ḡiyāṭīyya* (Pers.). – Lithograph print entitled *Al-Kitāb al-mustaṭāb al-musammā bi-Asrār al-tanzīl*. Tehran,

1301 H [1883–1884]. – The text is mentioned in lists of works compiled by Faḥr al-Dīn's biographers (cf. al-Zarkān 1963 [\*78: 115–116 no. 74]). Regarding manuscripts cf. Dirāyatī 2010 [\*42: VIII 1033]). – A Persian book on theology in three *maqālāt*. According to the colophon of the text (p. 169) as well as Āgā Buzurg Ṭīhrānī 1983 [\*8: XVIII 300], this is the Persian translation of Faḥr al-Dīn's Arabic work *Asrār al-tanzīl wa-anwār al-ta'wīl*. The text is dedicated to the Ġurīd sultan Ġiyāṭ al-Dīn Muḥammad (d. 599/1203) (p. 3). The catalogue description of ms Tehran, Kitābhāna-yi Mağlis-i Šūrā-yi Islāmī 5225 (Širāzī et al. [\*33: XVI 59] makes clear that this text also circulated under the title *Laṭā'if-i ġiyāṭīyya*. – An Arabic work by Faḥr al-Dīn entitled *Asrār al-tanzīl wa-anwār al-ta'wīl* was edited by 'Abd al-Raḥmān 'Umayra and 'Abd al-Mun'im Farağ Darwīš. Cairo, 2000. – Previous partial edition of the first *bāb* in the first *qism* entitled *Min Asrār al-tanzīl*. Ed. by 'Abd al-Qādir Aḥmad 'Aṭṭā. S.I. [Cairo], n.d. [1982]; repr. entitled *Asrār al-tanzīl*. Ed. by Aḥmad Ḥiğāzī al-Saqqā (Beirut, Cairo, 1412/1992); repr. Cairo, 2014. – According to Ḥağgi Ḥalifa [\*22: 1 82] *Asrār al-tanzīl* is an incomplete work on theology and *fiqh* in four parts (*aqsām*). This is confirmed by the edition by 'Umayra and Darwīš as well as a Berlin ms (cf. Ahlwardt's description [\*25: II 327–328 no. 1739]). The extant *Asrār al-tanzīl* represents only the first volume. In the version edited by 'Umayra and Darwīš, the text breaks off in the second

volume of the first *qism* on theology (*uṣūl al-dīn*). The Persian *Laṭā'if-i ġiyāṭī* overlaps with the text of the Arabic *Asrār al-tanzīl wa-anwār al-ta'wīl* (especially in the middle section of both texts, on the teleological proof of the existence of God) but the two are not identical.

58 *al-Ma'ālim fī uṣūl al-dīn*. – Originally *al-Ma'ālim fī l-uṣūlayn*, discussing Islamic theology (*uṣūl al-dīn*) as well as jurisprudence (*uṣūl al-fiqh*). In the form of this comprehensive oeuvre, the work is accessible only as the base text of the critical commentary by Nağm al-Dīn al-Kātibī al-Qazwīnī (d. c. 675/1276): *As'īlat Nağm al-Dīn al-Kātibī 'an al-Ma'ālim li-Faḥr al-Dīn al-Rāzī ma'a ta'ālīq 'Izz al-Dīn Ibn Kammūna*. Ed. by Sabine Schmidtke and Riḍā Pūrğawādī [Reza Pourjavady]. Tehran, Berlin, 1386/2007. – Partial edition of the part on Islamic theology (*Ma'ālim fī uṣūl al-dīn*) in the margin of *Muḥaṣṣal afkār al-mutaqaddimīn wa-l-muta'aḥḥirīn* and *Talḥiṣ al-mulaḥḥaṣ* by Naṣīr al-Dīn al-Ṭūsī. Miṣr [Cairo], 1323 [1905–1906]. – Ed. of the part on theology by Ṭāhā 'Abd al-Ra'ūf Sa'd entitled *Uṣūl al-dīn*. Cairo, n.d. [1970]; repr. with different pagination. Cairo, 2004. – Ed. by Samiḥ Duğaym. Beirut, 1992. – Ed. by Aḥmad 'Abd al-Raḥīm al-Sāyih and Samī 'Afīfī Ḥiğāzī. Cairo, 2000. – Ed. of the part on theology with the commentary by 'Abdallāh b. Muḥammad al-Fihri Ibn al-Tilimsānī (d. 644/1246) by 'Ā.A. 'Abd al-Mawğūd and 'A.M. Mu'awwaḍ. Beirut, 1999. – Ed. of the part on theology by 'A.M. 'Awād Sālim. Cairo,

1432/2011. – Partial edition of the part on jurisprudence in *al-Maʿālim fi ʿilm uṣūl al-fiqh*. Ed. by ʿAlī Muḥammad Muʿawwaḍ and ʿĀdil Aḥmad ʿAbd al-Mawḡūd. Cairo, 1414/1994.

59 *al-Maṭālib al-ʿāliya min al-ʿilm al-ilāhī*. – Ed. by Aḥmad Ḥiğāzī al-Saqqā, 9 vols. Beirut, 1987. – Partial edition of part 8 in *al-Nubuwwāt wa-mā yataʿallaqu bihā*. Ed. by Aḥmad Ḥiğāzī al-Saqqā. Cairo, n.d. [1985]. – Partial edition of the first part entitled *Itbāt wuḡūd Allāh*. Ed. by Aḥmad Ḥiğāzī al-Saqqā. Cairo, 2001. – Partial edition of part 9 entitled *al-Qaḍāʾ wa-l-qadar*. Ed. by Muḥammad al-Muʿtaṣim al-Bağdādī. Beirut, 1410/1990. – Two commentaries are known to exist. One by Sayf al-Dīn al-Āmidī (d. 631/1233), *Mukhtaṣar al-Maṭālib al-ʿāliya*, MS Istanbul, Millet Kütüphanesi, Fayḍallāh 1101, and another by Afḍal al-Dīn al-Ḥūnağī (d. 646/1248), *Talḥiṣ al-Maṭālib al-ʿāliya*. Ed. by ʿAbdallāh M. Ismāʿīl and Muḥammad Ḍarğām. 2 vols. Cairo, 1442/2021.

60 *Taʾsīs al-taqdīs fi l-radd ʿalā ahl al-taṣbiḥ*. – Ed. by ʿAbdallāh Muḥammad ʿAbdallāh Ismāʿīl under the title *Kitāb Asās al-taqdīs fi ʿilm al-kalām*. Cairo, 1432/2011. – First edition (together with *al-Durra al-fāhira* by ʿAbd al-Raḥmān al-Ġāmī [d. 898/1492]) by Muḥyī al-Dīn Ṣabrī al-Kurdī et al. Miṣr [Cairo], 1328 H [1910–1911]. – Repr. with Ġāmī's text. Miṣr [Cairo], 1354/1935. – Repr. without Ġāmī's text. Beirut, 1993, 1995. – Ed. by Aḥmad Ḥiğāzī al-Saqqā. Cairo, 1986, 1993, 2001. – All these printings and editions were published under the incorrect title

*Asās al-taqdīs*. – New edition under the original title *Taʾsīs al-taqdīs* by Anas Muḥammad ʿAdnān al-Šarafāwī and Aḥmad Muḥammad Ḥayr al-Ḥaṭīb. Damascus, 2011.

61 *al-Taḥṣīr al-kabīr aw Maḡātīḥ al-ğayb*. – Ed. by ʿAbd al-Raḥmān Muḥammad et al., 32 vols. Miṣr [Cairo], n.d. [1933–1939]. – Repr. Beirut, 1401/1981; Tehran, n.d. [c.1970] as well as numerous other reprints, usually in 32 vols. – First printed in 6 vols. Miṣr [Cairo], 1278 H [1862]; repr. Miṣr, 1307–1308 H [1889–1890]. – Comprehensive Quranic commentary. – Lagarde 1996 [\*119] provides an index of names, groups, locations, and technical terms as well as a concordance [\*120: 60–80] of the three prints Miṣr, 1933–1939, Beirut, 1401/1981, and Tehran, n.d. [c.1970].

#### *Astrology and Occult Sciences*

62 *al-Sirr al-maktūm fi muḥāṭabat al-nuğūm*. – Ed. by Mīrzā Muḥammad Šīrāzī [Lithograp print]. Cairo, n.d. [c.1880]. – MS Berlin, Staatsbibliothek Preuß. Kulturbesitz, Petermann I 207, 214 fol., described in Ahlwardt 1887–1899 [\*25: v 282–284 no. 5886]. Accessible online: <http://resolver.staatsbibliothek-berlin.de/SBB0000C09100000000>. – A text on astrology and the art of talismans.

63 *al-Iḥṭiyārāt al-ʿalāʾiyya fi l-iḥṭibārāt al-samāwiyya* (Pers.). – MS Istanbul, Ayasofya 2689, 89 fol. – For further manuscripts cf. Krause 1936 [\*27: 489], Şeşen 1975–1982 [\*34: II 282–283], Şeşen 1997 [\*40: 650]. – According



to Ḥaḡḡī Ḥālifa [\*22: 1 19] and some manuscripts also: *al-Aḥkām al-‘alā’iyya fi l-a‘lām al-samāwiyya*. – Work on astrology dedicated to the Ḥwārazm-Šāh ‘Alā’ al-Dīn Muḥammad b. Tekiś (r. 596–617/1200–1220) (cf. Storey [\*2: II 49–50]), transmitted in some manuscripts with an incorrect dedication to the latter’s father Tekiś b. ʾĪ Arslan (r. 567–596/1172–1200). – Arabic transl. in e.g. MS Istanbul, Fatih 5308, 1<sup>r</sup>–19<sup>v</sup>, or MS Dublin, Chester Beatty Library, Ar. 4537, as well as three manuscripts of the Bibliothèque Nationale, Paris (de Slane 1883–1895 [\*23: I 218–219. II 449. 468–469]). This Arabic translation is also sometimes dedicated incorrectly to Tekiś b. ʾĪ Arslan.

**64** *Kitāb al-Firāsa*. – Ed. with French transl. by Youssef Mourad, *La physiognomonie arabe et le Kitāb al-firāsa de Faḡhr al-Dīn al-Rāzī*. Paris, 1939. – Ed. by Aḥmad ‘Abd al-Raḥmān al-Šāḡūl. Cairo, 2006.

### Doxography

**65** *Ṭaḡṣīl al-ḥaqq wa-taḡḡīq al-ḥalq*, also: *Ṭaḡṣīl al-ḥaqq wa-maqālat al-ḥalq* (Pers.). – Printed in facsimile of the *Safīna-yi Tabrīz*. *Girdāwarī wa biḥ ḥaṭṭ-i Abū l-Maḡd Muḥammad b. Mas‘ūd Tabrīzī*. Ed. N. Pūrḡawādī. Tehran, 1381 h.š. [2002], 314–322. – Older partial edition of the second part of the text (pp. 318–322 in the *Safīna-yi Tabrīz*) entitled *Kitāb al-firaq fi šarḥ aḥwāl maḡdāhib al-muslimīn wa-l-mušrikīn*. In *Čahārdah risāla. Ta‘līf wa-tarḡūma-yi Faḡhr al-Dīn-i Rāzī, Šihāb al-Dīn Suhrawardī, Aṭīr al-Dīn Abḥarī ... wa-dīgarān*. Ed. by

Muḥammad Bāqir Sabzawārī. Tehran, 1340 h.š. [1961], 109–145; repr. Tehran, n.d. [c.2010]. – Persian treatise in two parts; first a presentation of Sunni doctrines, then a heresiography and doxography of various religious groups within and beyond Islam.

**66** *ʾIṭiqādāt firaq al-muslimīn wa-l-mušrikīn*. – Ed. by ‘Alī Sāmī Naššār with an introduction by Muṣṭafā ‘Abd al-Rāziq. Cairo, 1356/1938; repr. Beirut, 1402/1982. – Arabic adaptation of the second part (heresiography and doxography) of *Ṭaḡṣīl al-ḥaqq* [\*65]. – Ed. by Muṣṭafā al-Hawārī together with the *Kitāb al-Muršid al-amīn ilā ‘ṭiqādāt al-muslimīn wa-l-mušrikīn* by Ṭāḥā ‘Abd al-Ra‘ūf Sa‘d. Cairo, 1398/1978. – Ed. by Muḥammad al-M. al-Baḡdādī. Beirut, 1407/1986. – Ed. by Muḥammad Z. M. ‘Azab. Cairo, 1413/1993. – Pers. transl. by Muḥammad Taqī Dānišpažūh. “Mu‘arrifi-yi du risāla.” *Našriyya-yi Dāniškada-yi Adabiyyāt va ‘Ulūm-i Insānī-yi Tabrīz* 20 (Tabrīz 1347/1969): 143–158. 317–328. – Ital. transl. by Giuseppe Algeri. “Il Libro sulle credenze delle fazioni dei musulmani e degli associatori di Faḡhr ad-Dīn ar-Rāzī (1149–1210).” *Annali dell’Istituto Universitario Orientale di Napoli* 63 (Naples 2003): 33–81.

**67** *al-Riṭāq al-mu‘niqa* [also: *mūniqa*] *fi arā’ ahl al-‘ilm*. – Ed. by al-As‘ad Ġum‘a. Tunis, 2004. – 2nd ed. in 12 vols. Tunis, 2008. – Comprehensive doxographical work, divided according to subjects as well as groups. The structure is analysed in Eichner 2009 [\*205: 357–358].

*Autobiography*

68 *al-Munāẓarāt fī bilād mā warāʾ al-nahr*. – Ed. and Engl. transl. in: Kholeif 1966 [\*108]. – First printed: *Munāẓarāt ġarat fī bilād mā*

*warāʾ al-nahr fī l-ḥikma wa-l-ḥilāf wa-ġayrihimā bayna l-Imām Faḥr al-Dīn al-Rāzī wa-ġayrih*. Hyderabad, 1355 H [1936–1937].

## 2 Life

The most detailed description of Faḥr al-Dīn's life is found in Harawī (1964 [\*79]), who discusses questions regarding his biography as well as his relations with contemporaries in monograph form. Not all the information here is reliable, a fault that also afflicts the detailed discussion of Faḥr al-Dīn in al-Zarkān 1963 [\*78: 8–36]. Further important contributions to the study of Faḥr al-Dīn's life are found in Anawati 1962 [\*54], ʿIrāqī 1986 [\*80], Street 1997 [\*83], Āl Dawūd 2003 [\*82: 1–11], Shihadeh 2006 [\*61: 4–11], Burqāʾī 2010 [\*86: 21–37]. The most informative description of Faḥr al-Dīn's life may be found in Griffel 2021 [\*67: 264–303] and Griffel 2007 [\*85]), with additional details included by Altaş 2013 [\*88].

Faḥr al-Dīn Abū ʿAbdallāh Muḥammad b. ʿUmar b. al-Ḥusayn al-Rāzī, also known as Ibn al-Ḥaṭīb (son of the preacher), was born on 25 Ramaḍān 544 / 26 January 1150 in Rayy (Ibn al-Aṭīr [\*6: XII 190], al-Mundirī [\*9: XX 187], Griffel 2021 [\*67: 265]). At the time, Rayy was the main centre of the fertile region at the foot of Mount Elburz; nowadays it is a southern suburb of Tehran. Faḥr al-Dīn's father, Ḍiyāʾ al-Dīn Abū l-Qāsim (also: Abū Ḥaḥṣ) ʿUmar b. al-Ḥusayn al-Ṭabarī al-Makkī, was an Ašʿarī scholar whose family came from Ṭabaristān, the region between the Elburz and the Caspian Sea. The family appears to have been of Arab descent originally (tracing themselves back to the first caliph Abū Bakr), and Ḍiyāʾ al-Dīn's grandfather was still living in Mecca around the middle of the 5th/11th century (Ibn al-Šaʿār [\*8: VI 107]). It was either this great-grandfather of Faḥr al-Dīn's or his grandfather who emigrated from Mecca to Ṭabaristān. From here, the family moved on to Rayy. It is uncertain whether Faḥr al-Dīn's father grew up in Ṭabaristān or in Rayy (cf. the ambiguity in Ibn al-Šaʿār [\*8: VI 107], discussed by Shihadeh 2013 [\*84: xi]). Faḥr al-Dīn's father studied in Nishapur and made a name for himself in Rayy as a theologian and popular preacher (*ḥaṭīb*) (al-Subkī [\*19: VII 242], Shihadeh 2013 [\*84]). His teacher in Nishapur was Abū l-Qāsim al-Anṣārī (d. 512/1118) (Ḍiyāʾ al-Dīn al-Makkī, *Nihāya* [\*2: fol. 384<sup>r</sup>–384<sup>v</sup>]), a pupil of al-Ġuwaynī's (d. 478/1085) and a conservative rival of al-Ġuwaynī's more famous student

al-Ġazālī (d. 505/1111). Later, Faḥr al-Dīn would proudly trace back his theological genealogy through his father, al-Anṣārī and al-Ġuwaynī to al-Aṣ‘ārī (e.g. in *al-Riyāḍ al-mu‘niqa* [\*68: 183–184], cf. also Ibn Ḥallikān [\*13: IV 252]), emphasising that the highly accomplished line passing through al-Anṣārī existed in its own right beside the more prominent tradition of al-Ġazālī. Faḥr al-Dīn’s father Ḍiyā’ al-Dīn left a work on *kalām* the first half of which is extant (*Nihāya* [\*2]). After Ḍiyā’ al-Dīn’s death (in the year 559/1163–1164 according to Baġdatlı Paşa [\*23: I 784] which cannot, however, be verified), Faḥr al-Dīn moved to Nishapur in order to study religious subjects including *kalām* under Kamāl al-Dīn al-Simnānī (d. 575/1179–80), a second-generation student of al-Ġazālī’s. Here in Ḥurāsān, al-Qifṭī tells us, he first encountered the works of Ibn Sīnā and al-Fārābī and began to focus on philosophy. A second, and probably more influential, teacher of his was Abū l-Faḍl Maġd al-Dīn Yūsuf b. Naṣr al-Ġilī, an expert in the ancient sciences (*‘ulūm al-awā’il*), in philosophy, and in logic (Ibn al-Ša‘ār [\*8: VI 107], Ibn Abī Uṣaybi‘a [\*11: II 23]). Yāqūt (*Mu‘jam al-udabā’* [\*5: VI 2591–2592]) describes interviewing one of Faḥr al-Dīn’s sons concerning his father’s teachers in the sciences, and the son mentioning al-Ġilī in particular who, Yāqūt points out, was one of the ‘great scholars among the philosophers (*min kibār al-ḥukamā’*)’. This passage conveys the impression, as do Ibn al-Ša‘ār [\*8: VI 107] and Ibn Abī Uṣaybi‘a [\*11: II 23], that Faḥr al-Dīn travelled to Marāġa in north-west Iran in order to study under al-Ġilī there. Ibn Ḥallikān, on the other hand [\*13: IV 250], writes that after his studies in Nishapur, Faḥr al-Dīn first returned to his home in Rayy where he studied under al-Ġilī and then moved to Marāġa when the latter received a call from there. The historian Ibn al-Fuwaṭī (d. 723/1323), who worked as the librarian in the Marāġa observatory between 660/1261 and 679/1281, confirms that Faḥr al-Dīn al-Rāzī studied under al-Ġilī in Marāġa in 570/1174–1175 [\*17: III 164–165, IV 555].

After the end of his studies, Faḥr al-Dīn’s travels become more difficult to reconstruct. His biographers write that he went on to teach in other madrasas in western Iran (Hamadan) and the Iranian province Azerbaijan (Marand) after his training in Marāġa (Ibn Abī Uṣaybi‘a [\*11: II 23]). However, there are also indications that he moved to the court of the Ḥwārazm-Šāh Tekiṣ b. ʿĪl Arslān (reg. 569–596/1172–1200) around 571–572/1176, soon after completing his education in Marāġa, and began writing about philosophy. Some of his early works are dedicated to Qiwām al-Dīn Abū l-Naġm (or Abū l-Ma‘ālī) Suhayl b. ‘Abd al-‘Azīz al-Mustawfī, a high-ranking official and vizier at the Ḥwārazm-Šāh’s court (al-Waṭwāt [\*3: II 62–63, 86], Ibn al-Fuwaṭī [\*17: III 497–498]). This early close connection with the Ḥwārazm-Šāh and his court later may have seemed compromising to Faḥr al-Dīn, when he lived among their enemies the Ġūrīds,

hence it does not appear in his biographies. Al-Qiftī [\*7: 227] tells us only that the search for patronage led Faḥr al-Dīn to Bukhara. Not having found a patron there, he fell ill and sank into poverty, and then entered into the service of the Ḥwārazm-Šāh Tekiš. According to al-Qiftī [\*7: 291], the first encounter with Tekiš took place in Ḥurāsān, over which Tekiš and his renegade brother Sulṭān-Šāh were fighting at the time. Tekiš was an increasingly powerful ruler from the dynasty of the Persian-speaking Turkish Anūštigids. His power base was in Gurgān in Ḥwārazm, the former delta of the Oxus river on the Aral Sea in present-day Uzbekistan and Turkmenistan.

Although we have only little information on this time of his life, the two decades between 570/1175 and 590/1195 were Faḥr al-Dīn's most productive period. During this time, he composed, among others, the two influential philosophical compendia *al-Mabāḥiṭ* [\*25] and *al-Mulaḥḥaṣ* [\*26], that would create a new basis for the study of philosophy in the Islamic world. Faḥr al-Dīn composed several works for members of Tekiš's family (cf. *Manzūma-yi mantiq wa-falsafa* [\*28]), and he became the tutor of his two sons Nāṣir al-Dīn Malikšāh (d. 593/1196–1197) and 'Alā' al-Dīn Muḥammad (d. 617/1220), who would later become Tekiš's successor. From Ḥurāsān or Ḥwārazm, Faḥr al-Dīn presumably travelled to neighbouring Transoxania with its centres of Bukhara and Samarkand, ruled by the Turkish Qarā-Ḥānids at the time, who were in turn subject to the non-Muslim Qarā-Ḥiṭāy. Decades later (around 601/1205), Faḥr al-Dīn wrote an autobiographical account of his controversial debates with scholars in Transoxania (*Munāẓarāt* [\*69], for the dating see Griffel 2021 [\*67: 292–295]). This confirms his presence in Bukhara in 582/1186 and in Samarkand shortly afterwards [\*69: 32. 54; Engl. transl. 55–56. 76] (cf. also Griffel 2007 [\*85: 320]). It seems probable that Faḥr al-Dīn visited Transoxania regularly while he held a lucrative position with the Ḥwārazm-Šāh. Years later, he relocated to Ġurid Afghanistan (Griffel 2007 [\*85: 321]).

At this time, Afghanistan was ruled by various branches of the Ġurid dynasty, who successfully enticed Faḥr al-Dīn away from their antagonists the Anūštigids (Griffel 2007 [\*85: 334]). This is likely to have happened around 590/1194 or shortly afterwards. It may be that the death of Faḥr al-Dīn's pupil Nāṣir al-Dīn Malik-Šāh in 593/1197, heir to the throne of the Ḥwārazm-Šāh and governor of Nishapur, played a part in Faḥr al-Dīn's decision to move to the Ġurids (Griffel 2021 [\*67: 280–282]). An early part of his Great Quranic Commentary [\*61] is dated to the year 595/1199 (cf. Jomier 1977 [\*110: 255]). At this point, Faḥr al-Dīn was working in the border region between Ḥurāsān and Ġūr in present-day western Afghanistan, a region ruled by the Ġurids at the time. Ibn al-Šā'ār [\*8: VI 108] informs us that Faḥr al-Dīn was initially recruited by Bahā' al-Dīn

Sām (d. 602/1206), a member of a collateral branch of the Ġūrīds. Faḥr al-Dīn dedicated the *Risāla-yi Bahā'īyya* (cf. al-Ġūzġānī [\*10: I 429]) to him, a work that is probably identical with the extant Persian text on theology and dogmatics *al-Barāhīn al-bahā'īyya* [\*56]. Later, he joined Ġiyāṭ al-Dīn Muḥammad (d. 599/1203) and, after the latter's death, was supported by his brother Mu'izz al-Dīn Muḥammad (d. 602/1206). The colophons of the texts he composed during this time (collected in Ṭāšköprüzāde [\*21: I 447–448] and Jomier 1977 [\*110]) allow the inference that he spent a considerable amount of time in Ġūrīd lands in Afghanistan and from there accompanied Mu'izz al-Dīn Muḥammad on one of his lucrative raids into northern India (Griffel 2021 [\*67: 291–296]). Faḥr al-Dīn's most important sponsor was Ġiyāṭ al-Dīn Muḥammad, to whom he dedicated a theological summa in Persian (*Laṭā'if-i ġiyāṭī* [\*57]), a large-scale project that remained unfinished. Al-Šahrazūrī also mentions the close personal relationship between Faḥr al-Dīn and Ġiyāṭ al-Dīn [\*16: II 146–147]. As early as 595/1198–1199, at the beginning of their acquaintance, Ġiyāṭ al-Dīn employed military means to protect al-Rāzī from his theological opponents, who had incited the population of the city of Fīrūzkūh (present-day Ġām in Afghanistan) against Faḥr al-Dīn (Ibn al-Aṭīr [\*6: XII 99–100], Griffel 2007 [\*85: 335–337]). As a result of the opposition in Fīrūzkūh, Faḥr al-Dīn moved to Herat in Muḥarram 596/November 1199, becoming the head of a madrasa endowed by Ġiyāṭ al-Dīn Muḥammad. His great wealth and the hostility of his opponents meant that Faḥr al-Dīn had to be accompanied by bodyguards when he went out into the street (Griffel 2007 [\*85: 337]).

In 602/1206, Herat fell into the hands of the Anūštīgīds under the leadership of the new Ḥwārazm-Šāh 'Alā' al-Dīn Muḥammad b. Tekiṣ (reg. 596–617/1200–1220), Faḥr al-Dīn's former pupil. After a period of unrest in the city, 'Alā' al-Dīn Muḥammad took possession of Herat in 605/1208, honouring his old teacher Faḥr al-Dīn by giving him, among other things, the previous governor's palace. Faḥr al-Dīn al-Rāzī, 58 years of age and in ill health, was compelled to accompany 'Alā' al-Dīn Muḥammad to his capital Gurgānġ in Ḥwārazm as the leading legal scholar supporting the Ḥwārazm-Šāh's endeavour to replace the Abbasid caliph in Baghdad with an 'Alid from 'Alā' al-Dīn's own court. However, al-Rāzī soon returned to Herat, where he fell seriously ill in the summer of 606/1209 and dictated his spiritual testament (*waṣīyya*) (transmitted by, among others, Ibn Abī Uṣaybi'a [\*11: II 27–28]; Engl. transl. in Street 1997 [\*83: 136–137]). He died on the first day of Ša'bān 606/29 March 1210 in Herat. Al-Qifṭī [\*7: 291] reports a legend according to which the hostility in the city did not permit burying him outside his house. Faḥr al-Dīn's grave site is near the main northern road (Ḥayyābān) leading out of Herat (Griffel 2021 [\*67: 299]).

### 3 Works

3.1 Overview and Dating – 3.2 Philosophical Compendia – 3.3 Commentaries on Works by Ibn Sīnā – 3.4 Ethics – 3.5 Logic – 3.6 Theology

#### 3.1 Overview and Dating

Faḥr al-Dīn's oeuvre has been well established bibliographically. Anawati 1962 [\*77: 226–232] provides a table comparing different lists of works compiled by his biographers with the list of transmitted texts in Brockelmann, GAL [\*3: I 506–508, S I 920–924]. Al-Zarkān 1963 [\*78: 56–164] adds the bibliographical information from Ḥāḡḡī Ḥalīfa and Baḡdathī Paşa, creating a detailed catalogue of extant and lost works to which new information from manuscripts from Turkey and Iran was added recently by Altaş 2013 [\*89]. Al-Zarkān lists 93 certainly authentic works together with a further 99 that are either alternative titles of genuine works or texts of uncertain attribution. Al-ʿAlwānī 2010 [\*87: 119–227] edits and supplements al-Zarkān's information, but without the same clear overview. Further modern lists of works are found in Griffel 2019 [\*67: 585–589], Kaḥḥāla 1957–1961 [\*5: XI 79–80, repr. 1993 III 558–560 no. 15007] and in the two catalogues of manuscripts in Turkey (Karabulut 2005 [\*41: III 1302–1306 no. 4306]) and in Iran (Dirāyatī 2010 [\*42: XI 856–858]). Fānī 1986 [\*81] and Kadīwar, Nūrī 2000 [\*10: II 1709–1716] give an overview of Faḥr al-Dīn's printed works, the latter also of secondary literature in Persian. For a detailed and annotated bibliography of the secondary literature on al-Rāzī, see Janos, Attar 2023 [\*68].

Altaş's (2013 [\*89]) significant attempt at dating Faḥr al-Dīn's works fails to convince in some of its more detailed claims. Only few of Faḥr al-Dīn's works may be dated to a clear period. Even so, Altaş provides a reliable overview over the sequence and relative chronology of Faḥr al-Dīn's most important works (cf. also Shihadeh 2006 [\*61: 5–11], Griffel 2007 [\*85: 344]). His oeuvre begins (*pace* Shihadeh 2020 [\*173]) with a comparatively short text on *kalām* (*al-Iṣāra* [\*51]), still under the influence

of his father. Al-Rāzī's first philosophical summa, *al-Mabāḥiṭ al-maṣriḳiyya* (*The Eastern Investigations*) [\*25], is also an early work, composed apparently very soon after his move to the Ḥwārazm-Šāh's court. This text must be regarded as the starting point of Faḥr al-Dīn's philosophical work, as it is here where he develops the method that would be fundamental to all his later oeuvre. Another relatively early work is *Nihāyat al-ʿuqūl fī dirāyat al-uṣūl* (*The Utmost Reach of Rational Insight in Theology*) [\*52], an impressive summa of Aṣʿarī theology that investigates philosophy in some depth, and *al-Maḥṣūl fī ʿilm uṣūl al-fiqh* (*The Book of Results on the Methods of Jurisprudence*) [\*53], his *magnum opus* on jurisprudence. Faḥr al-Dīn's second and significantly more influential philosophical summa, *al-Mulaḥḥaṣ fī l-ḥikma wa-l-manṭiq* (*The Compendium on Philosophy and Logic*) [\*26], was completed in 579/1184 (de Goeje et al. [\*21: III 357]) and is the earliest work that can be dated with certainty. Many, if not all, these texts were written under the patronage of the Anūštigid court in Ḥwārazm. It was also during this early period that al-Rāzī's exploration of Ibn Sīnā's *al-Iṣārāt wa-l-tanbīhāt* (*Pointers and Reminders*) began. This would give rise to at least three texts [\*29, \*30, \*31]. Many of Faḥr al-Dīn's important works on the natural sciences (including astrology, magic, geomancy, and physiognomy) are also datable to this middle period during which he profited from the direct patronage of the Ḥwārazm-Šāh Tekiś and his court.

Faḥr al-Dīn enjoyed another productive phase after his move to the Gūrīds around 593/1197 and during his time as teacher at a madrasa in Herat. Here, he appears to have established a veritable workshop dedicated to two monumental works above all, his

Long Quranic Commentary [\*61] and his late philosophical–theological work *al-Maṭālib al-‘āliya* (*The Exalted Areas of Inquiry*) [\*59]. Both were unfinished at the time of his death. The majority of texts composed during this later phase is concerned with religious topics, which led Faḥr al-Dīn’s traditionalist opponents to accuse him of having, towards the end of his life, abandoned the philosophical rationalism of his earlier years (discussed by Street 1997 [\*83: 138–140], Shihadeh 2006 [\*61:

201–202]). Faḥr al-Dīn al-Rāzī’s reputation as a leading expert on Ibn Sīnā and a leading Aṣ‘arī theologian had spread so far that distant rulers commissioned texts from him, namely *Šarḥ ‘Uyūn al-ḥikma* (*Commentary on the Fundamental Questions of Philosophy*) [\*32] and *Ta’ṣīs al-taqdīs fī r-radd ‘alā ahl al-tašbīḥ* (*Laying the Foundation for [Understanding] God’s Transcendence in Response to the Anthropomorphists*) [\*60].

### 3.2 Philosophical Compendia

#### *Ġāmi‘ al-‘ulūm*

#### *Compendium of the Sciences*

A Persian overview of all available branches of the sciences (‘*ulūm*’), originally covering 40 disciplines and subsequently expanded to 60. The manuscripts (cf. Storey [\*2: 11 351–352], Pertsch [\*26: 162–163]), and above all the information in Ḥāḡḡī Ḥalifa [\*22: 1 565. 633]) suggest that the version comprising 40 disciplines circulated under the title *Ġāmi‘ al-‘ulūm* (*Compendium of the Sciences*) and the version with 60 was entitled *Ḥadā’iq al-anwār fī ḥaqā’iq al-asrār* (*Luminous Gardens on the Elucidation of Mysteries*). The modern editions entitled *Ġāmi‘ al-‘ulūm*, however, contain the text with all 60 disciplines (for an overview of the content see Steinfels 2020 [\*170]). This book is also known as *Sittīnī* (*The Sixty*). The beginning of both versions is identical (Pertsch [\*26: 126]), and it appears that the longer version was simply composed by inserting or appending the additional 20 disciplines. Al-Rāzī initially dedicates the text to the Ḥwārazm-Šāh (‘Alā’ al-Dīn) Tekiś b. ʾĪl Arslan (567–596/1172–1200), adding that he composed it after spending three years at the ruler’s court (p. 69–70). This presumably applies to the version comprising 40 disciplines, the beginning of which was adopted for the longer version as well. Two manuscripts of the longer version mention at the end of their colophons that the text was completed in Dū l-ḥiḡḡa 574/May 1179 (Altaş 2013 [\*89: 104–105], Storey [\*2: 11 352]), which may refer to either the original or the extended version.

It is probably the early version, as it is unlikely that Faḥr al-Dīn arrived at the Ḥwārazm-Šāh’s court before 571/1176.

Each of the 60 chapters describes the ‘outward’ foundations’ (*al-uṣūl al-zāhira*) of the respective discipline, such as e.g. the subject matter and the methods. Al-Rāzī then goes on to report ‘controversial teachings’ (*al-uṣūl al-muškila*) in the science, summarising the discussion on this topic. Finally, he comes to the ‘individual investigations’ (*imtiḥānāt*) of the sciences and adds brief accounts a few sentences long. Each science is discussed for seven to eight pages on average. Faḥr al-Dīn begins with the rational religious sciences, i.e. *kalām*, jurisprudence (*uṣūl al-fiqh*), dialectics (*ġadal*), and the differences between the different schools of Islam (*ḥilāf, maḏhab*), and then moves on to the transmitted religious sciences: *ḥadīth*, history, accounts of the campaigns of the early Muslims. The disciplines of Arabic linguistic education follow (grammar, morphology, syntax, prosody, etc.), then the natural sciences including medicine. This section also includes disciplines such as physiology (*firāsa*) or alchemy (*‘ilm al-iksīr*), in which Faḥr al-Dīn was a recognised expert. The originally 40 disciplines of the first version end with geometry, the measurement of surfaces and the identification of metals on the basis of their density. The additional 20 disciplines of the extended version begin with algebra and ‘Indian calculation’, and go on to include such diverse subjects as music, astronomy, astrology, geomancy (*ramal*), and doxography (*‘ilm maqālāt ahl al-‘ālam*). The

list concludes with the political sciences, knowledge of the afterlife, and an instruction concerning petitionary prayers. These brief but very informative chapters on the individual disciplines have barely received scholarly attention. Analyses are available concerning chapter 45 on arithmetic (Brentjes 1988–1989 [\*116]), chapter 48 on music (Tribuzio 2005 [\*133]) and chapter 57 on household management (*tadbīr al-manzil*) (Plessner 1928 [\*103: 35–38], Pūrğawādī 2000 [\*122]). Biesterfeldt 2002 [\*128: 76–78] and Steinfels 2020 [\*170] contextualises the work among the extant encyclopaedias in Islam. A comprehensive analysis of the entire treatise, its structure, and its dependence on earlier encyclopaedias of science like those by Ibn Sīnā and al-Bīrūnī, remains a desideratum.

*al-Mabāḥiṭ al-mašriqiyya*  
*The Eastern Investigations*

The earlier of the two innovative philosophical summae by Faḥr al-Dīn. As the second work of this type, *al-Mulaḥḥaṣ fī l-ḥikma wa-l-manṭiq*, was completed in Šawwāl 579/January 1184 (de Goeje et al. [\*21: III 357]), this text must have been composed during the up to eight preceding years in which Faḥr al-Dīn was active at the court of the Ḥwārazm-Šāh Tekiś b. ʾĪ Arslān (r. 567–596/1172–1200) in Gurgānġ (Ḥwārazm). It is dedicated to Qiwām al-Dīn Abū l-Nağm (or: Abū l-Maʿālī) Suhayl b. ʾAbd al-ʿAzīz al-Mustawfī, whose birth and death dates are unknown and to whom Faḥr al-Dīn dedicated other early works as well (Altaş 2013 [\*89: 107–109. 113–114]). He was a high-ranking official at the court of the Ḥwārazm-Šāh Tekiś in Gurgānġ (al-Waṭwāt [\*3: II 62–63. 86], Ibn al-Fuwaṭī [\*17: III 497–498]). At the beginning, Faḥr al-Dīn describes the work as ‘acquisition’ or ‘critical study’ (*taḥṣīl*) of the knowledge he found in the books by the philosophers who came before him. The objective, he says, is to present the knowledge of the ancients concisely and without unnecessary digression but with as much detail as is necessary in order to avoid misunderstandings [\*25: I 87 Bağdādī]. In fact, the book – like the shorter *al-Mulaḥḥaṣ* – is in large parts an opinionated

report of Ibn Sīnā’s teachings regarding the various disciplines of philosophy. In many places, the work goes beyond being a mere report and accuses Ibn Sīnā of errors in philosophy, for instance when embracing a fundamentally different understanding of ‘knowledge’ and a different epistemology (Ibrahim 2012, 2013 [\*128, \*130], Benevich 2019 [\*164: 26–33], Jacobsen Ben Hammed 2021 [\*168], Griffel 2021 [\*67: 336–351]), or when it argues for a separation of existence and essence in the case of God (Benevich 2017, 2020 [\*156, \*166], Griffel 2021 [\*67: 387–416]). Even so, al-Rāzī remains within the Avicennan system in the innovations he proposes in *al-Mabāḥiṭ al-mašriqiyya* and in *al-Mulaḥḥaṣ fī l-ḥikma wa-l-manṭiq*. That is, he does not endeavour to align Avicennan philosophy with the doctrines of Ašʿarī theology, instead teaching a philosophy in both books that leads to the conclusion of a world not created within time, and a God acting out of pure necessity rather than free will (*iḥtiyār*).

*Al-Mabāḥiṭ al-mašriqiyya* differs from *al-Mulaḥḥaṣ fī l-ḥikma wa-l-manṭiq* firstly by limiting itself to the natural sciences, metaphysics, and theology, while *al-Mulaḥḥaṣ* contains a section on logic as well, and secondly in its considerably more thorough treatment of the natural sciences. The basic division of the fields of philosophy (without logic) into three books (On General Things, On the Natural Sciences, and On the Knowledge of God) is already present, and further divisions into ‘main parts’ (sg. *ğumla*), ‘disciplines’ (sg. *fann*), ‘chapters’ (sg. *bāb*) and ‘sections’ (sg. *qism*) can also be found in the *Mulaḥḥaṣ*. In direct comparison, the long middle part on the natural sciences in *al-Mabāḥiṭ al-mašriqiyya* is even longer than the one in *al-Mulaḥḥaṣ*, amounting to around 1,000 pages in the two printed editions, which is equal to more than 80 per cent of the text.

Ahlwardt’s description of the Berlin MS [\*25: IV 403–415 no. 5064] documents the divisions and subdivisions in *al-Mabāḥiṭ al-mašriqiyya*. Thanks to its detailed nature, it is also helpful for the analysis of *al-Mulaḥḥaṣ*. Arnaldez [\*59: 130–250] provides an extensive review of the contents of *al-Mabāḥiṭ*



*al-mašriqiyya*. Much of what may be said of the contents and structure of *al-Mulaḥḥaṣ* also applies to this book. As it has been available in printed form (unlike the *Mulaḥḥaṣ*) since 1925, it has been consulted disproportionately frequently in the study of Faḥr al-Dīn's philosophy, compared to the much more influential *Mulaḥḥaṣ*.

*al-Mulaḥḥaṣ fī l-ḥikma wa-l-mantiq*  
*The Compendium of Philosophy and Logic*

This work is the second philosophical summa in which Faḥr al-Dīn presents the philosophical and scientific knowledge of his time in a novel fashion and adds an innovative introduction. The manuscript in the University Library in Leiden (Or. 132) transmits in a reader's note (reproduced in de Goeje et al. [\*21: 111 357]) that the work was completed in Šawwāl 579/January 1184 when Faḥr al-Dīn was working at the court of the Ḥwārazm-Šāh Tekiś b. ʾĪ Arslān (r. 567–596/1172–1200) in Gurgānġ (Ḥwārazm). *Al-Mulaḥḥaṣ fī l-ḥikma wa-l-mantiq* differs from the preceding *al-Mabāḥiṯ al-mašriqiyya* primarily in that it is only a little over half as long as the latter but discusses more material: in addition to the three books on metaphysics, natural sciences, and theology, it also contains a section on logic.

Eichner 2009 [\*205: 31–60] undertook a detailed analysis of the structure of this work. Inspired by developments that began in Ibn Sīnā's works and were continued by some of his pupils, such as Bahmanyār b. al-Marzubān (d. 458/1067), Faḥr al-Dīn rearranges the discussions of the individual topics of philosophy. Unlike Ibn Sīnā, he does not use the corpus of Aristotle's writings as his model, but establishes a structure based on the subject matter and its position in Faḥr al-Dīn's own ontology. The division at the highest level is visible in the two descriptions of the London and Berlin manuscripts (Rieu 1895 [\*27: 496–497 no. 725], Sellheim 1976 [\*35: 141–142 no. 41]). Al-Rāzī breaks with the fundamental classification of all philosophical topics (in this context excluding mathematics

and music) into logic, natural sciences, and metaphysics. Logic is discussed in a section of the same name (*fī ʾilm al-mantiq*) and, being above all the study of argumentation rather than a proper part of philosophical science, is the first topic taken up, discussed over 140 pages. The 'First Book' which follows logic discusses a topic that was previously part of metaphysics. Ibn Sīnā had divided metaphysics into two fields, resulting in an investigation of the most universal concept that cannot be defined, namely 'existence', and an investigation of the First Cause, i.e. philosophical theology. Al-Rāzī had already separated these two topics in *al-Mabāḥiṯ al-mašriqiyya*, and now does the same in *al-Mulaḥḥaṣ*, discussing them in two 'books' framing the natural sciences.

The 'First Book' is entitled 'On general things' (*fī l-ʾumūr al-ʾamma*) and is divided further into five chapters (sg. *bāb*) that offer a philosophical exploration of existence and its divisions; this runs to about 120 pages. 'Existence' may be divided into two sub-forms, the divine existence that is necessary of itself, and in the existence of created beings, which is only possible, but not necessary, of itself. In the long 'Second Book', entitled 'On the natural sciences' (*fī l-ṭabīʿiyyāt*), al-Rāzī discusses the existents that are possible of themselves, and in the third one, entitled 'On the knowledge of the divine' (*fī l-ʾilm al-ilāhī*), finally, the existent that is necessary of itself. This division of metaphysics into two books, as well as the further divisions of this science, are discussed in Eichner 2007 [\*135] as well as Janssens 2010 [\*138]. Al-Rāzī also employs a new arrangement for the natural sciences, once again based on the respective subject matter. The 'Second Book', which is remarkably long, occupying over half the text, is divided into an introduction (*muqaddima*) and two main parts (sg. *ḡumla*), the first on accidents (*fī aḥkām al-aʾrāḍ*) and the second on substances (*fī l-ḡawāḥir*). These in turn are divided into individual 'disciplines' (sg. *fann*), which are in turn divided into chapters (sg. *bāb*) and sections (sg. *qism*). The third book on philosophical theology is the shortest of the four main

parts, comprising barely over twenty pages. The book concludes with a treatment of God's essence, His attributes and His actions, each in a dedicated chapter.

*Al-Mulaḥḥaṣṣ fi l-ḥikma wa-l-manṭiq* differs from *al-Mabāḥiṭ al-mašriqiyya*, among other things, because it frequently draws a critical conclusion at the end of a discussion, which is not found in the longer predecessor work.

### 3.3 Commentaries on Works by Ibn Sīnā

*Šarḥ al-Išārāt wa-l-tanbihāt*

*Commentary on Pointers and Reminders*

Faḥr al-Dīn al-Rāzī studied Ibn Sīnā's works intensively, particularly his most programmatic work concerning the teachings of revealed religions, *Pointers and Reminders* (*al-Išārāt wa-l-tanbihāt*). Šaraf al-Dīn al-Mas'ūdī (d. c. 585/1190), a philosophical scholar of the generation before Faḥr al-Dīn, had written a book containing objections to 14 positions embraced by Ibn Sīnā in *al-Išārāt* [\*4]. Faḥr al-Dīn al-Rāzī composed three texts in which he explores Ibn Sīnā's book and al-Mas'ūdī's critical commentary. First, perhaps around 585/1190, he wrote a complete lemmatised commentary on *al-Išārāt* [\*29]. In it, Faḥr al-Dīn applies a technique that was developed in the genre of *tafsīr* literature in order to comment on the Quran. He divides the original text into manageably sized chunks (the lemmata), then discusses it lemma by lemma. The original text is reproduced in its entirety in the commentary, where Ibn Sīnā's passages alternate with Faḥr al-Dīn's comments. Faḥr al-Dīn is one of the first scholars to apply this method to a work of philosophy originally written in Arabic. In addition to this commentary technique, Faḥr al-Dīn divides the text into clear 'questions' (sg. *mas'ala*), adding a further philosophical structural analysis to the division into lemmas. In this way, he founds not only a new literary genre – that of the philosophical commentary – but also a new form of expressing philosophical as well as non-philosophical ideas that would achieve great popularity in the centuries after him.

Such an upshot may be a critical assessment of the conclusions drawn in philosophy (*ḥikma*), or a brief reference to how the topic in question is treated in books of the *kalām* genre. It is possible that these critical references, together with the brevity of the work, contributed to its greater success in the madrasa education of Muslim theologians.

Later, Faḥr al-Dīn wrote a response to al-Mas'ūdī's objections to Ibn Sīnā's *al-Išārāt wa-l-tanbihāt* [\*30] (cf. Shihadeh 2014 [\*145], Wisnovsky 2013 [\*142]), and around 597/1201 (thus Hāggī Ḥalifa [\*22: 1 94]) *Lubāb al-Išārāt wa-l-tanbihāt* (*The Core of the Pointers and Reminders*), an epitome of his own *Šarḥ al-Išārāt wa-l-tanbihāt*. Al-Rāzī's commentary on *al-Išārāt wa-l-tanbihāt* also provoked the first philosophical super-commentary, as Sayf al-Dīn al-Āmidī (d. 631/1233) wrote a commentary on al-Rāzī's commentary shortly after the latter's death (see Hassan 2020 [\*168]). A generation after these two, Nāṣir al-Dīn al-Ṭūsī (d. 672/1274) wrote another super-commentary on Faḥr al-Dīn's commentary [\*12], defending teachings of Ibn Sīnā that Faḥr al-Dīn had criticised. Arnaldez 2002 [\*59: 250–254] compares these two commentaries. Together, both books form a teaching set that would be part of madrasa education until well into the 20th century, above all in Iran and in India.

*Šarḥ 'Uyūn al-ḥikma*

*Commentary on the Fundamental Questions of Philosophy*

Faḥr al-Dīn here applies the form of the complete lemmatised commentary, adopted from *tafsīr* literature, to a second work by Ibn Sīnā. While his *Šarḥ al-Išārāt wa-l-tanbihāt* dates to the period during which al-Rāzī was active at the court of the Ḥwārazm-Šāh, *Šarḥ 'Uyūn al-ḥikma* is a late work. It refers to a number of other works by al-Rāzī (Altaṣ 2013 [\*89: 136–137]), including comparatively

late ones such as e.g. *al-Arbaʿin fī uṣūl al-dīn* (*Forty Points on Theology*) [\*55] (*Šarḥ ʿUyūn al-ḥikma* [\*32: 111–112]), and was completed only a short time before al-Rāzī's illness, which began in the summer of 605/1209 (Altaş 2013 [\*89: 136]). The book was commissioned by the Širwān-Šāh Muḥammad b. Riḍwān b. Manūčīhr, ruler of Širwān in present-day Azerbaijan, whom Faḥr al-Dīn in the introduction calls his student [\*32: 1–40]. In this introduction (analysed in Eichner 2009 [\*205: 64–66]), Faḥr al-Dīn describes the work on which he comments, the *ʿUyūn al-ḥikma* (*The Fundamental Questions of Philosophy*) (cf. Mahdawī

1954 [\*29: 183–185 no. 93]), as an immature early work by Ibn Sīnā that, due to its faults and shortcomings, invites its readers to write glosses and marginalia, which negligent copyists would then, taking a step further, regard as part of the text itself. The objective of his commentary is to cleanse the text of such interpolations and provide clear explanations in order to correct the faults caused by the author's carelessness. As in his earlier *Commentary on Pointers and Reminders*, al-Rāzī applies the technique of dividing the text into 'questions'.

### 3.4 Ethics

*al-Nafs wa-l-rūḥ wa-šarḥ quwāhumā*  
*The Soul, the Spirit, and an Explanation of Both their Capacities*

This work is extant as a unique manuscript in the Bodleian Library in Oxford (MS Hunt. 534). It is divided into two parts, the first discussing teachings on the soul and psychology, while the second is dedicated to presenting Aristotelian virtue ethics, closely based on religious texts. The book is apparently the work announced in *al-Mabāḥiṭ al-mašriqīyya* [\*25: 11–557 Baġdādī], on the subject of 'how actions that serve and obey God will lead to the purification of the soul.' Such a book should discuss ethics (*ʿilm al-aḥlāq*), i.e. the knowledge of character traits (*ḥulq, aḥlāq*) and of how positive ones can be encouraged and negative ones suppressed. This requires, first of all, an instruction on the foundations of the teachings on the soul in the first part of the book. Al-Rāzī explains in twelve chapters the meaning of words such as 'soul' (*nafs*), 'spirit' (*rūḥ*), 'heart' (*qalb*), and 'intellect' (*aql*), all of which are denotations of the rational part of the soul, which is regarded as an independent substance. This rational part of the soul is connected to the body but not a part of it, and lives on after its death. In the afterlife, the rational soul experiences 'intellectual delights' the intensity of which exceeds the delights of the body, among the latter being culinary and sexual pleasures. The

foundation of this psychology are the teachings of Ibn Sīnā. The second part discusses in twenty chapters how one can be healed (*ʿilāġ*) of negative character traits. The focus on negative qualities confirms al-Rāzī's fundamentally pessimistic assumptions in matters of ethics and human actions, documented by Shihadeh (2006 [\*61: 142–170], 2019 [\*184]). One cannot expect good deeds, any more than one can expect good character traits, which means that the main objective in ethics is to avoid wicked deeds and vicious character traits (vices). In the second part of the book, al-Rāzī quotes a number of religious sources, Quran and *ḥadīṭ*, but also the *Stories of the Prophets* (*qīṣaṣ al-anbiyāʾ*), which may challenge the book's claim to being a work in the genre of 'philosophy' (*ḥikma*). Griffel 2021 [\*174] argues that the focus on religious sources is due to al-Rāzī's understanding of philosophical ethics. In his model of the philosophical sciences, ethics is replaced by revelation and religious instruction. While religious rules for human actions may not have the same degree of precision as those in philosophical texts on ethics, they achieve a much higher degree of compliance. As this is the true aim of ethics, it would not make sense in al-Rāzī's view to compose books on philosophical ethics independently of revelation. Instead, his book is conceived in such a way that it offers philosophical understanding of the human soul and the virtues in the context of religious writings.

### 3.5 Logic

*al-Āyāt al-bayyināt fī 'ilm al-manṭiq*  
*The Clear Signs in Logic*

Ibn Abī Uṣaybi'a [\*11: 11 174] (repeated in abridged form by Ḥāḡḡī Ḥalifa [\*22: 1 204]) mentions that Faḥr al-Dīn's student al-Ḥusrawšāhī (d. 652/1254) composed a 'continuation' of Faḥr al-Dīn's *Āyāt al-bayyināt* (*Tatimmat kitāb Āyāt al-bayyināt*). The text on which this 'continuation' built, however, Ibn Abī Uṣaybi'a points out, is not the 'well-known' (*ma'rūfa*) and 'brief' (*ṣaḡīr*) work *al-Āyāt al-bayyināt*, but instead a book that discusses logic only up to the second figure of the syllogism. Ibn Abī Uṣaybi'a continues by saying that the well-known *al-Āyāt al-bayyināt* is a short text in ten chapters (*abwāb*). This book, mentioned by Faḥr al-Dīn himself, e.g. in *Lubāb al-Iṣārāt* [\*3r: 69], is *al-Āyāt al-bayyināt fī 'ilm al-manṭiq*, extant in at least two manuscripts and transmitted in a

small number of commentaries (one of them printed).

The ten sections (*fuṣūl*) of the work present the logic of the *Organon* in an innovative arrangement which covers all important elements and leads into a theory of science, represented by demonstrative proof (*burhān*). This comparatively slim work of only 20 pages begins with remarks on predication and definitions, moves on to the different kinds of judgement (*qaḍāyā*), and finally investigates syllogistics, sophistic fallacies, and demonstrations. Among secondary sources, only Falaturi 1969 [\*109] has used this brief but very programmatic work. The work on logic mentioned by Ibn Abī Uṣaybi'a, which was continued by al-Ḥusrawšāhī and which appears to have been rather less well-known, may well be the considerably more detailed treatise *al-Manṭiq al-kabīr*. It exists in a single manuscript and has now been edited.

### 3.6 Theology

*Muḥaṣṣal afkār al-mutaqaddimīn wa-l-muta'ahḥirīn min al-'ulama' wa-l-ḥukamā' wa-l-mutakallimīn*  
*The Summary of the Thoughts of Ancients and Recent Scholars Among the Philosophers and the Theologians*

A textbook of Aṣ'arī theology that discusses select problems (sg. *ma's'ala*) in a way that presents different solutions by the Aṣ'arī and Mu'tazilī camps, as well as by Ibn Sinā and his school (the *falāsifa*), neutrally and without polemic. As in many of his works, Faḥr al-Dīn displays an interest in strengthening the arguments of all sides, leading in turn to his own position being affirmed. Because of the book's position on Meno's paradox of the impossibility of acquiring knowledge, van Ess (1966 [\*195: 142–148]) regarded it as an early text whose position would be abandoned in Faḥr al-Dīn's later works. Kraus 1937 [\*104: 193], however, had previously dated the book to the last period of Faḥr al-Dīn's life. It was actually composed during the middle period.

The book mentions the *kalām* work *Nihāyat al-'uqūl* [\*54: 492. 602] and 'our philosophical books' [\*54: 553], referring to *al-Mabāḥiṭ al-mašriqiyya* and very probably also *al-Mulaḥḥaṣ*. Altaş 2013 [\*89: 118–120] dates the book to the period of 585–590/1189–1194, but it might already have been composed during the years after 579/1184. However, as *al-Munāẓarāt* does not mention it among the books extant around 582/1186, it was probably composed after this date but before c.593/1197, when al-Rāzī went over to the Ġūrīds.

Al-Ṣafadī [\*18: iv 254] writes that *al-Muḥaṣṣal* was commissioned by a sultan unknown to him who subsequently studied it together with Faḥr al-Dīn. The book is dedicated to Qiwām al-Dīn al-Mustawfī [\*54: 79], a high-ranking official at the court of the Ḥwārazm-Šāh Tekiś, to whom al-Rāzī had already dedicated his first philosophical compendium, *al-Mabāḥiṭ al-mašriqiyya*. The structure of this work is unusual for a text on *kalām*, which may be explained by the fact that it endeavours to introduce theological

discussion to readers whose educational background is in philosophy (*ḥikma*). Gardet, Anawati 1948 [\*106: 162–164] and Eichner 2009 [\*205: 361–362] describe the structure of the work, which is divided into four main parts (sg. *rukn*). The first main part discusses questions of epistemology (preliminaries, *muqaddimāt*), the second ontology (classification of the objects of knowledge, *fī taqṣīm al-maʿlūmāt*). The third and fourth main parts are dedicated to theology as such, divided into the teachings about God, His essence, His attributes, and His works (3rd main part: *fī l-ilāhiyyāt*), and the knowledge humans must adopt from revelation (4th main part: *fī l-samʿiyyāt*). The last-named are doctrines of prophecy, the afterlife, the status of believers, and the political organisation of the Muslim community. In a paraphrase of the work, Horten 1912 [\*102] called the 3rd main part ‘speculative theology’ and the 4th main part ‘positive theology’. Horten (1910 [\*101]) had already paraphrased the first two main parts in a book on Faḥr al-Dīn’s ‘philosophical opinions’.

*al-Maṭālib al-ʿāliya*

*The Exalted Areas of Inquiry*

The theological and philosophical *magnum opus* from al-Rāzī’s later period, composed between 603/1207 and the summer of 606/1209 when his terminal illness began (Griffel 2007 [\*85: 326]). Ibn Abī Uṣaybiʿa [\*11: 11 29]) writes that this was al-Rāzī’s last work, which he left unfinished. Some readers (Yāqūt [\*5: VI 2589], Ḥaḡḡī Ḥalifa [\*22: 11 1503. 1714]) describe this book as a work on theology (*kalām*) which is not, however, stated in the book itself. Rather, it refers to ‘the knowledge of divine matters’ (*al-ʿilm al-ilāhī*), claiming that this is that ‘which in the Greek language was called *utūlūḡyā*’ (‘theology’) [\*59: 1 33]. Al-Rāzī is implicitly referring to pseudo-Aristotelian *Theology* and its subject matter, namely God, the divine attributes and God’s actions in relation to creation, which in this case includes questions of cosmology and prophecy as well as psychology associated with it. This suggests a close connection to a

philosophical inquiry (*ḥikma*) and above all in that part of metaphysics that deals with God (*al-ilāhiyyāt*). Al-Rāzī may have pursued the aim of resolving disputes between *kalām* and Avicennan philosophy by discussing them as individual questions. In many fundamental subjects, he agrees with the teachings of Aṣʿarī *kalām*, giving many readers the impression that he was adhering to this discipline. The book’s position on the pre-eternity of the world, for instance, has attracted considerable attention (İskenderoğlu 2002 [\*125: 59–124], Hassan 2021 [\*176]) together with that of God’s free will. In both cases al-Rāzī sides in this book with the position of Aṣʿarī *kalām*, albeit with arguments that are personal rather than universal and that leave space for the validity of the opposite Avicennan position (Griffel 2021 [\*67: 543–549], Hassan 2021 [\*176: 249–254]). In individual questions such as the verification of prophecy (cf. Abrahamov 2000 [\*123], Griffel 2004 [\*130], 2015 [\*149], issues of psychology, or ethics (Shihadeh 2006 [\*61]), the presentation is considerably influenced by Ibn Sinā to the extent that it can hardly be described as a work of Aṣʿarī *kalām*.

The book was originally planned in ten parts. The last part on the ‘spiritual and bodily afterlife’ (*al-maʿād al-rūḥānī wa-l-ḡismānī*), announced at the beginning [\*59: 1 64], is not extant. In the form in which it survives, the book consists of nine ‘parts’ (sg. *ḡuzʿ*) or ‘books’ (sg. *kitāb*) dedicated to sub-topics of ‘divine matters’ (*ilāhiyyāt*). The sequence of topics is roughly based on that of a *kalām* compendium. The nine extant parts are: (1) On the proof of the existence of God, (2) on the oneness of God (*tawḥīd*) and his transcendence (*tanzīh*), (3) on the divine attributes, (4) on the question of whether the world has existed eternally or was created within time, (5) on time (*zamān*) and space (*makān*), (6) on the question of whether bodies are created from prime matter (*hayūlā*) or from atoms, (7) on spiritual beings that occur in the heavens and on earth (i.e. on angelology and psychology), (8) on prophecy, and (9) on the ontology of human actions (*aḡʿāl al-ibād*). With the exception of epistemology and the doctrine

of method (logic), al-Rāzī covers almost all the subjects discussed in a traditional *kalām* compendium in this book. In fact, Altaş 2020 [\*171] suggested, based on the evidence of a single manuscript, that originally the book included those subjects as well. A number of manuscripts have a colophon at the end of the eighth book that says Fakhr al-Dīn's authorship ends here (reproduced in [\*59: XIII 196]). This suggests that the ninth book on compulsion and divine predestination (*al-ğabr wa-l-qadar*) was initially an independent composition of al-Rāzī that was added to this work. In the lost tenth part, al-Rāzī would have explored the so-called *sam'yyāt*, i.e. the after-life and probably also questions of political

organisation (*imāma*) and the status of believers (*mu'min*), which traditionally conclude a *kalām* compendium. *Kalām* is implicitly suggested to be the same as 'philosophical theology' (*ilāhiyyāt*) of the Avicennan type. This innovative structure of Islamic theology inspired by philosophical literature was, however, hardly ever adopted in later *kalām* works. *Al-Maṭālib al-'ālīya* attracted two commentaries, both from within a century of its composition. Both end at the same passage within the second part of the ninth book on *al-ğabr wa-l-qadar* [\*59: IX 184], which suggests that a received text that circulated among the book's original readers ended here.

## 4 Doctrine

### 4.1 Methodological Innovations – 4.2 The State of Research Concerning Faḥr al-Dīn's Position on Individual Philosophical Questions

#### 4.1 *Methodological Innovations*

In the *Eastern Investigations* (*al-Mabāḥiṭ al-mašriqiyya*), one of his earliest books on philosophy, al-Rāzī lays out in the foreword the way in which he intends to present the knowledge discussed in this book [\*25: I 87–94 Baġdādī]. Al-Rāzī achieves the critical study (*taḥṣīl*) he aspires to by first dividing the material into individual questions (sg. *maṭlab*) and then determining their relevance, dismissing them as irrelevant (*naqḍ*) if necessary. In the next step he evaluates the individual questions, considers objections and discusses problems. Finally, he provides, where possible, the answers to the question. Faḥr al-Dīn claims that it is irrelevant in this context whether the answers resemble solutions that have already been established or not. He describes his method as a middle course between the blind imitation of traditional authority (especially that of Ibn Sīnā) and the similarly inappropriate criticism of such authorities 'in everything they say, be it thin or fat, false or useless' [\*25: I 89 Baġdādī]. The last words presumably refer primarily to al-Ġazālī's followers Šaraf al-Dīn al-Mas'ūdī and Ibn Ġaylān al-Balḥī (both d. c. 585/1190). Eichner 2009 [\*205: 66–70], who translated the introductory part of *al-Mabāḥiṭ al-mašriqiyya* into English, was able to document its proximity to Abū l-Barakāt al-Baġdādī's *al-Kitāb al-Mu'tabar* [\*1] (see also Griffel 2021 [\*67: 499–505]). Like Abū l-Barakāt, Faḥr al-Dīn emphasises his independence

from the 'greats' of philosophical tradition, reacting to an important criticism in al-Ġazālī's works ([\*1: 4], cf. Griffel 2011 [\*139: 66–67]). In his *Tahāfut al-falāsifa*, al-Ġazālī accused Ibn Sīnā and his followers of blind and uncritical adherence to Aristotle's teachings (cf. Griffel 2005 [\*131]).

Like Abū l-Barakāt al-Baġdādī's *al-Kitāb al-Mu'tabar, al-Mabāḥiṭ al-mašriqiyya* reacts to al-Ġazālī's harsh criticism. As Abū l-Barakāt had done (cf. Griffel 2011 [\*139]), al-Rāzī abandons philosophy's claim to being a demonstrative science. The key idea in al-Rāzī's approach is 'division into individual (sub-)questions' (... *an nufaṣṣila al-maṭālib ba'duhā 'an al-ba'd* [\*25: 1 88 Baġdādī]). Eichner emphasised as an achievement of Faḥr al-Dīn's that he is able to 'resolve complex arguments into a series of short problems' (2009 [\*205: 61–62]); in his works, these appear as *mas'ala* or *maṭlab* (questions). Al-Ṣafadī [\*18: IV 249] writes that Faḥr al-Dīn was the first to develop a new technique to solve these individual questions, called *al-sabr wa-l-taqṣīm* ('probing and [exhaustively] dividing'). In the first step, a problem is 'probed' by listing all possible suggestions for its solution – including those that offer only a formal solution. Once it has been established that the investigation has indeed exhaustively covered all possible suggested solutions, it proceeds to go through them one after the other, eliminating and rejecting those that do not provide a solution, ultimately determining 'that which was sought' (*al-maṭlūb*), namely the solution of the problem. This process of resolving philosophical problems is not demonstrative, and suffers from the disadvantage that one can never be entirely sure whether all possible solutions have been investigated sufficiently (Griffel 2021 [\*67: 506–517]).

The technique of 'probing and dividing' has its origins in *kalām* (Gardet, Anawati 1948 [\*106: 73]) and in Muslim jurisprudence (Griffel 2021 [\*67: 506–512]). It leads to a multitude of suggested solutions, of the first, second, and third order, for individual philosophical questions, which will be discussed one after the other. Beginning with *al-Mulāḥḥaṣ*, Faḥr al-Dīn introduces a system of numbering in order to organise his texts, employing the letters of the Arabic alphabet. The discussion of the celestial bodies, for instance, is divided into 28 questions (sg. *mas'ala*) which are further divided into aspects (sg. *waġh*) [\*26: III 83–140, ed. Cairo]. Successful study of these texts is possible only if the reader is aware at all times of the place which the relevant passage or argument occupies within the greater system of the whole book. Including all possible aspects of a problem is a reaction to al-Ġazālī's complaint that many philosophical discussions did not rise to the level of demonstrative proof. At the same time, this new method is directed against al-Ġazālī's own strategy of criticising the philosophers' suggestions, especially in those instances where they contradicted al-Ġazālī's understanding of revelation. It is not enough, Faḥr

al-Dīn emphasises in his debate with the Ġazālian Ibn Ġaylān (cf. Griffel 2009 [\*62: 116–120]), to criticise the doctrine of the *falāsifa* from the point of view of *kalām*. A problem such as the question of whether the world has existed from past eternally or whether it was created in time, for instance, must be treated exhaustively, and it is not enough to discuss all solutions that were actually suggested by scholars. Rather, all *possible* suggestions for solutions must be discussed individually (regarding Faḥr al-Dīn's discussion of the question of the eternal duration of the world cf. İskenderoğlu 2002 [\*125: 59–124] and Hassan 2021 [\*176]).

Faḥr al-Dīn's method of dividing an issue into individual questions is derived from Muslim jurisprudence, while being at the same time an expression of the new educational institution of the madrasas (Eichner 2009 [\*205: 62. 185–186]). Since it suited the madrasa teaching method, it is no surprise that Faḥr al-Dīn's works – including the philosophical ones – became part of the standard curriculum of madrasa education. His commentary on Ibn Sīnā's *al-Iṣārāt wa-l-tanbīhāt* would remain a central part of higher education in Islam for centuries (Robinson 1997 [\*198]). In this commentary as well as the later one on Ibn Sīnā's *Elements of Philosophy* (*ʿUyūn al-ḥikma*), Faḥr al-Dīn makes good use of the technique of dividing issues into individual questions (sg. *masʿala*). In the case of *al-Iṣārāt wa-l-tanbīhāt*, this means that Faḥr al-Dīn further divided the text of Ibn Sīnā – who had already arranged it roughly into 20 ways or methods (sg. *naḥḡ*) and forms (sg. *namat*) – into individual questions (sg. *masʿala*), giving each a title (cf. Shihadeh 2017 [\*155]). These titles provide a structure and a kind of running commentary, adapting the Avicennan text to the teaching method of the madrasa. In his foreword to his commentary on *ʿUyūn al-ḥikma*, Faḥr al-Dīn writes without false modesty that this early and, in his eyes, immature text of Ibn Sīnā becomes useful only through his exegetical treatment ([\*32: I 40–42]; analysed in Eichner 2009 [\*205: 64–66]).

The organisation of philosophical texts is an issue to which Faḥr al-Dīn devoted thorough consideration, resulting in a multitude of innovations. In his first work of philosophy, *al-Mabāḥiṭ al-mašriqiyya*, Faḥr al-Dīn already employs an innovative arrangement of philosophy that he further developed in *al-Mulāḥḡaṣ*. It would ultimately revolutionise the study of philosophy in Islam. Eichner (2009 [\*205: 355]) called this type of philosophical and theological summa 'ontological', because it arranges the discussion of philosophical doctrines following their subject matter in accordance with an organisational structure of being. While almost all preceding philosophical summae in Islam arrange the contents following the transmitted canon of Aristotle's works, Faḥr al-Dīn treads an entirely new path. Retaining the three fundamental disciplines of philosophy, namely logic, natural sciences, and metaphysics, he starts from



innovations that appear in some works of Ibn Sīnā and his pupils and divides metaphysics into two disciplines. Ibn Sīnā taught that metaphysics has two subjects to investigate, on the one hand existence per se, and on the other the First Cause, that is, God. Faḥr al-Dīn uses this distinction, dividing metaphysics into two disciplines, first the science of 'general things' (*al-umūr al-ʿamma*) and second that of 'philosophical theology' (*al-ilāhiyyāt*). His mature philosophical summa *al-Mulaḥḥaṣ* consists of four main parts: (1) on logic, (2) on general things, (3) on the natural sciences, and (4) on philosophical theology. The ontological structure becomes clear in the last three main parts (which can already be found in *al-Mabāḥiṭ al-mašriqiyya*): part two discusses being as such, part three the being that is possible by itself, i.e. all created things, and part four the being necessary by virtue of itself, i.e. God. Within these four parts, the structure is again determined by ontological considerations. The natural sciences are divided into two basic disciplines (sg. *fann*) in accordance with the Aristotelian division into accidents and substances. On a lower level, substances are divided into those that are bodies, souls, or intellects. And so forth, until a level is reached where the discussion of problems and their individual questions begins. Eichner (2009 [\*205: 31–50]) has demonstrated the structure of the *Mulaḥḥaṣ* and its dependence on Ibn Sīnā's ontological ordering principle. The 'ontological' mode of arrangement is not, however, limited to philosophy, but is also employed in works addressing a decidedly theological audience, such as e.g. the *Muḥaṣṣal afkār al-mutaqaddimīn wa-l-muta'aḥḥirīn* [\*54]. As an ordering principle it even influences Faḥr al-Dīn's *Great Quranic Commentary* [\*62].

Faḥr al-Dīn's new method of writing about philosophy is a deliberate turning away from the treatise or epistle, in which authors endeavoured to convince readers of their positions or their way of thinking, towards dialectical consideration of all important aspects of a philosophical question. It is consequently often difficult to determine Faḥr al-Dīn's own positions. In addition, the character of his two philosophical summae and his theological textbook is not unambiguous. The impression conveyed in *al-Mabāḥiṭ al-mašriqiyya* is that Faḥr al-Dīn presents teachings found in the philosophical sciences without wanting to pronounce a final verdict on them. If, for instance, he writes that the following proof (*burhān*) applies to the problem under discussion, he does not make clear whether he himself recognises the apodictic nature of the argument. Using the word 'proof' may be part of his reporting the doctrines of the *falāsifa*, rather as e.g. al-Ġazālī does in his *Maqāṣid al-falāsifa*.

These ambiguities have led to the three works of the 'ontological' type (*al-Mabāḥiṭ*, *al-Mulaḥḥaṣ*, and *Muḥaṣṣal*) often being ignored by scholars who endeavoured to determine al-Rāzī's philosophical and theological positions.

These instead focussed on other works by him. One exception is epistemology and theory of science, in which context Ibrahim (2012 [\*141], 2013 [\*143]) successfully works with *al-Mabāḥiṭ al-mašriqiyya*. We can see that Faḥr al-Dīn follows al-Ġazālī in criticising Ibn Sīnā's theory of knowledge, but presents his criticism in a way that engages Ibn Sīnā's logic in a dialogue. Faḥr al-Dīn denies that definitions are the linguistic representations of the real essential meaning of things, and in keeping with this, denies also that we can recognise the essence of things by means of definitions (Falaturi 1969 [\*109]). This shows once again that his attitude to Ibn Sīnā's approach of pursuing the natural sciences as demonstrative sciences, which represent nature in its essence, is a highly critical one (Griffel [\*67: 336–355]). In all his works on *ḥikma* – i.e. above all *al-Mabāḥiṭ*, *al-Mulaḥḥaṣ* and his commentary on *al-Iṣārāt wa-l-tanbīhāt* – al-Rāzī shows himself fascinated by the project of a purely rationalistic explanation of the world and of God that has no direct recourse to revelation. In his commentary on *al-Iṣārāt wa-l-tanbīhāt*, for example, al-Rāzī recognises the validity of Ibn Sīnā's proof of the existence of God based on the contingency of creation, but at the same time denies that the proof implies the unity and simplicity of the deity ([\*29: II 335–383], analysed in Mayer 2003 [\*129]). Instead, he teaches that the 'Necessary Existent by virtue of itself' (*wāǧib al-wuǧūd bi-dātihi*), namely God, is – like all other beings – divided into essence (or quiddity, *māhiyya*) and existence (*wuǧūd*) (cf. Benevich 2017 [\*156], 2019 [\*164: 26–33]). What at first looks like an Aṣ'arī criticism of Ibn Sīnā is in reality an attempt at a system-immanent reform of Ibn Sīnā's philosophy that takes many of its cues from al-Ġazālī's criticism. In al-Rāzī's philosophical books, God's essence is necessary of itself, and 'acts' eternally from pure necessity, without free will. The existence of God and thus also that of the world are a 'necessary' implication or 'comcomitant' (*lāzim*) of His essence (Griffel [\*67: 392–416]). The philosophical doctrines that al-Rāzī develops in his books on *ḥikma* differ from Ibn Sīnā's above all in their epistemology and in the ontological understanding of the 'Necessary Existent by virtue of itself'. Yet al-Rāzī does not argue against Ibn Sīnā's necessitarianism nor against the doctrine of the world's pre-ternity.

#### 4.2 *The State of Research Concerning Faḥr al-Dīn's Position on Individual Philosophical Questions*

Although outdated in many points, al-Zarkān 1963 [\*78] still provides the most detailed survey of Faḥr al-Dīn's positions on individual philosophical and theological questions. Celan 1996 [\*57] discusses a large number of theological topics. Both works – and indeed many other contributions on Faḥr al-Dīn al-Rāzī – suffer from the fact that they try to harmonise the frequently

contradictory doctrines in his works on *ḥikma* and on *kalām* or, wherever possible, try to explain them as chronological developments of one coherent position. Griffel 2021 [\*67: 551–562] suggested that throughout most of his career, al-Rāzī practiced epistemological constraint and remained undecided whether the position of ‘the people of religion’ (*al-millīyyūn*) – namely that God is a freely-choosing actor who created the world at one moment in time – or that of ‘the philosophers’ (*al-ḥukamāʾ*) – that God is a self-necessitated principle and that the world is pre-eternal – is true. The conflict between these two positions can also be observed in other authors of the post-classical period (Griffel 2021 [\*67: 13–14, 551], Hassan 2020 [\*168]) where it has also been explained by developmental arguments (Hassan 2020 [\*168: 12–31, 107, 283–286]). It remains to be seen whether the precise dating of these authors’ works allow for such drastic developments of fundamental positions. In the case of al-Rāzī it does not (Griffel 2021 [\*67: 315–316]). This suggests that al-Rāzī simultaneously wrote works in both genres – *ḥikma* and *kalām* – and did not display an interest in resolving the contradictions between them, at least not in his early works and those of his mid-career. Rather, he accepted both positions concerning God – Ibn Sīnā’s necessitarian one and the *kalām*’s voluntarist one – as possible true descriptions of the creator, as there is no way to decide the issue. While all revelations argue for a voluntarist God, their statements cannot be philosophically verified, which means that their position is only one of two possible positions that one can hold (Griffel 2018 [\*160] 2021 [\*67: 551–562]).

*Logic.* – Ibn Ḥaldūn (d. 808/1406) already recognised Faḥr al-Dīn’s reorganisation of this discipline and its reorientation from a comprehensive theory of science to the study of predication, propositions, and formal syllogistics [\*20: III 94–95; Engl. transl. III 142–143]. In western scholarship, Rescher 1964 [\*6: 185] regarded Faḥr al-Dīn’s logic as part of an opposition movement against Ibn Sīnā’s logic. El-Rouayheb 2010 [\*63: 38–48; \*203: xvii–xviii] corrected this view, emphasising that on the contrary, in his logic al-Rāzī is fundamentally in harmony with Ibn Sīnā, even defending the latter against critics. The modifications al-Rāzī undertakes within Avicennan logic are thus not motivated by external factors to any significant degree. It is possible that there was an exception, namely al-Rāzī’s decision to understand modal propositions in two ways when used in syllogisms: on the one hand as allowing for change in the object of the predication (*dātī*), on the other as being true only when the object displays the feature expressed in the proposition (*wasfī*). Street (2005 [\*132]) points out that Ibn Sīnā allowed only the latter way of understanding, and that Faḥr al-Dīn’s decision to allow both may have been motivated by considerations within the field of metaphysics.

*Theology.* – In his theological works, which range from the early *al-Iṣāra* [\*57] to the late work *al-Maṭālib al-‘āliya* [\*59], Faḥr al-Dīn endeavours to find a new foundation for the transmitted doctrines of the Aṣ‘arī school in Muslim theology, frequently with recourse to arguments he adopts from Ibn Sīnā. In his works on *kalām*, al-Rāzī recognises many of the cosmological doctrines of the *falāsifa*, but rejects certain elements of their cosmology such as the Neo-Platonic doctrine of the emanation (Heer 1992 [\*119]), instead developing a position that would be adopted by many Aṣ‘arīs after him: God is understood to be ‘the Necessary Existent by virtue of itself’ (*wājib al-wuḡūd bi-dātihi*), but acts of his own free will which is not determined by God’s essence (as al-Rāzī himself teaches in his works on *ḥikma*). This allows Faḥr al-Dīn to understand the world as an expression of God’s free will while at the same time recognising elements in Ibn Sīnā’s proof of the existence of God. As for his position in *kalām*, al-Rāzī follows al-Ġazālī who had evolved an Aṣ‘arī theologian’s critical understanding of Ibn Sīnā’s works a century earlier. Unlike al-Ġazālī, however, al-Rāzī engages much more intensively with Ibn Sīnā’s texts, and discusses them critically in his own *kalām* works.

Faḥr al-Dīn also follows his predecessor al-Ġazālī in his theology of human acts based largely on secondary causes. Like most Aṣ‘arīs, he denies that humans have any freedom of action (analysed in Gimaret 1980 [\*113: 134–153] and Shihadeh 2006 [\*61: 13–44]). He also agrees with al-Ġazālī that prophecy can be verified far more reliably through a rational investigation of the prophet’s teachings than by means of the criterion, favoured by the early Aṣ‘arīs, of the prophetic miracle (cf. Abrahamov 2000 [\*123] and Griffel 2004 [\*130], 2015 [\*149]). Abrahamov (2002 [\*127]) studies the position of the two Aṣ‘arīs in the context of the possibility of knowing God, and finds similar patterns. In his strategy of harmonising the results of a rational investigation with a possibly contradictory text of the Muslim revelation, al-Rāzī follows al-Ġazālī’s so-called ‘law of allegorical interpretation’ (*qānūn al-ta’wīl*; Griffel 2015 [\*149]). While these ideas were controversial in al-Ġazālī’s time, they became mainstream within Aṣ‘arism thanks to Faḥr al-Dīn’s embracing them publicly, Ibn Taymiyya (d. 728/1328) would vehemently oppose this development a century after Faḥr al-Dīn (Heer 1993 [\*197]). In individual questions, Faḥr al-Dīn does diverge from al-Ġazālī, for instance in his opposition to the latter’s doctrine that this is the best of all possible worlds (Shihadeh 2006 [\*61: 102–103, 160–169], Shihadeh 2019 [\*163]).

After its *editio princeps* in 1905 the early literature by authors such as Horten (1910 [\*101], 1912 [\*102]) or Gardet, Anawati 1948 [\*106] focused on *Muḥaṣṣal* [\*54]. With the edition of *al-Maṭālib al-‘āliya* in 1987, this changed and *al-Maṭālib*

has become the work of al-Rāzī that has been studied the most, with analyses on many of its teachings (e. g. Abrahamov 1992 [\*117], 1999 [\*121], 2000 [\*123], 2002 [\*127], Adamson 2017 [\*157], 2018 [\*158], 2018 [\*159], Adamson, Lammer 2020 [\*165], Griffel 2004 [\*130], Hassan 2021 [\*176], İskenderoğlu 2000 [\*125], Jacobsen Ben Hammed 2018 [\*162], Setia 2006 [\*134] and Shihadeh 2006 [\*61]). Other works of theology, such as the four-volume *Nihāyat al-ʿuqūl*, which was edited in 2015 [\*52], or the programmatic *al-Arbaʿīn* [\*55], which is available in print since 1934–35, have received far less attention. While doubtless a work on theology, the character of *al-Maṭālib al-ʿāliya* as a work on Aṣʿarī *kalām* has recently been called into question (Griffel 2021 [\*67: 545]). There are also questions about its manuscript transmission and its original size (Altaş 2020 [\*171]). Further studies on the nature of the work and its scope are needed to determine its position both within al-Rāzī's oeuvre as well as the tradition of post-classical thought in Islam.

*Ontology and Cosmology.* – Faḥr al-Dīn's position on Ibn Sīnā's hylomorphism has been discussed by scholars with relative frequency. Al-Zarkan 1962 [\*78: 410–437] saw this question as a fundamental decision between the two poles of Aṣʿarī *kalām*, which represents an atomist ontology, and Ibn Sīnā's Aristotelianism. In his early philosophical summa *al-Mabāḥiṭ al-maṣriqīyya* [\*25], al-Rāzī discusses the issue from the *falāsifa*'s point of view, devoting almost the entire space to Ibn Sīnā's anti-atomist arguments (Dhanani 2015 [\*148: 91–97], Baffioni 1982 [\*114: 211–275]). In his response to al-Masʿūdī's *Šukūk* [\*30], he defends one of Ibn Sīnā's arguments supporting hylomorphism (Shihadeh 2014 [\*146]). In his *kalām* works (*Nihāyat al-ʿuqūl* [\*52], *al-Arbaʿīn* [\*55], *al-Maṭālib al-ʿāliya* [\*59]) and in two epistles on the issue [\*44; \*45], on the other hand, he argues in favour of an atomist ontology and against hylomorphism (cf. Altaş 2014 [\*147: 72–85], Setia 2006 [\*134], Dhanani 2015 [\*148: 97–104]). The discussions on time, space, and the void in *al-Maṭālib al-ʿāliya* [\*59], studied by Adamson (2017 [\*157], 2018 [\*158], 2018 [\*159]) and by Adamson, Lammer (2020 [\*165]), end in conclusions that should be read as philosophical explanations of atomism and occasionalism. There appears to be a divide between al-Rāzī's works on *ḥikma* and *kalām* here with an embrace of hylomorphism in the former and atomism in the latter.

*Ethics and Sufism.* – Important aspects of his ethics and many associated topics are discussed by Shihadeh 2006 [\*61]. Griffel 2021 [\*174] discusses the curious nature of al-Rāzī's only preserved work on virtue ethics (*aḥlāq*) [\*46]. In relation to Sufism, al-Rāzī holds that divine inspiration (*ilhām*) can contribute to solving philosophical problems (Shihadeh 2007 [\*136], Janos 2015 [\*151], İskenderoğlu 2015 [\*150]). Here, he seems to be influenced by the last three chapters of Ibn Sīnā's *al-Išārāt wa-l-tanbihāt*. Pūrjavādī 1986 [\*115], Shihadeh

2007 [\*136], and Rustom 2014 [\*144] discuss al-Rāzī's contact with prominent Sufis of his time. Abrahamov (1999 [\*121]) presents Faḥr al-Dīn's explanation of the veneration of the graves of prominent Sufi shaykhs. It is closely linked to his psychology, in which al-Rāzī combines a fundamentally Avicennan approach with elements of Galen as well as older *mutakallimūn* (cf. Jaffer 2015 [\*66: 169–213]). Marmura (1992 [\*118]) presents Faḥr al-Dīn's commentary on Ibn Sīnā's 'flying man' thought experiment.

*The Occult Sciences.* – Al-Rāzī wrote works on astrology [\*64], physiognomy [\*63] as well as about magic and miracles. Jaffer 2020 [\*169] looks at al-Rāzī's taxonomy of events that break the regular custom that humans are habituated to. Among the works in the occult sciences, *al-Sirr al-maktūm* [\*62] was the most controversial and has attracted most attention, both among pre-modern and modern scholars. Noble 2021 [\*175], 2020 [\*173], 2018 [\*161] show how al-Rāzī adopts the teachings of 'the Sabians' as well as certain Indian sages and how he explains with what kind of practices one can influence the astral powers of the planets. Vesel 2011 [\*140] contextualises the work among other Islamic books of its kind.

## 5 Influence

Faḥr al-Dīn al-Rāzī occupies a central position in the history of philosophy, theology, and logic in Islam. This becomes clear, for instance, when Ibn Ḥaldūn (d. 808/1406) gives his readers an overview of developments in Islamic theology and logic. After al-Ġazālī, he says, Faḥr al-Dīn was the first to pursue Islamic theology (*kalām*) using a new method, by combining (*muḥālaṭa*) the technique of earlier *kalām* works with those employed by the *falāsifa*. Many *mutakallimūn* followed him [\*20: III 35–36; Engl. transl. III 52–54]. In logic, it was once again al-Ġazālī and Faḥr al-Dīn who popularised the study of this discipline, but only Faḥr al-Dīn pursued it with such dedication that he advanced it further [\*20: III 95; Engl. transl. III 143]. Faḥr al-Dīn was able to demonstrate, so Ibn Ḥaldūn, that logic can be a valuable tool for proving tenets of faith and that it does not contradict them [\*20: III 97; Engl. transl. III 146]. Two centuries after his lifetime, Faḥr al-Dīn still occupied an important place in the Islamic sciences, illustrated by, among others, the fact that Ibn Ḥaldūn himself composed an epitome (*talḥīs*) of al-Rāzī's theological textbook *al-Muḥaṣṣal* (cf. Badawī 1979 [\*112: 34–35]).

Already around sixty years after Faḥr al-Dīn's death, the Jacobite Christian historian Bar Hebraeus (d. 695/1286) wrote in his world-chronicle [\*15: 336] that the many works he left behind brought the world great benefit. Bar Hebraeus

compares him to the Church Father Origen who, he says, was later often regarded as a heretic in spite of his positive influence on early Christianity. In his view, the same is true of Faḥr al-Dīn who is called ‘an unbeliever’ (*kāfir*) and a ‘follower of the doctrines of Aristotle’. In another book [\*14: 445], Bar Hebraeus considers Faḥr al-Dīn’s teaching activity, mentioning that around the year 625/1228 many of his students came to Syria and Egypt from the east of the Islamic world in order to make a name for themselves as authors of works on philosophy and logic (evaluated by Endress 2006 [\*200: 403–408]). Even before the conflict with the Mongols under Genghis Khan (d. 624/1227) began in 616/1219, there was an exodus of Iranian scholars to Syria, Egypt, and Anatolia (Marlow 2010 [\*202: 279–280]), which increased after the Mongols destroyed Herat (618/1221) and other cities in Ḥurāsān, Ḥwārazm, and Transoxania. Damascus, Cairo, and Konya became new centres of philosophical scholarship. Al-Rāzī’s most prominent pupil, Quṭb al-Dīn al-Miṣrī (cf. Endress 2006 [\*200: 405–406]), died during the Mongol sacking of Nishapur in 618/1221. According to Bar Hebraeus, one of al-Rāzī’s most important pupils, Zayn al-Dīn al-Kaššī (cf. El-Rouayheb 2010 [\*203: xviii–xix]), remained in the east while Šams al-Dīn al-Ḥusrawšāhī (d. 652/1254; cf. Endress 2006 [\*200: 406–407]) was regarded as al-Rāzī’s most prominent pupil in Syria and Egypt and Tāğ al-Dīn al-Urmawī (d. 655/1257–1258; cf. Ibn Abī Uṣaybi’a [\*11: 11 30], al-Šafadī [\*18: 11 353]) in Konya. In addition to these four, who certainly studied under Faḥr al-Dīn, Bar Hebraeus mentions three other prominent philosophical scholars of the 7th/13th century: Afḍal al-Dīn al-Ḥūnağī (d. 646/1248; cf. El-Rouayheb 2010 [\*203], EI<sup>3</sup> [\*11], Marlow 2010 [\*202: 285–287]), Atīr al-Dīn al-Abharī (d. c. 663/1265; cf. Eichner in EI<sup>3</sup> [\*11]), and Sirāğ al-Dīn al-Urmawī (d. 682/1283; cf. Marlow 2010 [\*202]). However, it is doubtful whether they were in fact Faḥr al-Dīn’s pupils. Bar Hebraeus’ identification of all these philosophers as pupils of Faḥr al-Dīn demonstrates his great prestige as a teacher and as the founder of a new kind of philosophy. While he may not have been their direct teacher, Faḥr al-Dīn’s teaching activity led to the generation of networks into which almost all philosophical scholars of the 7th/13th century were happy to be linked in (Marlow 2010 [\*202: 284]). Further important pupils of Faḥr al-Dīn’s, although not mentioned by Bar Hebraeus, were Šihāb al-Dīn al-Naysābūrī (Ibn Abī Uṣaybi’a [\*11: 11 23], al-Šahrazūrī [\*16: 11 144]), and Šams al-Dīn al-Ḥuwayyī (d. 637/1240), who completed al-Rāzī’s *Great Quranic Commentary* (Gramlich 1979 [\*111: 100–103], Jomier 1980 [\*196]) and who worked in Damascus (regarding these and other pupils of al-Rāzī’s cf. al-‘Alwānī 2010 [\*87: 113–117]).

With the active support of the ruling dynasties of the Ḥwārazm-Šāhs and the Ġūrīds, Faḥr al-Dīn himself spread his rationalist interpretation of Islam, informed by Ibn Sīnā’s philosophy, in the east of the Islamic world with great

success (Griffel 2007 [\*85]). One generation later, his pupils did the same in Syria, Egypt, and Anatolia, where they found support from the Ayyubids and Rum-Seljuks and occupied influential positions at their madrasas. Many of them achieved the high office of the Šāfiʿī chief justice (*qāḍī l-quḍāt*) in one of the great cities of Syria, Egypt, or Anatolia. Rationalist theology and Quranic interpretation came into fashion at the same time as studying Ibn Sīnā in the 7th/13th century, and dominated madrasa education. While there were always conservative opponents who were able to persuade rulers to implement an anti-rationalist religious and education policy, for two centuries after Faḥr al-Dīn's death at least, the pendulum of scholarship in Islam swung towards rationalism and philosophical theology. Not even the fervent opposition of prominent Damascus Ḥanbalīs such as Ibn Taymiyya (d. 728/1328) and Ibn Qayyim al-Ğawziyya (d. 751/1350) could change this. A more detailed investigation of their works reveals that even they – in keeping with the spirit of the times – were influenced by Faḥr al-Dīn's teachings and received them thoroughly, without, of course, openly admitting it (regarding Ibn Taymiyya cf. Hoover 2007 [\*201], 2018 [\*207], regarding Ibn Qayyim cf. Langermann 2010 [\*204]). At the same time, we find, alongside this conservative, traditionalist opposition, also polemical criticism expressed by philosophical scholars who accused Faḥr al-Dīn of opposing important doctrines of the *falāsifa*, of displaying a lack of originality, and of maintaining overly close relations with sultans and rulers (al-Šahrazūrī [\*16: II 144–150]).

Among Faḥr al-Dīn's philosophical works, his commentary on Ibn Sīnā's *Pointers and Reminders* (*Šarḥ al-Išārāt wa-l-tanbīhāt* [\*29]) in particular sparked controversy. After Nāṣir al-Dīn al-Ṭūsī (d. 672/1274) wrote a super-commentary, defending many of Ibn Sīnā's teachings criticised by Faḥr al-Dīn, and 'resolving' many problems the latter had raised (hence the title: *Ḥall muškilāt al-Išārāt*, i.e. *The Resolution of the Problems of the Pointers* [\*12]), a genre of philosophical works emerged in Islam that weighed these two against each other and arrived at a verdict similar to those pronounced in a courtroom (*muḥākama*). This style of *muḥākamāt* books, which discuss the arguments proposed in Faḥr al-Dīn's and al-Ṭūsī's commentaries, emerged in the generation after al-Ṭūsī, with works by al-ʿAllāma al-Ḥillī (d. 726/1325) and Badr al-Dīn al-Tustarī (d. 732/1332). The most famous example was that of Quṭb al-Dīn al-Rāzī al-Taḥṭānī (d. 766/1364) (for an overview of this genre see Wisnovsky 2014 [\*206]). Faḥr al-Dīn's commentary on Ibn Sīnā's *al-Išārāt wa-l-tanbīhāt* remained one of his most widely read books on philosophy and was the only one of his works (together with al-Ṭūsī's super-commentary) to be included in the canonical madrasa curricula. In many cities of the Islamic world, these



would remain in force until well into the 20th century, and in a few places, they are still being studied to this day (Robinson 1997 [\*198]).

Important philosophical authors under the late ʿĪl-Ḥānids and early Timurids such as al-Bayḍāwī (d. c. 700/1300), ʿAḍud al-Dīn al-Īǧī (d. 756/1355), al-Taftāzānī (d. 793/1390), and al-Šarīf al-Ġurǧānī (d. 816/1413) composed works that would replace those by Faḥr al-Dīn in the madrasa education. Van Ess (1966 [\*195: 11. 31–32]) and, with more far-reaching results, Eichner (2009 [\*205: 351–503]) were able to prove that these great *kalām* compendia of the 8th/14th century were influenced profoundly by Faḥr al-Dīn's writings. Above all, it was his new division of the disciplines of philosophy following a system based on ontology, which he had realised in *al-Mulaḥḥaṣ*, that was adopted by *kalām* works of the 8th/14th century and that would ultimately occupy a canonical position in the madrasa education.

In view of the current state of research, we cannot say much about his influence beyond the 8th/14th century. Aydin 2005 [\*199: 104–105] writes that Faḥr al-Dīn al-Rāzī was one of the most influential theologians in Ottoman Turkey, whose teachings were circulated by prominent followers such as Šams al-Dīn Meḥmet Fenārī (d. 834/1431). Many Ottoman scholars had their chains of theological genealogy (*isnād*) end with him. Consequently, Faḥr al-Dīn must be regarded as one of the most influential philosophers of Islam, even though this rank is not properly reflected in current research on philosophy in the Islamic world.

## 6 Secondary Literature

Reference Works, Dictionaries [\*1–\*11] – Lists and Catalogues of Manuscripts [\*21–\*42] – Lists of Works – Introductions, Overviews [\*53–\*68] – Life and Works [\*77–\*89] – Individual Works and Topics [\*100–\*176] – Influence [\*195–\*208]

### *Reference Works, Dictionaries*

1 Suter, Heinrich. *Die Mathematiker und Astronomen der Araber und ihre Werke*. Leipzig, 1900.

2 Storey, Charles Ambrose. *Persian Literature. A bio-bibliographical survey*, 5 vols. London, 1927–2004.

3 GAL = Brockelmann, Carl. *Geschichte der arabischen Litteratur*, 2 vols; 3 suppl. vols. Leiden, 1937–1949

(2nd ed.). – Edition adapted to the supplement volumes.

4 EI<sup>2</sup> = *The Encyclopaedia of Islam. New edition*. Ed. by Clifford Edmund Bosworth et al., 11 vols, 6 suppl. vols. and index. Leiden, London, 1954–2009.

5 Kaḥḥāla, ʿUmar Riḍā. *Muʿjam al-muʿallifin. Tarāǧim mušannifi l-kutub al-ʿarabiyya*, 15 vols. Damascus,

1957–1961. – Repr. in 4 vols. Beirut, 1414/1993.

6 Rescher, Nicholas. *The Development of Arabic Logic*. Pittsburgh, 1964.

7 Elr = *Encyclopaedia Iranica*. Ed. by Ehsan Yarshater, vols 1 ff. London, 1982ff.

8 al-Tehrānī, M.M. *Āgā Buzurg. al-Dar'ā ilā taṣānif al-š'ra*, 26 vols. Beirut, 1983.

9 Daiber, Hans. *Bibliography of Islamic Philosophy*, 2 vols. Leiden, 1999. – Supplement, 2007.

10 Kadīwar, Muhsin and Muḥammad Nūrī. *Ma'ḥadṣināsī-i 'ulūm-i 'aqlī. Manābī-i 'čāpī-yi 'ulūm-i 'aqlī az ibtidā' tā 1375*, 3 vols. Tehran, 1379 [2000].

11 EI<sup>3</sup> = *Encyclopaedia of Islam*, THREE [EI Three]. Ed. by Marc Gaborieau et al. vol. 1 ff. Leiden, 2007ff.

#### *Lists and Catalogues of Manuscripts*

21 de Goeje, M.J., M. Th. Houtsma et al. *Catalogus codicum orientalium Bibliothecae Academiae Lugduno Batavae*, 6 vols. Leiden, 1851–1877.

22 *Fihrist al-kutub al-'arabiyya al-maḥfūza bi-l-Kutubḥāna al-Ḥidwīyya*, 7 vols. Cairo, 1301–1309 H [1883–1891].

23 de Slane, Le Baron. *Catalogue des manuscrits arabes de la Bibliothèque Nationale*, 3 vols. Paris, 1883–1895.

24 Derenbourg, Hartwig, É. Lévi-Provençal and H.P.J. Reinaud. *Les manuscrits arabes de l'Escurial*, 3 vols. Paris, 1884–1941. – Repr. Hildesheim, 1986.

25 Ahlwardt, Wilhelm. *Die Handschriften-Verzeichnisse der Königlichen Bibliothek zu Berlin. Verzeichnis der arabischen Handschriften*,

10 vols. Berlin, 1887–1899. – Repr. Hildesheim, 1980.

26 Pertsch, Wilhelm. *Verzeichniss der persischen Handschriften der Königlichen Bibliothek zu Berlin*. Berlin, 1888.

27 Rieu, Charles. *Supplement of the catalogue of the Arabic manuscripts in the British Museum*. London, 1894.

28 Krause, Max. "Stambuler Handschriften islamischer Mathematiker." In *Quellen und Studien zur Geschichte der Mathematik, Astronomie und Physik, Abteilung B*, vol. 3 (1936), 437–532. – Repr. in Fuat Sezgin (ed.), *Beiträge zur Erschließung der arabischen Handschriften in Istanbul und Anatolien*, vol. 2. Frankfurt a.M., 1986, 683–778.

29 Mahdawī, Yahyā. *Fihrist-i nushahā-yi muṣannafāt-i Ibn-i Sīnā*. Tehran, 1333 [1954].

30 Karatay, Fehmi Edhem. *Topkapı Serayı Müzesi Kütüphanesi Arapça Yazmalar Kataloğu*, 4 vols. Istanbul, 1962–1969). – Repr. Beirut, 1990.

31 Dānišpažūh, Muḥammad Taqī. *Fihrist mükürūfilmhā-yi kitābḥāna-yi markazī-yi wa-markaz-i asnād-i Dānišgāh-i Ṭihrān*, 3 vols. Tehran, 1348–1363 h.š. [1967–1984].

32 Anwār, 'Abdallāh. *Fihrist-i nusaḥ-i ḥaṭṭī-yi Kitābḥāna-yi Millī*, vol. 1 ff. (1343 ff./1964 ff.).

33 Širāzī, Ibn Yūsuf et al. *Fihrist-i Kitābḥāna-yi Maḡlis-i Šūrā-yi Millī, spāter: Fihrist-i asnād-i Kitābḥāna-yi Maḡlis-i Šūrā-yi Islāmī*, vol. 1 ff. Tehran, 1353 h.š. [1974ff.].

34 Šišīn, Ramaḍān [Ramazan Şeşen]. *Nawādir al-maḥṭūṭāt al-'arabiyya*

*fî maktabât Turkiyâ*, 2 vols. Beirut, 1975–1982.

35 Sellheim, Rudolf. *Verzeichnis der orientalischen Handschriften in Deutschland, Band xvii, Reihe A. Arabische Handschriften. Materialien zur arabischen*

*Literaturgeschichte. Teil 1*. Wiesbaden, 1976.

36 Voorhoeve, Petrus. *Handlist of Arabic Manuscripts in the Library of the University of Leiden and Other Collections in the Netherlands*. Den Haag, 1980 (2nd, extended edition).

37 Şeşen, Ramazan, Cevad İzgi, and Cemil Akpınar. *Fihris maḥṭūṭāt al-ṭibb al-İslāmī bi-l-lugāt al-ʿarabiyya wa-t-turkiyya wa-l-fārisiyya fî maktabât Turkiyâ / Catalogue of Islamic Medical Manuscripts (in Arabic, Turkish & Persian) in the Libraries of Turkey*. Ed. by E. İhsanoğlu. Istanbul, 1984.

38 Şeşen, Ramazan, Cevad İzgi, and Cemil Akpınar. *Fihris maḥṭūṭāt maktabat Küprülü / Catalogue of Manuscripts in the Köprülü Library*, 3 vols. Istanbul, 1406/1986.

39 Zaydān, Yūsuf. *Fihris maḥṭūṭāt baladiyyat al-İskandariyya*, 5 vols. Ed. by Muḥsin Muḥarram Zahrān. Alexandria, 1417–1423/1996–2001.

40 Şişin, Ramaḍān [Ramazan Şeşen]. *Muḥṭārāt min al-maḥṭūṭāt al-ʿarabiyya al-nādira min maktabât Turkiyâ*. Istanbul, 1997.

41 Karabulut, Ali Reza. *İstanbul ve Anadolu kütüphanelerinde mevcut el yazması eserler ansiklopedisi*, 3 vols. Kayseri, 2005.

42 Dirāyatī, Muṣṭafā. *Fihristwāra-yi dastnīwiṣṭhā-yi Īrān*, 12 vols. Tehran, 1389 h.š. [2010].

### *Lists of Works*

GAL [\*3: 506–508. S I 920–924]

Kaḥḥāla 1957–1961 [\*5: XI 79–80], ND 1993 [III 558–560 no. 15007].

al-Zarkān 1963 [\*78: 56–164].

Kholeif 1966 [\*108: 190–203].

Daiber 1999 [\*9: I 275f.].

Karabulut 2005 [\*41: III 1302–1306 no. 4306].

al-Alwānī 2010 [\*87: 119–227].

Dirāyatī 2010 [\*42: XI 856–858].

Altaş 2013 [\*89].

### *Introductions, Overviews*

53 Nasr, Seyyid Hossein. “Fakhr al-Dīn Rāzī.” In M.M. Sharif (ed.), *A History of Muslim Philosophy*, vol. 1. Wiesbaden, 1963–1966, 642–656.

54 Anawati, Georges C. “Fakhr al-Dīn al-Rāzī.” In EI<sup>2</sup> 1965 [\*4: 751–755].

55 Ulugağ, Süleyman. *Fahrettin Rāzî. Hayatı / Fikirleri / Eserleri*. Ankara, 1991.

56 Yavuz, Yūsuf Şevki. “Fahredden er-Rāzî.” In *Türkiye Diyanet Vakfı İslâm Ansiklopedisi*, vol. 12. Üsküdar, 1995, 89–95.

57 Celan, Yasi. *Theology and Tafsir in the Major Works of Fakhr al-Din al-Razi*. Kuala Lumpur, 1996.

58 Duğaym, Samih [Samih Dgheim]. *Mawsūʿat muṣṭalaḥāt al-Imām Faḥr al-Dīn al-Rāzī*. Beirut, 2000.

59 Arnaldez, Roger. *Fakhr al-Dīn al-Rāzī. Commentateur du Coran et philosophe*. Paris, 2002.

- 60 Shihadeh, Ayman. "From al-Ghazālī to al-Rāzī. 6th/12th century developments in Muslim philosophical theology." *Arabic Sciences and Philosophy* 15 (2005): 141–179.
- 61 Shihadeh, Ayman. *The Teleological Ethics of Fakhr al-Dīn al-Rāzī*. Leiden, 2006.
- 62 Griffel, Frank. *Al-Ghazālī's Philosophical Theology*. New York, 2009.
- 63 El-Rouayheb, Khaled. *Relational Syllogisms and the History of Arabic Logic* 900–1900. Leiden, 2010.
- 64 Nasr, Seyyid Hossein and Mehdi Aminrazavi (eds). *An Anthology of Philosophy in Persia, 11: Philosophical Theology in the Middle Ages and Beyond from Mu'tazilī and Ash'arī to Shī'ī Texts*. London, 2010.
- 65 Griffel, Frank. "Fakhr al-Din al-Razi." In *Encyclopedia of Medieval Philosophy. Philosophy between 500 and 1500*. Ed. by Henrik Lagerlund, 2 vols. Dordrecht, 2011, 665–672.
- 66 Jaffer, Tariq. *Rāzī. Master of Qur'ānic Interpretation and Theological Reasoning*. New York, 2015.
- 67 Griffel, Frank. *The Formation of Post-Classical Philosophy in Islam*. New York, 2021.
- 68 Janos, Damien and M. Fariduddin Attar. *A Comprehensive, Annotated, and Indexed Bibliography of the Modern Scholarship on Fakhr al-Dīn al-Rāzī (544/1150–606/1210)*. Leiden, Boston, 2023.
- Life and Works*
- 77 Qanawātī, Ğürğ [Georges Anawati]. "Faḥr al-Dīn al-Rāzī. Tamhīd li-dirāsāt ḥayātihi wa-mu'allafātihi." In *Ilā Tāhā Ḥusayn fi 'id milādihi al-sab'īn / Mélanges Taha Husayn*. Ed. by 'Abdarrahmān Badawī. Cairo, 1962, 193–234.
- 78 al-Zarkān, Muḥammad Ṣ. *Faḥr al-Dīn al-Rāzī wa-ārā'uḥu al-kalāmīyya wa-l-falsafīyya*. N. p. [Cairo], n. d. [1963].
- 79 Harawī, Māyil. *Šarḥ-i ḥāl wa-zindagī wa-munāẓarāt-i Imām Faḥr al-Dīn Rāzī*. N. p. [Kābul], 1343 H [1964].
- 80 'Irāqī, Aḥmad Ṭāhirī. "Zindagī-yi Faḥr-i Rāzī." *Ma'ārif* 3.1 (Tehran, 1365 h.š. [1986]): 5–28.
- 81 Fānī, Kāmīrān. "Fihrist-i atār-i čāpī-yi Imām Faḥr-i Rāzī." *Ma'ārif* 3.1 (Tehran, 1365 h.š. [1986]): 277–282.
- 82 Āl Dawūd, 'Alī. "Muqaddima" [Preface]. In *Faḥr al-Dīn al-Rāzī: Ġāmi' al-'ulūm* [\*24: 1–65].
- 83 Street, Tony. "Concerning the life and the works of Fakhr al-Dīn al-Razi." In *Islam. Essays on Scripture, Thought and Society. A Festschrift in honour of Anthony H. Johns*. Ed. by Peter G. Riddell and Tony Street. Leiden, 1997, 135–146.
- 84 Shihadeh, Ayman. "Introduction." In *Ḍiyā' al-Dīn al-Makkī: Nihāyat al-marām fi dirāyat al-kalām* [\*2: vii–xix].
- 85 Griffel, Frank. "On Fakhr al-Dīn al-Rāzī's life and the patronage he received." *Journal of Islamic Studies* 18 (Oxford 2007): 314–344.
- 86 Burqā'ī, Ḥusayn Riḍāwī. "Muqaddima-yi muṣaḥḥih" [Editor's preface]. In *Faḥr al-Dīn al-Rāzī: Ḥifẓ al-badan. Risāla-yi kuhan dar bāb-i bihdāšt-i tan*. Tehran, 1389 h.š. [2010], 13–74.
- 87 al-'Alwānī, Ṭāhā Ğābir. *al-Imām Faḥr al-Dīn al-Rāzī wa-muṣannaḥātuhū*. Cairo/Alexandria, 1421/2010.

- 88 Altaş, Eşref. "Fahredden er-Râzî'nin Hayatı, Hâmleri İlmî ve Siyasî İlişkileri." In *İslam düşüncesinin dönüşüm çağında Fahreddin er-Râzî*. Ed. by Ö. Türker and O. Demir. Istanbul, 2013, 41–90.
- 89 Altaş, Eşref. "Fahredden er-Râzî'nin eserlerinin kronolojisi." In *İslam düşüncesinin dönüşüm çağında Fahreddin er-Râzî*. Ed. by Ö. Türker and O. Demir. Istanbul, 2013, 91–164.

### *Individual Works and Topics*

- 100 Margoliouth, David Samuel. *Analecta orientalia ad poeticam Aristoteleam*. London, 1887. – Repr. Hildesheim, 2000.
- 101 Horten, Max. *Die philosophischen Ansichten von Râzî und Tusi (1209† und 1273†) mit einem Anhang: Die griechischen Philosophen in der Vorstellungswelt von Râzî und Tusi*. Bonn, 1910. – Repr. Frankfurt a.M., 2000.
- 102 Horten, Max. *Die spekulative und positive Theologie des Islam nach Razi (1209†) und ihre Kritik durch Tusi (1273†)*. Nach Originalquellen übersetzt und erläutert. Mit einem Anhang: Verzeichnis philosophischer Termini im Arabischen. Leipzig, 1912. – Repr. Hildesheim, 1967, Frankfurt a.M., 2000.
- 103 Plessner, Martin. *Der OIKONOMIKOS des Neupythagoreers 'Bryson' und sein Einfluss auf die islamische Wissenschaft*. Heidelberg, 1928.
- 104 Kraus, Paul. "Les 'Controverses' de Fakhr al-Dîn Râzî." *Bulletin de l'Institut d'Égypte* 19 (1937): 187–214. – Repr. in P. Kraus, *Alchimie, Ketzerei, Apokryphen im frühen Islam. Gesammelte Aufsätze*. Ed. by Rémi Brague. Hildesheim, 1994, 191–218.
- 105 Kraus, Paul. "The 'Controversies' of Fakhr al-Dîn al-Râzî." *Islamic Culture* 12 (Hyderabad 1938): 131–153.
- 106 Gardet, Louis and M.M. [Georges C.] Anawati. *Introduction à la théologie musulmane. Essai de théologie comparée*. Paris, 1948 (further editions 1970, 1981, 2013).
- 107 Tritton, A.S. Review of Faḥr al-Dîn al-Râzî, *Muḥaṣṣal* Cairo, 1323 [1905–1906]. *Oriens* 18–19 (1965–1966), 335–346.
- 108 Kholeif, Fathalla [Faṭḥallāh Ḥulayf]. *A Study on Fakhr al-Dîn al-Râzî and His Controversies in Transoxiana*. Beirut, 1966, 1987 (2nd ed.). – Repr. Tehran, 1364/1406 [1985].
- 109 Falaturi, A. Ġawād [Abdoldjavad]. "Fakhr al-Din al-Razi's critical logic." In *Yādnāma-yi Īrānī-yi Mīnūrskī* [Minorsky]. Ed. by Muğtabā Minūwī [Mojtaba Minovi], Īrağ Afšār [Iraj Afshar]. Tehran, 1348/1969, 51–79.
- 110 Jomier, Jacques. "Les Mafatih al-ghayb de l'imam Fakhr al-Din al-Razi: quelques dates, lieux, manuscripts." *Mélanges de l'Institut Dominicain d'Études Orientales* 13 (1977): 253–290.
- 111 Gramlich, Richard. "Fakhr ad-Din ar-Razis Kommentar zu Sure 18,9–12." *Asiatische Studien* 33 (Zurich, 1979): 99–152.
- 112 Badawī, 'Abd al-Raḥmān. *Mu'allafāt Ibn Ḥaldūn*. Tripoli, Tūnis, 1399/1979 (2nd ed.).
- 113 Gimaret, Daniel. *Théories de l'acte humain en théologie musulmane*. Paris, 1980.
- 114 Baffioni, Carmela. *Atomismo e anti-atomismo nel pensiero islamico*. Naples, 1982.

- 115 Pūrğawādī, Naṣrallāh [Nasrollah Pourjavady]. "Rābiṭa-yi Faḥr-i Rāzī bā mašāyih ṣūfiyya." *Ma'ārif* 3.1 (Tehran, 1365 h.š. [1986]): 29–80.
- 116 Brentjes, Sonja. "Das Kapitel 'ilm al-aṭimāṭiqī aus der persischen Wissenschafts-Enzyklopädie von Faḥr ad-Dīn ar-Rāzī. Edition, Übersetzung und Kommentar." *Persica* 13 (1988–1989): 77–105.
- 117 Abrahamov, Binyamin. "Fakhr al-Dīn al-Rāzī on God's Knowledge of the Particulars." *Oriens* 33 (1992): 133–155.
- 118 Marmura, Michael E. "Fakhr al-Dīn al-Rāzī's critique of an Avicennan Tanbih." In *Historia philosophiae Medii Aevi: Studien zur Geschichte der Philosophie des Mittelalters*. Ed. by B. Mojsisich and O. Pluta. Amsterdam, 1992, 627–637.
- 119 Heer, Nicholas. "Al-Rāzī and al-Tūsī on Ibn Sina's theory of emanation." In *Neoplatonism and Islamic Thought*. Ed. by Parviz Morewedge. Albany, N.Y., 1992, 111–125.
- 120 Lagarde, Michel. *L'index du Grand Commentaire du Faḥr al-Dīn al-Rāzī*. Leiden, 1996.
- 121 Abrahamov, Binyamin. "Fakhr al-Dīn al-Rāzī's philosophical justification of visiting tombs." *Al-Masāq* 11 (1999): 109–120.
- 122 Pūrğawādī, Riḍā [Reza Pourjavady]. "Risāla-yi tadbīr-i manzil dar Ġāmi' al-ʿulūm-i Faḥr-i Rāzī." *Ma'ārif* 17.1 (Tehran, 1379 h.š. [2000]): 23–44.
- 123 Abrahamov, Binyamin. "Religion versus philosophy. The case of Faḥr al-Dīn al-Rāzī's proof for prophecy." *Oriente Moderno* 80 (2000): 415–425.
- 124 Pūrğawādī, Naṣrallāh [Nasrollah Pourjavady]. "Manzūma-yi mantiq wa-falsafa az Imam Faḥr-i Rāzī." *Ma'ārif* 17.3 (Tehran, 1379 h.š. [2001]): 3–16.
- 125 İskenderoğlu, Muammer. *Fakhr al-Dīn al-Rāzī and Thomas Aquinas on the Question of the Eternity of the World*. (Leiden 2000).
- 126 Pūrğawādī, Naṣrallāh [Nasrollah Pourjavady]. *Du Muğaddid. Pażūhiṣhā-yi dar bāra-yi Muḥammad-i Ġazālī wa Faḥr-i Rāzī / Two Renewers of Faith. Studies on Muhammad-i Ghazzālī and Fakhr al-Dīn al-Rāzī*. Tehran, 2002.
- 127 Abrahamov, Binyamin. "Fakhr al-Dīn al-Rāzī on the knowability of God's essence and attributes." *Arabica* 49 (2002): 204–230.
- 128 Biesterfeldt, Hans Hinrich. "Arabisch-islamische Enzyklopädien. Formen und Funktionen." In *Die Enzyklopädie im Wandel vom Hochmittelalter bis zur Frühen Neuzeit*. Ed. by C. Meier. München, 2002, 43–83.
- 129 Mayer, Toby. "Faḥr ad-Dīn ar-Rāzī's critique of Ibn Sina's argument for the unity of God in the Iṣārāt and Naṣīr ad-Dīn aṭ-Ṭūsī's defense." In *Before and After Avicenna. Proceedings of the First Conference of the Avicenna Study Group*. Ed. by D.C. Reisman and Ahmed H. al-Rahim. Leiden, 2003, 199–218.
- 130 Griffel, Frank. "Al-Ġazālī's concept of prophecy. The introduction of Avicennan psychology into Aṣʿarite theology." *Arabic Sciences and Philosophy* 14 (2004): 101–144.
- 131 Griffel, Frank. "Taqlīd of the philosophers. Al-Ghazālī's initial accusation

in the Tahāfut." In *Ideas, Images, and Methods of Portrayal. Insights into Arabic Literature and Islam*. Ed. by Sebastian Günther. Leiden, 2005, 273–296.

132 Street, Tony. "Fahraddin ar-Razi's critique of Avicennan logic." In *Logik und Theologie. Das Organon im arabischen und lateinischen Mittelalter*. Ed. by D. Perler and U. Rudolph. Leiden, 2005, 101–116.

133 Tribuzio, Laura. "The Avicennian Tradition and Sound: A Treatise on Musical Science from *Jāmiʿ al-ʿulūm* by Faḥr al-Dīn al-Rāzī." *Eurasian Studies* 4 (2005): 265–98.

134 Setia, Adi. "Atomism versus hylo-morphism in the kalam of Fakhr al-Dīn al-Rāzī. A preliminary survey of the Matalib al-ʿAliyyah." *Islam and Science* 4 (2006): 113–140.

135 Eichner, Heidrun. "Dissolving the unity of metaphysics. From Fakhr al-Dīn al-Rāzī to Mullā Sadrā al-Shīrāzī." *Medioevo* 32 (2007): 139–197.

136 Shihadeh, Ayman. "The mystic and the sceptic in Fakhr al-Dīn al-Rāzī." In *Sufism and Theology*. Ed. by A. Shihadeh. Edinburgh, 2007, 101–122.

137 Lagarde, Michel. *Les secrets de l'invisible: essai sur le Grand commentaire de Fahr al-Dīn al-Rāzī (1149–1209)*. Beyrouth, 2008.

138 Janssens, Jules. "Ibn Sina's impact on Faḥr al-Dīn ar-Rāzī's 'Mabāḥith al-Mašriqiyya', with particular regard to the section entitled 'al-Ilāhiyyāt al-maḥḍa'. An essay of critical evaluation." *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010): 259–285.

139 Griffel, Frank. "Between al-Ghazālī and Abū l-Barakāt al-Baghdādī. The

dialectical turn in the philosophy of Iraq and Iran during the 6th/12th century." In *In the Age of Averroes. Arabic Philosophy in the Sixth/Twelfth Century*. Ed. by Peter Adamson. London, 2011, 45–75.

140 Vesel, Živa. "Le *Sirr al-maktūm* de Fakhr al-Dīn al-Rāzī (m. 606H/1210) face à la *Ghāyat al-ḥakīm*." In *Images et magie: Picatrix entre Orient et Occident*. Ed. by Jean-Patrice Boudet, Anna Caiozzo and Nicolas Weill-Parot. Paris, 2011, 77–94.

141 Ibrahim, Bilal. *Freeing philosophy from metaphysics. Fakhr al-Dīn al-Rāzī's philosophical approach to the study of natural phenomena*. PhD Diss. McGill University, Montreal, 2012.

142 Wisnovsky, Robert. "Avicennism and exegetical practice in the early commentaries on the *Ishārāt*." *Oriens* 41 (2013): 349–378.

143 Ibrahim, Bilal. "Faḥr al-Dīn ar-Rāzī, Ibn al-Hayṭam and Aristotelian science. Essentialism versus phenomenism in post-classical Islamic thought." *Oriens* 41 (2013): 379–431.

144 Rustom, Mohammed. "Ibn ʿArabī's Letter to Fakhr al-Dīn al-Rāzī: A Study and Translation." *Journal of Islamic Studies* 25 (2014): 113–37.

145 Shihadeh, Ayman. "Fakhr al-Dīn al-Rāzī's response to Sharaf al-Dīn al-Masʿūdī's critical commentary on Avicenna's *Ishārāt*." *Muslim World* 104 (2014): 1–61.

146 Shihadeh, Ayman. "Avicenna's corporeal form and proof of prime matter in twelfth-century critical philosophy. Abū l-Barakāt, al-Masʿūdī and al-Rāzī." *Oriens* 42 (2014): 364–396.

147 Altaş, Eşref. "Fakhr al-Dīn al-Rāzī's Epistle on al-Hayūlā waʿal-sūrah. A study

and editio princeps." *Nazariyat* 1 (2014): 61–107.

148 Dhanani, Alnoor. "The impact of Ibn Sīnā's critique of atomism on subsequent kalām discussions of atomism." *Arabic Sciences and Philosophy* 25 (2015): 79–104.

149 Griffel, Frank. "Al-Ghazālī at his most rationalist. The universal rule for allegorically interpreting revelation (al-Qānūn al-kullī fi l-ta'wīl)." In *Islam and Rationality. The Impact of al-Ghazālī*. Ed. by Georges Tamer, vol. 1. Leiden, 2015, 89–120.

150 İskenderoğlu, Muammer. "Fakhr al-Dīn al-Rāzī and Ibn 'Arabī on the Ways to Knowledge of God: Unveiling or Reflection and Reasoning." In *The Character of Christian-Muslim Encounter: Essays in Honor of David Thomas*. Ed. by Douglas Pratt, Jon Hoover, John Davies and John Chesworth. Leiden, 2015, 111–25.

151 Janos, Damien. "Intuition, intellection, and mystical knowledge. Delineating Fakhr al-Dīn al-Rāzī's cognitive theories." In *Islam and Rationality. The Impact of al-Ghazālī*. Ed. by Frank Griffel, vol. 2. Leiden, 2015, 189–228.

152 Knobel, Franziska. "Faḥr al-Dīn al-Rāzī, 'Al-Mantīq al-kabīr' (ms Aḥmad III, no. 3401, Jahr 1268 n.Chr.). Über den Nutzen der Dialektik." *Oriens* 43 (2015): 414–432.

153 Altaş, Eşref. "An analysis and editio princeps of Fakhr al-Dīn al-Rāzī's Risālah: Al-Jawhar al-fard." *Nazariyat* 2 (2015): 77–178.

154 Erlwein, Hannah C. "Proving God's Existence? A Reassessment of al-Rāzī's Arguments for the Existence of the

Creator." *Journal of Qur'anic Studies* 19 (2017): 31–63.

155 Shihadeh, Ayman. "Al-Rāzī's (d. 1210) commentary on Avicenna's Pointers. The confluence of exegesis and aporetics." In *The Oxford Handbook of Islamic Philosophy*. Ed. by Khaled El-Rouayheb and Sabine Schmidtke. Oxford, 2017, 286–325.

156 Benevich, Fedor. "The essence-existence distinction. Four elements of the post-Avicennian metaphysical dispute (11–13th centuries)." *Oriens* 45 (2017): 203–258.

157 Adamson, Peter. "Fakhr al-Dīn al-Rāzī on place." *Arabic Sciences and Philosophy* 27 (2017): 205–236.

158 Adamson, Peter. "The existence of time in Faḥr al-Dīn al-Rāzī's al-Maṭālib al-'āliya." In *The Arabic, Hebrew and Latin Reception of Avicenna's Physics and Cosmology*. Ed. by Dag N. Hasse and Amos Bertolacci. Berlin, 2018, 65–99.

159 Adamson, Peter. "Fakhr al-Dīn al-Rāzī on void." In *Islamic Philosophy from the 12th to the 14th Century*. Ed. by Abdelkader Al Ghouz. Bonn, Göttingen, 2018, 307–324.

160 Griffel, Frank. "Was Fakhr al-Dīn al-Rāzī an Averroist after all? On the double-truth theory in medieval Latin and Islamic thought." In *Studying the Near and Middle East at the Institute for Advanced Study, Princeton, 1935–2018*. Ed. by Sabine Schmidtke. Piscataway, NJ, 2018, 205–216.

161 Noble, Michael. "Fakhr al-Dīn al-Rāzī and Occult Science as Philosophy: An Aspect of the Philosophical Theology of Islam at the



- Beginning of the Thirteenth Century.” *Annals of Japan Association for Middle East Studies* 34 (2018): 1–33.
- 162 Jacobsen Ben Hammed, Nora. *Knowledge and Felicity of the Soul in Fakhr al-Dīn al-Rāzī*. PhD Diss. University of Chicago, 2018.
- 163 Shihadeh, Ayman. “Avicenna’s theodicy and al-Rāzī’s anti-theodicy.” *Intellectual History of the Islamicate World* 7 (2019): 61–84.
- 164 Benevich, Fedor. “God’s knowledge of particulars. Avicenna, kalām, and the post-Avicennian synthesis.” *Recherches de Théologie et Philosophie Médiévales* 86 (2019): 1–47.
- 165 Adamson, Peter and Andreas Lammer. “Fakhr al-Dīn al-Rāzī’s Platonist account of the essence of time.” In *Philosophical Theology in Islam. Later Ash’arism East and West*. Ed. by Ayman Shihadeh and Jan Thiele. Leiden, Boston, 2020, 95–122.
- 166 Benevich, Fedor. “The necessary existent (‘wājib al-wujūd’). From Avicenna to Fakhr al-Dīn al-Rāzī.” In *Philosophical Theology in Islam. Later Ash’arism East and West*. Ed. by Ayman Shihadeh and Jan Thiele. Leiden, Boston, 2020, 123–155.
- 167 Jacobsen Ben Hammed, Nora. “Meno’s Paradox and First Principles in Fakhr al-Dīn al-Rāzī.” *Oriens* 48 (2020): 320–44.
- 168 Hassan, Laura. *Ash’arism Encounters Avicennism: Sayf al-Dīn al-Āmidī on Creation*. Piscataway N.J., 2020.
- 169 Jaffer, Tariq. “Fakhr al-Dīn al-Rāzī’s Taxonomy of Extraordinary Acts.” In *Light upon Light: Essays in Islamic Thought and History in Honor of Gerhard Böwering*. Ed. by Jamal J. Elias and Bilal Orfali. Leiden; Boston, 2020, 347–65.
- 170 Steinfels, Amina M. “Knowledge on Display. Fakhr al-Dīn al-Rāzī’s Universal Compendium.” In *Light upon Light: Essays in Islamic Thought and History in Honor of Gerhard Böwering*. Ed. by Jamal J. Elias and Bilal Orfali. Leiden; Boston, 2020, 335–346.
- 171 Altaş, Eşref. “In Pursuit of the Lost Volumes of *al-Maṭālib al-‘āliya*.” *Nazariyat* 6 (2) (2020): 169–82.
- 172 Noble, Michael. “Sabian Astral Magic as Soteriology in Fakhr al-Dīn al-Rāzī’s *al-Sirr al-maktūm*.” In *Islamicate Occult Sciences in Theory and Practice*. Ed. by Liana Saif, Francesca Leoni, Matthew Melvin-Koushki, and Farouk Yahya. Leiden; Boston, 2020, 207–229.
- 173 Shihadeh, Ayman. “Al-Rāzī’s earliest kalām work.” In *Philosophical Theology in Islam. Later Ash’arism East and West*. Ed. by Ayman Shihadeh and Jan Thiele. Leiden, Boston, 2020, 36–70.
- 174 Griffel, Frank. “The place of virtue ethics within the post-classical discourse on ḥikma. Fakhr al-Dīn al-Rāzī’s *al-Nafs wa-l-rūḥ wa-sharḥ quwāhumā*.” *Journal of Arabic and Islamic Studies* 21 (2021): 55–80.
- 175 Noble, Michael Sebastian. *Philosophising the Occult. Avicennan Psychology and ‘The Hidden Secret’ of Fakhr al-Dīn al-Rāzī*. Berlin, Boston, 2021.
- 176 Hassan, Laura. “In Pursuit of the World’s Creator: Fakhr al-Dīn al-Rāzī’s Discussions of the Origins of the Universe in *al-Maṭālib al-‘āliya*.” *Res Philosophica* 98 (2021): 233–59.

### *Influence*

- 195 van Ess, Josef. *Die Erkenntnislehre des 'Aḥudaddīn al-Īcī. Übersetzung und Kommentar des 1. Buches seiner Mawāqif*. Wiesbaden, 1966.
- 196 Jomier, Jacques. "Qui a commenté l'ensemble des sourates al-'Ankabūt à Yāsīn (29–36) dans «Le Tafsīr al-kabīr» de l'Imām Fakhr al-Dīn al-Rāzī." *International Journal of Middle East Studies* 11 (1980) 467–485.
- 197 Heer, Nicholas. "The priority of reason in the interpretation of scripture. Ibn Taymiyya and the Mutakallimun." In *The Literary Heritage of Classical Islam. Arabic and Islamic Studies in Honor of James A. Bellamy*. Ed. by M. Mir. Princeton, 1993, 181–195.
- 198 Robinson, Francis. "Ottomans-Safavids-Mughals. Shared knowledge and connective systems." *Journal of Islamic Studies* 8 (1997): 151–184.
- 199 Aydın, Ömer. "Kalam between tradition and change. The emphasis on understanding classical Islamic theology in relation to Western intellectual effects." In *Change and Essence. Dialectical Relations between Change and Continuity in the Turkish Intellectual Tradition*. Ed. by S. Gunduz and C.S. Yaran. Washington, 2005, 102–121.
- 200 Endress, Gerhard. "Reading Avicenna in the madrasa. Intellectual genealogies and chains of transmission of philosophy and the sciences in the Islamic east." In *Arabic Theology, Arabic Philosophy. From the Many to the One. Essays in celebration of Richard M. Frank*. Ed. by James E. Montgomery. Leuven, 2006, 372–422.
- 201 Hoover, Jon. *Ibn Taymiyya's Theodicy of Perpetual Optimism*. Leiden, 2007.
- 202 Marlow, Louise. "A thirteenth-century scholar in the eastern Mediterranean. Sirāj al-Dīn Urmavī, jurist, logician, diplomat." *Al-Masāq* 22 (2010): 279–313.
- 203 El-Rouayheb, Khaled. "Introduction" in *Afḍal al-Dīn al-Hūnaḡī. Kaṣf al-asrār 'an ḡawāmiḡ al-afkār*. Ed. by Kh. El-Rouayheb. Berlin/Tehran, 2010, iii–lix.
- 204 Langermann, Y. Tzvi. "The naturalization of science in Ibn Qayyim al-Ḡawziyyah's Kitāb al-Rūḡ." *Oriente Moderno* 90 (2010): 211–228.
- 205 Eichner, Heidrun. *The post-Avicennian philosophical tradition and Islamic orthodoxy. Philosophical and theological Summae in context*. Professorial diss., Universität Halle-Wittenberg, 2009.
- 206 Wisnovsky, Robert. "Towards a genealogy of Avicennism." *Oriens* 42 (2014): 323–363.
- 207 Hoover, Jon. "Ibn Taymiyya's use of Ibn Rushd to refute the incorporealism of Fakhr al-Dīn al-Rāzī." In *Islamic Philosophy from the 12th to the 14th Century*. Ed. by Abdelkader Al Ghouz. Bonn, Göttingen, 2018, 469–491.
- 208 Bonmariage, Cécile. "Ṣadrā's Use of Fakhr al-Dīn al-Rāzī's *al-Mabāḡith al-mashriḡiyya* in the *Asfār*." *Oriens* 48 (2020): 188–218.

# The Philosophical Tradition of the Syriac Christians (5th/11th and 6th/12th Centuries)

Hans Daiber

1 Primary Sources – 2 Jacobite Authors – 3 Nestorian Authors – 4 Secondary Literature

## 1 Primary Sources

1 Aristotle. *Meteorology* (Compendium, Arab. and Ger.). – Hans Daiber, *Ein Kompendium der aristotelischen Meteorologie in der Fassung des Ḥunain Ibn Ishāq*. Amsterdam, Oxford, 1975.

2 Pseudo-Aristotle. *De mundo* (ed. and Syr. transl. by Sergius von Rešʿainā). In Paul de Lagarde, *Analecta Syriaca*. Leipzig, 1858, repr. Osnabrück, 1967, 134–158. – Repr. in Daiber 2021–2023 [\*36: I 176–288].

3 Theophrastus. *Meteorology* (Syr., Arab. and Engl.). – H. Daiber, “The Meteorology of Theophrastus in Syriac and Arabic Translation.” In *Theophrastus. His psychological, doxographical, and scientific writings*. Ed. by William W. Fortenbaugh, Dimitri Gutas. New Brunswick, London, 1992, 166–293. – Repr. in Daiber 2021–2023 [\*36: V 308–418].

4 Nicolaus Damascenus. *Philosophy of Aristotle* (partial edition and transl.). – H.J. Drossaart Lulofs, *Nicolaus Damascenus on the Philosophy of Aristotle*. Leiden, 1969.

5 *Patrologia Graeca* = *Patrologiae cursus completus, seu, Bibliotheca universalis, integra, uniformis, commoda, oeconomica, omnium SS. Patrum, doctorum scriptorumque ecclesiasticorum. Series Graeca*, 161 vols. Ed. by Jacques-Paul Migne. Paris, 1857–1866.

6 Plotinus (Works, Arab. and Engl.). – *Plotini opera*, vol 2: *Plotiniana arabica ad codicum fidem anglice vertit G. Lewis*. Ed. by Ed. by P. Henry, H.-R. Schwyzer. Paris, Brussels, 1959.

7 Nemesios of Emesa. *De natura hominis*. Ed. by Moreno Morani. Leipzig, 1987.

8 Proclus. *Elementatio theologica* – Proclus. *The Elements of Theology. A revised text with translation, introduction and commentary*. Ed. by Eric Robertson Dodds. Oxford, 1963 (2nd ed.).

9 Moses Bar Kepha. *Buch über die Seele* (Germ. transl.). – Oskar Braun, *Moses Bar Kepha und sein Buch von der Seele*. Freiburg i.Br., 1891.

10 Moses Bar Kepha. *Commentary on the Hexaemeron* (Germ. transl.). – Lorenz Schlimme, *Der Hexaemeronkommentar*

des Moses Bar Kepha. *Einleitung, Übersetzung und Untersuchungen*, 2 vols. Wiesbaden, 1977.

11 al-Ḥwārizmī. *Mafātīḥ al-ʿulūm*. Ed. by Gerlof van Vloten. Lugduni Batavorum (=Leiden), 1895.

12 Ibn Sīnā. *Kitāb al-Išārāt wa-l-tanbīhāt*. Ed. by Sulaimān Dunyā, 4 vols. Cairo, 1968–1971 (2nd ed.).

13 al-Bīrūnī. *Kitāb al-Taḥfīm li-awāʾil šināʿat al-tanǧīm*. Ed. and transl. by R. Ramsay Wright, *The Book of Instruction in the Elements of the Art of Astrology*, London, 1934.

14 al-Ġazālī. *Iḥyāʾ ʿulūm al-dīn*. Ed. by ʿAbdallāh al-Ḥālīdī, 5 vols. Beirut, 1998.

15 al-Ġazālī. *Maqāṣid al-falāsifa*. Ed. by Sulaimān Dunyā. Cairo, 1960.

16 Abū l-Barakāt al-Baġdādī. *Kitāb al-Muʿtabar*, 3 vols. Hyderabad, 1357–1358 (1938–1939). – Repr. Isfahan, 1415 H. (1994), Jubayl, Paris, 2012.

17 Bar Zoʿbī. *Grammar*. Section on punctuation. Ed. by P. Martin, *Traité sur l'accentuation chez les Syriens orientaux*, Paris 1877. – Special reprint from *Actes de la Société philologique* VII, no. 1.

18 Bar Zoʿbī. “The distinction between nature and hypostasis, and between “person” (prosopon, paršōpā) and face (appē).” Ed. and transl. by Giuseppe Furlani, “Yohannān Bar Zoʿbī sulla differenza tra natura, ipostasi, persona e faccia.” *Rivista degli Studi Orientali* 12 (1929–30): 272–285.

19 Faḥr al-Dīn al-Rāzī. *Kitāb al-Mabāḥiṭ al-mašriqīyya*. Hyderabad, 1343/1924–5.

20 Bar Šakkō. *Dialogues: Grammar*. Ed. by Adalbert Merx, *Historia artis grammaticae apud Syros*. Leipzig, 1889.

21 Bar Šakkō. *Dialogues: Logic*. Partial editions and translations. Book II, Memrā 1, Prologue, Beginning (ed. and transl.), cf. Ruska 1897 [\*42] 146–147. – Book II, Memrā 1, Questions 7–18 (ed. and transl.), cf. Baumstark 1900 [\*11] 25,16–33 (Syr. text), 202, ante-penult. – 210,16 (transl.). – Book II, Memrā 1, Question 20 (ed. and transl.), cf. Baumstark 1900 [\*11] 20, 10–27 (Syr. text.), 197 (transl.). – Ital. transl. of the entire text with notes: Giuseppe Furlani, “La logica nei Dialoghi di Severo bar Šakkō.” *Atti del Reale Istituto Veneto di Scienze, Lettere ed Arti* 86/2 (Venice 1926–7): 289–348.

22 Bar Šakkō. *Dialogues: Philosophy*. Partial editions and translations. 1. Introduction. Ed. by Ruska 1897 [\*42] 147–148. – 2. Book II, Memrā 2 a, Questions 1 and 5. Ed. by Baumstark 1900 [\*11] 15,20–20,9 (Syr. text), 192–197,14 (transl.). – 3. Book II, Memrā 2 a, (unnumbered) Question. Ed. by Baumstark 1900 [\*11] 25,16–20 (Syr. text.), 202,16–26 (transl.). – 4. Book II, Memrā 2 a, Question 8. Ed. by G. Furlani, “Contributi alla storia della filosofia greca in oriente. Testi siriaci. III: Frammenti di una versione siriana del commento di Pseudo-Olimpidodoro alle Categorie d'Aristotele.” *Rivista degli Studi Orientali* 7 (1916–18): 131–163. 148–150. – Edition with Germ. transl. and commentary by Ruska 1897 [\*42: 149–151].

23 Bar Šakkō. *Dialogues: Physics*. Partial editions and translations. – Question 6, ed. and transl. by Ruska 1897 [\*42: 155–157]. – Question 19, ed. and transl. by Ruska 1897 [\*42: 157–160].

- 24 Bar Šakkō. *Dialogues: Poetics*. Questions 1–11, Syriac with French transl. by Jean Pierre Paul Martin, “De la métrique chez les Syriens.” *Abhandlungen für die Kunde des Morgenlandes* VII/2 (Leipzig, 1879): 8–67.
- 25 Bar Šakkō. *Dialogues: Poetics*. Questions 12–20 (ult.), Syriac with Engl. transl. of Questions 12–13 by Martin Sprengling, “Severus Bar Shakko’s Poetics, Part II.” *American Journal of Semitic Languages and Literatures* 32 (1915): 293–308.
- 26 Bar Šakkō. *Dialogues: Quadrivium*. Ed. and transl. by Julius Ruska *Das Quadrivium aus Severus Bar Šakkū’s Buch der Dialoge* (Ph. D. Dissertation), Heidelberg, Leipzig 1896. – Questions 1, 3, and 4 (Syr. text p. 7,10–8,5, 10,18–14,11) also ed. by Baumstark 1900 [\*11: 23,15–25,15] (Syr. text), transl. 200,15–202,15.
- 27 Našīr al-Dīn al-Ṭūsī. *Ahlāq-i Nāširī*. Ed. by Muğtabā Mīnuwī, ‘Aliridā Ḥaydarī (Tehran, 1356/1937). – Arab transl. ed. by Joep Lameer, *The Arabic Version of Tusi’s Nasirean Ethics*, Leiden 2015. – Engl. transl. by George Michael Wickens, *The Nasirean Ethics by Našīr ad-Dīn Ṭūsī*. London, 1964.
- 28 Ibn Ḥallikān. *Wafayāt al-a’yān*, 5 vols. Ed. by Iḥsān ‘Abbās. Beirut, n. d.
- 29 Bar Hebraeus. *Butyrum sapientiae* (*De anima*. Excerpts). Ed. and summarised by G. Furlani, “La psicologia di Barhebreo secondo il libro La Crema della Sapienza.” *Rivista degli Studi Orientali* 13 (1931): 24–52.
- 30 Bar Hebraeus. *Butyrum sapientiae. De plantis*. Ed. and Engl. transl. by Hendrik Joan Drossaart Lulofs, in H.J. Drossaart Lulofs, E.L.J. Poortman, *Nicolaus Damascenus, De plantis. Five Translations*. Amsterdam, Oxford, New York, 1989, 56–113.
- 31 Bar Hebraeus. *Butyrum sapientiae. Ethics, Economy, and Politics*. Ed. and Engl. transl. by N. Peter Joosse, *A Syriac Encyclopaedia of Aristotelian Philosophy. Barhebraeus (13th c.), Butyrum sapientiae, Books of Ethics, Economy and Politics. A critical edition, with introduction, translation, commentary and glossaries*. Leiden, Boston, 2004.
- 32 Bar Hebraeus. *Butyrum sapientiae. Meteorology, Mineralogy*. Ed. and Engl. transl. by Hidemi Takahashi, *Aristotelian Meteorology in Syriac. Barhebraeus, Butyrum sapientiae, Books of Mineralogy and Meteorology*. Leiden, Boston, 2004.
- 33 Bar Hebraeus. *Butyrum sapientiae. Poetics*. Ed. by David Samuel Margoliouth, *Analecta orientalia ad Poeticam Aristoteleam*. London, 1887, repr. Hildesheim, 2000, 114–139.
- 34 Barhebraeus. *Butyrum sapientiae. Rhetoric*. Ed. and Engl. transl. by John W. Watt, with the assistance of Daniel Isaac, Julian Faultless, Ayman Shihadeh, *Aristotelian Rhetoric in Syriac*. Leiden, Boston, 2005.

- 35 Bar Hebraeus. *Candelabrum sanctuarii*. Base I–II. Ed. and French transl. by Ján Bakoš, “Le candélabre des sanctuaires.” *Patrologia Orientalis* 22/4 (Paris, 1930): 491–628; 24/3 (1933): 297–439.
- 36 Bar Hebraeus. *Candelabrum sanctuarii*. Base VIII. Ed. and French transl. by Ján Bakoš, *Psychologie de Grégoire Aboulfaradj dit Barhebraeus*. Leiden, 1948.
- 37 Bar Hebraeus. *Chronicon ecclesiasticum*. Ed. and Lat. transl. by Joannes Baptista Abbeloos, Thomas Josephus Lamy. Louvain, 1872. – Engl. transl. and reprint by David Wilmschurst, *The Ecclesiastical Chronicle*. Piscataway, NJ, 2016.
- 38 Bar Hebraeus. *Kṭābā da-swād softyā*. Ed. and French transl. by Herman F. Janssens, *L’entretien de la sagesse*, Liège, Paris, 1937.
- 39 Bar Hebraeus. *Kṭābā d-bāḥātā*. Ed. and partial Germ. transl. by Curt Steyer, *Buch der Pupillen von Gregor Bar Hebraeus* (Ph. D. Diss.), Leipzig 1908. – Herman F. Janssens, “Barhebraeus’ Book of the pupils of the eye.” *The American Journal of Semitic Languages and Literatures* 47 (1930–1931): 26–49. 94–134; 48 (1932): 209–263; 52 (1935–1936): 1–21.
- 40 Bar Hebraeus. *Kṭābā d-huddāyē*. Ed. by Y.Y. Çiçek. Glane/Losser, 1986.
- 41 Bar Hebraeus. *Kṭābā d-ṭīqon*. Ed. by Paulus Bedjan. Paris, Leipzig, 1898. Photomechanical repr. of an MS copy: Glane/Losser, Holland, 1985. – New ed. with Engl. transl. of Memrā 1 by Herman G.B. Teule, *Gregory Barhebraeus, Ethicon. Memrā 1*. Lovanii, 1993 [*Corpus Scriptorum Christianorum Orientalium* 534.535 = *Scriptores Syri* 218.219]. – Partial Engl. transl. by A.J. Wensinck, *Bar Hebraeus’s Book of the Dove, Together with Some Chapters from His Ethikon*. Leiden, 1919, 85–117.
- 42 Bar Hebraeus. *Kṭābā d-yaunā*. Engl. transl. by A.J. Wensinck, *Bar Hebraeus’s Book of the Dove, Together with Some Chapters from His Ethikon*. Leiden, 1919, 1–81. – Ed. Yuliyos Yesu‘ Çiçek. Glane, 1983.
- 43 Bar Hebraeus. *Muḥtaṣar fī ‘ilm al-naḥs al-insāniyya*. Ed. by Paul Sbath. Miṣr (Cairo), 1928.
- 44 Bar Hebraeus. *Maqāla muḥtaṣara fī ‘ilm al-naḥs*. Ed. by Louis Cheikho. In *Traité inédits d’anciens philosophes arabes*. Beirut, 1911 (2nd ed.), repr. Frankfurt a. M., 1974, Cairo 1985, 76–102.
- 45 ‘Aḥdīšō‘ Bar Berikā. *Carmen Ebedjesu Metropolitae Sobae et Armeniae continens catalogum librorum omnium Ecclesiasticorum*. In Assemanus, *Bibliotheca Orientalis* [\*47: III/1 (1728/1975) 1–362]. – Partial Engl. transl. in George Percy Badger, *The Nestorians and their Rituals*, vol. 2. London 1852, repr. 1957, 361–379.
- 46 ‘Aḥdīšō‘ Bar Berikā. *Kṭābā d-Margānītā*. Ed. and Lat. transl. by Angelo Mai, *Scriptorum veterum nova collectio e vaticanis codicibus edita* 10/2. Rome, 1838, 317–366. – Engl. transl. in Badger 1852 [\*45: II 380–422].
- 47 Assemani, Joseph. *Bibliotheca Orientalis Clementino-Vaticana*. Avec une postface par Joseph-Marie Sauget, 3 vols. Hildesheim, New York, 1975 (repr. of the edition Rome, 1719, 1721, 1728).

## 2 Jacobite Authors

2.1 Mošeh Bar Kepha – 2.2 Dionysius Jacob Bar Šalībī – 2.3 Ya'qōb/Severus Bar Šakkō – 2.4 Bar Hebraeus

### 2.1 *Mošeh Bar Kepha*

Mošeh Bar Kepha (d. 290/903) is regarded as a prominent theologian and philosopher of his time (Assemanus 1721 [\*47: II 127–131], GSL [\*22: 281–282], Braun 1891 [\*9: 3–18], Griffith 1987 [\*47: 147–148]). He was born in Balad, a town on the Tigris near Mosul, around 197/813 or 217/833 (Reller 1994 [\*51: 33]) and studied the Bible as well as philosophy and theology under Abbot Kyriakos at the Monastery of Mar Sergius (between Šingar and Balad). In 248/863 he was elected bishop of the Dioceses of Bēt Raman (northeast of Mosul, on the Tigris near Balad) and Bēt Kiyōnayā as well as Mosul. Probably around 274/888 he became *periodeutes* of Tagrit for ten years. Among his numerous writings on theology and the exegesis of the Bible (Schlimme 1977 [\*10: I 4–14], Griffith 1987 [\*47: 147–148]) are some works that demonstrate his interest in philosophy and the natural sciences. According to an account in Bar Hebraeus' *Chronicon ecclesiasticum* [\*37: II 215], Bar Kepha wrote commentaries on books on logic (*ktābē da-mlilūtā*). One of these commentaries, a fragment on Aristotle's *Categories*, appears to be extant in manuscript form (GSL [\*22: 281, n. 4]).

*On the Soul.* – In his monograph *Memrā d-'al nafšā* (*Treatise on the Soul*) [\*9], which was translated into Arabic (CGAL [\*24: 230]) and consulted in the 7th/13th century by Bar Hebraeus in his *Maqāla muḥtašara fī l-nafs al-bašariyya* (*Short Treatise on the Human Soul*) [\*44], Bar Kepha quotes not only Christian authors writing in Greek and Syriac but also a remarkable number of Greek philosophers, among them the pre-Socratics Anaximenes, Democritus, Empedocles, Heraclitus, and Thales, and also Pythagoras, Plato, Aristotle, and John Philoponus. Based on Aristotelian psychology and with constant references to the Bible, Mošeh Bar Kepha begins with a definition of the soul (chap. 1), followed by a proof of its existence – especially the rational soul of humans – on the basis of the movement of the various faculties and activities of the soul (chap. 2). A doxographical chapter on the teachings of the 'heathen philosophers' (chap. 3) is followed by a refutation of the Stoic doctrine of the physicality of the soul and a defence on behalf of the 'correct' views (chap. 4). The doxographical information in this and other chapters frequently touches on Aetius' *Placita philosophorum* (*Opinions of the Philosophers*) (Daiber 1980 [\*75: 457; Index s. v.], Daiber 1991 [\*14: 46]) while not – as a comparison demonstrates – deriving directly from these (Braun 1891 [\*39: 40]), but from a Greek compilation which in turn drew on the *Placita*. This text may have been

*De natura hominis* (*On the Nature of the Human Being*) by Nemesios of Emesa, an anthropology composed around 400 CE, which harmonises mid- and Neo-Platonic doctrine with Christian dogma, and in addition contains doxographical passages. Chapters 5 to 7 provide proof of the substantiality, immateriality, and simplicity of the soul; chapters 8 to 10 are dedicated to the nature, the faculties, and the activities of the soul. While chapters 11 and 12 once again discuss the rational nature and the movement of the soul, the intention of the following sections is to prove the intellectual capacity and to develop a definition of the soul on the basis of Porphyry's *Isagoge* (chap. 13–15). Chapter 16 once again conducts a proof of the immortality of the soul. Subsequently, Bar Kepha seeks to deduce the soul's incorporeality from its indivisibility (chap. 17 and 18). Chapter 19 focusses on the ancient doctrine (Daiber 1975 [\*73: 352–354]) of the soul as the body's organon. Chapters 20 to 22 look to Porphyry's *Isagoge*, discussing the differences between souls in their existence and their number while emphasising that they are altogether identical as to their substance. Chapter 23 presents the necessary consequence for the souls that have left the body; in accordance with his doctrine of the creation in the *Commentary on the Hexaemeron* [\*10], Bar Kepha seeks to prove, against Mani, Bardesanes, and Markion, that the soul was created by God out of nothing. In the following chapters, he focusses on the createdness of the soul and its relation with the body (chap. 24–26). Chapters 27 to 41 discuss special issues concerning the relation between body and soul, the soul's continued existence after death, and its resurrection. Bar Kepha intends to prove that the soul is an 'image and parable of God' (chap. 40) that can be transferred onto the bearer of the soul, the body, only as long as the two are joined. In the last, the 41st chapter, finally, the author aims to show that it is worthwhile to pray and sacrifice for the dead, as they – or their souls – will be resurrected (Braun 1891 [\*9: 158–161]).

Bar Kepha's *Treatise on the Soul* follows Aristotle's psychology, makes use of his *Organon* and Porphyry's *Isagoge*, but combines Aristotelian with Platonic ideas. The major subjects of the book, especially in chapters 2, 5, 6, 7, 13, and 16, are inspired by a compendium on the soul; its Greek original, entitled *Λόγος κεφαλαϊώδης περί ψυχῆς πρὸς Τατιανόν*, was incorrectly attributed to Gregory the Thaumaturge (3rd cent.; *Patrologia Graeca* [\*5: x 1137–1146]) but in fact goes back to Nemesios of Emesa's *On the Nature of the Human Being* [\*7]. *Λόγος κεφαλαϊώδης* was extant in an anonymous Syriac translation as early as the 1st/7th century and was later translated into Arabic in a long and an abridged version (Gätje 1971 [\*13: 95–113, 114–129]). As a comparison with the seven sections of *Λόγος κεφαλαϊώδης* shows, chap. 2 of Bar Kepha's book follows *Logos* § 1 and 2, chap. 5 *Logos* § 3, chap. 6 *Logos* § 4, chap. 7 *Logos* § 5, chap. 13 *Logos* § 7, and chap. 16 *Logos* § 6. However, Mošeh Bar Kepha not only drew



on Pseudo-Gregory the Thaumaturge's *Λόγος κεφαλαϊώδης* but also on the text on which he based it, namely Nemesios' *On the Nature of the Human Being* (Klinge 1939 [\*72: 226–227], Zonta 1991 [\*15: 226–227]), as well as a further text dependent on Nemesios. The latter is *On the Soul*, extant in fragments only, by the Monophysite bishop John of Dārā (GSL [\*22: 277]) of the generation before Mošeh Bar Kepha (Zonta 1991 [\*15: 229–230], Reller 1999 [\*16]).

*The Commentary on the Hexaemeron* – Bar Kepha demonstrates his scientific interest in the commentary on the *Hexaemeron*, an exegetic approach to the biblical creation story, following Jacob of Edessa in parts (Schlimme 1977 [\*10: II 684–740]). The text remains inedited but has been translated into German. The biblical story of the creation is interpreted in the second book, displayed traditionally in the context of a cosmological proof of the existence of God. Bar Kepha follows this exegesis with a description of the cosmos that ranges from the celestial bodies and the animals (Book III) through the four elements earth, water, air, and fire (Book IV) to an extensive discussion of meteorology (Book V). For this last book, he drew on Theophrastus' *Meteorology*, the Greek original of which has been lost and which is extant only in Syriac translation and an Arabic version based on the latter (Daiber 1992 [\*3: esp. 171–174]). Another source of the fifth book was a compendium of Aristotle's *Meteorology*, which is lost in the original as well as in its Syriac translations. It is extant in an Arabic version attributed to Ḥunayn b. Ishāq, or possibly originating in his 'school' (Daiber 1975 [\*5], 1980 [\*75: 822–823], 1991 [\*14: 47–48]).

Of particular philosophical interest, however, is the dogmatic introduction to the commentary on the *Hexaemeron* in the first book. It begins by listing the various sources of the knowledge of truth, among them the divine revelation, which is then discussed again towards the end of the book (chap. 31–38) in the context of a discussion of prophethood. This is followed by contrasting the createdness and temporality of the world (chap. 2) with the uniqueness, eternity, infinity, incomprehensibility, and immutability of God (chap. 3–7), reaching the conclusion that God possesses three hypostases equal in respect of οὐσία and divinity (chap. 8, ll. 99–100, namely God the father (the active cause and ruler), His son (His impact or His word), and the Holy Spirit (chap. 8–10). Chapters 11–22 contain a refutation of 'heretical' doctrines on the origin of the world, in particular the theory of the eternal duration of the world as presented by Aristotle and Proclus (chap. 12), and the sophist's denial of creation from nothing. Mošeh Bar Kepha emphasises the createdness of matter, the four elements, out of nothing, without, however, naming the four elements – water, fire, earth, and air – here (chap. 12) stating instead their 'properties', namely 'lightness, heaviness, density, thinness, softness, hardness, moistness, dryness,

cold, warmth, colour, shape, mark, and measure' (Schlimme 1977 [\*10: 175; on the meaning 504–538]). This is obviously linked to the doctrine of the Islamic Dahrites who denied the existence of a creator and reduced everything to the four natures (*al-ṭabāʿi*), i.e. moistness, dryness, cold, and warmth – a doctrine to which Theodore Bar Konī also refers in his *Book of the Scholia*, and which was criticised by Christian circles as well as the Muʿtazilī al-Nazzām (Daiber 1999 [\*91: 29–32]).

The structure and content of Book 1 of the Commentary on the Hexaemeron followed a system used in Muʿtazilī literature on the oneness of God (*tawḥīd*) (Rudolph 1994 [\*52], 1997 [\*53: 243–245]) – with the exception of the insertion on the three hypostases, the Christian trinity based on Monophysite theology (Bruns 2003 [\*85: 35]), although the fact that Mošeh Bar Kepha shared the Greek philosophical terminology of the Christian theologians does not necessarily imply that he applied it in an identical way. Thus, there are instances of the distinction between substance and accidents, which goes back to Aristotle's *Categories* and Aristotle's commentators as well as Porphyry's *Isagoge*, in the Syriac scholastics of the 5th century (Bruns 2003 [\*85: 14]), but it is also found in the theology of the Muʿtazila (Daiber 1975 [\*73: 62–76]), and does not appear in the context of trinitarian theology in Mošeh Bar Kepha's work but rather with reference to the Muʿtazilī theory of the changeability and transitoriness of the accidents (Daiber 1975 [\*73: 72–73]). This distinction was also aimed – as in the case of the Muslim theologians – at proving the createdness of the accidents as well as the existence of their creator (Rudolph 1994 [\*52: 311–312]). Mošeh Bar Kepha, modifying the Church Fathers' traditional trinitarian dogmas (Schlimme 1977 [\*10: 143], Wolfson 1976 [\*74: 120–132]), adds a Neo-Platonic component to his understanding of God, equating the creator with the 'first intellect', described as a first cause without cause, immutable, eternal, and self-sufficient, and as light (Plotinus, *Enn.* v 4–6; vi 7–9; *Plotini opera* [\*6: 332–369. 430–488], Proclus [\*8: Prop. 160–162]). This should not, however, obscure the fact that Mošeh Bar Kepha's theology was inspired by the language and the substance of Muʿtazilī Islamic theology, especially in cases where the latter employed ideas taken from Greek Christian theology.

It is thus not surprising that in his treatise on free will and predestination, which has been transmitted without a title, Mošeh Bar Kepha looks to the Islamic determinists and their explicitly stated theory of God's foreknowledge. Here, he polemicalises against the Muslims, i.e. 'against the Mhaggrāyē [Muslim Arabs] who also abolish freedom and claim that Good and Evil have been preordained for us by God' (Griffith 1987 [\*47: 151–159]). Bar Kepha himself rejects predestination, marking it as the teaching of the heathens, of the

Manichaeans, and of Marcion (Barsoum 2000 [\*30: 401 no. 9], Griffith 1987 [\*47]). In this, he adheres to a tradition known since Ephrem the Syrian in the 4th century, whose main argument against dualism, above all that of the Manichaeans, was the freedom humans have to choose between good and evil (Griffith 1987 [\*47: 143]).

## 2.2 *Dionysius Jacob Bar Šalībī*

Dionysius Jacob Bar Šalībī (d. 566/1171), Bishop of Amid (Diyarbakir), studied not only theology but all the sciences of the time in Melitene (Assemanus 1721 [\*6: 156–211], Wright 1894 [\*21: 246–250], GSL [\*22: 295–298], Ortiz de Urbina 1965 [\*27: 220–221], Rassi 2019 [\*66: 329–379], Barsoum 2000 [\*30: 432–441]). Bar Hebraeus names him in his *Church History* [\*37: I 561/562] as the author of ‘commentaries on logic (by Aristotle, in fact)’. These are extant in a Cambridge MS (shelfmark Gg. 2.14) where they precede a collection of texts by Nicolaus of Damascus (incorrectly Barsoum 2000 [\*30: 439]) and include versions of Pophryry’s *Isagoge* as well as Aristotle’s *Organon* up to the *Prior Analytics*. In the manuscript, they are dated to 1148 (GSL [\*22: 298 n. 11]). According to the synopsis by Barsoum [\*65: 438–439], Bar Šalībī included complex passages from the *Posterior Analytics* in his commentary of the *Prior Analytics*, stating in this context that according to George, Bishop of the Arabs, the *Prior Analytics* and the *Posterior Analytics* were connected, as a result of which Bar Šalībī regarded both books as the first book of the Apodeictics. According to his own words, Bar Šalībī refrained from writing a commentary on the *Posterior Analytics* because the tradition was lacking and in addition – as he remarks with recourse to Syriac scholars who limited themselves to discussing the *Prior Analytics* up to chapter 17 (Daiber 2001 [\*83: 334–335]) – because the book was superfluous, as its substance was already known to students of philosophy (Barsoum [\*65: 439]).

## 2.3 *Ya‘qōb/Severus Bar Šakkō*

Ya‘qōb/Severus Bar Šakkō (d. 638/1241) was born in Barṭellā near Mosul (Wright 1894 [\*21: 260–263], GSL [\*22: 311–312], Barsoum 2000 [\*30: 455–458], Yousif 2003 [\*31: 246], Teule 2007 [\*59: 143–154], Rassi 2019 [\*66: 329–379]). He was a monk in the monastery of Mar(y) Mattai, where he became bishop under the name Severus in 629/1232. His contemporary Bar Hebraeus reports in the *Church History* ([\*37: II 409/411], Ruska 1897 [\*42: 24–25]) that Bar Šakkō studied grammar as well as ‘the first book of logic’ with the Nestorian monk Bar Zo‘bī, and was introduced to the ‘Arabic texts on logic and philosophy’ by the philosopher Kamāl al-Dīn ibn Yūnus in Mosul, but that apart from these studies, Bar Šakkō was an autodidact. He is said to have owned a number of books

that were taken to 'the treasury of the prince of Mosul' after his death. Bar Hebraeus names him explicitly as the author of the *Dialogues*.

Besides Bar Hebraeus and Dionysius Bar Šalībī, Bar Šakkō was among the few scholars of his time who, like the contemporary patriarch Ignatius III (618–649/1222–1252), pursued the aim of spreading the knowledge of church doctrine and worldly science. According to Bar Hebraeus (*Chronicon ecclesiasticum* [\*37: 1671], Ruska 1897 [\*42: 34–35], Kawerau 1960 [\*26: 56]), Ignatius III employed teachers and thus 'in truth reawakened God's holy church to true life out of the growing coarseness'. In a similar way, Bar Hebraeus regarded the maphrian Ignatius IV (1264–1283) as an authority in the fields of medicine, logic, and philosophy (Kawerau 1960 [\*26: 59]). It has been pointed out correctly that the sciences were neutral territory where 'Jacobites and Nestorians, Christians and Muslims met in friendship' (Kawerau 1960 [\*26: 60]). As a consequence, the Jacobite Bar Šakkō was able to study under the Nestorian Bar Zo'bī as well as the Muslim scholar Kamāl al-Dīn ibn Yūnus (d. 639/1242), who was famous at the time, and from whom treatises on mathematics and geometry have been transmitted (GAL [\*23: 859], GAS [\*29: V 134. 141. 324; VII 402–403]).

*The Dialogues* – According to Arabic biographical literature, Kamāl al-Dīn ibn Yūnus was regarded as a polymath well versed in philosophy, logic, physics, theology, and medicine, who was consulted by his contemporaries on difficult questions (Ibn Ḥallikān [\*28: 311–317, esp. 312, 4–7], transl. Ruska 1897 [\*42: 27–29]). It has thus been suggested with good reason that Bar Šakkō's *Dialogues* owe their inception to the lectures of Kamāl al-Dīn b. Yūnus (Ruska 1897 [\*42: 30–31]). Bar Šakkō is said to have composed them at the request of a friend of his, a monk called Basilius (Ruska 1897 [\*42: 148]), as a useful 'tool' (Ruska 1897 [\*42: 33]) to present the 'intentions and opinions of the philosophers' free from all polemic – although this was not always in fact the case (Ruska 1897 [\*42: 148]). However, the text was also intended for posterity, to transmit encyclopaedic knowledge in Syriac.

Bar Šakkō employed the question-and-answer format (Daiber 1991 [\*49]), a method applied at the time by Kamāl al-Dīn b. Yūnus and other scholars (Ibn Ḥallikān [\*28: 314, 20] transl. Ruska [42: 29]), and also by Emperor Frederick II (Schramm 2001 [\*84: 301–308]). In true didactic fashion, the *Dialogues* first ask a question which is then answered in the following deliberations. The title of the text is thus based on its structure; correspondingly, the book cannot be reduced to the literary presentation of a study course in Syriac. Rather, the *Dialogues* grew out of the fruitful encounters between Muslim scholars, who possessed a wealth of knowledge inspired by ancient texts in Arabic translation, and Christian scholars who were able to contribute the knowledge transmitted in Syriac (Ruska 1897 [\*42: 20–21]). In this way, the latter cultivated the

Syriac language while transmitting to the members of their church the wealth of knowledge of Arabic Islamic culture.

The *Dialogues*, which have not so far been edited in their entirety, are divided into two parts: The first one presents grammar – followed by a section on its metrics (Merx 1889 [\*20]) – rhetoric, poetics (Martin 1879 [\*24], Sprengling 1915 [\*25]) and the merits of Syriac in four successive dialogues. The second part consists of two dialogues on, respectively, logic [\*27] and philosophy [\*22].

In the introduction to the dialogue on philosophy [\*27: 1], Bar Šakkō shows himself favourably impressed by the Alexandrine Platonic definition of philosophy (Daiber 1990 [\*79: 118–120]) as assimilation to God insofar as humans are capable of it. He regards renunciation of the world as a precondition for meditating on ‘the real truth’. It is worth noting that he placed the chapter on logic before that on philosophy. Thus, logic is not presented as a part of philosophy but rather as its instrument. In the context of a question that had been discussed in Syriac since Sergius of Rēš‘ainā, Bar Šakkō is following a tradition which he himself attributes to Aristotle in a doxographical list of three diverging statements (Furlani [\*27: 294]). Remarkably, the passage is found in almost exactly the same words in al-Ḥwārizmī’s outline of the sciences *Maḡāṭih al-‘ulūm* (*The Keys of the Sciences*), written in the 4th/10th century, albeit without naming the champions of the respective positions. There is thus reasonable doubt, at least in this context, as to whether Ḥwārizmī’s works were known to Bar Šakkō – perhaps through the mediation of Kamāl al-Dīn b. Yūnus. It seems more probable that both works were based on the same source (cf. Daiber 1980 [\*75: 329–330]).

The main part of the dialogue on philosophy consists of five sections (*mimrē*): (1) Definitions, parts, and schools of philosophy [\*22: 2–4]; Bar Šakkō is following the Alexandrian tradition of the school of Ammonius here (Daiber 1985 [\*46: 76–77], Hein 1985 [\*77: 39; 65–103; 133–148; 155; 245–146; 260]); (2) Practical philosophy, or ethics, including a presentation of the differences between Plato and Aristotle (Ruska 1897 [\*42: 152]); (3) Physics, in which he follows a structure customary in Hellenistic textbooks (Daiber 1980 [\*75: 327]), beginning with (Ruska 1897 [\*42: 152–153]) nine questions dealing with the basic concepts (question 6: [\*23]), then the celestial movement (questions 10 and 11), the simple and the compound elements (question 12), meteorology (questions 13–18), chemical substances and the emergence of the seven metals out of sulphur and mercury (question 19: [\*23]; cf. Takahashi 2006 [\*90]), plant and animal life followed by a discussion of the soul and its capacity (questions 20–27; cf. Havard 1994 [\*50]). Bar Šakkō’s intention is essentially to present the Aristotelian perspective. In the corresponding fourth chapter on the same subject in his earlier book *Kṭābhā d-sīmātā* (*Book of Treasures*) (GSL [\*22: 311–312,

title incorrect], Barsoum 2000 [\*30: 456], cf. also Nau 1896 [\*41] and Teule 2007 [\*59]) composed in 628/1231, he focused on the biblical history of creation, adding astronomical, geographical, and meteorological chapters. From time to time, he mentioned his sources in the *Book of Treasures*, namely Aristotle, Ephrem, Jacob of Edessa, Mošeh Bar Kepha, and Theodore the Nestorian (possibly referring to Theodore Bar Konī) (Nau 1896 [\*41: 290; 293; 321]); (4) The quadrivium, consisting of mathematics, arithmetic, geometry, and astronomy [\*26], and finally (5) Metaphysics, or theology.

In the order of the topics discussed in the *Dialogues*, Bar Šakkō follows, with certain modifications, al-Fārābī's list of the sciences inspired by the Alexandrians (Gutas 1983 [\*76: 257–267]), beginning with the field of language, followed by poetics, rhetoric, logic, practical, and finally theoretical philosophy (Daiber 1990 [\*79: 120–121]), which is divided into physics, mathematics, and metaphysics or theology. It integrates the ancient and Byzantine educational ideal of the ἐνυκλῖος παιδεία, the propaedeutic subjects, or the medieval liberal arts, which consist of the trivium grammar, rhetoric, and dialectic, and the quadrivium geometry, arithmetic, astronomy, and musical theory (Daiber 1980 [\*75: 68–69]).

Bar Šakkō also used Arabic sources: such as Abū 'Abdallāh Muḥammad al-Ḥwārizmī's *Maḡātīḥ al-ʿulūm* (*The Keys of the Sciences*) and the *Epistles of the Pure Brethren* of Basra, the *Rasā'il Iḥwān al-Šafā'* (Ruska 1896 [\*26: 5–6; 33–79]) in the chapter on the quadrivium. Both texts might have been made accessible to him via an unknown Arabic source about which he might have learned from his teacher Kamāl al-Dīn Ibn Yūnus – who might, indeed, have himself been its author. This might also have been the source for Bar Šakkō's meteorological information, which goes back to Faḥr al-Dīn al-Rāzī's *al-Mabāḥiṭ al-mašriqiyya* (*The Eastern Investigations*) and would later be adopted by Zakariyā' ibn Muḥammad al-Qazwīnī (d. 682/1283) in his cosmography *ʿAğā'ib al-maḥlūqāt* (*The Wonders of the Creatures*) (Takahashi 2004 [\*32: 41], 2006 [\*90]). Besides these Arabic sources, Bar Šakkō would also have consulted Syriac texts, i.e. Syriac traditions and editions of Greek traditions. However, it is not always certain whether Bar Šakkō's knowledge of the Greek text was acquired from a Syriac or an Arabic source. Even so, we can be sure that in questions 11 to 13, he inserted excerpts from Sergius of Reš'ainā's Syriac translation of Pseudo-Aristotle's *De mundo* (Ruska 1897 [\*42: 154–155]). It is probable that for the meteorological information, he also drew on Job of Edessa's (d. 220/835) *Ktābhā d-sīmātā* (*Book of Treasures*) (Takahashi 2004 [\*32: 41]). For the dialogue on logic, he referred not only to Syriac translation of Aristotle's *Organon*; in question 26 (Furlani 1926/27 [\*21: 342]) we find passages from Paul of Persia's compendium of logic (cf. PIW I § 2.3.1), in questions 34 and 36 (Furlani 1926/27 [\*21: 343–344]) Bar

Šakkō draws on Severus Sebōkt's treatise on the syllogisms (cf. PIW 143), and in question 49 (Furlani 1926/27 [\*21: 346]) on Athanasius of Balad's introduction to Aristotelian logic and syllogistic (cf. PIW 144). Further parallels, for instance with Sergius of Rēš'ainā's treatise on the categories (Hugonnard-Roche 2004 [\*88: 143–164; 187–231], (Furlani 1926/27 [\*21: 336; 338–339]), cannot be traced back to their sources with certainty, either because Bar Šakkō paraphrases or because he was consulting a source which in turn reflects identical Greek traditions. His source in this instance may have been a collection of texts which drew on Aristotle's *Organon* and Porphyry's *Isagoge*, but also on the Alexandrian commentaries of the school of Ammonios and which, contrary to Baumstark's opinion, also followed by Wolska-Conus (1989 [\*48: 69–82]), cannot be traced back without all doubt to John Philoponus and his contemporary Stephanus Alexandrinus (Daiber 1985 [\*46: 75–80]).

#### 2.4 *Bar Hebraeus*

Abū l-Faraġ Ibn al-'Ibrī (Bar Hebraeus, born 620 or 622/1225 or 1226 in Melitene/Malatya), is considered the most important Syriac author in almost all fields of knowledge of the time (Wright 1894 [\*21: 265–281], GSL [\*22: 312–320], Barsoum 2000 [\*30: 463–481], Yousif 2003 [\*31: 246–255], Teule 2003 [\*57], Takahashi 2005 [\*2], Hugonnard-Roche 2008 [\*60: 129–143], Takahashi 2019 [\*67: 381–388], Schmitt 2020 [\*68: 157–175]). He received a thorough education in theology in Antioch and later in Tripoli, with a Nestorian teacher. During this time, he studied rhetoric and medicine, as well as philosophy, mathematics, astronomy, and natural science. Barely twenty years old, Bar Hebraeus was anointed Bishop of Gūbos (near Melitene) in 643/1246, taking the episcopal name Gregory; a year later, he resided in nearby Lāqābīn. A troubled period of constant rivalries followed, from which Bar Hebraeus eventually emerged victorious. Between 650/1253 and 657/1259, he was bishop in the more important bishopric of Aleppo, where the universally educated scholar established himself as an influential personality of the church. In 662/1264, he was elected Maphrian of Tagrit and the East, i.e. metropolitan bishop of the Eastern half of the Jacobite (formally: Syriac Orthodox) Church, residing in this function in the Monastery of Mar(y) Mattai (north of Mosul) for the rest of his life. Due to his numerous duties and his good connections with the Mongol Īl-Khānids to the East – whose attitude towards Christians was still friendly at the time – and the Nestorians of the East, he embarked on numerous journeys which frequently involved lengthy stays away. He spent several months in Baghdad, for instance, where he was received with great honour by the Nestorian Catholicos patriarch, and was found in his titular residence of Tagrit in 675/1277. He travelled to the West twice, to Armenia Minor (severe illness in 665–888/1267–1268);

he repeatedly spent time in calmer Azerbaijan, in Marāḡa, the capital of the Īl-Khānids (besides Tabriz), where he was able to make use of the well-stocked libraries and pursue his scientific work without being disturbed. When Bar Hebraeus died in Marāḡa in 685/1286, he was a scholar esteemed equally by Christians and Muslims; his body was later transferred to Mar(y) Mattai, where his grave may be visited to this day.

Bar Hebraeus is the main representative of the so-called Syriac renaissance on the West Syriac Jacobite side. His extraordinary literary productivity is amazing, as is his ability to compile new works out of Syriac, Arabic, and Persian sources. Traditionally, only little originality has been attributed to him; however, his work proves him to have been a compiler who often finds more precise formulations than the authors of his sources, and sometimes presents nuances that demonstrate independent reflection and acute insight. His encyclopaedic knowledge makes him a valuable witness to the scholarship of the time, which was able to link Christian Syriac and ancient tradition with the Arabic Islamic one (Watt 2010 [\*61]). In over thirty texts, partly in Arabic but mostly in Syriac (some of which were later translated into Arabic), some of which have not been edited in their entirety (CGAL [\*24: 275–281]), Bar Hebraeus proved the wealth of knowledge he possessed in theology and biblical exegesis, philosophy, history, grammar, natural science, and medicine, and even made a name for himself as a poet. He furthermore enjoyed the reputation of being the compiler of a book that was composed based on Arabic sources and unique in Syriac, namely the *Ktābā d-tunnāyē mḡaḥḥkānē* (*Book of Delightful Stories*). This collection of 727 anecdotes, fables, dream interpretations etc. uses Greek, Arabic, Persian, and Indian material as well as the *Apophthegmata Patrum* (editions and further reading: GSL [\*22: 318 n. 2], Takahashi 2005 [\*2]). Bar Hebraeus also composed a book of law that became the standard among the Syriac Jacobites, a codification of ecclesiastical as well as secular law, the *Ktābā d-huddāyē* (*Book of Guidance*) ([\*40], GSL [\*22: 316 n. 3], Takahashi 2005 [\*2]), in which he referred to al-Ġazālī's *al-Waḡīz fī fiqh madḡhab al-Imām al-Šāfiʿī* (*Overview of Jurisprudence According to the Imām al-Šāfiʿī*) and *al-Wasīṭ fī l-madḡhab* (*The Mediator in Legal Recourse*) (Takahashi 2015 [\*92: 306–309]).

In the following, we shall limit ourselves to the philosophical–theological works of Bar Hebraeus (overview: Takahashi 2003 [\*86]).

*Candelabrum sanctuarii* – Presumably during the years between 664–665/1266–1267 and 669–670/1271–1272 (Takahashi 2002 [\*55: 167]), when he already held the Maphrianate of Tagrit and the East, Bar Hebraeus wrote his first great theological opus, the *Ktābā da-mnāraṭ qudšē* or *Candelabrum sanctuarii* (*Book of the Light of the Sanctuary*) (editions in Takahashi 2005 [\*2]). He would



later compose a summary in the form of a compendium of this encyclopaedic *Summa Theologiae*, called *Ktābā d-zalgē* (*Book of Lightning Bolts*) (GSL [\*22: 314 n. 4], Takahashi 2002 [\*56: 243–244], 2004 [\*32: 44–45], 2005 [\*58: 407–422], 2014 [\*94: 181–188]). The *Candelabrum sanctuarii* is divided into 12 bases, i.e. main dogmas of the Church, as there are: (1) knowledge in general [\*35]; (2) the nature of the universe [\*35]; (3) the dogma of the deity; (4) the incarnation; (5) the dogma of the angels; (6) priesthood and the dogma of the sacraments; (7) the dogma of the demons; (8) the dogma of the rational soul ([\*36], cf. Furlani 1932 [\*43]), of which an Arabic synopsis entitled *Muḥtaṣar fī ‘ilm al-naḥs al-insāniyya* (*Compendium on the Science of the Human Soul*) is extant under the name of Bar Hebraeus ([\*43], cf. Furlani 1932 [\*43: 3]), CGAL [\*24: 276–277], Doru 2017 [\*93: 930]). The latter differs considerably from the wording of Bar Hebraeus’ *Maqāla muḥtaṣara fī n-naḥs al-baṣariyya* (*Brief Treatise on the Human Soul*) [\*44], which is a synopsis of Mošeh Bar Kepha’s monograph on the soul (CGAL [\*24: 273–274]); (9) free will and destiny; (10) the resurrection of the dead; (11) the Last Judgment; and (12) paradise.

The work’s aim is to gather the entire theological, philosophical, and scientific knowledge of the time; it combines the Syriac Aristotle with the geographical and patristic as well as ancient scientific knowledge of the Arab world. Of interest philosophically are, above all, the first two sections in which Bar Hebraeus follows the example of Mošeh Bar Kepha’s commentary on the Hexaemeron by presenting the sources of knowledge and cosmology. He draws on numerous sources, in particular in the section on cosmology, in which he copied several Greek and Arabic works inspired by Aristotelian texts. Among the Greek Syriac sources for the passages on minerals and meteorology (Takahashi 2002 [\*56]), the Aristotelian Nicolaus of Damascus (1st cent. BCE) has been documented, whose compendium of Aristotelian philosophy (Περὶ τῆς Ἀριστοτέλους φιλοσοφίας; the Greek original of which is lost) is extant in a fragmentary and to date only partially edited in Syriac translation (Drossaart Lulofs 1969 [\*4]). Other confirmed sources include Pseudo-Aristotle’s *On the Cosmos* (*De mundo*) following the Syriac translation attributed to Sergius of Rēš‘ainā [\*2] and Dioscurides’ *Materia medica*, which was translated into Syriac by Ḥunayn b. Iṣḥāq and subsequently, together with Iṣṭifān ibn Bāsil, from Greek into Arabic and later translated or re-edited once again (Ullmann 1970 [\*28: 258–263]). A Greek Arabic source to be mentioned is Ptolemy’s *Almagest*, which had been translated into Arabic several times since the end of the 2nd/8th century (GAS 1978 [\*29: VI 88–89]). Even more important, finally, are Arabic sources in the tradition of Ibn Sīnā’s *Kitāb al-Šifā’* (*The Cure*), above all Faḥr al-Dīn al-Rāzī’s *al-Mabāḥiṭ al-mašriqiyya* (*The Eastern Investigations*) [\*79] (Takahashi 2014 [\*94: 172–181]) which in many instances provides the

conceptual framework for Bar Hebraeus' *Ktābā da-mnāraṭ qudšē* (*Book of the Light of the Sanctuary*), and to a lesser extent also Abū l-Barakāt al-Baḡdādī's *Kitāb al-Mu'tabar* (*The Book of Carefully Considered Teachings*) [\*16], and finally, for geographical information, Birūnī's astronomical work *al-Taḥfīm li-awā'il šinā'at al-tanḡīm* (*Explanation of the Principles of the Art of Astrology*) [\*13], which served to supplement Ptolemaios' *Almagest* as well as Jacob of Edessa's *Hexaemeron* (cf. PIW I § 2.3.3) and Mošeh Bar Kephā's commentary on the latter.

*Butyrum sapientiae* – Bar Hebraeus' most extensive and perhaps most important work on the field of philosophy and the sciences is a late work, completed on 12. 12. 684/8. 2. 1286 (Takahashi 2004 [\*32:9]), *Ktābā d-hēwat ḥekmāṭā*, traditionally known as *Butyrum sapientiae* (*The Book of the Cream of Wisdom*). It is the most comprehensive presentation of the entire Aristotelian system of theories ever written in Syriac. The work, which has to date been edited in parts only, follows Ibn Sīnā's *Kitāb al-Šifā'* (Bakoš 1948 [\*36: 75], Doru 2017 [\*93: 921–924]) to a considerable extent – as, indeed, does Bar Hebraeus' book on metals and meteorology (Takahashi 2003 [\*86: 253; 261–271], 2004 [\*10: 48–53]). However, following Nicolaus of Damascus' compendium of Aristotelian philosophy, Bar Hebraeus changed the structure of his work slightly compared to his source (Takahashi 2004 [\*32: 13–14]), as his work contains the sections: (I) Logic, comprising the parts Isagoge, Categories, On Interpretation, Prior Analytics, Posterior Analytics (Schmitt 2012 [\*91]), Topics, Rhetoric, (ed./transl. Watt 2005 [\*34]), and Poetics (ed. Margoliouth 1887 [\*33]); – (II) The natural sciences comprising the parts Physics, On the Heavens (Takahashi 2012 [\*63]), On Generation and Corruption, Mineralogy and Meteorology (ed./transl. Takahashi 2004 [\*32]), On Plants (ed./transl. Drossaart Lulofs 1989 [\*8]), On Animals, On the Soul (excerpts ed. Furlani 1931 [\*7]); – (III) Metaphysics comprising the parts Metaphysics and Theology – (IV) Practical philosophy comprising the parts Ethics, Economics, and Politics (ed./transl. Joosse 2004 [\*37]; cf. Joosse 2010 [\*62]).

Despite the clear alignment with Ibn Sīnā's *Kitāb al-Šifā'*, Bar Hebraeus also referred critically to his model, by presenting his own observations and deliberations as well as considering additional sources. Thus, he added to the catalogue of topics by including a chapter on practical philosophy inspired and strongly informed by the *Aḥlāq-i Nāširi* (*Ethics for Nāšir*) [\*27] (cf. Daiber 2002 [\*54: x 747]) of his contemporary in Marāḡa, Nāšir al-Dīn al-Ṭūsī. Philosophical sources he used furthermore included Miskawayh's (d. 421/1030) *Tahḏīb al-aḥlāq* (*Refinement of Character*), through which he had acquired knowledge of Aristotle's *Nicomachean Ethics* in the version of the *Summa Alexandrinorum* (Dunlop 2005 [\*89: 28–31]), as well as Abū Qurra's Arabic version of Pseudo-Aristotle's *On Virtues and Vices*, Nicolaus of Damascus'

aforementioned compendium of Aristotelian philosophy, Galen's treatise *On Character Traits* (lost in Greek but extant in Arabic), the *Epistles of the Pure Brethren* (*Rasā'il Iḥwān al-Ṣafā'*), and al-Ġazālī's (d. 505/1111) *Kīmīyā' al-sa'āda* (*The Elixir of Bliss*), a Persian synopsis of the same author's *Iḥyā' 'ulūm al-dīn* (*The Renewal of the Religious Sciences*) (Joosse 2004 [\*31: 11–12], 2010 [\*62]; Doru 2017 [\*93: 931–934]). It will certainly be possible to add to the number of Greek-Syriac, Syriac, and Greek-Arabic as well as Arabic and Persian sources once the *Butyrum sapientiae* is accessible in its entirety.

*Further philosophical works* – Other philosophical books by Bar Hebraeus did not achieve the significance of the *Summa Theologiae*, namely the *Candelabrum*, or the philosophically oriented late work, the *Butyrum*. Instead, they were limited to partial aspects of his *Summa Theologiae*, and were consequently more in the nature of preliminary studies to his major works. Bar Hebraeus' datable texts give the impression that most if not all his works were composed after his election as Maphrian of Tagrit and the East in 662/1264. The *Kṭābā d-teḡrat teḡrātā* (*Treatise of Treatises*) (Janssens 1937 [\*38: 5, n. 1]) limits itself to logic, physics, and metaphysics. Contrary to a widely expressed opinion, the latter is not a synopsis of the *Butyrum*, but the earliest philosophical compendium based not – contrary to Anton Baumstark's understanding (GSL [\*22: 317]) – on Ibn Sīnā's *Uyūn al-ḥikma* (*The Elements of Philosophy*) but on al-Ġazālī's *Maqāṣid al-falāsifa* (*The Intentions of the philosophers*) (Takahashi 2002 [\*55: 153–154], 2015 [\*92: 314–319]; Doru 2017 [\*93: 929]). As a comparison demonstrates, some passages from the chapter on the soul were incorporated into Bar Hebraeus' *Candelabrum* (Furlani 1934 [\*44: 299–305]). The *Kṭābā da-swād sofiyā* (*The Book of the Conversation of Wisdom*) [\*38] presents the substance of logic, physics, and metaphysics in abridged form as an introduction for beginners and was composed after the *Kṭābā d-teḡrat teḡrātā* (Takahashi 2002 [\*55: 153], 2004 [\*32: 42]; Doru 2017 [\*93: 924–929; 942]). The *Kṭābā d-bāḥbātā* (*Book of the Pupils of the Eyes*) [\*39] focuses exclusively on Aristotelian logic and Porphyry's *Isagoge*, while the occasional references to Ibn Sīnā in Janssens' edition and translation ([\*39: 41–44; 47 and 52, 1–21]; cf. Doru 2017 [\*93: 929–930]) do not clearly convey the degree to which Bar Hebraeus was dependent on Ibn Sīnā. A systematic comparison, also of the above-mentioned *Kṭābā da-swād sofiyā* with Ibn Sīnā's *Kitāb al-Iṣārāt wa-l-tanbihāt* (*Book of Pointers and Reminders*) [\*12] and Bar Hebraeus' Syriac translation of this work (Furlani 1946 [\*12: 89–101], Takahashi 2003 [\*86: 257–258]) would undoubtedly illuminate the issue.

Bar Hebraeus gives us the last Syriac–Jacobite version of Aristotelian philosophy. His work does not develop its own philosophical system but is of an encyclopaedic nature, as Bar Hebraeus was at home in the Arabic as well as

the Syriac culture. He wrote works in Arabic and intended to convey Arabic cultural heritage to his fellow-Syrians in Syriac. In the course of this undertaking, he created a Syriac terminology that, while it could draw in part on Greek-Syriac sources, also relied on neologisms. He also looked to Arabic scientific literature, which had become the standard thanks to Greek–Arab cultural exchanges.

It left clear marks on his theological works. Besides the *Candelabrum*, the text worth mentioning above all is *Awṣar rāzē* (*The Treasury of Mysteries*) composed during the last decade of his life between December 1277 and early August 1278 (Raḡab 676 and Rabīʿ 1 677): It provides an extensive commentary on nearly all the books of the Bible in the form of scholia and explanatory remarks which contain, among other things, mystical ideas. Bar Hebraeus also drew on his knowledge of the fields of philosophy, theology, natural science, astronomy, geography, and medicine for the exegesis (Takahashi 2004 [\*32: 47]) and combined it with the collection of Mošeh Bar Kepha's work from the 3rd/9th century transmitted by Dionysius Bar Ṣalībī (d. 566/1171).

*Ethikon* – Towards the end of Bar Hebraeus' life, his interest in mysticism is also reflected in the *Kṭābā d-īṭiqon* (*Book of Ethics*) [\*41]. This work not only follows the mystic–ascetic tradition of Eastern Christianity, but owes essential aspects of structure and substance to al-Ġazālī's (d. 505/1111) *Iḥyā' 'ulūm al-dīn* (*The Renewal of the Religious Sciences*) [\*14] (Teule 1993 [\*41: CSCO 535, XXXff.], Teule 2003 [\*57: 27–30], Takahashi 2015 [\*92: 309–314], Doru 2017 [\*93: 934–942]) and the Islamic mystical traditions presented in it. In addition, the work is reminiscent of Ibn Sīnā (Teule 1992 [\*80]) and Naṣīr al-Dīn al-Ṭūsī (Teule 1999 [\*82]). Under the title *Ethics*, Bar Hebraeus followed Aristotle's tripartite division of practical philosophy into ethics, economics, and politics (Teule 1993 [\*41: CSCO 535, XIX] differs). In the *Nicomachean Ethics* (vi 9, 1142a9–10), however, Aristotle used the terms φρόνησις, οἰκονομία and πολιτεία. Rendering φρόνησις as ἡθικόν is remarkable: besides Bar Hebraeus, this modification is also found in the Alexandrian commentators of Aristotle's works Ammonios, David Elias, and Pseudo-Elias; correspondingly, Quṣṭā b. Lūqā (3rd/9th cent.) used the term *siyāsāt al-da'b* (ethics) in his classification of the sciences (Daiber 1990 [\*79: 124]).

Bar Hebraeus' *Ethics* consists of 4 treatises (*memrā*): Memra 1 describes the ascetic acts such as prayer, recitation, meditation, etc. – Memra 2 deliberates the correct care for one's own body (food, drink, marriage, purity) and for other persons (work, alms). – Memra 3 discusses purifying the soul from passions. Bar Hebraeus goes into a number of practical questions such as measures against greed, envy, anger, hypocrisy, and arrogance. – Memra 4 examines everything concerning the instruction of novices, beginning with the basics

of lessons which are either aligned with ecclesiastical traditions, e.g. the Old and New Testaments, or of a secular nature and either 'good' (medicine, language lessons) or 'bad' (astrology, magic), or a combination of both (philosophy). Subsequently chapters 2 to 16 go into topics such as admonishment and criticism, faith, penitence, patience, thankfulness, hope, fear of God, poverty, trust, loving one's neighbour, 'remembrance of God' (*dīkr*), meditation, purity of thought, love of God, and meditation on death.

At the end of his life, Bar Hebraeus probably summarised the substance of the *Ethikon* in a kind of guideline for monkhood, the *Kṭāḇā d-yaunā* (*Book of the Dove*) [\*42]. The appendix to this text, the *Tašṭtā 'al ṭalyūteh d-haunā* (*Narrative on the Youth of Reason*), remained unfinished. The *Book of the Dove* is informative regarding the last years of Bar Hebraeus' life in that its last chapter describes Bar Hebraeus' journey to mystical piety. This may have begun in the year 666/1268, when Bar Hebraeus by his own account found the *Kṭāḇā d-Īratāwus* (*Book of Hierotheos*) attributed to the mystic Stephen Bar Šudaile (c.500 CE) with the commentary of the patriarch Theodosius (d. 283/896) and copied an excerpt of it. At the same time, Bar Hebraeus appears to have been influenced by al-Ġazālī's *al-Munqid min al-ḍalāl* (*Deliverance from Error*) (Takahashi 2015 [\*92: 313–314]).

### 3 Nestorian Authors

#### 3.1 Yōḥannān Bar Zo'bi – 3.2 'Aḇdišō' Bar Berikā

##### 3.1 Yōḥannān Bar Zo'bi

Yōḥannān Bar Zo'bi lived around the end of the 6th/12th and beginning of the 7th/13th century (Assemanus 1728 [\*6: III/1, 307–308], Wright 1894 [\*21: 258–259], GSL [\*22: 310–311]). He was a monk in the Bēt Qūqā monastery near Arbil and became known above all as a grammarian; his great Syriac grammar, of which so far only the section on punctuation has been edited [\*17], marks the fruition of grammar studies among the Nestorians (GSL [\*22: 310 n. 12]); the author displays familiarity with Aristotle's *Organon* (Merx [\*20: 159–160]), and quotes examples from Aristotle's *Meteorology*, *History of Animals*, and *On Plants* (Bohas 2015 [\*64]). Bar Hebraeus is quoted as having said that his contemporary Bar Šakkō was Bar Zo'bi's pupil in the fields of grammar and 'the first book of logic'. He probably meant Aristotle's *Categories*, which together with Porphyry's *Isagoge* constituted the beginning of the Aristotelian *Organon*. Bar Zo'bi's *Memrā d'al pullāgē* (*Treatise on the Parts [of Philosophy]*), written in seven-syllable metre and consisting of 43 short chapters, may be seen as

evidence of the truth of this theory. This treatise, transmitted in ten manuscripts (Daiber 1985 [\*46: 73–80], Kessel 2023 [\*17: 167]), continues the Alexandrian tradition of dihairesis by – following the Alexandrian commentaries (above all Ammonios) on Aristotle's *Categories* and Porphyry's *Isagoge* – beginning with an explanation of the division of philosophy. According to Bar Zo'bi, it consists of a theoretical part comprising theology, the natural sciences, and mathematics; and a practical part comprising politics, economics, and ethics. He goes on to say that mathematics is something that exists neither materially nor immaterially but exclusively in the intellect and consists of geometry, astronomy, arithmetic, and music.

He goes on to discuss practical philosophy, with an excursus along the lines of Aristotle's *Nicomachean Ethics* concerning the four Platonic cardinal virtues 'wisdom', 'courage', 'temperance', and 'justice', which are allocated to the ultimately Platonic parts of the soul, the rational, spirited, and appetitive, require the principle of balance. Subsequently the author focusses on the categories of quantity, quality, 'where', 'when', categories of acting, of distinguishing, the kinds of *hyle*, followed by genus, species, and accident, as well as their shared properties and contraries. The beginning of the discussion of the categories is interrupted by an excursus on the origin of the seven Greek schools of philosophers, which also follows Ammonios' Alexandrian exegesis of Aristotle.

Parallels between the works of the Arab historian Ya'qūbī (d. 284/897) and the philosopher al-Fārābī (d. 339/950–951) (Daiber 1985 [\*46: 80]) substantially confirm the age of the text on dihairesis transmitted by Bar Zo'bi that also influenced Bar Šakkō's book of *Dialogues*. This may be considered a further piece of evidence in favour of Bar Hebraeus' information on the teacher–pupil relationship between Bar Zo'bi and Bar Šakkō. However, a closer comparison shows that Bar Šakkō wrote in more detail and more systematically than Bar Zo'bi and – as the chapter on the seven Greek schools of philosophers shows (Daiber 1985 [\*46: 76–77]) – probably used the same sources independently of him. Still, it remains to be clarified whether and to what degree both not only employed collections of texts of Alexandrian origin, but also Syriac translations of Greek texts. Quotations from Athanasius of Balad's Syriac translation of Porphyry's *Isagoge* can be verified in Bar Zo'bi's works (Daiber 1985 [\*46: 79]), and quotations from Athanasius of Balad's introduction into Aristotelian logic and syllogistic in Bar Šakkō's *Dialogues* (cf. PIW I § 2.3.2).

Bar Zo'bi's *Memrā d'al pullāgē* (*Treatise on the Parts [of Philosophy]*) is continued in his untitled treatise on the four fundamental problems of philosophy. Addressed to his pupils Šlībā, Gīwargīs, and 'Abdallāh, this work is also written in seven-syllable metre, and is extant in four manuscripts. Following Aristotle's *Posterior Analytics* and on the basis of a four-question structure

devised by the Alexandrians Elias and David and probably Olympiodorus as well, the definition of the essence of philosophy must answer four questions: Does philosophy exist?, What is it?, Why is it?, and: How is it? (Daiber 1985 [\*46: 73–74], Hein 1985 [\*77: 55–70]).

Bar Zoʿbī's interest in Aristotle's *Categories* is also reflected in a further rhymed text, *Memrā da-mḥawwē beh puršān kyānā men qnōmā wa-d-paršōpā men appē* (*Treatise on the proof of the difference between nature and hypostasis as well as between 'prosopon' [πρόσωπον, paršōpā, 'person'] and face [appē]*) (Furlani 1929–1930 [\*18], 1941 [\*1: 140–141]). 'Prosopon', according to Bar Zoʿbī, is a constituent of the hypostasis, which is in turn a component of the nature – this, he holds, is proof against the Monophysites of the existence of two natures and two hypostases in the 'Prosopon' (πρόσωπον) of the son of God who is related to God the father as His child. Bar Zoʿbī assumes, as shown by his *Memrā d-puššāq rāzē* (*Treatise on the Explanation of the [Divine] Mysteries*), written in twelve-syllable metre (de Vries 1943 [\*45: 193–196]), a oneness of being in the three divine hypostases, speaking of two hypostases (the divine and the human) that are perfect in their natures in a 'prosopon' in Christ. – A further result of Bar Zoʿbī's study of the terms and their parts is his *Puššāqā da-šmāhē ʿasqē* (*Explanation of Difficult Philosophical Terms*) (GSL [\*22: 311 n. 9], Daiber 1985 [\*46: 73–74]). Finally, it is conceivable that the question of the 'why' of philosophy asked by Aristotle in the *Posterior Analytics* inspired Bar Zoʿbī to compose his *Memrā d-ʿal fīlasōfiyā* (*Treatise on philosophy*) (GSL [\*22: 311 n. 11], Younansardaroud, Weltecke 2020 [\*70: 307–317]) written in twelve-syllable metre, in which he investigates the causal principle and its effect on grammar, logic, and natural philosophy.

### 3.2 ʿAbdišōʿ Bar Berikā

ʿAbdišōʿ Bar Berikā (d. 717/1318) became metropolitan of Nisibis and Armenia before 689/1290, and engaged in multi-faceted literary activity (Wright 1894 [\*21: 285–289], GSL [\*22: 323–325], Yousif 2003 [\*31: 257–261], Rabo 2019 [\*65]). Besides works on dogmatics and church law and a work, lost today, commenting on the entire Bible, he composed scientific treatises, such as on the calculation of chronology, as well as poetry. Of inestimable value is his catalogue of books which J.S. Assemanus' included in his *Bibliotheca orientalis* published in Rome in 1728 under the title *Carmen Ebedjesu Metropolitae Sobae et Armeniae continens catalogum librorum omnium Ecclesiasticorum* [\*45], making it accessible for the first time complete with a Latin translation and annotations.

Unfortunately, ʿAbdišōʿs philosophical works, which are our primary interest here – *Kṭābā d-rāzē gnīzē d-fīlāwsōfiyā d-yaunāyē* (*The book of the Hidden Mysteries of the Philosophy of the Greeks*), *Puššāq eggarteh d-rabbā Arīṣṭaṭālīs*

*tmhā hāy da-kṭab l-Aleksandrāws ‘al umānūtā rabbṭā* (*The explanation of Aristotle’s letter to Alexander [the Great] on ‘the great art’ [i.e. alchemy]*), and *Tre’sar mēmmin ḥāḇōšē d-kull yulfānīn* (*Twelve Treatises that Comprise all the Sciences*) (Assemanus 1728 [\*47: 111/1, 360–361]; Badger 1852 [\*45: 379]) – have not survived. An insight into his philosophical theology, however, may be gained from his work *Kṭāḇā d-Margānītā* (*The Book of the Pearl*), which concerns truth in Christianity [\*46]. In five parts, he presents God, the creation, individual dogmas rejected by him as being heretical, the sacraments of the Church, the festival calendar and the ecclesiastical duties, and the resurrection. In his doctrine of God (Badger 1852 [\*46: 382–387]), which emphasises the uniqueness, eternal duration, inconceivability and non-corporeity of God, and presents the Trinity of God as the triad of intellect (God the Father), wisdom (God the Son), and life (God the Holy Spirit), he follows the modified adaptation of a Neo-Platonic doctrine of triads that had been adopted by Christian circles from the 3rd/9th century onwards (Holmberg 1989 [\*78: 37–38; 84–87; 131–138], Daiber 2004 [\*87: 158–159]). In addition, he embraces the Nestorian doctrine of the existence of Christ in the two natures and persons, the divine and the human.

#### 4 Secondary Literature

Bibliographies [\*1–\*2] – Textual Tradition and Textual History [\*11–16] – Biographies, Introductions, Overviews [\*21–\*31] – Individual Groups of Works, Texts, Problems, Terms [\*41–\*64] – Influence [\*71–\*93]

##### *Bibliographies*

- 1 Furlani, Giuseppe. “I miei lavori dal 1925 al 1940 sulla filosofia greca presso i Siri.” *Rivista di Filologia e d’Istruzione Classica* 19 (1941): 121–149.
- 2 Takahashi, Hidemi. *Barhebraeus. A Bio-Bibliography*. Piscataway (NJ), 2005.

##### *Textual Tradition and Textual History*

- 11 Baumstark, Anton. *Aristoteles bei den Syrern vom V.–VIII. Jahrhundert*. Leipzig, 1900.
- 12 Furlani, Giuseppe. “La versione siriana del Kitāb al-Iṣārāt wat-tanbihāt di

Avicenna.” *Rivista degli Studi Orientali* 21 (1946): 89–101.

- 13 Gätje, Helmut. *Studien zur Überlieferung der aristotelischen Psychologie im Islam*. Heidelberg, 1971.
- 14 Daiber, Hans. “Nestorians of 9th century Iraq as a source of Greek, Syriac and Arabic. A survey of some unexploited sources.” *Aram* 3/1–2 (1991): 45–52. – Repr. in Daiber 2021–2022 [\*36: I 167–175].
- 15 Zonta, Mauro. “Nemesiana Syriaca. New fragments from the missing Syriac version of the *De natura hominis*.”



*Journal of Semitic Studies* 36 (1991): 223–258.

- 16 Reller, Jobst. “Iwannis von Dara, Mose Bar Kephä und Bar Hebräus über die Seele, traditionsgeschichtlich untersucht.” In *After Bardaisan. Studies on continuity and change in Syriac Christianity in honour of Han J. W. Drijvers*. Ed. by G. J. Reinink, A. C. Klugkist. Leuven, 1999, 253–268.
- 17 Kessel, Grigory. “Field Notes on Syriac Manuscripts IV.” *Hugoye* 26 (2023): 143–188.

*Biographies, Introductions, Overviews*

- 21 Wright, William. *A Short History of Syriac Literature*. London, 1894; repr. Amsterdam, 1966.
- 22 GSL = Anton Baumstark, *Geschichte der syrischen Literatur mit Ausschluss der christlich-palästinensischen Texte*. Bonn, 1922.
- 23 GAL = Carl Brockelmann, *Geschichte der arabischen Litteratur*, Suppl. 1. Leiden, 1937.
- 24 CGAL = Georg Graf, *Geschichte der christlich-arabischen Literatur*, vol. 2. Vatican City, 1947.
- 25 EI<sup>2</sup> = *The Encyclopaedia of Islam*. New edition. Ed. by Clifford Edmund Bosworth et al., 9 vols, 6 suppl. vols and indices. Leiden, London, 1960–2009.
- 26 Kawerau, Peter. *Die jakobitische Kirche im Zeitalter der syrischen Renaissance. Idee und Wirklichkeit*. Berlin, 1960.
- 27 Ortiz de Urbina, Ignatius. *Patrologia Syriaca. Altera editio emendata et aucta*. Rome, 1965.
- 28 Ullmann, Manfred. *Die Medizin im Islam*. Leiden, Cologne, 1970.

29 GAS = Fuat Sezgin, *Geschichte des arabischen Schrifttums*, vols 5–7. Leiden, 1974, 1978, 1979.

30 Ignatius Aphram 1 Barsoum. *The Scattered Pearls. A history of Syriac literature and sciences. Translated and edited by Matti Moosa. With a foreword by Cyril Aphrem Karim*. Piscataway (NJ), 2000 (2nd ed.).

31 Ephrem Isa Yousif. *La floraison des philosophes*. Paris, Budapest, Turin, 2003.

32 Brock, Sebastian P., Aaron Michael Butts, George Anton Kiraz and Lucas Van Rompay (eds.), *Gorgias Encyclopedic Dictionary of the Syriac Heritage*, Piscataway, NJ, 2011 [online version: [gedsh.bethmardutho.org/index.html](http://gedsh.bethmardutho.org/index.html)].

33 Fiori, Emiliano and Henri Hugonnard-Roche (eds.), *La philosophie en syriaque*, Paris 2019.

34 King, Daniel (ed.), *The Syriac World*, Abingdon 2020.

35 Perkams, Matthias and Alexander Schilling (eds.), *Griechische Philosophie und Wissenschaft bei den Ostsyrern : zum Gedenken an Mār Addai Scher (1867–1915)*, Berlin 2020.

36 Daiber, Hans. *From the Greeks to the Arabs and Beyond*, 6 vols. Leiden, Boston 2021–2023.

*Individual Groups of Works, Texts, Problems, Terms*

41 Nau, François. “Notice sur le livre des trésors de Jacques de Bartela évêque de Tagrit.” *Journal Asiatique* 9/7 (1896): 286–331.

42 Ruska, Julius. “Studien zu Severus bar Šakkū’s ‘Buch der Dialoge.’”

- Zeitschrift für Assyriologie* 12 (1897): 8–41; 145–161.
- 43 Furlani, Giuseppe. “Barhebreo sull’anima razionale.” *Orientalia* N.S. 1 (1932): 1–23; 97–115 [on Bar Hebraeus, *Candelabrum*, Base VIII].
- 44 Furlani, Giuseppe. “Di tre scritti in lingua siriana di Barhebreo sull’anima.” *Rivista degli Studi Orientali* 14 (1934): 284–308. – Compares *Candelabrum sanctuarii*, *Kṭābā d-teḡraṭ teḡrātā*, *Kṭābā da-swād sofiyā*, and *Kṭābā d-zalgē*.
- 45 de Vries, Wilhelm. “Die ‹Erklärung aller göttlichen Geheimnisse› des Nestorianers Joḥannan Bar Zo’bi (13. Jh.).” *Orientalia Christiana Periodica* 9 (1943): 188–203.
- 46 Daiber, Hans. “Ein vergessener syrischer Text. Bar Zo’bī über die Teile der Philosophie.” *Oriens Christianus* 69 (1985): 73–80. – Repr. in Daiber 2021–2022 [\*36: I 419–428].
- 47 Griffith, Sidney H. “Free will in Christian kalām. Moshe bar Kephā against the teachings of the Muslims.” *Le Muséon* 100 (1987): 143–159.
- 48 Wolska-Conus, Wanda. “Stéphanos d’Athènes et Stéphanos d’Alexandrie.” *Revue des Études Byzantines* 47 (1989): 5–89.
- 49 Daiber, Hans. “Masā’il wa-adjwiba.” In EI<sup>2</sup> [\*25: VI 636–639]. – Repr. in Daiber 2021–2022 [\*36: I 106–116].
- 50 Havard, Clive A. “Jacob Bar Shakkō ‹On the faculties of the soul.›” *VI Symposium Syriacum 1992* (Rome, 1994): 259–267.
- 51 Reller, Jobst. *Mose bar Kephā und seine Paulinenauslegung*. Wiesbaden, 1994.
- 52 Rudolph, Ulrich. “Christliche Bibelexegese und mu’tazilitische Theologie. Der Fall des Moses bar Kephā (gest. 903 n. Chr.).” *Oriens* 34 (1994): 299–313.
- 53 Rudolph, Ulrich. *Al-Māturīdī und die sunnitische Theologie in Samarkand*. Leiden etc., 1997. – Engl. transl. Leiden, 2014.
- 54 Daiber, Hans. “al-Ṭūsī, Naṣīr al-Dīn, 1.-2.” In EI<sup>2</sup> [\*25: X 746–750]. – Repr. in Daiber 2021–2022 [\*36: II 614–628].
- 55 Takahashi, Hidemi. “Barhebraeus und seine islamischen Quellen. Tēgrat tēgrātā (Tractatus tractatum) und Ġazālīs Maqāṣid al-falāsifa.” In *Syriaca. Zur Geschichte, Theologie, Literatur und Gegenwartslage der syrischen Kirchen. Zweites Deutsches Syrologen-Symposium, Juli 2000, Wittenberg* (Münster etc., 2002): 147–175.
- 56 Takahashi, Hidemi. “The Greco-Syriac and Arabic sources of Barhebraeus’ mineralogy and meteorology in *Candelabrum of the sanctuary*, Base II.” *Islamic Studies* 41 (2002): 215–269.
- 57 Teule, Herman. “Gregory Barhebraeus and his time. The Syrian Renaissance.” *Journal of the Canadian Society for Syriac Studies* 3 (Toronto, 2003): 21–43.
- 58 Takahashi, Hidemi. “Bemerkungen zum Buch der Blitze (Ktobo d-zalge) des Barhebraeus.” In *Die Suryoye und ihre Umwelt 4. Deutsches Syrologen-Symposium in Trier 2004*. Ed. by Martin Tamcke, Andreas Heinz. Münster, 2005, 407–422.

- 59 Teule, Herman. "Jacob bar Šakko, the Book of Treasures and the Syrian Renaissance." In *Eastern Crossroads. Essays on Medieval Christian Legacy*. Ed. by Juan Pedro Monferrer-Sala. Piscataway, 2007, 143–154. – Includes a bibliography.
- 60 Hugonnard-Roche, Henri. "L'œuvre logique de Barhebraeus." *Parole de l'Orient* 33 (2008): 129–143.
- 61 Watt, John W. "Graeco-Syriac tradition and Arabic philosophy in Bar Hebraeus." In *The Syriac Renaissance*. Ed. by Herman Teule, Carmen Fotescu Tauwinkl. Leuven, 2010, 123–133.
- 62 Joosse, Peter. "Expounding on a theme. Structure and sources of Bar Hebraeus' 'Practical Philosophy' in The Cream of Wisdom." In *The Syriac Renaissance*. Ed. by Herman Teule, Carmen Fotescu. Leuven, 2010, 135–150.
- 63 Takahashi, Hidemi. "Edition of the Syriac philosophical works of Barhebraeus, with a preliminary report on the edition of the Book of heaven and the world and the Book of generation and corruption of the Cream of wisdom." In *The Letter before the Spirit. The Importance of Text editions for the Study of the Reception of Aristotle*. Ed. by Aafke M.I. van Oppenraay, Resianne Fontaine. Leiden, Boston, 2012, 109–130.
- 64 Bohas, Georges. "Définition du substantif et catégorisation des choses qui sont dans l'univers chez Bar Zoʿbī." *Mélanges de l'Université Saint-Joseph* 66 (2015): 21–41.
- 65 Rabo, Gabriel. *Dionysius Jakob Bar Šalibi. Syrischer Kommentar zum Römerbrief. Einleitung, Edition und Übersetzung mit einem Verzeichnis der syrischen Handschriften zu seinen sämtlichen Werken*, Wiesbaden, 2019.
- 66 Rassi, Salam. "From Greco-Syrian to Syro-Arabic Thought: The Philosophical Writings of Dionysius bar Salibi and Jacob bar Shakko." In E. Fiori, H. Hugonnard-Roche 2019 [\*33: 329–379].
- 67 Takahashi, Hidemi. "Barhebraeus comme philosophe: La philosophie de Barhebraeus ou les oeuvres philosophiques de Barhebraeus." In E. Fiori, H. Hugonnard-Roche 2019 [\*33: 381–388].
- 68 Schmitt, Jens Ole. "Some Remarks on East Syrian Influences Found in Barhebraeus's Works." In M. Perkams, A. Schilling 2020 [\*35: 157–175].
- 69 Rassi, Salam. *Christian Thought in the Medieval Islamicate World. ʿAbdīshōʿ of Nisibis and the Apologetic Tradition*, Oxford, 2022.
- 70 Younansardaroud, Helen and Dorothea Weltecke. "Zu Yōḥannān Bar Zoʿbīs Mēmṛā über die Philosophie." In *Überleben im Schatten: Geschichte und Kultur des syrischen Christentums. Beiträge des 10. Deutschen Syrologentages an der FU Berlin* 2018. Ed. by Shabo Talay, Wiesbaden, 2020, 307–317.
- Influence*
- 71 Furlani, Giuseppe. "Avicenna, Barhebreo, Cartesio." *Rivista degli Studi Orientali* 14 (1934): 21–30.
- 72 Klinge, Gerhard. "Die Bedeutung der syrischen Theologen als Vermittler der griechischen Philosophie an den Islam." *Zeitschrift für Kirchengeschichte* 3. Folge 9 (58) (1939): 346–386.
- 73 Daiber, Hans. *Das theologisch-philosophische System*

des Mu'ammad Ibn 'Abbād as-Sulamī (gest. 830 n. Chr.). Beirut, Wiesbaden, 1975.

74 Wolfson, Harry Austryn. *The Philosophy of the Kalam*. Cambridge/Mass., London, 1976.

75 Daiber, Hans. *Aetius Arabus*. Wiesbaden, 1980.

76 Gutas, Dimitri. "Paul the Persian on the classification of the parts of Aristotle's philosophy. A milestone between Alexandria and Baḡdād." *Der Islam* 60 (1983): 231–267.

77 Hein, Christel. *Definition und Einteilung der Philosophie. Von der spätantiken Einleitungsliteratur zur arabischen Enzyklopädie*. Frankfurt a.M. etc., 1985.

78 Holmberg, Bo. *A Treatise on the Unity and Trinity of God by Israel of Kashkar (d. 872)*. Lund, 1989.

79 Daiber, Hans. "Qosṭā Ibn Lūqā (9. Jh.) über die Einteilung der Wissenschaften." *Zeitschrift für Geschichte der Arabisch-Islamischen Wissenschaften* 6 (1990): 93–129. – Repr. in Daiber 2021–2022 [\*36: III 520–556].

80 Teule, Herman. "Barhebraeus' Ethicon, al-Ghazālī and Ibn Sīnā." *Islamochristiana* 18 (1992): 73–86.

81 Daiber, Hans. "Rebellion gegen Gott. Formen atheistischen Denkens im frühen Islam." In *Atheismus im Mittelalter und in der Renaissance*. Ed. by Friedrich Niewöhner, Olaf Pluta. Wiesbaden, 1999, 23–44. – Repr. in Daiber 2021–2022 [\*36: III 79–106].

82 Teule, Herman. "«La critique du Prince». Quelques aspects d'une philosophie politique dans l'œuvre de Barhebraeus." In *After Bardaisan*.

*Studies on continuity and change in Syriac Christianity in honour of Professor Han J.W. Drijvers*. Ed. by G.J. Reinink, A.C. Klugkist. Leuven, 1999, 287–294.

83 Daiber, Hans. "Die Aristotelesrezeption in der syrischen Literatur." In *Die Gegenwart des Altertums. Formen und Funktionen des Altertumsbezugs in den Hochkulturen der Alten Welt*. Ed. by D. Kuhn, H. Stahl. Heidelberg, 2001, 327–345. – Repr. in Daiber 2021–2022 [\*36: I 145–166].

84 Schramm, Matthias. "Frederick II of Hohenstaufen and Arabic science." *Science in Context* 14/1–2 (2001): 289–312.

85 Bruns, Peter. "Aristoteles-Rezeption und Entstehung einer syrischen Scholastik." In id. (ed.), *Von Athen nach Bagdad*. Bonn, 2003, 29–41.

86 Takahashi, Hidemi. "The reception of Ibn Sīnā in Syriac. The case of Gregory Barhebraeus." In *Before and after Avicenna. Proceedings of the first conference of the Avicenna study group*. Ed. by David C. Reisman, Ahmed H. al-Rahim. Leiden, Boston, 2003, 249–281.

87 Daiber, Hans. "Raimundus Lullus in der Auseinandersetzung mit dem Islam." In *Juden, Christen und Muslime*. Ed. by Matthias Lutz-Bachmann, Alexander Fidora. Darmstadt, 2004, 136–172. – Repr. in Daiber 2021–2022 [\*36: IV 79–116].

88 Hugonnard-Roche, Henri. *La logique d'Aristote du grec au syriaque*. Paris, 2004.

89 *The Arabic version of the Nicomachean Ethics*. Ed. by Anna A. Akasoy, Alexander Fidora. Leiden, Boston, 2005.

- 90 Takahashi, Hidemi. "Fakhr al-Dīn al-Rāzī, Qazwīnī and Bar Shakkō." *The Harp* 19 (2006): 365–379.
- 91 Schmitt, Jens O. "Barhebraeus's Analytics: Medical Analytics." In *The Letter before the Spirit. The importance of text editions for the study of the reception of Aristotle*. Ed. by Aafke M.I. van Oppenraay. Leiden, Boston, 2012, 131–157.
- 92 Takahashi, Hidemi. "The influence of al-Ghazālī on the juridical, theological and philosophical works of Barhebraeus." In *Islam and Rationality. The Impact of al-Ghazālī. Papers collected on his 900th anniversary*, 1. Ed. by Georges Tamer. Leiden, Boston, 2015, 303–325.
- 93 Doru, M. Nesim. "The influence of Islamic philosophy on Bar Hebraeus (Abu' l-Faraj Ibn Al-Ibrī)." *Cumhuriyet İlahiyat Dergisi – Cumhuriyet Theology Journal* 21/2 (Sivas, 2017): 913–946.
- 94 Takahashi, Hidemi. "Reception of Islamic Theology among Syriac Christians in the Thirteenth Century: The Use of Fakhr al-Dīn al-Rāzī in Barhebraeus' Candelabrum of the Sanctuary." *Intellectual History of the Islamicate World* 2 (2014): 170–192.

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*Philosophy in the Islamic World* is a comprehensive and unprecedented four-volume reference work devoted to the history of philosophy in the realms of Islam, from its beginnings in the eighth century AD down to modern times. In the period addressed by this second volume (Eleventh and Twelfth centuries; Part 1: Central and Eastern Regions), both major and minor figures of the period are covered, giving details of biography and doctrine, as well as detailed lists and summaries of each author's works. This is the English version of the relevant volume of the *Ueberweg*, the most authoritative German reference work on the history of philosophy (*Philosophie in der Islamischen Welt. Band 2/1: 11.–12. Jahrhundert. Zentrale und östliche Gebiete*, Basel: Schwabe, 2021).

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