

PART III

NEW SCHOLARLY DIRECTIONS AFTER 1570

CHAPTER EIGHT

ANTIPARACELSICA

With God's help, I have finished the first part of the work against Paracelsus. . . . If a Swiss person wrote evil (however, I do not yet believe that he was Swiss), then a Swiss person has refuted him, if not well, at least truly. . . . For I solemnly swear to you, that neither Arius, nor Photinus, nor Muhammad, nor other Turk, nor any heretic who has [ever] lived was more heretical than this most pestilential magician.

Erastus to Heinrich Bullinger

The lost art of Medicine—recovered by Paracelsus—had an eternally sure foundation, against which all the gates of Hell cannot prevail, let alone the trashy books which Erastus, with his blind, stubborn adherents, has vomited forth against God and the truth.

Benedictus Figulus on Erastus¹

The year 1570 and the Speyer Imperial Diet marked a turning point in the life of Erastus. In addition to fulfilling his duties as professor of medicine and practicing physician, Erastus spent the first half of the 1560s shaping and defending the Reformed confession in the Palatinate. Although he had written several Latin medical and philosophical treatises, only one appeared in print prior to 1569.² For the remainder of his tenure in Heidelberg, Erastus invested most of his time in scholarly pursuits. The first project he took on, his four-volume refutation of the work of Paracelsus, would bring him both fame and infamy in the history of science.

As a humanist physician with deep reverence for classical medical texts, Erastus was appalled by the medical revolutionary Paracelsus,

¹ Benedictus Figulus [aka Benedikt Töpfer], "Dialogus, Alexandri a Suchten . . .," in *Pandora Magnalium Naturalium Aurea Et Benedicta, De Benedicto Lapidis Philosoph. Mysterio* (Strasbourg: Lazarus Zetzner, 1608), 89: "Ich geschweig die Lumpenbücher so Erastus sampt seinen blinden/ verstockten und verfluchten Adhaerenten wider Gott unnd die warheit außgespreyhet hat." English translation: *A Golden and Blessed Casket of Nature's Marvels*, trans. [Arthur Edward Waite] (London, 1893), 134–135.

² Thomas Erastus, *Ratio Formandorum Syllogismorum* (Basel: J. Oporinus, 1565).

who sought to discard all prior medical knowledge. Although Paracelsus had hardly concerned him before this point, Erastus was personally acquainted with Paracelsus's most important early opponents and thus well-placed to refute Paracelsus. Johannes Crato von Krafftheim, Heinrich Bullinger, Johann Jakob Grynæus, and others aided Erastus in assembling his four volumes of anti-Paracelsian disputations (*Disputationum de medicina nova Philippi Paracelsi pars prima-quarta*, hereafter referred to as *De medicina nova*, 1–4).³ After reviewing Paracelsus's vast corpus, Erastus unleashed a comprehensive attack on the religious, philosophical, and therapeutic bases of Paracelsus's medical program. Since Erastus's thinking differed from Paracelsus's at every turn, Erastus's effort to refute him supplies a salutary contrast which allows Erastus's unstated assumptions to become visible. Written at the nadir of his time in the Palatinate, Erastus used his attack on Paracelsus to secure a place among the medical elite of the Holy Roman Empire and to demonstrate his own theological orthodoxy. This chapter will focus on the manner in which Erastus portrayed Paracelsus and why he found Paracelsus's natural philosophy so profoundly heretical.

The Historical Background of Erastus's Opposition to Paracelsus

The sixteenth century was a period of great intellectual ferment. The invention and spread of printing in the mid-fifteenth century magnified the Renaissance cultural renewal that had taken hold in Northern Europe around the turn of the century. Without the proliferation of printing presses in Germany, it would have been impossible to imagine that Martin Luther's revolt would have ever turned into such a tremendous mass media event. The Protestants were not the only beneficiaries of movable type. Elizabeth Eisenstein has asserted that the advent of print

³ *Disputationum De medicina nova Philippi Paracelsi Pars Prima: In qua, quae de remediis superstitiosis & Magicis curationibus ille prodidit, praecipue examinantur* (Basel: Pietro Perna, [1571]); *Disputationum de nova Philippi Paracelsi medicina Pars Altera: In qua Philosophiae Paracelsicae Principia & Elementa explorantur* ([Basel]: Pietro Perna, 1572); *Disputationum de nova Philippi Paracelsi Medicina Pars Tertia* ([Basel]: Pietro Perna, 1572); *Disputationum de nova medicina Philippi Paracelsi Pars Quarta et Ultima* (Basel: Pietro Perna, 1573; hereafter collectively cited as *De medicina nova*, with the respective volume designated with an Arabic numeral). See also the translation of *De medicina nova*, 1 (without the appendix), Franz Josef Schmidt, ed., *Disputationen über die neue Medizin des Philippus Paracelsus* (Hamm: self-published, 1978).

enabled the rediscovery of antique culture to turn into a “permanent renaissance.”⁴ This recovery of classical knowledge also had a profound impact on medical studies. The fundamental basis of all learned European medical knowledge—Muslim, Christian, and Jewish—had been the Greek medical authors of the ancient world. The classics of ancient medicine were the *Hippocratic corpus* associated with, though not all authored by, Hippocrates of Cos (ca. 460–ca. 377 BC) as well as the even more voluminous writings of Galen of Pergamum (ca. 130–ca. 200 AD). Galen assimilated and structured the medical knowledge of the ancient world to such a degree that the title “Galenism” can basically stand for the conventional wisdom in learned medicine from late antiquity into the early modern era. In the early medieval era, medical knowledge fared no better than other types of secular learning in the general cultural decline pejoratively referred to as the Dark Ages. Only a few of the antique medical texts remained in circulation. With limited access to the classics of ancient medicine and restricted knowledge of Greek, Western Europeans would eventually find alternatives in the great medical compilations of Arab-Islamic civilization which entered Western Europe from the twelfth century onward. Admittedly, it is rather crude to speak of the Arab-Islamic medical tradition as a monolithic entity. Two of its most famous representatives, Avicenna (Ibn Sina, 980–1037) and Rhazes (Razi, d. 925), were Persians; the translator Johannitius (Hunayn ibn Ishaq, d. 837) was a Nestorian Christian from southern Iraq; and the great Aristotelian philosopher-physician Averroës (Ibn Rushd, 1126–1198) was from Moorish Spain. Avicenna’s *Canon*, a great medical sourcebook that distilled the classics of the ancient world into a manageable system, became far and away the favorite medical textbook of the Latin West. Learned medieval Christian practitioners remained largely within the medical tradition founded by Hippocrates and Galen; however, this tradition was mediated to the West primarily through Arabic sources such as Avicenna.⁵

⁴ See Elizabeth Eisenstein, *The Printing Revolution in Early Modern Europe* (Cambridge: Cambridge UP, 1983), 111.

⁵ Lawrence I. Conrad, “The Arab-Islamic Medical Tradition,” in *The Western Medical Tradition 800 BC to AD 1800*; Vivian Nutton, “Medicine in Late Antiquity and the Early Middle Ages,” in *The Western Medical Tradition*; idem, “Medicine in Medieval Western Europe, 1000–1500,” in *The Western Medical Tradition*; Nancy G. Siraisi, *Medieval and Early Renaissance Medicine* (Chicago: University of Chicago Press, 1990); idem, *Avicenna in Renaissance Italy: The Canon and Medical Teaching in Italian Universities after 1500* (Princeton: Princeton UP, 1987).

The dominant position of Arabic medicine in the West was to change during the late Renaissance. First, a revival of Greek letters beginning in Italy in the early fifteenth century became widespread by the second half of the century. This revival of Greek coincided with the development of printing. The first complete works of Galen in Greek hit the fairs in 1525 and the *Hippocratic Corpus* would follow the next year. The new proliferation of knowledge of Greek, combined with the availability of a wider array of texts, transformed medical knowledge in the sixteenth century. When historians speak of the “medical Renaissance” of the sixteenth century, it is primarily this recovery of ancient learning that they have in mind. In general this medical Renaissance was text-oriented and deferred to the authority of the classics like the other “humanisms” of the period. The medical Renaissance’s privileging of Greek texts has led some scholars to suggest that the phenomenon should actually be more properly labeled medical “Hellenism” as opposed to simple medical humanism.⁶ Many of the scholars of the period, including Erastus, cultivated a certain disdain for the classic Arabic medical texts that had been favored in the high medieval and early Renaissance period.⁷ While this revival of the Greek medical knowledge of the ancient world was at the heart of the medical Renaissance, the movement did venture beyond the simple assimilation and recapitulation of ancient medical knowledge. Girolamo Fracastoro put forward his intuitively perceptive “seeds of disease” theory, which in some senses presaged the later discoveries of Robert Koch and Louis Pasteur. Andreas Vesalius published his epochal work of anatomy *De humani corporis fabrica* in 1543 with the Basel publishing house of Johannes Oporinus, Erastus’s biographer and publisher. Beyond the real advances represented by these figures and other luminaries such as Jean Fernel, Gabriele Falloppio, and Giambattista da Monte, what is most striking is the degree to which these individuals remained within the larger Galenic paradigm. Fracastoro’s innovative theory of disease was largely derived from Galen and other ancient sources. Even Vesalius, the person with the best claim to be a true innovator, remained largely within Galenic conceptions of anatomy and physiology and did not overturn the notion of inter-ventricular pores, a bequest of Galen which was critical to the faulty understanding of the circulation of blood.

⁶ See the introduction to A. Wear, R.K. French, and I.M. Lonie, *The Medical Renaissance of the Sixteenth Century* (Cambridge: Cambridge UP, 1985), 8.

⁷ See chapter 2 regarding Erastus’s role in the revision of the University of Heidelberg’s medical statutes and early anatomical instruction in Heidelberg.

In short, the sixteenth century did experience a distinct medical Renaissance; however, the parameters for this renewal were largely determined by ancient Greek medical texts.⁸ The “medical revolution” awaited future centuries.

Protestants were active participants in this “medical Renaissance.” Only a few years after Luther nailed his *Ninety-five Theses* to the castle church door in Wittenberg, his younger associate Melanchthon began the project of setting forth a distinctly Protestant natural philosophy based largely on Aristotle, Plato, and Galen at the University of Wittenberg.⁹ Although Luther had early rejected what he considered the pernicious influence of Aristotle on theological studies, Luther himself, and Melanchthon to an even greater degree, still considered the ancient Greeks to be the highest authorities in questions of natural philosophy. With a basis of a Protestant biblical theology and humanist study of the classical texts of natural philosophy, the Wittenberg curriculum served as a model for other central European universities such as Marburg, Jena, Tübingen, and later Heidelberg. This new Protestant tradition did not represent a radical break with the scholastic past, but a reorientation brought on by changes in theological assumptions and a rapid incorporation of humanist methodology. Within this Protestant-humanist intellectual drift, there was a natural sympathy for the program of medical Hellenism. For example, Johannes Crato von Krafftheim, a prized pupil of Luther and Melanchthon, traveled to Padua to study medicine, where he eventually served as an assistant to Giambattista da Monte, one of the most influential of the medical humanists, before embarking on his own illustrious career as imperial physician. As Vivian Nutton has shown, Melanchthon himself had a tremendous impact on the development of the Wittenberg anatomy and incorporated these medical insights into his conception of human nature.¹⁰ In a word, there was no conflict between the medical Renaissance and Protestantism; rather, Protestant Germans were avid participants in the renewal of ancient medical knowledge.

⁸ Regarding Fracastoro’s originality or lack thereof, see Vivian Nutton, “The Seeds of Disease: An Explanation of Contagion and Infection from the Greeks to the Renaissance,” *Medical History* 27 (1983): 1–34. Andrew Wear, “Medicine in Early Modern Europe 1500–1700,” in *The Western Medical Tradition 800 BC to AD 1800*, 207–361, cf. especially the “chronological table” on pp. 207–213.

⁹ Kusukawa, *The Transformation of Natural Philosophy: The Case of Philip Melanchthon*.

¹⁰ Nutton, “Wittenberg Anatomy,” in *Medicine and the Reformation*, 11–32.

While the medical Renaissance was still in its early phase, Paracelsus (1493/94–1541) proposed a more radical overhaul of natural philosophy and medical practice. Born Theophrastus Bombastus von Hohenheim, sometimes with an extra name or two thrown in for good measure, Paracelsus was the true knight-errant of the medical Renaissance. Paracelsus advocated the abandonment of ancient authorities of natural philosophy and the development of a new experimental learning, which integrated themes from alchemy, natural magic, and a spiritualistic brand of Christianity.¹¹ Paracelsus's new philosophy made its public debut in his meteoric rise and fall at the University of Basel in 1527–1528, which was signaled by his unprecedented medical lectures in the vernacular and the perhaps legendary account of his burning of Avicenna's *Canon*.¹² After his fall from prominence in Basel, Paracelsus led an itinerant life, stopping for short sojourns here and there, depositing manuscripts far and wide. He died in relative obscurity in Salzburg in 1541.¹³

If Paracelsus had been underappreciated while alive, it was due in large part to the fact that his contemporaries did not know the full richness of his corpus, since few of his works were printed in his lifetime. His unconventional habits and difficult personality likewise made it nearly impossible for Paracelsus's medical contribution to be judged on its own terms. For all his limitations and quirks, he was, in the words of leading contemporary historian of pre-modern medicine Nutton, "the only innovative medical theorist of the sixteenth century."¹⁴ He rejected the Galenic notion that disease was by definition an imbalance of the four humors and developed a theory that emphasized external causes of disease. In this theory, sometimes termed a parasitic conception of disease, an exter-

¹¹ Paracelsus's religiosity defies simple categorization. He is now generally considered something of a radical spiritualist reformer, though he never formally broke with the Catholic Church. See Ute Gause, *Paracelsus: Genese und Entfaltung seiner frühen Theologie* (Stuttgart: J.C.B. Mohr, 1993).

¹² Pagel, *Paracelsus* (see above n. 3), 19–22.

¹³ Regarding Paracelsus's biography, see Udo Benzenhöfer, *Paracelsus* (Reinbek bei Hamburg: Rowohlt, 1997); Charles Webster, *Paracelsus: Medicine, Magic and Mission at the End of Time* (New Haven: Yale UP, 2008). See also the competent popular treatment in English by Philip Ball, *The Devil's Doctor: Paracelsus and the World of Renaissance Magic and Science* (New York: Farrar, Straus and Giroux, 2006). For a brief introduction to Paracelsus studies and concise bibliography, see Gerhild Scholz Williams and Charles D. Gunnoe, eds., *Paracelsian Moments: Science, Medicine, and Astrology in Early Modern Europe* [SCE&S 64] (Kirksville, Mo.: Truman State UP, 2002). See additionally the new collection of translated texts: Paracelsus, *Essential Theoretical Writings*, ed. Andrew Weeks (Leiden: Brill, 2008).

¹⁴ Nutton, "The Seeds of Disease," 23.

nal agent would attack one particular organ. In Paracelsus's theory, this harmful agent was the disease itself rather than simply being the cause of disease. If his theory ran 180 degrees against the Galenists, so did his proposed therapies. He abandoned traditional remedies, which after all were intended to restore the balance of the four humors, in favor of new chemical medicines. His miracle drugs were perhaps even more dangerous than the traditional run of prescriptions based on herbs. In this case, Paracelsus's chemical medicine was important primarily for the stimulus that it gave to the emerging science of chemistry. Beyond his general stimulus to chemical medicine, in his emphasis on experiment and observation, seen for example in his path-breaking work linking certain diseases to the mining industry, he has rightly earned a prominent place in the history of medicine.

Paracelsus's works were to find a warmer reception in the second half of the sixteenth century than they ever had in his lifetime. A full-scale Paracelsian revival was afoot by the 1570s. Michael Toxites, Gerhard Dorn, and Adam von Bodenstein (son of the Reformer Andreas Karlstadt von Bodenstein) all worked feverishly to uncover Paracelsus's manuscripts and see them through press. The popularity of Paracelsus's writings was enough to spawn a veritable Paracelsian school in the later sixteenth century which featured new works in the Paracelsian tradition by authors such as Jacques Gohory (aka Leo Suavius), Alexander von Suchten, Petrus Servinus, and Oswald Croll, as well as a befuddling panoply of pseudo-Paracelsian texts. As we shall see below in the late sixteenth century, it became increasingly difficult to separate the "Paracelsian" from the genuine Paracelsus. As time progressed, the Paracelsian movement displayed a more pervasive Hermetic influence and a greater predilection for transmutational alchemy (chrysopoeia) than Paracelsus's own work had exhibited.¹⁵ This school did not represent the establishment, but rather, the vibrant counter-culture in sixteenth-century natural philosophy. Though Paracelsus had clearly thrown down the gauntlet with his explicit rejection of Galen, Aristotle, and Avicenna, the two paradigms of medical theory were not always in conflict, and figures such as Theodor Zwinger and Johann Winther (Guintherius) von Andernach

¹⁵ The fourteenth volume of the Sudhoff edition contains many such spurious works. For a fascinating look into the pseudo-Paracelsian world, see Joachim Telle, "Von der Wahrheit der alchemischen Kunst': Der pseudoparacelsische Brieftraktat 'Vom Wunderstein' in einer frühneuzeitliche Verfassung," in *Resultate und Desiderate der Paracelsus-Forschung*, ed. Peter Dilg and Hartmut Rudolf (Stuttgart: Franz Steiner Verlag, 1993), 57-78.

sought to mediate between the competing traditions.¹⁶ Alternatively, there were times when the divisions between the two schools of natural philosophy seemed absolute, as in Thomas Erastus's comprehensive rejection of the Paracelsian system.

Erastus published the first full-scale refutation of Paracelsianism at precisely the time when the Paracelsian revival was reaching a crescendo. He had not been the first to become alarmed by Paracelsian practitioners; an undercurrent of humanist criticism had already joined insinuations of heresy from orthodox Protestant medical scholars. As this excursus on anti-Paracelsianism will demonstrate, Erastus was closely connected to the major pre-1570 critics of Paracelsus. Every element of the anti-Paracelsian critique before Erastus would find its way into the text of Erastus's *De medicina nova*.

Anti-Paracelsianism before Erastus

Johannes Oporinus

Paracelsus's first major "critic," if we may use the term loosely, was his former amanuensis Johannes Oporinus (1507–1568), who later found fame as Basel's leading humanist printer. Oporinus had served Paracelsus during the height of Hohenheim's acceptance by Basel's humanist-oriented establishment in the late 1520s. Oporinus lived through Paracelsus's fall and abrupt departure from Basel (1528), and helped facilitate his master's resettlement in Alsace. After abandoning his medical studies, Oporinus was briefly engaged as a professor of classical languages at the University of Basel before he discovered his life work in printing, a career that was crowned by the printing of Theodor Bibliander's edition of the *Koran* (1543) and Vesalius's *De humani corporibus fabrica* (1543).¹⁷

Oporinus's influence on the Paracelsian revival of the second half of the sixteenth century was ambiguous. On the one hand, he was the

¹⁶ See Allen G. Debus, "Guitherius, Libavius and Sennert: The Chemical Compromise in Early Modern Medicine," in *Science, Medicine and Society in the Renaissance: Essays to Honor Walter Pagel*, ed. Allen G. Debus (New York: Science History Publications, 1972); Carlos Gilly, "Zwischen Erfahrung und Spekulation: Theodor Zwinger und die religiöse und kulturelle Krise seiner Zeit," *Basler Zeitschrift für Geschichte und Altertumskunde* 77 (1977): 57–137 and 79 (1979): 125–233.

¹⁷ Martin Steinmann, *Johannes Oporinus: Ein Basler Buchdrucker um die Mitte des 16. Jahrhunderts* [BBG 105] (Basel: Helbing & Lichtenhahn, 1967).

source for many of the Paracelsian manuscripts that eventually found their way into the famous Huser edition of Paracelsus's works. On the other hand, in a development that many Germanic Paracelsus scholars have viewed with scorn, he also composed a letter which detailed Hohenheim's lifestyle, cures, and vices.¹⁸ Much remains uncertain regarding this letter, including when it was written (in 1555 or 1565) and to whom it was originally addressed. Although Johann Weyer has commonly been held as the addressee, the earliest extant manuscript version does not corroborate this fact.¹⁹ At this juncture there is no consensus as to whether Oporinus's letter should be regarded as a *Schmähbrief* (slandorous attack),²⁰ as most pro-Paracelsian scholarship has seen it, or if it represented, in the words of Walter Pagel, "awe mingled with a measure of admiration and relief as after waking after a nightmare."²¹ Despite its appreciation for Hohenheim's cures, the letter contains much information that could make it a fertile source for someone attempting to discredit Paracelsus. The allegations include an overly large appetite for drink, carousing among peasants, never being heard to pray, rejecting the pope and Luther as well as Galen and Hippocrates, and a general want of hygiene, which prompted Oporinus to refer to Paracelsus as "pig-like." Most damaging, as Sepp Domandl has suggested, were the parts of the letter potentially implicating Paracelsus in sorcery, including Oporinus's suggestion that Hohenheim's purse was always mysteriously full.²²

There is every reason to expect that Erastus and Oporinus knew each other quite well. Although no correspondence between the two has survived, abundant surviving evidence suggests they had a strong connection with one another. Erastus studied at the University of Basel and was part of Oporinus's humanist milieu, corresponding with his

¹⁸ Sepp Domandl, "Paracelsus, Weyrer, [sic] Oporin. Die Hintergründe des Pamphlets von 1555," in *Paracelsus. Werk und Wirkung. Festgabe für Kurt Goldhammer* [SBPF 13], ed. Sepp Domandl (Vienna: Verband der wissenschaftlichen Gesellschaften Österreichs, 1975): 53–70 and 391–392. Udo Benzenhöfer, "Zum Brief des Johannes Oporinus über Paracelsus: Die Bislang älteste bekannte Briefüberlieferung in einer 'Oratio' von Gervasius Marstaller," *Sudhoffs Archiv* 73 (1989): 55–63. Domandl reprints Daniel Sennert's 1629 Latin version. Benzenhöfer prints a 1571 manuscript version stemming from Gervasius Marstaller. For an English summary and assessment, see Pagel, *Paracelsus*, 29–31.

¹⁹ Benzenhöfer, "Zum Brief des Johannes Oporinus," 61. The letter was addressed either to Weyer or Reiner Solenander or to both collectively.

²⁰ Domandl, "Paracelsus, Weyrer, Oporin," 53. Taking issue with Sudhoff's earlier negative assessment, Domandl also concludes that "Oporin war sicher ein begabter, sehr gebildeter und tüchtiger Mann." Domandl, "Paracelsus, Weyrer, Oporin," 67.

²¹ Pagel, *Paracelsus*, 30.

²² Domandl, "Paracelsus, Weyrer, Oporin," 53–55, 62.

associates Bonifacius and Basilius Amerbach, Martin Borrhaus, and Caelio Secundo Curione.²³ Moreover, a remark in a letter from Oporinus to Bullinger suggests that Erastus had corresponded with Oporinus.²⁴ Indeed this would be expected, since Oporinus was the publisher of Erastus's first philosophical work in 1565. The best piece of evidence that connects them is the biographical sketch of Erastus that Oporinus composed for Pantaleon's book of biographies (which was reproduced in chapter one). Thus, we know definitively that Oporinus had considerable knowledge of Erastus's early life.²⁵ Since Erastus was the junior member of this relationship and he mentioned Oporinus in both his printed works and correspondence, it would seem fair to assume that Erastus knew Oporinus equally well.

This connection raises the possibility that Erastus's conception of Paracelsus was dependent in part on conversations with Oporinus. Indeed, in a section of *De medicina nova* in which Erastus quoted Oporinus, he remarked that the characterizations came from Oporinus's "letters and his words."²⁶ Although we cannot exclude such a possibility, I judge it unlikely that Erastus had actually discussed Paracelsus's life and customs at length with Oporinus before the latter's death. I base this assessment on Erastus's apparent lack of interest in Paracelsus before 1570. This theory appears to be supported by the fact that Erastus was not able to produce any unique testimony from Oporinus in *De medicina nova*, but printed forty percent of the text of Oporinus's "Letter to Weyer" nearly verbatim. This perhaps suggests that he learned of Oporinus's opinions concerning Paracelsus only secondhand and after Oporinus's death in 1568.²⁷ Thus, we can in all likelihood exclude a firsthand transmission of Oporinus's opinions regarding Paracelsus to Erastus. It is not clear how Erastus received a copy of Oporinus's "Letter to Weyer," though it may have come through Grynaeus or Zwinger in Basel, Caspar Wolf or Bullinger in Zurich, or perhaps from Weyer himself. Although one may agree with Webster that "the Oporinus letter counts as a benign judgement" concerning Paracelsus, we shall see below that the manner in which Konrad Gessner and Erastus interpreted its content and employed it in their anti-

²³ See the Correspondence Register.

²⁴ CO, 18:241–242 (no. 3275).

²⁵ Pantaleon, *Prosopographia Heroum*, 3:545. See chapter 1.

²⁶ *De medicina nova*, 1:239: "Haec partim ex Oporini literis excepere, partim ex eius sermonibus annotare libuit."

²⁷ *De medicina nova*, 1:236–240. Concerning Oporinus, see also *De medicina nova*, 2:12.

Paracelsian propaganda was hardly benign.²⁸ Thus, whether or not Oporinus was attempting to slander his former master, his portrait became an important component of Erastus's attempt to assassinate Hohenheim's character.

Konrad Gessner

If Oporinus was an anti-Paracelsian by default, Konrad Gessner was also an enigmatic anti-Paracelsian. Gessner (1516–1565) is remembered as Switzerland's great early modern naturalist for such works as the *Historiae animalium* (1551) and for being the first modern bibliographer, with the *Bibliotheca universalis* (1545). Among his additional works was a collection of medical recipes titled *Thesaurus Evonymi Philatri de remediis secretis* (1552), which also established him as a proponent of experimentally oriented chemical medicine.²⁹ Despite all that he had in common with the Paracelsians, however, Gessner was the most outspoken opponent of Paracelsus in the 1560s. His appreciation for chemical pharmacology aside, he was to become, in the words of Webster, "arguably the figure most responsible for determining the image of Paracelsus."³⁰

Gessner's assault on Paracelsus was more of an attack on Paracelsus's peculiar customs and teachings than a critique of chemical medicine in general. This assault was not limited to Paracelsus but applied to other Paracelsians, such as Suchten, as well. Gessner's letters from the early 1560s are peppered with accusations and warnings concerning the sect of Paracelsian physicians.³¹ To Joachim Camerarius II, Gessner

²⁸ Charles Webster, "Conrad Gessner and the infidelity of Paracelsus," *New Perspectives on Renaissance Thought: Essays in the History of Science, Education and Philosophy in Memory of Charles B. Schmitt*, ed. John Henry and Sarah Hutton (London: Duckworth, 1990), 15.

²⁹ For an English translation, cf. Konrad Gessner, *The Treasure of Euonymus* (London, 1559; facsimile reprint, New York: De Capo, 1969).

³⁰ Webster, "Conrad Gessner and the infidelity of Paracelsus," 13; Konrad Gessner, *Epistolarum Medicinalium libri III* (Zurich: C. Froschauer, 1577); Bernhard Milt, "Conrad Gessner und Paracelsus," *Schweizerische medizinische Wochenschrift* 59 (1929): 486–509; Gernot Rath, "Die Briefe Konrad Gefßners aus der Trewschen Sammlung," *Gesnerus* 7 (1950): 140–170; 8 (1951): 195–215; Egon Helmich, ed., *Die Briefe Konrad Gesners an Crato von Krafftheim nach der Briefsammlung von 1566* (Düsseldorf: G.H. Nolte, 1938).

³¹ E.g. Gessner to Crato, Zurich, Aug. 16, 1561. Gessner, *Epistolarum medicinalium*, fol. 1^v: "Oporinus Basileae olim discipulus Theophrasti, & familiaris fuit, is mira de eius cum daemonibus commercio praedicat. Astrologiam vanam, Geomantiam, Necromantiam, & huiusmodi artes prohibitas exercent. Equidem suspicor illos ex Druidarum reliquiis esse, qui apud Celtas veteres in subterraneis locis a daemonibus aliquot annis

had emphasized that the Paracelsians he knew were both unlearned and immoral.³² An extreme example of his critique can be seen in a letter to Crato dated August 16, 1560, in which he concludes that Paracelsus was an “impious man, and sorcerer, who was clearly in league with demons.”³³ Gessner’s critique was thus fundamentally religious and contained two separate accusations. The first was that of magic, but not benign or natural magic; rather, conversation with demons. The second accusation suggested that the Paracelsians denied Christ’s divine nature and were, therefore, a reprise of the Arian heresy. At best, then, Paracelsians were a sect of Antitrinitarians, at worst a group practicing pre-Christian sorcery.

The enigma of Gessner’s rejection of Paracelsianism was that he paired this religious refutation with a call to defend the tradition of medicine represented by Galen and Hippocrates. This argument might represent a cogent line of reasoning if Gessner were a conservative desiring to defend all things traditional, but this was manifestly not the case. As mentioned above, in his *Treasury of Euonymus*, Gessner had spurred the trend toward innovation in chemical pharmacology and displayed a willingness to try secret remedies. In a letter to Johann Muralt he admitted that he had learned much concerning metals from Paracelsus, and that he himself used antimony, though infrequently.³⁴ It is difficult to comprehend Gessner’s rejection of Paracelsian medicine, when he said, “I do not approve of their teaching and methods and also not their forbidden craft,” since he had not fully spelled out what aspect of their medical therapy he rejected.³⁵ Thus, we are left with Gessner’s clear rejection of Paracelsus on religious grounds and a seemingly ambivalent-to-positive opinion regarding Paracelsian pharmacology.

Since Erastus was from Baden in Switzerland and had ties to such Zurich notables as Bullinger, Konrad Pellikan, and Rudolf Gwalther, it seems almost inevitable that Erastus’s and Gessner’s paths would have

erudiebantur.” Gessner to Didymus Obrecht, Zurich, March 18, 1560, Gessner, *Epistolarum medicinalium*, fol. 114^v: “Fuit is Paracelsus nostra memoria Magus, admirabilis homo, notus amicis quibusdam meis, a vicinis nostris Helvetiis oriundus, pervagatus magnum orbis partem. Chymia arte, quam ipse puto Spagyricam vocat, excellentissimus omnium, ita ut per eam metalla immutaret, argentum ac aurem faceret....”

³² Rath, “Die Briefe Konrad Geßners,” 159–162.

³³ Gessner, *Epistolarum medicinalium*, fol. 1^v.

³⁴ Rath, “Die Briefe Konrad Geßners,” 207–211.

³⁵ Rath, “Die Briefe Konrad Geßners,” 160, 162. Gessner to J. Camerarius, Jan. 27, 1565, Rath, 160: “Doctrinam et methodum eorum non probo neque artes illicitas quas medicinae exercendae necessarius aiunt ... Medicamenta vero eorum multa sane admiror.”

crossed. Indeed, their paths did cross frequently, but, rather than becoming fellow travelers, it seems that they were often moving in opposite directions. For example, even if the theory that Erastus studied in Zurich before attending the University of Basel is correct, he would not likely have come into significant contact with Gessner, since this period would have been when Gessner was a Greek instructor at the Lausanne Academy (1537–1540). Later the two would have had the opportunity to meet in Basel, where Gessner received his M.D. in 1541, although the neophyte Erastus hardly would have been a peer to Gessner, who was already such an accomplished scholar that his reception of the doctorate from the Basel faculty was something akin to an honorary presentation.³⁶ As we saw in chapter one, when Erastus was a student in Bologna, he attempted to act as an intermediary between Gessner and the great Swedish naturalist Olaus Magnus. Since we do not possess the contemporary letters that passed between Erastus and Gessner, it is difficult to perceive how the episode eventually turned out, though the limited information we possess does not indicate they were on overly familiar terms at that juncture. Their acquaintance is further attested by Erastus's signature in Gessner's *Liber amicorum*, and the two extant letters of Erastus to Gessner reveal a degree of personal familiarity.³⁷ In later years when the two were on a more comparable intellectual level, even though Erastus was a medical professor, theological controversies absorbed much of his productive energy. However, Erastus did compose his "Letter concerning the Nature, Material, Origin, and Use of the Sandstone (*Lapis Sabulosus*), Which Is Found in the Rhenish Palatinate," a work hailed as the earliest independent publication in soil science, at Gessner's behest.³⁸

³⁶ Eduard K. Fueter, *NDB*, 6:343.

³⁷ Richard Durling, "Conrad Gesner's *Liber amicorum* 1555–1565," *Gesnerus* 22 (1965): 134–159 (no. 15). Erastus's undated entry is signed "Thomas Erastus, Helvetius." Erastus to Gessner, April 11, (1557), *StAZ*, MSE II 361, fol. 56; Erastus to Gessner, Heidelberg, Sept. 17 1564, Zurich, Zentralbibliothek, MS Z VIII 119, fols. 1–18 (partially printed in Thomas Erastus, *Disputationum et Epistolarum Medicinalium volumen*, ed. Theophil Mader (Zurich: Johannes Wolf, 1595), fols. 90^r–105^v (no. 25)). Ironically, Erastus's letter from Sept. 17, 1564 was a treatise on the plague, the disease which would take Gessner's life the next year. Erastus had suffered the plague as a youth and published a vernacular tract on it as well. *Kurtzer Bericht für den gemeinen Mann/ wie er sich in disen sterbenden leuffen/ ohne sondern kosten mit Preservativen unnd Remedien verwaren und halten soll* (Heidelberg: J. Mayer, 1563). Cf. Wesel-Roth, *Thomas Erastus*, 2–3. Concerning the "Bericht," cf. Joachim Telle, "Die Pestschrift des Thomas Erastus," in *Bibliotheca Palatina. Katalog zur Ausstellung*, Textband, ed. Elmar Mittler (Heidelberg: Braus, 1986), 97–98.

³⁸ "Epistola de natura, materia, ortu atque usu lapidis sabulosi, qui in Palatinatu ad Rhenum reperitur," in *Explicatio quaestionis famosae illius, utrum ex metallis ignobilibus*

Erastus grasped the magnitude of Gessner's scholarly achievement and, upon learning of his death, composed a moving tribute to Gessner in a letter to their mutual friend Bullinger.³⁹ By the early 1570s when Erastus turned his attentions fully upon questions of natural philosophy, Gessner had been dead nearly five years. Arguably much of Erastus's best work is in the spirit of Gessner's naturalism and in some senses Erastus was to become Gessner's intellectual heir. This is manifestly the case with regard to Gessner's impact on Erastus's conception of Paracelsus. However, although we know Gessner wrote to Crato, Didymus Obrecht, Aldoph Occo, and others warning them of Paracelsians, there is no surviving evidence that he conveyed a similar admonition to Erastus. In the limited extant sources connecting the two during Gessner's lifetime, there is apparently no mention of Paracelsus. Thus, it appears that as in the case of Oporinus, Erastus did not experience his elder contemporary's opinions regarding Paracelsus directly. On the contrary, he encountered them as literary sources years after they were written.

Erastus did have direct access to Gessner's writings concerning Paracelsus. While he could have received a more than adequate impression of Gessner's opinion of Hohenheim from Crato or Camerarius, with whom Erastus was in communication at this time, Erastus was also able to access Gessner's papers through the assistance of Gessner's successor, Caspar Wolf.⁴⁰ Erastus's readers, in turn, benefited from his good connections and read a twenty-four line selection condemning Paracelsus from Gessner's letter to Crato from August 16, 1560, in the third volume of *De medicina nova*.⁴¹ The rabid repudiation of Hohenheim's unortho-

aurum verum & naturale arte conflare possit, printed with *De medicina nova*, 2. See below. See Wolfgang Ziehen, ed., *Epistola de natura, materia, ortu atque usu lapidis sabulosi qui in Palatinatu ad Rhenum reperitur* (Aalen: Scientia Verlag, 1984).

³⁹ Erastus to Bullinger, Heidelberg, Jan. 1, 1566, StAZ, E II 361, fol. 10: "Valde perturbarunt nos literae tuae in ea parte, in qua D. Gesnerum mortuum scribis. Vir fuit summus, in laboribus perpetuus, ea praeditus humanitate et ingenii placiditate, qua vix alius quisquam. Deus ut nos quidem iudicamus, magnum lumen extinxit patriae. Vix multis saeculis extitit homo [t]ogatus, excipio Theologos, qui magis illustravit et ornarit patriam. Sed Dei consilia bona sunt, cogitationes nostrae sunt somnia. Valde amavi optimum, eruditissimum et sanctum virum, et cum gaudio, ubi Deo visum erit, eum cum aliis piis revidebo in Semperiternum. Amen."

⁴⁰ Wolf would later serve as the editor of the 1577 edition of Gessner's correspondence. Erastus was also in correspondence with the Zurich physician Taddeo Duni in the spring of 1571. See the Correspondence Register.

⁴¹ What follows is taken from Erastus's text of *De medicina nova*, 3 (1572). The texts are virtually identical, with only two alternate readings in Erastus's version. In the 1577 edition of Gessner's letters "Alexandria Suchten:" is read in the place of "N.N." Two lines

doxy and the accusation of magic contained in Gessner's letters were to become central features of Erastus's censure of Paracelsus.

Johann Weyer

One of the first writers to assail Paracelsus in print was Johann Weyer (1515–1588), court physician of Duke Wilhelm III of Jülich-Cleves and famed opponent of witch-hunts, whose controversy with Erastus on that topic will be investigated in the following chapter. Weyer studied at the University of Paris and should also be counted as a representative of the medical Renaissance. In both his appreciation for the medical authorities of antiquity and his disdain for anything that smacked of quackery, Weyer was a natural opponent of Paracelsian revival. The likelihood that Weyer was the recipient of the famous letter of Oporinus recalling Paracelsus's lifestyle suggests that Weyer had been following the advance of Paracelsianism from an early date.⁴² It will be recalled that Oporinus's publishing house also printed every authorized Latin version of *De praestigiis daemonum* published in Weyer's lifetime.⁴³ Weyer was not alone in his opposition to Paracelsian practitioners, but part of a larger lower Rhenish circle of anti-Paracelsians including Gervasius

further, "Dei filium" is read instead of "filium Dei." There are also minor differences in punctuation, which I have not noted.

"His scriptis reperi propositiones a te missas nebulonis illius N.N. [Alexandri a Suchten:] de cuius in re medica, causis & curationibus morborum imperitia, ut nihil dicam, (neque enim opus est apud te). Vide quem nobis conspicuum filium Dei [Dei filium] faciat: non alium scilicet, quam spiritum mundi & naturae, eundemque corporis nostri (mirum quod non etiam asini ac bovis addit) qui artificio Discipulorum Theophrasti a materia seu corporibus elementorum separari potest. Si quis ipsum urgeat; dicet se Philosophorum sententiam retulisse, non suam. At qui ita recitat, ut laudet. Et scio alios quoque Theophrasteos talia suis scriptis aspergere, unde Christi divinitatem eos negare facile appareat. Ipsum quidem Theophrastum Arianum fuisse omnino mihi constat. Hoc agunt, ut Christum omnino nudum hominem fuisse persuadeant, nec alium in eo spiritum quam in nobis esse. Scio in Polonia & dudum Arianos multos fuisse, & nuper ab Italis quibusdam eo profectis ipsorum numerum augeri. Itaque & hanc ob causam, & ut artis medicae nostrae fundamenta ac methodum secundum Hippocratem & Galenum verissime traditam tuearis, oro te & hortor, vir doctissime, ut omnibus modis te illis calumniatoribus, magis, & Arianis opponas. Qua in re si quid ego etiam potero, non deero." *De medicina nova*, 3:14–15.

⁴² See chapter 9 for literature on Weyer.

⁴³ George Mora et al. eds., *Witches, Devils and Doctors in the Renaissance: Johann Weyer, De praestigiis daemonum* (Binghamton, N.Y.: Center for Medieval and Early Renaissance Studies, 1991; hereafter cited as Mora, *Witches, Devils and Doctors*), lviii.

Marstaller, Rainer Solenander, and Bernhard Dessen von Kronenburg.⁴⁴ Weyer included this harsh rebuke of the Paracelsian sect in *De praestigiis daemonum*:

They rail at the ancient and sacrosanct art of medicine, and slander and reject it, and bend their efforts to trample it underfoot, fabricating new principles and new expressions, which even they do not understand or defend by rational argument, content with the confused heap of useless words with which Paracelsus filled his writings. He vaunts that he is the monarch of medicine, discoverer of the true art; and as such do his followers regard him and worship and venerate him.⁴⁵

The picture that Weyer presented was of Paracelsus as a would-be medical prophet who had rejected all previous medicine, and who now possessed a cult-like band of followers whom Weyer rejected as charlatans. Weyer, like other humanists such as Crato and Gessner, was put off by the deliberate obscurity of Paracelsian texts. Weyer was quick to assert, however, that he was not opposed to chemistry and that he employed chemical cures himself (including antimony). Weyer's position on chemical medicine was at best ambivalent, however, since he added that the "Paracelsians' eyes have been closed by the soot of Chemistry," leaving them vulnerable to Satan's exploits.⁴⁶ While leaving the door cracked for a positive role for iatrochemistry, Weyer's estimation of the learning and practice of Paracelsians was uniformly negative.

Although there were few direct references to Weyer in *De medicina nova*, it is clear from a letter Erastus sent to Bullinger on October 29, 1570, that the *De praestigiis daemonum* was one of the first things Erastus read concerning Paracelsus.⁴⁷ The magnitude of Weyer's influence on

⁴⁴ See Benzenhöfer, "Zum Brief des Johannes Oporinus."

⁴⁵ Quoted from Mora, *Witches, Devils and Doctors*, 154. Johann Weyer, *De praestigiis daemonum, et incantationibus ac veneficiis Libri sex* ... (Basel: Ex Officina Oporiniana, 1568), 196: "quibus medicam artem veterem & sacrosanctam insectantur, calumniantur, rejiciunt, pedibusque conterere satagunt, nova ementiti principia cum vocibus novis: quae nec ipsi quidem intelligunt, nec rationibus defendunt, contenti verborum inutilium, quibus sua Paraclesus opplevit scripta, congerie & acervo. Hic se medicinae monarcham, veraeque artis inventorum iactat: talem illum quoque habent colunt & veneratur eius sectatores." For an assessment of the ebb and flow of Weyer's conception of Paracelsus, see Michaela Valente, *Johann Wier: agli albori della critica razionale dell'occulto e del demoniaco nell'Europa del Cinquecento* (Florence: L.S. Olschki, 2003), 109–134.

⁴⁶ Weyer, *De praestigiis daemonum* (1568), 200: "Paracelsistarum oculos fuligine chymico obductos."

⁴⁷ Erastus to Bullinger, StAZ, E II 345, fol. 741. The editions of *De praestigiis daemonum* vary greatly, with the trend being accumulation over time (and greater demonization of Paracelsus). For instance, the 1564 edition did not have the negative refer-

Erastus's image of Paracelsus has been obscured by their disagreement regarding witchcraft. Weyer has the curious distinction of being a chief source for Erastus's conception of Paracelsus as well as being himself the principal subject of one of the disputations of *De medicina nova*.⁴⁸ Erastus's correspondence with Bullinger and Joachim Camerarius II reveals that Erastus had seen letters from Weyer around the end of 1572 and that their disagreement concerning the punishment of witches was the source of a measure of antagonism.⁴⁹ Disagreements aside, Weyer did not hesitate to recognize Erastus's critique of Paracelsus in his 1577 edition of *De praestigiis daemonum*.⁵⁰ In fact, although Erastus opposed Weyer on his central passion, defending the accused from the charge of witchcraft, it would be difficult to suggest another sixteenth-century figure who influenced Erastus's natural philosophy as much as Weyer. Although Weyer cannot be considered an active collaborator on *De medicina nova*, Erastus knew Weyer's work well and eventually would make Weyer's image of Paracelsus as a medical false prophet a central theme of his refutation of Paracelsus.

Erastus's Decision to Refute Paracelsus

Although Erastus was personally connected to all of Paracelsus's major critics, in other ways he was an unlikely opponent of Paracelsus. Erastus had been brought to the University of Heidelberg in 1558 by the

ence to Paracelsus quoted above. The 1577 edition added the *Liber Apologeticus*, which has more anti-Paracelsian material. Michaela Valente offers side-by-side comparisons of many relevant texts. Valente, *Johann Wier*, 125–134.

⁴⁸ *De medicina nova*, 1:193–215. Erastus, however, did not mention Weyer by name in this disputation and would later employ the same tactic in his later *Repetitio disputationis de Lamiis* (Basel: Pietro Perna, [1578]). Erastus does mention Weyer on at least two other occasions in the work. *De medicina nova*, 1:187; 4:131. See below.

⁴⁹ The letters are discussed in detail in chapter 9. Erastus to J. Camerarius II, Jan. 31, [1573], UB Erlangen (Sammlung Trew), MS no. 6 and Erastus to Bullinger, Jan. 13, [1573], StAZ, E II 361, fol. 31.

⁵⁰ Concerning the opinions of Augier Ferrier, Weyer notes: "Hanc autem Ferrerii sententiam, eiusmodi nimirum effectus ex constanti & firma operantis persuasione consequi, modo patientis animus non reluctetur, erudite confutat ornatissimus vir D. Thomas Erastus in parte prima disputat. de nova Paracelsi medicina." *De praestigiis daemonum* ... (Basel: Ex Officina Oporiniana, 1577), col. 579. In his rebuttal of Leo Suavius (Jacques Gohory) in the *Liber Apologeticus*, Weyer states: "Tibi autem Leo Suavi, quum ad monomachiae conflictum in Paracelsi protectionem nimis pruriant unguiculi, cum doctissimo exercitatissimoque in hoc belligerandi genere Thoma Erasto philosopho, & antiquae

pro-alchemical Elector Ottheinrich, who had earlier employed the Paracelsians Suchten, Bodenstein, and Toxites and whose former residence in Neuburg was a major repository of Spagyric manuscripts.⁵¹ When Erastus was called to Heidelberg, he may have been known as an anti-astrological doctor, but not as an anti-Paracelsian. At that point, Erastus's medical reputation was based chiefly on his practice and not on his publishing activity. Erastus testified in a dedicatory letter to August of Saxony in the first volume of *De medicina nova* that he had come upon one of Paracelsus's writings some time previously when Paracelsus was not so famous, but that he had set it aside since he found it barbarous.⁵² It was only when the "Paracelsian revival" reached a crescendo around the year 1570 with a spate of spagyric publications that Erastus began to take note of Hohenheim again.⁵³ A survey of Erastus's earlier writings reveals no definitive mention of Paracelsus before he wrote *De medicina nova*. Although Erastus had many close connections to Hohenheim's contemporaries, he had shown practically no interest in Paracelsus's medical philosophy, much less his personal life, until he decided to undertake the refutation in the fall of 1570.

Erastus had displayed some interest, however, in Paracelsian pharmacology in the 1560s. The first issue that brought him into contact with Paracelsian medicine was the antimony debate. The introduction to the first volume of *De medicina nova* spoke of "heated dispute among some scholars over the power of antimony."⁵⁴ Rather than the later Parisian debate over antimony, Erastus apparently was speaking of the south German controversy whose key players were Achilles Pirmin Gasser and Lukas Stenglin. Both men worked in Augsburg and were the most visible opponents of Paracelsian pharmacology during this period.⁵⁵ Stenglin

medicinae patrono multis nominibus laudatissimo congregere, si quid verae philosophiae, quid artis medicae, quid animi aut virium in te resideat." *De praestigiis daemonum* (1577), col. 881.

⁵¹ Telle, "Kurfürst Ottheinrich, Hans Kilian und Paracelsus," 130–146.

⁵² *De medicina nova*, 1:aiiv.

⁵³ For a general (and none too sympathetic) overview of the Paracelsian revival, see Thorndike, *History of Magic and Experimental Science*, 5:617–651. Whereas Sudhoff could only find eleven editions of works by Paracelsus published in the 1550s, he was able to list ninety-four editions from the 1560s. Indeed, seventeen editions were printed in 1570 alone. Karl Sudhoff, *Versuch einer Kritik der Echtheit der Paracelsischen Schriften. I. Theil: Bibliographia Paracelsica. Besprechung der unter Hohenheims Namen 1527–1893 erschienenen Druckschriften* (Berlin, 1894; reprint, Graz, 1958; hereafter cited as *Bibliographia Paracelsica*), 44–218.

⁵⁴ *De medicina nova*, 1:aiiv.

⁵⁵ Włodzimierz Hubicki, "Alexander von Suchten," *Sudhoffs Archiv* 44 (1960): 54–

addressed the antimony question in a set of theses in 1566, which assessed the drug's usefulness as a purgative in strict Galenic terms. He concluded that antimony's toxicity was widely recognized, like mercury and other metals, and that its capacity for harm, in most cases, outweighed its therapeutic usefulness. While not directly assaulting Paracelsus, Stenglin noted antimony's novelty and suggested that some doctors might use it out of avarice or ignorance.⁵⁶ Erastus had likewise weighed in on the antimony debate, perhaps as early as 1563, in the closing sections of his book *On the occult powers of drugs*.⁵⁷ He also warned of antimony's toxicity but limited his critique to the drug itself. Erastus displayed none of his later vitriol against Paracelsus in the work. Since the book was not published until 1574, however, we cannot be sure that the brief chapter on antimony was written in 1563. Thus, while there is evidence that Erastus had passing knowledge of the fringes of Paracelsian medicine in the 1560s, his

63; *De medicina nova*, 3:13–60. Erastus received a manuscript of Gasser and Stenglin's censure of Alexander von Suchten's propositions from Balthasar Brauch of Schwäbisch Gmünd. These theses, rather than being the printed theses of Stenglin cited below, were likely the two sets of manuscript theses that Thorndike reviewed in the Vatican Library (Thorndike, *History of Magic and Experimental Science*, 5:640–641). Erastus's connection with Stenglin is documented in a letter from 1575; however, I have found no sources which prove a direct contact between them in the late 1560s. Erastus to Stenglin, Jan. 10, 1575, printed in Erastus, *Disputationum et Epistolarum Medicinalium volumen*, fols. 73^r–76^v (no. 22). Likewise, there is evidence for contact between Erastus and Gasser in the mid-1570s, but not before. Cf. Karl-Heinz Burmeister, *Achilles Pirmin Gasser, 1505–1577: Arzt und Naturforscher, Historiker und Humanist*, 2 vols. (Wiesbaden: Guido Pressler, 1970), 193.

⁵⁶ Lukas Stenglin, *Quaestiones III. Quarum primus est. An Stimmi seu Antimonium aer-grotantibus citra noxam exhiberi possit* (Augsburg: Philipp Ulhard, 1566), theses 58 and 60; idem, *Apologia Adversus Stibii Spongiam, non ita dudum a Michaele Toxite* (Augsburg: Mathaeus Francus, 1569). Concerning Toxites's response, see Charles Schmidt, *Michael Schütz genannt Toxites: Leben Eines Humanisten und Arztes aus dem 16. Jahrhundert* (Strasbourg, 1888), 101–102.

⁵⁷ Thomas Erastus, *De occultis pharmacorum potestatibus* ... (Basel: Pietro Perna, 1574). This work contains the only potential pre-1570 mention of Paracelsus by Erastus that I have found. I say potential, in that, although the text of the book was dated July 22, 1563, it was not printed until 1574. The book mentions a "Theophrastus" in the text once (p. 127) and likewise in the chapter dedicated to antimony. Otherwise the only other likely reference to Paracelsus comes in the title of Chapter 26, "Refutatio rationis, qua Paracelsici usum Stibii commendant" (p. 125). In my estimation, it is likely that this title was composed during the preparation of the book for publication in 1574, particularly since such practitioners are referred to as "Paracelsians," which would have been a novel category in 1563; whereas, it would have been common by the mid-1570s. Because the chapter itself does not include a personal attack on Paracelsus, which was a conventional part of *De medicina nova* and *De auro potabili*, I think that it is likely that the chapter was in fact written in 1563.

special concern for Paracelsus only commenced with the composition of *De medicina nova*.

Erastus made the decision to refute the teachings of Paracelsus while the imperial diet was being held in Speyer in 1570.⁵⁸ The first mention of Paracelsus in Erastus's correspondence comes out of the blue in a letter to Bullinger from October 29, in which he reports, "I am completely absorbed in reflection regarding confuting the most monstrous and absurd dogma of Paracelsus."⁵⁹ Activities at Speyer provided the impulse for Erastus to undertake the confutation. Erastus reported to Grynaeus that a conference had been held in Speyer with Crato and Heinrich Petri in attendance concerning the "life and vices of Paracelsus."⁶⁰ After the meeting, Crato wrote to Erastus and urged him to undertake the refutation of Paracelsus. Erastus also relates that Johann Hermann, personal physician to Duke August of Saxony, urged him to refute Paracelsian doctrine in toto.⁶¹

Having outlined his course of action, Erastus wrote his friends seeking their input on the project. Analysis of the work itself and Erastus's correspondence grants a clear picture of who supplied him with information. Erastus immediately turned to Bullinger for information regarding Paracelsus's personal life. With his position as head of the Zurich church and through his immense correspondence network, Bullinger was ideally located to channel any fruitful source material regarding Paracelsus's Swiss origins to Erastus. Erastus first asked Bullinger if he knew anything about a "von Hohenheim" family in Einsiedeln and what he knew of Paracelsus through Dr. Clauser. Very likely to Erastus's surprise, Bullinger was able to comply with his request by sending along his own reminiscence of meeting Paracelsus some forty years before (discussed below). Beyond his assistance in ferreting out Paracelsus's Swiss origins, Bullinger was also consulted by Erastus regarding the theological sections of the work as the project progressed.

In Erastus's contemporaneous correspondence, he singled out the imperial court physician Johannes Crato von Krafftheim (1519–1585) as the person who most strongly urged him to undertake a refutation of Paracelsus. Crato, one of the leading academic physicians of the age,

⁵⁸ See discussion in chapter 6. The diet was held May 22 – Dec. 11, 1570.

⁵⁹ Erastus to Bullinger, Oct. 29 [1570], StAZ, E II 345, fols. 741–742. See Appendix B, text no. 1.

⁶⁰ Erastus to J.J. Grynaeus, Nov. 29, [1571], Basel UB, G II 4, fol. 300^v. Quoted in full in Appendix B, text no. 2.

⁶¹ *De medicina nova*, 1:aiiv.

served the Habsburg court from late in the reign of Ferdinand I and enjoyed an especially close relationship with the Emperor Maximilian II.⁶² At some point Crato appears to have become extremely alarmed at the growing menace of Paracelsianism and by the late 1560s had become something of a leader of the opposition to Paracelsus.⁶³ He had been one of the first authors to lash out at Paracelsus in print, including a long diatribe against Paracelsus in the preface of his edition of Da Monte's *In Nonum Librum Rhasis ad R. Almansorem [...] lectiones*.⁶⁴ Paracelsus was not mentioned by name in this attack, however, due to the cunning maneuver of the printer Pietro Perna, who was also one of the chief printers of Paracelsus's works. Perna simply removed Paracelsus's name from the text. Even though Hohenheim's name was excised, as Carlos Gilly has argued, it was not difficult to discern the object of Crato's scorn.⁶⁵ Crato greatly encouraged Erastus's work; in fact, one receives the impression that Erastus was tapped to tackle a project that Crato did not have the time to do himself. Crato loomed large both in the pages of *De medicina nova* and in Erastus's letters to other individuals at that time. Unfortunately, no letters survive from Crato to Erastus with which we can directly assess Crato's encouragement of the project. We can discern, however, that Crato was content with Erastus's work when he commends the effort of "Noster Erastus" in later letters to

⁶² Gillet, *Crato von Crafftheim und seine Freunde*; Marlene Jantsch, "Crato von Krafft-heim," in *Gestalten und Ideen um Paracelsus* [SBPF 11], ed. Sepp Domandl (Vienna: Notring, 1972), 99–108; Howard Louthan, *Johannis Crato and the Austrian Habsburgs: Reforming a Counter-Reform Court* [Studies in Reformed Theology and History 2/3] (Princeton, 1994).

⁶³ Carlos Gilly, "Theophrastia Sancta': Der Paracelsismus als Religion im Streit mit den offiziellen Kirchen," in *Analecta Paracelsica*, Joachim Telle, ed. (Stuttgart, Steiner, 1994), 431–432 (For a shorter English version of the article see: Carlos Gilly, "Theophrastia Sancta'—Paracelsianism as a Religion, in Conflict with the Established Churches," in *Paracelsus: The Man and His Reputation, His Ideas and Their Transformation*, ed. Ole Grell (Leiden: Brill, 1998), 151–185); Webster, "Conrad Gessner and the infidelity of Paracelsus," 23; Ralf Bröer, "Friedenspolitik durch Verketterung: Johannes Crato (1519–1585) und die Denunziation der Paracelsisten als Arianer," *Medizinhistorisches Journal* 37 (2002): 139–182. See also Charles D. Gunnoe, Jr. and Jole Shackelford, "Johannes Crato von Krafftheim (1519–1585): Imperial Physician, Irenicist, and Anti-Paracelsian," in *Ideas and Cultural Margins in Early Modern Germany: Essays in Honor of H.C. Erik Midelfort*, ed. Elizabeth Plummer & Robin Barnes (Aldershot, England: Ashgate, 2009), 201–216.

⁶⁴ Giovanni Battista da Monte (Montanus), *In Nonum Librum Rhasis ad R. Almansoren lectiones*, ed. Johannes Crato (Basel: [Pietro Perna & Heinrich Petri], 1562). Gilly reprints a long quotation from the work in "Theophrastia Sancta," 432, note 18.

⁶⁵ Gilly, "Theophrastia Sancta," 431–432.

Zwinger.⁶⁶ Erastus's correspondence to Crato from this time (1570–1573) has also not survived, perhaps because Crato was accompanying Emperor Maximilian II on his travels. The letters from Erastus to Crato that have survived, both from the 1560s and the later 1570s, do not concern Paracelsus. Nevertheless, in his correspondence with Bullinger, Heinrich Smet, and Joachim Camerarius II, Erastus reports having received letters from Crato encouraging the work. These lost letters must be the source for the quotations from Crato found in the pages of *De medicina nova*.⁶⁷

What Erastus records from Crato is a reprise of Gessner's accusations, re-emphasizing the Paracelsians' ties to Arianism.⁶⁸ In the fourth volume of *De medicina nova* Erastus includes a quote from Crato saying that he had seen a book written some two hundred years earlier by a monk from Ulm that contained Hohenheim's medications.⁶⁹ Not only does this slander Paracelsus, but it also had the effect of distancing some positive elements of Paracelsian pharmacology from Hohenheim's person. Crato also supplied a lively account of Paracelsus's stay in Moravia, which will be discussed more fully below. Beyond the information he supplied, Crato's chief significance must be seen in his role as the project's catalyst and cheerleader.

Considering Crato's difficult life as an itinerant imperial physician, it is unlikely that he would have made an ideal collaborator for a multi-volume work. Into the void created by Crato's inaccessibility stepped Johann Jakob Grynaeus, Camerarius, Heinrich Smet, and to a lesser degree, Bullinger and Gwalther. Erastus referred to the project as "*Paracelsica nostra*" when speaking to these men who served as collaborators in proofing and critiquing the work.⁷⁰

⁶⁶ Scholtz, *Epistolarum philosophicarum, medicinalium, ac chymicarum a summis nostrae aetatis philosophis ac medicis exaraturum, volumen*, cols. 237–240.

⁶⁷ Erastus to Camerarius, May 30 [1571], Erlangen UB (Sammlung Trew), MS no. 2; Erastus to Bullinger, April 9, (15)71, StAZ, E II 361, fol. 18. See the Correspondence Register.

⁶⁸ *De medicina nova*, 3:15–16. Regarding Crato and the accusation of Arianism, see Bröer, "Friedenspolitik durch Verketzerung," 142, 166–169; Wilhelm Kühlmann and Joachim Telle, eds., *Corpus Paracelsisticum: Dokumente frühneuzeitlicher Naturphilosophie in Deutschland, Der Frühparacelsismus* (Tübingen: Max Niemeyer, 2001, 2004), 1:473–474.

⁶⁹ *De medicina nova*, 4:300 (Crato quoted by Erastus): "Remedia quibus aliquando usus dicitur, non illius esse ex eo certus sum, quod librum vidi ante 200. fere annos a monacho quod a Ulmae scriptum, in eo eadem medicamenta, quae ille frustillatim nunc in has nunc in alias chartas sparsit, perspicue sunt perscripta. Nullum reperies in ullo Paracelsi libro medicamentum integrum in uno loco, spargit in diversas."

⁷⁰ E.g., Appendix B, text no. 9.

The humanist physician Joachim Camerarius II (1534–1598) of Nuremberg was an ideal person to help with the project, considering his broad humanist medical training and his ties to Crato and Gessner. Joachim Camerarius II was the namesake of his more famous father Joachim Camerarius the Elder (1500–1574), who was a leading humanist, confessional irenicist, and close associate of Melanchthon. After studying medicine with Crato in Breslau, Camerarius II likewise took his place as one of the most influential humanist naturalists of central Europe. Apparently Erastus and Camerarius II began to correspond only after Erastus undertook the anti-Paracelsian project. Erastus informed him of his researches and sent him volumes to review.⁷¹ He even sought to persuade Camerarius II to talk his friend, the famous pharmacologist Pierandrei Mattioli (1500–1577), into undertaking an investigation of Paracelsus's pharmacology.

Erastus's key collaborator on the anti-Paracelsian project was Johann Jakob Grynaeus, who at that time was a pastor and superintendent in Rötteln in the Margravate of Baden outside of Basel. Grynaeus's most valuable asset to the anti-Paracelsian project was his proximity to Basel, where Paracelsus had experienced a memorable sojourn. Erastus charged Grynaeus with securing a printer for the project and also for digging up material on Paracelsus in Basel. Grynaeus served as Erastus's primary contact with the printer Perna and produced the indices for the work.

Three members of the faculty of the University of Heidelberg also supported Erastus's endeavor. It was only natural that Erastus's close friend and confessional ally Simon Grynaeus, Johann Jakob's brother, would aid Erastus. He was still a member of the arts faculty in the early 1570s, though he would later ascend to the more prestigious and higher paying medical faculty. Sigismund Melanchthon, the nephew of Philipp Melanchthon and occupant of the third chair of medicine at the Heidelberg University when the project began, was party to some of the discussions that lay behind the project.⁷² Finally, Wilhelm Xylander, the academy's leading classical scholar and an ally of Erastus in university politics, wrote introductory poems in Greek and Latin for volume one.⁷³

⁷¹ Erastus to Camerarius, Erlangen UB (Sammlung Trew), MSS nos. 1–6. Erastus sent Camerarius greetings in a letter by Zacharias Ursinus dated May 3, 1567. This fact suggests that Erastus was keen to make Camerarius's acquaintance and perhaps gain entrance into the larger Crato intellectual circle. Rott, "Briefe des Heidelberger Theologen Zacharias Ursinus aus Heidelberg und Neustadt a.H.," 65.

⁷² *De medicina nova*, 4:69, 182; Wesel-Roth, *Thomas Erastus*, 71.

⁷³ *De medicina nova*, 1:B2–B3; Wesel-Roth, *Thomas Erastus*, 66.

Aside from Crato and Camerarius, this entire group had previously cooperated with Erastus's attempt to resist the imposition of a consistory of elders in the Palatinate.

Disputations on the New Medicine of Philip Paracelsus

Erastus's anti-Paracelsian work was issued in four parts from 1571 to 1573. The first volume of *De medicina nova* does not bear a date on the title page and has generally been assigned the date of 1572, along with volume two, as they always seem to be bound together in library collections. However, since the autumn Frankfurt fair catalog confirms that volume one was already in print in 1571, we can confidently assign that year as the publication date.⁷⁴ Volumes two and three followed in 1572 and volume four in the fall of 1573.

In the first volume of *De medicina nova*, Erastus primarily dealt with the theological implications of Paracelsus's magical-astrological worldview. The subtitle of the book read: "In which the things concerning the superstitious remedies and magical cures he produced are chiefly examined." A list of the chapter titles grants a good indication of the range of the work:

1. On creation.
2. On the effective power (*virtute effectrice*) of miracles.
3. On imaginative powers, which the body exercises either in itself or in another.
4. On enchantment and its associated effects.
5. Certain things concerning the rotating intelligences of the celestial orbs.
6. Whether other natural and licit magic be permitted.
7. On the operation of magic, and on its types; whereby, on the efficacy of words, characters, images figures and other superstitious medications are disputed in great detail.
8. On *lamia* or *striges* [witches] things which are not un-useful to know.

⁷⁴ *Die Messkatalog Georg Willers*, 1:382. See note 3 for full publication information. From Erastus's letters from 1571, it is clear that he was obsessed to see the first volume appear at the fall Frankfurt fair. The main body of the book was finished on March 26, 1571 and the introduction is dated May 1. Erastus's personal letter to Elector August of Saxony explaining his dedication of the work was dated Sept. 9, 1571.

9. On magic of divination, and of its kinds; and also not a little on foreseeing.
10. On the heavens of the stars and their power and influence.
11. A little on the life and death of Paracelsus.⁷⁵

In addition to the listed chapters, the book also included an appendix on pages 243–267, which addressed select topics that Erastus found particularly galling from Paracelsus's recently published *Astronomia Magna* (analyzed in detail below). Paracelsus was not always the target of Erastus's critique in the first volume, a phenomenon that has often confused scholars. For example as mentioned above, Erastus included a brief disputation on the punishment of witches in the book that was a response to Johann Weyer. This chapter had nothing to do with Paracelsianism per se beyond lumping Paracelsus in Weyer's category of learned magicians who were, according to Weyer, much more culpable for their crimes than ignorant witches.⁷⁶ Erastus also took on the Paracelsian notion that granted nearly unlimited powers to the imagination in the healing process. Using Aristotelian reasoning, Erastus rejected this notion that imagination could be an efficient cause for any natural effect. Using imagination, a person can only construct a mental image; imagination cannot impact physical reality.⁷⁷ Here Erastus was taking on the ideas of Pomponazzi and Avicenna as well as Paracelsus. As the list of chapter titles suggests, a primary focus of this first volume was astrology. Like his earlier anti-astrological works, his theologically driven desire to protect the honor of God occupied first place in his thought, though he paired this motif with arguments from experience. Hand-in-hand with Erastus's attack on astrology was a critique of natural magic. Here, too, Paracelsus was not the only target of the work; Erastus directly assaulted Marsilio Ficino himself. Erastus exclaimed,

Would you think this man a priest of God ... and not rather the patron and high priest of Egyptian mysteries ... ? Certainly there have never lived under the sun ... more diligent worshipers of demons than the Platonists.⁷⁸

⁷⁵ *De medicina nova*, 1:[β₄].

⁷⁶ *De medicina nova*, 1, chapter 8, pp. 193–215: "De lamiis seu strigibus non inutilia scitu."

⁷⁷ *De medicina nova*, 1:78. See Pagel, *Paracelsus*, 316–317; Walker, *Spiritual and Demonic Magic from Ficino to Campanella*, 156–166.

⁷⁸ English quotation from Walker, *Spiritual and Demonic Magic from Ficino to Campanella*, 163. *De medicina nova*, 1:118: "An tu Sacerdotem Dei, qualis videri voluit, ac

It should not be surprising that Erastus also rejected the notion that amulets possessed special powers or that specific words might have a healing agency. The first volume of *De medicina nova* was thus a full-fledged attack on natural and demonic magic focused on Paracelsus, whom Erastus saw as the culmination of the tradition.

Part two of *De medicina nova*, “In which the principles and elements of Paracelsian philosophy are explored,” as the subtitle proclaimed, was less oriented toward the magical-religious questions of volume one, but focused on a number of fundamental questions of pre-modern natural philosophy. The chapter headings included:

1. On the teaching and the teacher or master of Paracelsus.
2. On the true principles of natural things.
3. On the false principles of nature of Paracelsus.
4. On the elements of mixed things.
5. On the hidden seeds of things in the abyss of Paracelsian elements.
6. On mixture.
7. On the imperfection of certain mixtures, the generation and cause.
8. On generation.
9. On the Cabala and its types and parts, and whether it is in some way licit or not.⁷⁹

The absolute impasse between Erastus’s traditional Aristotelian scientific notions and Paracelsus’s more innovative and often ad hoc approach was never more evident than it was here. Whereas the object of book one had ultimately been to reveal Paracelsus’s “monstrous impiety,” the purpose of book two was to demonstrate his “incredible ignorance and asinine rudeness.”⁸⁰ Indeed, Erastus spent a great deal of energy simply asserting that Paracelsus lacked a rudimentary facility in philosophical discourse, as was evident in his misuse of terms. The chief subject of the second book was the refutation of Paracelsus’s three-principle theory. Paracelsus’s three principles—salt, sulfur, and mercury—played a central role in his chemical philosophy. These principles did not per se replace the four elements of fire, water, earth, and air as schematized by Empedo-

non potius Aegyptiorum sacrorum approbatorem & Antistitem esse putabis ita licenter in pietatem insanientem? Certum est, nullus sub hoc Sole (de Philosophis loquor) vixisse maiores & officiosiores Daemonum cultores Platonis.”

⁷⁹ *De medicina nova*, 1: []:(₄V).

⁸⁰ *De medicina nova*, 2:1.

cles. As Pagel has suggested, "They are rather principles within matter that condition the state in which matter can occur."⁸¹ Erastus objected to Paracelsus's use of terms since he had labeled something a "principle" that seemed by definition to possess material existence. He rejected Paracelsus's contention that any substance could be reduced to a combination of salt, sulfur, and mercury if decomposed by heat.⁸² Alternatively Erastus upheld the traditional four-element theory. He suggested that the properties of substances or composites, which Paracelsus credited to the innate principles, were nothing other than a factor of the specific mixture of the four elements in the substance. If Erastus found Paracelsus's quasi-material "principles" difficult, he had even less use for the tendency in some of Paracelsus's works to conceptualize "elements" as the non-material spirit that served as the guiding soul of a given substance. For Erastus, this notion represented an even greater misuse of conventional philosophical categories.⁸³ Erastus's critiques were well aimed. As Allen Debus commented, "Erastus had touched on a sore point when he attacked the work of Paracelsus in regard to the three principles. Paracelsus had not been at all lucid when he had spoken of the elements, the principles, and their interrelation."⁸⁴ Paracelsus's own contradictions on this matter perhaps also explain why Erastus took particular pains to address the more systematic presentation of Paracelsian element theory contained in Petrus Severinus's *Idea of Philosophical Medicine*, though without mentioning Severinus by name. Jole Shackelford has recently demonstrated that the Dane Severinus was the object of much of Erastus's critique of Paracelsian element theory.⁸⁵ Erastus rejected Paracelsus's chemical philosophy in toto and defended traditional Aristotelian concepts of elements, mixture, and change.

⁸¹ Walter Pagel, "Paracelsus," in *DSB*, 10:309.

⁸² Regarding this observation of Erastus, Debus remarked: "It is interesting that these were the most powerful arguments to be used by Robert Boyle against the principles in his *Sceptical Chymist* nearly a century later." Debus, *The English Paracelsians* (New York: Franklin Watts, 1966), 39.

⁸³ *De medicina nova*, 3, passim; Pagel, *Paracelsus*, 319–322.

⁸⁴ Debus, *The English Paracelsians*, 39.

⁸⁵ Petrus Severinus [Peder Soerenson], *Idea medicinae philosophicae fundamenta continens totius doctrinae Paracelsicae, Hippocraticae et Galenicæ* (Basel: Heinrich Petri, 1571). Jole Shackelford, "Early Reception of Paracelsian Theory: Severinus and Erastus," *SCJ* 26 (1995): 123–135; idem, *A Philosophical Path for Paracelsian Medicine: The Ideas, Intellectual Context, and Influence of Petrus Severinus (1540/2–1602)* (Copenhagen: Museum Tusculanum Press, 2004). Severinus's reaction to Erastus's censure will be discussed below.

In a move destined to vex catalogers through the centuries, Erastus's publisher Perna also printed two independent works of Erastus and attached them as addenda to *De medicina nova*, 2. Since the first of these works, *Explication of this Famous Question, Whether it Is Possible to Produce True and Natural Gold out of Ignoble Metals by Art* (*Explicatio quaestionis famosae*),⁸⁶ appeared with its own dated title page, separate pagination and distinct signature numbers and since it was not mentioned on the title page of *De medicina nova*, 2, by rights it should be considered an independent publication. Appearing with the *Explicatio quaestionis famosae* was Erastus's important "Letter Concerning the Nature, Material, Origin and Use of the Sandstone, Which Is Found in the Rhenish Palatinate,"⁸⁷ which also has its own title page but continues the pagination of *Explicatio quaestionis famosae*. Against considering *Explicatio quaestionis famosae* an independent book, however, is the fact that it was manifestly issued with *De medicina nova*, 2, and the fact that the two works were listed in the table of contents of *De medicina nova*, 2. Since these two works did not treat Paracelsus in particular, I will not include them in my analysis of the *De medicina nova*.⁸⁸ Without going into detail, I will note that the *Explicatio quaestionis famosae* did attract a significant amount of attention in its day. It prompted the French alchemist Gaston DuClo (aka Claveus) to write his *Defense of Chrysopoeia* to counter Erastus's rejection of alchemical transmutation.⁸⁹ What is particularly interesting is that DuClo was hardly more enamored with Paracelsian *arcana* than Erastus himself. DuClo took pains to praise Erastus's general status as a philosopher, though he rejected what he saw as Erastus's premature and poorly informed refutation of the transmutation of metals in his *Defense of Chrysopoeia*. DuClo's work in turn elicited the criticism of Andreas Libavius, whom Gilly has called the "most important intel-

⁸⁶ *Explicatio Quaestionis famosae illius, utrum ex metalis ignobilibus aurum verum & naturale arte conflare possit* (Basel, Pietro Perna, 1572).

⁸⁷ See note 38 above.

⁸⁸ For an analysis of the contents of *Explicatio quaestionis famosae* and its place in the early modern alchemical debate, see the chapter "Erastus and the Critique of Chemical Analysis" in William R. Newman, *Atoms and Alchemy: Chymistry and the Experimental Origins of the Scientific Revolution* (Chicago: University of Chicago Press, 2005), 45–65.

⁸⁹ Gaston DuClo, *Apologia Chrysopoeiae et Argyropoeiae, adversus Thomam Erastum, Doctorem et Professorem Medicinae* (1598; reprint, Oberursel: Cornelius Sutorius, 1602). Regarding DuClo, see Lawrence M. Principe, "Diversity in Alchemy: The Case of Gaston 'Claveus' DuClo, a Scholastic Mercurialist Chysopoeian," in *Reading the Book of Nature* [SCE&S 41], ed. Allen Debus and Michael Walton (Kirksville, Mo., 1998), 181–200.

lectual follower of Erastus.”⁹⁰ While Libavius may have borrowed a few elements of his anti-Paracelsian critique from Erastus, he likewise did not shy away from finding fault with Erastus’s chemical views. Libavius would debate the issue of transmutation with another anti-Paracelsian, Nicolas Guibert. These debates reveal that the chemical philosophy was not the proprietary territory of Paracelsians in the late sixteenth and early seventeenth centuries.⁹¹

In the third volume of *De medicina nova*, Erastus launched a broadside against the Paracelsian medical philosophy. Central to this volume was the fundamental difference between the Paracelsian and the more traditional conception of disease. As mentioned above, Paracelsus’s conception of disease was one of the more innovative aspects of his medical theory. Rather than understanding disease in the traditional sense as the simple imbalance of the four humors, Paracelsus developed a conception of disease as a toxin or a parasite that attacked a particular organ or “seat” of disease. Erastus had little patience for this complete departure from the traditional conception of disease and thought it was ludicrous to consider disease a “created substance.” Here Paracelsus had committed a most basic philosophical error in that he confused the cause of disease with disease itself. At no point did Erastus’s philosophical categories blind him more from the potential utility of Paracelsian theory. In this book, Erastus also rejected the pervasive notion of the microcosm-macrocosm analogy in Paracelsus’s works. Once again, far from restricting himself to the work of Paracelsus, Erastus also included a long refutation of Suchten’s 18 Propositions in *De medicina nova*, 3.⁹²

The final volume of *De medicina nova* was the only one to deal extensively with actual questions of medical therapy. Its subtitle proclaimed its goal of being a book, *In which the True Method (ratio) of Curing*

⁹⁰ Gilly, “Zwischen Erfahrung und Spekulation,” *Basler Zeitschrift für Geschichte und Altertumskunde* 77 (1977): 66.

⁹¹ Nicolas Guibert, *Alchymia ratione et experientia ita demum viriliter impugnata & expugnata, una cum suis fallaciis & deliramentis, quibus homines imbubinârati: ut nunquam imposterum se erigere valeat* (Strasbourg: Lazarus Zetzner, 1603). Andreas Libavius, *Defensio et declaratio perspicua alchymiae transmutatoriae, opposita Nicolai Guiperti Lotharingi Ph. Med. expugnationi virili: Et Gastonis Clavei Iurisconsulti Nivernatis Apologia contra Erastum malè sartae & pravae* ... (Oberursel: Ex officina Cornelii Sutorii, 1604). See Bruce T. Moran, *Andreas Libavius and the Transformation of Alchemy: Separating Chemical Cultures with Polemical Fire* (Sagamore Beach, MA: Science History Publications, 2007); Newman, *Atoms and Alchemy*, 66–153.

⁹² *De medicina nova*, 3:13–60. See Bröer, “Friedenspolitik durch Verketterung,” 175–178. See also Appendix B, text no. 12.

the Maladies of Epilepsy, Elephantitis or Leprosy, Dropsy, Arthritis and Colic Are Demonstrated and Paracelsianism Is Most Firmly Confuted. As is evident from the subtitle, Erastus discoursed here on various diseases, simultaneously critiquing Paracelsus and putting forward his own observations and theories. Although beyond the purview of this study, the volume offers a fertile field of investigation in determining the degree to which Erastus advanced the state of knowledge on select diseases. Owsei Temkin, one of the past century's foremost historians of medicine, applauded the advances made by Erastus in the description of epilepsy. It had been common to consider epilepsy a disease that caused loss of consciousness, making the entire body experience convulsions. Erastus broke with tradition and suggested that there might be forms of epilepsy that caused convulsions in only specific parts of the body. Being able to conceptualize a more limited form of epilepsy, Erastus distinguished between "perfect" and "imperfect" forms of epilepsy. From these observations Temkin concluded, "This simplified clinical classification represented a real advance over the elaborate and often artificial divisions of the preceding period."⁹³ Erastus has also been credited for recognizing the aura to be the sign rather than the cause of the onset of an epileptic episode—more than two hundred years before this became commonly accepted in Western medicine.⁹⁴ Though Erastus has sometimes been falsely labeled as a medical theorist with a "medieval" outlook due to his rejection of Paracelsus, Erastus's observations on epilepsy give us a brief glimpse of how original some of his medical contributions were.

Erastus's Reconstruction of the Historical Paracelsus

1. *Images of Paracelsus in De medicina nova*

One of the most enduring and often most entertaining aspects of Erastus's *Disputations* was its depiction of Paracelsus's life and customs for future generations. The fact that Erastus printed so many discrediting stories about Paracelsus caused him to be viewed as something of a pariah by early modern Paracelsians and by the Germanic founders of the history of medicine. Setting aside the hero worship of Paracelsus, one can

⁹³ Temkin, *The Falling Sickness*, 193. See also Pagel, *Paracelsus*, 327–329.

⁹⁴ William Richard Gowers, *Epilepsy and Other Chronic Convulsive Diseases: Their Causes, Symptoms & Treatment* (New York, 1885), 34.

appreciate that the unflattering stories that Erastus no doubt assembled for a polemical purpose hold in most cases genuine biographical kernels that should be seriously considered by scholars seeking to reconstruct Paracelsus's biography. Erastus assaulted Paracelsus not through misrepresentation and fabrication but through selection. Erastus may have been inclined to believe and report the worst of Paracelsus, but we have no reason to think that he was dishonest. Where we can verify his accounts with other sources, it is clear that he recounted the sordid tales he collected with great accuracy. Since the characterizations of Paracelsus by Gessner and Oporinus have already been discussed, they will not be addressed again in this section, even though Erastus incorporated their depictions in *De medicina nova*.

Erastus went to great lengths to collect information on Paracelsus. Around 1570, he asked his contacts in Switzerland to gather information regarding Paracelsus's family but was not able to connect Paracelsus to any living Swiss relative. This fact was some consolation to Erastus, who wanted to distance Paracelsus from his beloved homeland; as he writes in *De medicina nova*, "I can hardly believe he was Swiss."⁹⁵ Erastus incorrectly assumed that Paracelsus's given name had been "Philipp Bombast" and that he was born in Hohenheim in Southwestern Germany. He noted that Paracelsus had lived in the province of Carinthia in Austria for some years as a child. An unnamed source informed Erastus that Paracelsus had been castrated by a soldier when he was a young boy tending geese. Erastus suggested that this story corroborated Oporinus's claim that Paracelsus had shown little interest in women, but it ultimately seems too much calculated as a partisan insult to be credible. Later Paracelsus allegedly traveled to Spain, where he first learned magic, then chemistry. This account may represent the vestige of a pro-Paracelsian tradition that sought to connect Paracelsus with the tradition of the great Spanish alchemical theorists Ramon Lull and Arnold of Villanova.⁹⁶

⁹⁵ *De medicina nova*, 1:237: "Helvetium fuisse vix credo."

⁹⁶ *De medicina nova*, 1:237–238: "Hoc in loco, narratum mihi est exectos ei testes fuisse à milite, dum anseres pasceret... Eunuchum fuisse cum alia multa, tum facies indicant: & quod, Oporino teste, feminas prorsus despexit." A second castration story involved Paracelsus's testicles being removed by the bite of a boar. The examination of Paracelsus's skeleton has revealed the existence of certain female characteristics on his pelvis and cranium. This fact has led some scholars to suggest that Paracelsus may have suffered from a congenital hormonal imbalance related to the abnormal processing of androgens. A firm diagnosis of this condition would certainly shed light on Paracelsus's psychological state and his sexual history. See Herbert Kritscher et al., "Forensisch-

Johannes Crato von Krafftheim: Paracelsus in Moravia and Vienna

The most significant biographical gem that Erastus was able to uncover was a report by the Moravian nobleman Berthold V von Leipa (d. 1575), relayed to Erastus by Crato.⁹⁷ The story begins in the imperial chambers in Prague in 1570, where Crato was having a discussion with two other physicians of Emperor Maximilian, Giulio Alessandrini and Nicolaus Biese.⁹⁸ As they were talking the nobleman Berthold von Leipa approached them and told them a story of Paracelsus's misadventures in Moravský Krumlov.⁹⁹ Berthold recounted that his father, Johann von Leipa, had summoned Paracelsus to his bed because of Paracelsus's reputation in treating arthritis. Though Paracelsus attended Johann for some two years, he was not able to improve his condition. Other noble patients were not to be that fortunate. Paracelsus's treatment caused Berthold to lose sight in one eye and the medication he gave to the wife of Baron Johann von Zerotín caused her to break into seizures and promptly expire.¹⁰⁰ This disaster was enough to trigger one of Paracelsus's charac-

anthropologische Untersuchungen der Skelettreste des Paracelsus," in *Paracelsus* (1943–1541): *Keines andern Knecht* ... ed. H. Dopsch et al. (Salzburg: Anton Pustet, 1993), 53–61.

⁹⁷ *De medicina nova*, 4:159–160. Full translation and analysis in Gunnoe and Shackelford, "Johannes Crato von Krafftheim (1519–1585)," 210–212. The Leipa were a prominent Moravian noble house. Vladimír Zapletal, "Paracelsus-Tradition in der Tschechoslowakei," in *Gestalten und Ideen um Paracelsus*, 158–160; Augustin Tschinkel, "Paracelsus bei König Ferdinand I," in *Paracelsus—Werk und Wirkung* (Vienna, 1975), 340; Zedler, *Universal-Lexicon*, 16:1644–1645.

⁹⁸ Julius Alexandrinus von Neustein (Italian, Giulio Alessandrini, 1506–1590), a personal physician to Emperors Ferdinand I and Maximilian II from Trent. Like Crato, Alessandrini was also ennobled by the Habsburgs and granted the title of Count Palatine. Along with being a noted Platonic philosopher, Alessandrini also translated the works of Galen from Greek into Latin. He engaged in a heated exchange in defense of Galen against Girolamo Argenterio. *NDB*, 1:197; Zedler, *Universal-Lexicon*, 1:1173; Christoph Wilhelm Kestner, *Medicinisches Gelehrten-Lexicon* (Jena, 1740; reprint, Hildesheim: George Olms, 1971), 26; M.A. Becker, "Die letzte Tage und der Tod Maximilians II," *Blätter des Vereines für Landeskunde von Niederösterreich*, 11 (1877): 16–17. Nicolaus Biese (1516–1572) a Galenic physician from Ghent, who likewise served as personal physician to Maximilian II. Zedler, *Universal-Lexicon*, 3:1809; Kestner, *Medicinisches Gelehrten-Lexicon*, 112.

⁹⁹ Zapletal judged that Paracelsus's stay in Moravský Krumlov probably lasted five to six months. Zapletal, "Paracelsus-Tradition in der Tschechoslowakei," 161; Karl Pisa, *Paracelsus in Österreich* (St. Pölten/Vienna: Niederösterreichisches Pressehaus, 1991), 116–120.

¹⁰⁰ Likely Johanna von Pernstein (Johanka z Pernštejna, b. 1516, d. ?), daughter of Johann von Pernstein (Jan z Pernštejna, d. 1548), the wife of Johann III von Žerotín (Jan ze Žerotína, d. ca. 1558/60). Paracelsus must have journeyed to the Žerotín residence

teristic flights, this time into Hungary. Berthold also informed Crato that Paracelsus had written quite a lot in Moravský Krumlov—one of the volumes of the *Astronomia Magna* is in fact dated from that time—though Berthold added that he accomplished this in a drunken state.¹⁰¹ Evidently Paracelsus was able to recover the manuscripts that he deposited in Moravský Krumlov, perhaps through the intervention of the emperor.

How does one assess such a tale? On the one hand, it was told some thirty years after the events that it purports to describe, and it was passed from Berthold to Crato and then to Erastus. Given the care with which Erastus handled other texts by his humanist colleagues, we can confidently assume that Erastus printed Crato's account accurately. On the other hand, it is the story of an eyewitness (or rather, a one-eyed witness) of Paracelsus's activities in Moravia. It correlates well with Paracelsus's known movements of the time and the individuals described were historical personages. Though the story of a dissatisfied patient as recorded by a disparager of Paracelsus, the account possesses a fundamental historicity and has been used by Paracelsus scholars, with less than direct acknowledgment, as a source for Paracelsus's activities in Moravia.¹⁰²

In addition to Berthold's story of events which transpired in Moravia, Crato was also able to describe the circumstances of Paracelsus's supposed meeting with King Ferdinand in Vienna. This is one of two versions of the alleged meeting that we possess. The other is an utterly fanciful Czech account, *Colloquium Ferdinandi regis cum D. Theophrasto Paracelsus Svevo*.¹⁰³ In that version of events, despite the murderous opposition of the "learned physicians," Paracelsus treated the ailing king

in Strážnice, a Moravian city located near the current Czech-Slovak border. Zapletal, "Paracelsus-Tradition in der Tschechoslowakei," 161. Like the Leipa with whom they were intermarried, the Žerotíns were a prominent Moravian noble house and supporters of the *Unitas Fratrum*. See R.J.W. Evans, *Rudolf II and his World* (Oxford: Clarendon, 1973), 41–42.

¹⁰¹ His "Beschlußrede" to the *Astronomia Magna* is dated from there on July 22, 1537. *PI*, 12:vi and 273.

¹⁰² The basic work here is Zapletal's article, which contained no citations. A close reading of this work reveals a heavy dependence on the Crato-Erastus text. This reliance is rather ironic, as Zapletal had complained of Berthold's reminiscences, "die jedoch nun mehr verschwommen waren" (p. 162). Pisa (likewise without citations) brought much of Zapletal's content into his book. Zapletal, "Paracelsus-Tradition in der Tschechoslowakei;" Pisa, *Paracelsus in Österreich*.

¹⁰³ A. German translation of this Czech text is printed in Georg Sticker, "Ein Gespräch des Königs Ferdinand mit Paracelsus," *Nova Acta Leopoldina* 10 (1941): 267–279. Tschinkel critiques this translation in "Paracelsus bei König Ferdinand I." This story is also hinted at more faintly in the early seventeenth-century "Rhapsodia vitae Theophrasti

with potable gold and immediately improved his condition. After the successful cure, Paracelsus and the king sat down to dinner, during which Paracelsus discoursed on the requisite moral qualities of a successful alchemist. Paracelsus was fêted by the king and given a golden chain on his departure. About the only similarity between this Czech account and the one that appeared in Erastus's pages is the hostility between Paracelsus and the court physicians. In the Crato-Erastus text, King Ferdinand could smell a quack and denounced Paracelsus as a "lying and impudent impostor." Not content to conclude with Paracelsus's humiliation at the imperial court, the Crato-Erastus text added the additional insult: "Paracelsus always had traffic with Jews and the most vile men."¹⁰⁴

Crato's version of this story was recorded earlier and possesses more historically verifiable details than the later Czech account. It is difficult to escape the conclusion that the Crato-Erastus text must be given priority over the *Colloquium* as an historical source. Both texts tell us more about the polarization of the Paracelsus image that had occurred by the late sixteenth century, however, than about any putative meeting between Ferdinand and Paracelsus. In the one account, Paracelsus was the heroic alchemist whose success at chrysopoeia clearly led his list of credits. In the other account, Paracelsus was a plain charlatan whose greatest offense was his refusal to enter a meaningful dialogue with Ferdinand's humanist physicians. Armed with the firsthand information from Berthold von Leipa, Crato was able to construct a distinct image of a shiftless, drunken, and deliberately obscure quack that harmonized perfectly with the other negative testimony that Erastus assembled and published.

Paracelsi." See Sven Limbeck, "Paracelsus in einer frühneuzeitlichen Historiensammlung: Die 'Rhapsodia vitae Theophrasti Paracelsi' von Peter Payngk," in *Analecta Paracelsica*, 1–58.

¹⁰⁴ *De medicina nova*, 4:160: "Semper illi negotium fuisse cum Iudaeis & vilissimis hominibus." Alternatively, the "Colloquium Ferdinandi regis cum D. Theophrasto Paracelsus Svevo" places an anti-Semitic comment in the mouth of Paracelsus. See G. Sticker, "Ein Gespräch des Königs Ferdinand mit Paracelsus," 275. For a recent assessment of Paracelsus's anti-Semitism, see Udo Benzenhöfer and Karin Finsterbusch, "Antijudaismus in den medizinisch-naturwissenschaftlichen und philosophischen Schriften des Paracelsus," in *Paracelsus und seine internationale Rezeption in der frühen Neuzeit. Beiträge zur Geschichte des Paracelsismus*, ed. Heinz Schott and Ilana Zinguer (Leiden: E.J. Brill, 1998), 96–109.

Heinrich Bullinger: Paracelsus in Zurich

Another significant account of Paracelsus's life was relayed to Erastus by Bullinger. Bullinger had likely met Paracelsus in 1527, when Bullinger had taken leave of his teaching position in Kappel to spend a few months hearing lectures under Zwingli in Zurich.¹⁰⁵ Some forty years later, Bullinger recounted to Erastus:

I talked with him [Paracelsus] now and again about various things, also regarding theological and religious topics. But one would be hard pressed to fathom anything of piety from his words, but one could find a great deal regarding magic, though I do not know how he went about it. If you had seen him, you would not have said that he was a physician, but rather a teamster, and he was marvelously delighted by the companionship of teamsters. While he lived here at the Stork Inn,¹⁰⁶ he would observe teamsters arriving at the tavern, and the filthy man would eat and drink excessively with them. Sometimes he was so overcome by wine, that he would settle down on the nearest bench and sleep off his foul hangover. And then, [narrates Erastus], having interjected certain things concerning his habits and clothing, such as Oporinus's account also contains,¹⁰⁷ [Bullinger] concludes thus: In short, he [Paracelsus] was a dirty and vulgar man in every respect. He seldom if ever attended church services, and seemed to care little for God and holy things.¹⁰⁸

¹⁰⁵ Bullinger was in Zurich from the middle of June until the middle of November. Blanke, *Der junge Bullinger*, 67; Bullinger, *Diarium*, 11.

¹⁰⁶ The "Hotel zum Storch" continues to operate in Zurich. It is located at Weinplatz 2 across the Limat from the Grossmünster. Milt has also noted that its owner at that time remained loyal to the Catholic church. Bernhard Milt, "Paracelsus und Zürich," *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich* 86 (1941): 322.

¹⁰⁷ An abridged version of the Oporinus letter immediately precedes these passages from Bullinger in *De medicina nova*, 1:238–239. The extracts highlighted Paracelsus's proclivity to drink, his tendency to sleep in his clothes, and his lack of conventional piety, and included an insinuation of practicing magic. See the translation of Erastus's paired down version of Oporinus's text by Jeremy Venema in Gunnoe, "Thomas Erastus and his Circle of Anti-Paracelsians," in *Analecta Paracelsica*, 146–148.

¹⁰⁸ *De medicina nova*, 1:239–240: "Contuli cum eo, inquit, semel & iterum de rebus varijs etiam Theologicis vel Religionis. Sed ex omnibus eius sermonibus pietatis nihil intelligere licuit, Magiae verò, quam ille nescio quam fingeat, plurimum. Si eum vidisses, non Medicum dixisses, sed Aurigam: & sodalities Aurigarum mirificè delectabatur. Ergo dum viveret hîc in diversorio Ciconiae, observabat adventantes in hoc hospitium Aurigas: & cum his homo spurcus vorabat & perpotabat: ita nonnunquam vino sopitus, ut se in proximum scamnum collocaret, crapulam que foedam edormiret. [Erastus's paraphrase follows] Deinde interiectis quibusdam de habitu & vestitu eius, qualia Oporinus etiam habet, sic concludit. [Bullinger's letter concludes] Breviter sordidus erat per omnia & homo spurcus. Rarò aut nunquam ingrediebatur coetus sacros, ac visus est Deum & res Divinas leviter curare." This quotation probably comes from a lost letter from Bullinger

Bullinger's account must be taken seriously since it is one of the few eyewitness accounts of Paracelsus we possess. However, it must be conceded that Bullinger's engagement with Paracelsus must have been brief. Likewise, the long time span between when he likely met Paracelsus (ca. 1527) and when he probably composed this reminiscence (late 1570) undermines this document's value as source. Still, given the general reliability of Bullinger and the account's congruence with other stories of Paracelsus, we must lend it at least a modicum of credence. Bullinger's report contained a clear insinuation of magic and a direct slight of Paracelsus's piety. These accusations, paired with Gessner's attacks, revealed unanimity in the Zurichers' assessment: Paracelsus had practiced forbidden black magic. This was the inescapable conclusion of the combined testimonies of Gessner, Oporinus, and Bullinger, as Erastus himself expressed in his reply to Bullinger after receiving his report: "It is certain that he was a magician and a confederate of demons."¹⁰⁹ Bullinger's account offered yet another testimony, from a person who was an unrivaled authority in Reformed circles, to the heretical nature of Paracelsianism.

Georg Vetter: A Companion of Paracelsus

If we are to believe Erastus, however, not only Paracelsus's enemies but also his friends alleged that he toyed with demonic magic. Although not necessarily as provocative as the stories from Crato and Bullinger, of equal interest is the testimonial by the purported travel companion of Paracelsus, Georg Vetter. Vetter had attended Paracelsus's lectures in Basel and served as his *famulus* ca. 1527–1528. Erastus recounted that Vetter had traveled with Paracelsus for over two years "through Austria, Transylvania and other regions." If Erastus's description is accurate, this would suggest that Vetter accompanied Paracelsus sometime during the period from 1537 to 1540. In the 1570s Vetter worked as a minister in a parish about forty kilometers from Heidelberg in Beerfelden in the Odenwald. His clerical status is evidenced by Toxites's dedication of the 1574 edition of Paracelsus's testament.¹¹⁰ Vetter's testimony is particularly

to Erastus which was written between Oct. 29, 1570 and Jan. 3, 1571. See the German translation in Milt, "Conrad Gesner und Paracelsus" (1929), 488.

¹⁰⁹ Erastus to Bullinger, Jan. 3, 1571, ZBZ, F 62 fol. 204^v. See Appendix B, text no. 3.

¹¹⁰ Sudhoff, *Bibliographia Paracelsica*, 156, 256. For a thorough reconstruction of Vetter's connections to the Paracelsian movement, see text no. 54 "Toxites, Michael an Georg Vetter" in Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 2:297–320.

interesting, as it comes from someone who still claimed to be a supporter of Paracelsus. Not surprisingly, the information from Vetter's account largely mirrored the stories of Oporinus, Crato, and Bullinger, including the familiar charges of alcoholism and impiety. Expressed more strongly in the Vetter account, however, was an accusation of diabolical magic:

Recently a most pious, learned, and industrious man, Georg Vetter—loving and devoted to Paracelsus—adamantly brought to my attention that [Paracelsus] was extremely devoted to impious magic and that he had befriended an evil spirit. “I feared nothing more,” he said, “that when [Paracelsus] was drunk (which was frequently) that he would summon a troop of devils, which again and again he wanted to do by his special art; but at my request, he abandoned it. When I warned Paracelsus (when sober) that he made these utterances, which gravely offended God, and that the devil would render the final judgment upon his own servants, he responded that he would soon be singing for redemption.”¹¹¹

After the quotation, Erastus added the rhetorical comment that he was forced to accept Vetter's account because of Vetter's piety and genuine devotion to Paracelsus. He also included Vetter's comment that “The total time in which I lived with him, he did not discuss theology nor philosophy nor medicine besides surgery,” which not only assaulted Paracelsus's piety, but also lowered him from the ranks of learned physicians to the more humble status of a surgeon.

While Vetter remains something of an obscure figure to modern scholarship, his connection with Paracelsus was genuine, making this text in all likelihood an authentic biographical fragment from a firsthand witness. Adding further credence to Vetter is the fact that we find the Paracelsian Toxites making a respectful inquiry with Vetter for information about Paracelsus's life and cures *after* the publication of these reminiscences.¹¹² Additionally, it should be noted that Erastus quoted his sources faithfully, if selectively, in *De medicina nova*.¹¹³ With Vetter working in a nearby

¹¹¹ *De medicina nova*, 2:2: “Nuper mihi vir pius, doctus, industrius, D. Georg. Vetterus Paracelsi amans & stu[dio]sus, asserverantissimè affirmavit, eum Magiae nefandae perquam studiosum fuisse, & cacodaemonem haud aliter quàm socium nominare consuevisse. Nihil magis, inquiebat, metui, quotiens ebrius erat (erat autem frequenter) quàm ut agmina Diabolorum accerseret: quod saepenumero facere voluit (speciem artis suae editurus) sed à me rogatus omisit. Cum sobrium monerem, ut missa isthaec facere, quòd Deum graviter offenderet, quodque ad extremum triste stipendium solitus esset persolvere famulis suis diabolus: respondebat, se non multò pòst receptui cantaturum esse.”

¹¹² Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 2:303. The letter from Toxites to Vetter was dated March 12, 1574.

¹¹³ He clearly quoted Gessner and Oporinus with great accuracy. In my experience with comparing his citations from the works of Paracelsus, his quotations and translations

parish, Erastus would hardly have been in a position to fabricate or alter his testimony, especially given Erastus's own increasingly threatened personal reputation. It should also be noted that the most damning line, "that he was accustomed to call an evil spirit his friend," did not purport to be a direct quotation from Vetter but was Erastus's own interpolation. Despite these limitations, it is hard to escape the conclusion that Paracelsus considered himself to be an authentic *magus* and that his practice of these arts was enough to make a more conventionally pious associate very uncomfortable. If one lends a little additional credence to Vetter, it is possible to speculate that Paracelsus considered himself to be walking, and perhaps occasionally transgressing, the fine line between natural and demonic magic.¹¹⁴

Markus Recklau: Paracelsus in Upper Bavaria

Erastus also included the account of the court physician Markus Recklau, whose testimony attacked Paracelsus's medical reputation. Recklau, whom Erastus identifies as a personal physician of Ottheinrich and Frederick III, supplied Erastus with a noteworthy tale of Paracelsus's activities in upper Bavaria.¹¹⁵ According to Recklau, Paracelsus was summoned to attend the wife of an Augsburg patrician named von Langenmantel, who was then residing in the town of Schongau on the Lech in the foothills of the Alps.

appear to be quite accurate. Jole Shackelford has also been able to find very precise excerpts from Severinus's *Idea medicinae* in Erastus's text. Shackelford, "Early Reception of Paracelsian Theory," 127–128; idem, *A Philosophical Path for Paracelsian Medicine*, 217–218.

¹¹⁴ Erastus reiterates the claim of diabolical inspiration a few pages later. *De medicina nova*, 2:16. See also Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 1:135, 598–599. For Paracelsus's own opinion regarding the possibility of Christian magic, see Arlene Miller Guinsberg, "Die Ideenwelt des Paracelsus und seiner Anhänger in Hinsicht auf das Thema des christlichen Magus und dessen Wirken," in *Von Paracelsus zu Goethe und Wilhelm von Humboldt*, 27–54.

¹¹⁵ The existence of "Dr. Marx Recklau" is documented by manuscripts in the Codex Palatinus Germanicus (Heidelberg, UB, MS Cod. Pal. germ. 193) and by an entry in the Tübingen matriculation of "Marcus Rechlau de Memingen" (Nov. 3, 1529) (*Urkunden zur Geschichte der Universität Tübingen aus den Jahren 1476 bis 1550* (Tübingen, 1877), 647). Erastus also references "D. Marcus Reckclaw" in *De occultis pharmacorum potestatibus*, 123. It would seem likely that he was related to Johann Recklau, who was a member of the church council under Elector Frederick III. Press, *Calvinismus und Territorialstaat*, 243.

Paracelsus was able to restore the appearance of health to the woman, but soon after his departure, she expired. From there he traveled down the Lech to Landsberg, Bavaria, where Recklau practiced medicine at that time. Recklau currently attended two noble patients of the von Pfeten family—one suffering from edema (dropsy), the other from consumption (phthisis).¹¹⁶ Upon Paracelsus's advent, a local surgeon, Georg Rausner, informed Recklau that an illustrious physician had arrived who possessed the ability "to cure almost all serious diseases." With Recklau's approval, Paracelsus was taken to see the two noble patients. Recklau recounted that Paracelsus interrogated both himself and the noble relative of his patients in a most condescending manner. Paracelsus required Recklau to give a lengthy analysis of the patients' ailments, but after Recklau had finished his discourse, Paracelsus simply remained silent.

Later Paracelsus, the surgeon Raunser, and Recklau retired to a local tavern. While having a drink, Paracelsus allegedly spied the town's fine fountain, which spewed water high into the air. According to Recklau, Paracelsus declared the fountain to be a threat to public health. Paracelsus purportedly asserted, "If I were a doctor in this town, I would appeal to the magistrate to have this fountain destroyed, . . . lest the wind blow water into the faces of the women coming to market."¹¹⁷ According to Recklau's account, Paracelsus left the next day without saying farewell to Recklau, his noble patron Sebald von Pfeten, or his patients. Recklau added the additional insult that he had been unable to elicit one word of Latin from Paracelsus's tongue.

The Recklau text also included an epilogue recounting Paracelsus's next malpractice, relayed to Recklau by the Paracelsian Johann Vogt. Upon leaving Landsberg, Paracelsus traveled the short distance to Munich, where he treated a certain "Monachus," an official in the kitchen of the Duke of Bavaria. The story alleges that the ducal physicians Dr. Pantoleon and Dr. Alexander Karthauser were already treating Monachus quite successfully. The patient was taken from their care and entrusted to Paracelsus, who treated the patient with mercury. When Paracelsus saw that his patient, rather than improving, was ebbing towards death, he fled to Austria, leaving his patient to die the next day.¹¹⁸

¹¹⁶ The patients were the wife and sister of Sebald von Pfeten.

¹¹⁷ *De medicina nova*, 3:213: "[S]i huius oppidi forem medicus, inquit, apud magistratum hoc agerem, ut fons iste tolleretur. . . . [N]e ventus mulieribus ad mercatum venientibus aquam in faciem impelleret."

¹¹⁸ *De medicina nova*, 3:212–214.

As with Vetter, not enough is presently known of Recklau for us to assess this account, though with his purported prominence both as a court physician for the Palatine Wittelsbachs and as perhaps the city physician of Schongau, this question should yield to future research. The events described may have occurred during Paracelsus's travels in 1536, after the publication of *Grosse Wundarznei*, but standard biographical accounts of Paracelsus make no mention of a visit to Schongau or Landsberg.¹¹⁹ It is no great revelation to learn that Paracelsus led a highly itinerate life. The events which occurred in Landsberg, the only ones which Recklau likely observed firsthand, are likewise described from the position of a practitioner understandably jealous of his own status as a medical authority. While much in Recklau's account might smack of professional rivalry, the quixotic figure he describes harmonizes well with the historical Paracelsus. One hopes that future research will shed more light on these obscure episodes.

Brief Accounts

Beyond these longer accounts, Erastus also included a number of shorter testimonies in the *De medicina nova* that likewise undercut Paracelsus's reputation as a medical practitioner and chemical innovator. Crato's assertion that Paracelsus lifted his innovative preparations from medieval manuscripts falls into this category.¹²⁰ In much a similar spirit is the comment of Balthasar Brauch of Schwäbisch Gmünd that the physicians Hieronymus Schaller, Johann Magenbuch, and Wolfgang Talhauser had produced similar innovations in medical preparations, though they remained pious men and did not advance the ludicrous claim to be founding a whole new art.¹²¹

¹¹⁹ E.g., Pagel, *Paracelsus*; Johannes Hemleben, *Paracelsus: Revolutionär, Arzt und Christ*, 2nd ed. (Frauenfeld: Verlag Huber, 1974); Charles Webster, *Paracelsus: Medicine, Magic and Mission at the End of Time* (New Haven: Yale UP, 2008).

¹²⁰ *De medicina nova*, 4:300. "Remedia quibus aliquando usus dicitur, non illius esse ex eo certus sum, quòd librum vidi ante 200. ferè annos à monacho quodam Ulmae scriptum." The text in question has been identified as *Von der Heiligen Dreifaltigkeit* (aka *Buchs der Heiligen Dreifaltigkeit* or *Liber sancte trinitatis*) which was composed ca. 1410/19. Authorship of the piece is generally credited to a Minorite monk named Ulmannus. Herwig Buntz, "Deutsch alchemistische Traktate des 15. und 16. Jahrhunderts" (Doctoral dissertation, University of Munich, 1968), 34. See Joachim Telle, in *Lexikon des Mittelalters* (Munich: Artemis, 1983), 2:812–813; idem, "Ulmannus" in *Die deutsche Literatur des Mittelalters Verfasserlexikon* (Berlin: de Gruyter, 2004), 11:1574–1580.

¹²¹ *De medicina nova*, 2:3. See Joachim Telle, "Wolfgang Talhauser: Zu Leben und Werk

Erastus also claimed to have testimony from the inhabitants of Basel who had witnessed Paracelsus in action. These men did not begrudge credit to Paracelsus in his treatment of ulcers, but they were less laudatory of his treatment of other maladies. Although Paracelsus at first seemed to have cured the printer Johannes Froben, the Basellers (including Erasmus) would quickly learn that his medications had negative side effects. In Erastus's assessment, Paracelsus's remedies were very powerful in expelling corrupted humors, but the vestiges of Paracelsus's medicaments that remained in the body proved most toxic. Erastus recounted the rumor, which he alleged had been corroborated to him by many, that everyone who consumed Paracelsus's drugs in Basel perished within a year.¹²² In short, Paracelsus's cure was worse than the disease.

Though I have made some attempts to assess the potential reliability of these stories, my main interest here is to document how Erastus shaped the image of Paracelsus rather than embarking on a quest for the "historical Paracelsus." The representation that Erastus hammered home possessed seven basic features: (1) Paracelsus and his followers were dangerous heretics; (2) Paracelsus dabbled in demonic magic; (3) Paracelsus was unlearned and wrote in a most obscure style; (4) As a physician, Paracelsus was at best ineffective and at worst lethal; (5) Paracelsus was a drunkard; (6) Paracelsus was personally unreliable and prone to flight in difficult circumstances; (7) Though Paracelsus was a successful chemist, he was not as innovative or perhaps as independent as conventionally thought. Each of these basic points was to be found in more than one story, and most were made clearly enough that Erastus had little need to interpolate more. One exception is the charge of contact with demons. Though the theme was certainly present in the stories, Erastus spelled it out more explicitly than did his sources.

eines Augsburger Stadtarztes und seinen Beziehungen zu Paracelsus und Schwenckfeld," *Medizinhistorisches Journal* 7 (1972): 1–30; and Joachim Telle and Peter Assion, "Der Nürnberger Stadtarzt Johannes Magenbuch: Zu Leben und Werk eines Mediziners der Reformationszeit," *Sudhoffs Archiv* 56 (1972): 353–421.

¹²² *De medicina nova*, 4:253. Erastus had been aware of these stories as early as 1570. Erastus to Johann Jakob Grynaeus, Nov. 29, [1570], Basel UB, G II 4, fols. 300–301. See also Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 1:437, 511; Joachim Telle, "Paracelsus als Wunderheiler und Goldmacher in Basel: Zu dem Brief eines Ungenannten an Michael Neander (1575)," in *Medizin und Kultur: Ärztliches Denken und Handeln im Dialog zwischen Natur- und Geisteswissenschaften*, ed. Giovanni Maio and Volker Roelcke (Stuttgart: Schattauer, 2001), 13–32.

While Erastus emphasized these distinct points of Paracelsus's biography, whether his readers would have put them together as clearly as I have described is doubtful since Erastus scattered these biographical tidbits throughout the four volumes of *De medicina nova*. It is important to note that almost all of these accounts are given in the voice of a third party. This provided the rhetorical advantage of allowing the reports to appear more authoritative and Erastus to appear more objective. Nevertheless, Erastus was able to manage his sources in such a way as to put forward a coherent image of Paracelsus. By means of judicious selection, he was able to create his own composite narrative from the many eyewitness testimonies he included in the *De medicina nova*. The narrative Erastus crafted was an exhaustive attack on both Paracelsus's personal integrity and his professional competence.

Whether this narrative was persuasive to Erastus's contemporaries is another question. From the anecdotal evidence I have gathered, I can offer only a provisional assessment. On the one hand, Erastus's effort was apparently successful in convincing humanist physicians that Paracelsus was a disreputable character. Erastus's work quickly became a source for other anti-Paracelsian writers; for example, Bernhard Dessen von Kronenburg (1510–1574) incorporated biographical details from Erastus's work into his *Medicina veteris et rationalis* in 1573.¹²³ Similarly, Jean Antoine Fenot hailed the success of Erastus's exposé of Paracelsus's gross iniquity and false theory in his own critique of alchemy in 1575.¹²⁴ Later, academic physicians such as Andreas Libavius and Daniel Sennert who sought to mediate between Paracelsian and Galenic medicine tended to be most wary of Paracelsus's personal reputation.¹²⁵ Debus likewise has

¹²³ Bernhard Dessen von Kronenburg, *Medicinae Veteris Et Rationalis, Adversus Oberonis Cuiusdam Mendacissimi Atque Impudentissimi Georgii Fedronis, ac universae Sectae Paracelsiae imposturas, defensio* (Cologne: Johannes Gymnicus, 1573), 54, 90. This work actually appeared in print prior to the fourth volume of Erastus's *De medicina nova* (Die Messkatalog Georg Willers, 1:489, 518). Some of the details of Erastus's accounts also found their way into Christoph Gottlieb von Murr's "Litterargeschichte des Theophrastus Paracelsus," in *Neues Journal zur Litteratur und Kunstgeschichte* 2 (1799): 233–234.

¹²⁴ Jean Antoine Fenot, *Alexipharumacum, Sive Antidotus Apologetica, ad virulentias Iosephi cuiusdam Quercetani Armeniaci, evomit in libellum Jacobi Auberti, de ortu & causis Metallorum contra Chymistas* (Basil: [Pietro Perna], 1575), 2: "Quod ad Paracelsum nequissimum illum attinet, eum cum tota sua falsa doctrina ad Erastum celeberrimum illum philosophum & medicum praestantissimum ablegamus, qui pro dignitate honorificè eum excipiet."

¹²⁵ See Bruce Moran, "Libavius the Paracelsian? Monstrous Novelties, Institutions, and the Norms of Social Virtue," in *Reading the Book of Nature*, 67–79; and Debus, "Guitherius, Libavius and Sennert: The Chemical Compromise in Early Modern Medicine."

argued that Erastus's critique had a major impact on the reception of Paracelsianism in England and made English scientists quite suspicious of him.¹²⁶

On the other hand, Erastus's attack on Paracelsus's person does not appear to have had a major impact on the appeal of Paracelsian scientific ideas. For those who were inclined to look favorably on Paracelsus, Erastus's efforts smacked of partisanship and *ad hominem* overkill. This can be observed in the case of the English Paracelsian Richard Bostocke, who elected to write off his hero's alcoholism as a national defect:

If Paracelsus some tyme woulde be dronke after his Countrey maner I can not excuse hym no more then I can excuse in some nations glottenie, in other pride, and contempt of all others in comparison of themselves, in others breach of promise and fidelitie, in others dissimulation, triflyng and much babling, but lett the doctrine bee tried by the worke and successe, not by their faultes in their liues.¹²⁷

What Bostocke was unwilling to concede was that Paracelsus's quirks and peccadilloes somehow invalidated his scientific achievement. To the contrary, the virulence of Erastus's attack on Paracelsus's person seemed to betray an *a priori* unwillingness to entertain Paracelsus's scientific contribution.

Levinus Battus (1545–1591), a medical professor of Rostock, likewise was not impressed by Erastus's assault on Paracelsus's personal integrity. Little is known of Battus, but since he considered Paracelsus the “Luther of medicine,” one can confidently label him a Paracelsian.¹²⁸ In a letter from 1573, Battus took issue both with the *ad hominem* nature of Erastus's attack and his source base. Battus dismissed Vetter's account because he was such an obscure figure and the negative stories from Basel because they were likely written by Paracelsus's rivals. He argued

¹²⁶ Debus, *The English Paracelsians*, 49. See below.

¹²⁷ R.B. [Richard Bostocke], *The difference betwene the auncient Phisicke, first taught by the godly forfathers, consisting in unitie peace and concord: and the later Phisicke proceeding from Idolaters, Ethnikes, and Heathen: as Gallen, and such other consisting in dualitie, discord and contrarietie* (London: for Robert Walley, 1585), Liiiii.v. Regarding Bostocke, see David Harley, “Rychard Bostok of Tandridge, Surrey (C. 1530–1605), M.P., Paracelsian propagandist and friend of John Dee,” *Ambix* 47 (2000): 29–36.

¹²⁸ The claim that Paracelsus was the “Luther of medicine” has a long history. See the articles by Vivian Nutton and Bernhard Dietrich Haage in *Paracelsus: Das Werk—die Rezeption* as well as Andrew Weeks, *Paracelsus: Speculative Theory and the Crisis of the Early Reformation* (Albany: State University of New York Press, 1997). Battus likely introduced Paracelsian ideas to Tycho Brahe. See Shackleford, *A Philosophical Path for Paracelsian Medicine*, 63–65.

that Oporinus's letter hardly proved all that Erastus had attempted to draw from it and that Talhauser's and Magenbuch's excellence in chemical preparations did not detract from Paracelsus's honor. As for the claim that Paracelsus was not particularly learned or eloquent, Battus cited the adage of Celsus that medicines rather than eloquence cured diseases. Battus also resented that Erastus used dubious tactics in attacking propositions derived from the work of Severinus and then claiming victory over Paracelsus. Finally, he did not take Erastus's charge of diabolism seriously, because he thought that Paracelsus had made proper distinctions between natural and demonic magic in his writings and that Paracelsus's methods—the Kabbalah, chiromancy, physiognomy, the theory of signatures, and the art of the furnace—were not demonic but were derived from the light of nature.¹²⁹ In short, the obvious partisan slant made Erastus's work easier to dismiss, and a Paracelsian had little difficulty supplying a more sympathetic reading to the aspects of Paracelsus's life and teaching that Erastus had found so troubling.¹³⁰

Erastus's representations reflected one side of the polarization of the image of Paracelsus in the late sixteenth century. Not unlike Luther, Paracelsus had been increasingly sainted by his admirers and demonized by his enemies. At the extremes of both positions, Paracelsus was no longer simply a radical medical innovator with a quirky personality, but rather a man imbued with either magical or demonic power.

2. *Erastus's Paracelsian Library*

Erastus was a diligent student of Paracelsus. With his location in Heidelberg close to the biannual Frankfurt fairs and through his good connections with the Basel printing trade, Erastus was able to gather nearly all of the editions of Paracelsus that had been published at the time he composed *De medicina nova*. In the introduction Erastus recounted that he had read 113 books of Paracelsus. Karl Sudhoff himself, the great cataloger and editor of Paracelsus's works, found this an impressive number because of its close approximation to the number of editions that he was

¹²⁹ Levinus Battus, letter to [Heinrich Smet?], March 12, 1573, printed in Heinrich Smet, ed., *Miscellanea . . . Medica* (Frankfurt: Jonas Rhodius, 1661), 691–692. Note that this letter was written before the completion of *De medicina nova*, 4. For more on Battus and Smet, see Kühlmann and Telle, “Humanismus und Medizin,” 277–281.

¹³⁰ Figulus also repudiated Erastus's critique of Paracelsian medicine with great vitriol and humor in “Dialogus, Alexandri a Suchten,” 49–111 (especially pp. 67 ff.)

able to collect with imprints prior to 1571.¹³¹ From analysis of the rough citations in the *De medicina nova*, it is clear that Erastus's claim was no idle boast. Erastus used all of Paracelsus's major works in composing his refutation. The table below offers an approximate tally of Erastus's references to Paracelsus's works. Given the imprecision of sixteenth-century citations, linking Erastus's oblique references to Paracelsus's titles leaves a number of question marks. Nevertheless the table substantiates the claim that Erastus knew Paracelsus's published corpus well. Secondly it sheds light on which works most shaped Erastus's view of Paracelsus. Erastus cited Paracelsus's speculative philosophical works far more frequently than his more strictly medical works (e.g., far more citations from the *Astronomia Magna* than the *Grosse Wundarznei*). The exception to this pattern was the heavy citation of works on individual diseases that were treated in *De medicina nova*, 4. Another significant pattern was the heavy citation of works of questionable authenticity, especially the *Philosophia ad Athenienses*.

Figure 1. Erastus's Paracelsian Library. Table of the books of Paracelsus cited in Erastus's *Disputationum De medicina nova Philippi Paracelsi pars prima[-quarta]* (Basel, [1571]–73). Some of the alternate titles Erastus employed are included in parentheses.

Title of Paracelsian Work	Location in <i>Sämtliche Werke (PI)</i>	Number of Citations				
		1–2	3–5	6–10	10–15	15 +
<i>Astronomia Magna (Philosophia Sagax)</i>	I, 12					X
<i>Auslegung ... Aphorismorum Hippocratis</i>	I, 4	X				
<i>Das Buch von den tartarischen Krankheiten (Liber de Tartaro)</i>	I, 11			X		
<i>De artis praesagae</i>	I, 14	X ?				
<i>De Guaiaco [or Vom Holz Guajaco I, 7]</i>	I, 3	X ?				
<i>De Gradibus</i>	I, 4	X				
<i>De inventione artium</i>	I, 14	X				
<i>De lunaticis</i>	I, 14		X			
<i>De modo pharmacandi</i>	I, 4			X		
<i>De peste</i>	I, 8	X ?				
<i>De thermis (Bäderbuchlein)</i>	I, 2	X				

¹³¹ Sudhoff, *Bibliographia Paracelsica*, 217.

Title of Paracelsian Work	Location in <i>Sämtliche Werke (PI)</i>	Number of Citations				
		1-2	3-5	6-10	10-15	15 +
<i>De vita longa</i>	I, 3			X		
<i>Elf Tractat vom Ursprung, Ursachen und Kur einzelner Krankheiten:</i> <i>Von der Wassersucht</i> <i>De colico dolore (Kolik)</i>	I, 1		X			
<i>Große Wundarznei (De Chirugia)</i>	I, 10			X		
<i>Labyrinthus medicorum errantium</i>	I, 11	X				
<i>Herbarius (De Elleboro)</i>	I, 2		X			
<i>Liber meteororum (De Meteoris Ein Buch in zehn Capita)</i>	I, 13					X
<i>Neun Bücher Archidoxis</i>	I, 3					X
<i>Paragranum</i>	I, 8					X
<i>Der Paragraphe</i>	I, 5			X		
<i>Philosophia magna</i>	I, 14	X				
<i>Opus Paramirum</i> <i>De matrice [Paramiri Liber quartus de Matrice]</i>	I, 9			[x] [x]		X
<i>Sieben Defensionen</i>	I, 11	X				
<i>Spitalbuch (Liber pro Hospital.)</i>	I, 7		X			
<i>Von den hinfallenden Siechtagen (De Caduco, Epilepsia)</i>	I, 8					X
<i>Von den Podagrischen Krankheiten (De podagra)</i>	I, 1					X
<i>Von den unsichtbaren Krankheiten und ihren Ursachen (De morbis invisibilis)</i>	I, 9			X		
<i>Von Purgieren</i>	I, 4	X ?				
Pseudo-Paracelsian Works						
<i>De lapide philosophorum</i>	I, 14	X				
<i>De occulta philosophia</i>	I, 14		X			
<i>De tinctura physicorum</i>	I, 14		X			
<i>Liber vexationum</i>	I, 14	X				
<i>Philosophia ad Athenienses</i>	I, 13					X

Erastus's Rejection of Paracelsus's Religio-Philosophical Worldview

Recent scholarship has significantly enhanced our knowledge of the religious dimension of Paracelsianism. Andrew Weeks has provocatively argued that Paracelsus's religious speculation in fact lies at the heart of his scientific outlook.¹³² Not only is Paracelsus's theological corpus receiving fresh attention,¹³³ but scholars such as Gilly and Webster have displayed the importance of the accusation of heresy in the early reaction to Paracelsian ideas among the intellectual circles of the Holy Roman Empire.¹³⁴ Until the Paracelsian revival had reached an advanced stage, however, there was little sustained reflection on the religious implications of his natural philosophy. The publication in 1570 of Bartolomäus Reußner's *A Short Explanation and Christian Refutation of the Unheard of Blasphemies and Lies, which Paracelsus has poured out Against God, His Word and the Praiseworthy Art of Medicine in the Three Books of Philosophy to the Athenians* inaugurated a new era in the reaction to Paracelsus with the study of theological implications of Paracelsian texts.¹³⁵ Ironically, Paracelsus's early religious opponents had not read his specifically theological corpus, the bulk of which existed only in manuscript in

¹³² Weeks, *Paracelsus: Speculative Theory and the Crisis of the Early Reformation*, passim.

¹³³ For example, Katrin Biegger, *De invocatione beatae Mariae virginis: Paracelsus und die Marienverehrung* [Kosmosophie 6] (Stuttgart: Steiner, 1990); Hartmut Rudolph, "Paracelsus' Laientheologie in traditionsgeschichtlicher Sicht und in ihrer Zuordnung zu Reformation und katholischer Reform," in *Resultate und Desiderate der Paracelsus-Forschung*, ed. Hartmut Rudolph and Peter Dilg (Stuttgart: Steiner, 1993); Bruce T. Moran, "Paracelsus, Religion, and Dissent: The Case of Philipp Homagius and Georg Zimmermann," *Ambix* 43 (1996): 65–79; Dane T. Daniel, "Invisible Wombs: Rethinking Paracelsus's Concept of Body and Matter," *Ambix* 53 (2006): 129–142. See as well, Paracelsus, *Neue Paracelsus-Edition*, ed. Urs Leo Gantenbein (Berlin: de Gruyter, 2008–).

¹³⁴ Gilly, "Theophrastia Sancta," 425–488; Webster, "Conrad Gessner and the infidelity of Paracelsus," 13–23.

¹³⁵ Bartholomäus Reußner, *Ein kurtze Erklerung und Christliche Widerlegung/Der unerhörten Gotteslesterungen und Lügen/ welche Paracelsus in den dreyen Büchern Philosophiae ad Athenienses hat wider Gott/ sein Wort und die löbliche Kunst der Artzney außgeschüttet* (Gorlitz: Ambrosius Fritsch, 1570). Reußner, a city physician of Zittau (Lausitz), concentrated his attack on the Paracelsian conception of creation. Reußner was born March 11, 1532 in Lemberg where his father was a member of the city council. He practiced medicine in Breslau before becoming city physician in Zittau. He died on Oct. 23, 1572. Given Reußner's interests and locus of activity, it is difficult to imagine that he was not an acquaintance of Crato, through whom he easily could have come into contact with Erastus. I have yet to find a clear reference to Reußner in Erastus's work or correspondence. Christian Gottlieb Jöcher, ed., *Allgemeines Gelehrten-Lexicon* (Leipzig, 1750–1819) 3:2031–2032.

1570.¹³⁶ Thus, the late sixteenth-century theological reaction to Paracelsus was not a rejection of his religious writings per se, but an attack upon the religious implications of this natural philosophy.

Creation

Perhaps taking his cue from Reußner, Erastus opened his attack in the first volume of *De medicina nova* on the Paracelsian notion of creation. Before addressing Erastus's specific objections, it is fitting to outline the nature and difficulties of Paracelsus's theory of creation. Paracelsus taught that creation largely consisted of a divine or angelic separation of pre-existing matter. The central question regarding the Paracelsian theory of creation, which has intrigued commentators since the sixteenth century, is whether this primeval material—which he alternatively called *materia prima*, *materia ultima*, and *mysterium magnum*—was itself created by God or whether it was uncreated.

Since Pagel was able to show that many of Paracelsus's ideas appeared to have been influenced by Gnostic conceptions, we might imagine that Hohenheim advocated the existence of uncreated matter before "creation," in line with the Gnostic tradition.¹³⁷ Passages in the Paracelsian corpus appear to bear out this Gnostic interpretation. For example in *Das Buch de Mineralibus*, Paracelsus taught that *materia ultima* was "bei Gott" in the beginning. From it, *materia prima* was made. Pagel argued that this passage clearly assumed that some type of primeval matter existed alongside of God at creation.¹³⁸ While this passage was the most positive affirmation of the existence of uncreated matter among the genuine works of Paracelsus, other passages could be adduced to argue that he definitely taught that God first created all matter. For example in *De Meteoris*—in a passage that did not directly address the question of primeval matter—

¹³⁶ Gilly, "Theophrastia Sancta," 434. Erastus likewise quotes from all of Paracelsus's major medical and natural philosophical works but displays no awareness of Paracelsus's unpublished theological works.

¹³⁷ Walter Pagel, "Paracelsus in the Neoplatonic and Gnostic Tradition," *Ambix* 8 (1960): 125–166; idem, "The Prime Matter of Paracelsus," *Ambix* 9 (1961): 117–135; Walter Pagel and Marianne Winder, "The Higher Elements and Prime Matter in Renaissance Naturalism and in Paracelsus," *Ambix* 21 (1974): 94–127.

¹³⁸ *Das Buch de Mineralibus*, PI, 3:34: "Nun ist das erst gewesen bei got, der anfang, das ist ultima materia, die selbige ultimam materiam hat er gemacht in primam materiam." One should note that judging this reference is further complicated by the fact that Paracelsus here spoke of "materia ultima" rather than "materia prima." Pagel, "Paracelsus in the Neoplatonic and Gnostic Tradition," 142.

he did say that each of the four elements have bodies which were made "from nothing."¹³⁹ Thus, the works in which Paracelsus's authorship is not questioned are ambiguous on the question of the createdness of prime matter.

The spurious works in the Paracelsian corpus speak with no more clarity on this issue than the authentic works. On the one hand, the *Secretum magicum* suggested that God created the *materia prima*.¹⁴⁰ On the other hand, the *Philosophia ad Athenienses*, a text labeled pseudo-Paracelsian by Sudhoff but widely accepted as authentic in the sixteenth century, offered a definitive affirmation of the pre-existence of uncreated matter.¹⁴¹ Here our unknown author spoke of a *Mysterium magnum*

¹³⁹ *Liber Meteororum*, PI, 13:134: "nun sollent ir aber wissen, das alle vier corpora der vier elementen gemacht seind aus nichts, das ist alein gemacht durch das wort gottes, das fiat geheissen hat." Pagel did not find this reference a definitive rejection of the pre-existence of matter, since Paracelsus was speaking here of a later stage of creation. Pagel, "Paracelsus in the Neoplatonic and Gnostic Tradition," 145–144 [sic].

¹⁴⁰ Pagel, "Paracelsus in the Neoplatonic and Gnostic Tradition," 146.

¹⁴¹ Sudhoff treats the question of the authenticity of the *Philosophia ad Athenienses* in the introduction to PI, 13: xi–xiii. Sudhoff's first complaint against this text was the lack of manuscript attestation for it by its sixteenth-century editors. Neither its original publisher Theodor Birckmann nor Johann Huser, who included it in his authoritative collection, made any reference to a manuscript source. Sudhoff lamented, "Auch haben wir ausschließlich diesen Kölner Druck [of Birckmann] unserem Texte ... zugrunde legen müssen, da uns keine einzige handschriftliche Überlieferung dieser Schrift bekannt geworden ist." The second major complaint against the work stems from its fragmentary nature. It is obviously incomplete (e.g., it starts with the second "*paras*") and shows signs of having been worked over by an editor. The most obvious indication of the latter is the fact that the introductions refer to "the Prince Theophrastus" in the third person. Thus, Sudhoff considered it a work of questioned authenticity but did not rule out the possibility that the work might contain "einen echten Kern" which stemmed from Paracelsus. Later scholars have been more sanguine regarding its potential authenticity, and Josef Strebel regarded the text as a preliminary draft of the *Astronomia Magna*. Kurt Goldammer also raised objections to Sudhoff's earlier critique and referred to it as "die den echten Paracelsus gedankenreich paraphrasierende und interpretierende 'Philosophia ad Athenienses,'" though he still labeled the work "deutero-Paracelsian." Pagel often mined the *Philosophia ad Athenienses* as a source for "Paracelsian" ideas. With his extensive use of the work, Pagel appears to have been a de facto advocate of the authenticity of the *Philosophia ad Athenienses* even if he was forthcoming about the questions of its genuineness. Following Pagel, many Anglo-American writers have traced the impact of "Paracelsian" ideas in a broad sense, rather than limit their studies to works which can be concretely proven to have come from Paracelsus's pen. We can agree with Pagel and his followers that the work was universally regarded as "Paracelsian;" nevertheless, the fundamental reservations regarding the work's authenticity raised by Sudhoff have not been overturned. Given the fact that a later redactor edited the text and that it contains an apparent accretion of materials that are not in close harmony with the rest of Paracelsus's works, the *Philosophia ad Athenienses* cannot in the final analysis be regarded as a faithful representation of Paracelsus's own thought, however much it

from which all things were separated. Along with Paracelsus's sixteenth-century critics, Pagel asserted that it was clear that the *Philosophia ad Athenienses* taught that *mysterium magnum* was uncreated.¹⁴²

It was precisely on the concept of uncreated prime matter that Erastus focused his attack. Like his patristic and scholastic predecessors, Erastus asserted that the proposition that God created the world *ex nihilo* was a non-negotiable item for Christians. He claimed that Paracelsus had expressly taught that the *mysterium magnum* was uncreated in *Philosophia ad Athenienses* and that Paracelsus did not believe in "creation" per se, but only in the "separation" of previously existing material. Erastus interpreted Paracelsus's theory of creation to be nothing other than the chaos that existed in the beginning of the world as described by Pre-Socratic philosopher Anaxagoras.¹⁴³ Erastus went on to claim that Paracelsus's teaching was actually much worse than Anaxagoras's since at least the Pre-Socratic philosopher had taught that this "separation" was accomplished by God; whereas, Paracelsus suggested that "mortal gods" had completed this process of separation.¹⁴⁴ Thus, Paracelsus had denied the fundamental principle of creation *ex nihilo* and, worse yet, had suggested that God employed daemonic powers to complete creation.

became an integral part of the "Paracelsian" heritage. Sudhoff, *PI*, 13:xii; Pagel, *Paracelsus*, 89–91; Kurt Goldammer, "Zur philosophischen und religiösen Sinngebung von Heilung und Heilmittel bei Paracelsus," in *Paracelsus in neuen Horizonten: Gesammelte Aufsätze* [SBPF 24], 343–357 (Vienna: Verband der Wiss. Ges. Österreichs, 1986), 353.

¹⁴² *Philosophia ad Athenienses*, *PI*, 13:404–417. However, Pagel cannot prove that pseudo-Paracelsian author was definitely thinking in Gnostic terms in this passage. Pagel also noted the disagreement among Paracelsians regarding whether *materia prima* was uncreated. For example, Robert Fludd assumed that Paracelsus taught that the *materia prima* was uncreated, though Fludd himself preferred to think of it as created by God. Alternatively, both Heinrich Khunrath and Joseph Duchesne appear to have regarded the chaos as created. Pagel, "Paracelsus in the Neoplatonic and Gnostic Tradition," 143, 147–148.

¹⁴³ Anaxagoras of Clazomenae (ca. 500–428 BC) had rejected the notion of generation and passing-away. See G.S. Kirk et al., *The Presocratic Philosophers*, 2nd ed. (Cambridge: Cambridge UP, 1983), 352–384. It reveals much about Erastus's intellectual background that he connects this notion with Anaxagoras rather than the Hermetic tradition. Erastus no doubt knew Anaxagoras as mediated through Aristotle. He likely had passages in mind like this one from the *Physics* where Aristotle characterizes Anaxagoras's position with: "The upshot of all this is that everything must once have been mixed together and must have started changing at some point in time." Aristotle, *Physics*, trans. Robin Waterfield (Oxford: Oxford UP, 1996), 64 [203b].

¹⁴⁴ *De medicina nova*, 1:4. See the extensive discussion on this point with a long translation from Erastus in Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 1:11–13.

Erastus rejected the theory of the *Philosophia ad Athenienses* and offered his own theory of creation that interpreted the Genesis narrative within Aristotelian categories. According to Erastus, there were two clearly distinguishable types of creation, both of which only God had the power to perform. The first kind was absolute creation—the creation of the world *ex nihilo*.¹⁴⁵ In Erastus's conception, in the first moment of creation all the *materia* on earth received their particular *forma* by God's command: "For in the same moment that he commanded that they should exist by his omnipotent word, he mixed and arranged the parts of the *materia* and also differentiated and adorned them with many potentials and dispositions so that the different and manifold *forma* appeared in the same moment."¹⁴⁶ This first moment of creation was described in the first sentence of Genesis: "In the beginning, God created heaven and earth." Being a good Aristotelian, Erastus had to clarify that here Moses must have included all the terrestrial elements, including water, air, and fire, in the word "earth." After the initial creation, "the earth (i.e., the mass of the elements) existed empty and void."¹⁴⁷ This "prime matter" of Erastus lacked the *forma* of later composite *materia* and was equally suitable to be molded into any one type of *materia* as another.¹⁴⁸

Following the vocabulary of Genesis, Erastus was able to distinguish a second type of creation as well. The second type was a non-absolute creation, in which God made new compounds and creatures from the prime matter of his first act of creation. The most obvious example of this was the creation of Adam, whom Erastus noted was called a "creature" only when he received the spirit of life. Eve likewise was created when God formed her from Adam's rib. In this line of thought, something

¹⁴⁵ Of course, Aristotle himself had not taught creation *ex nihilo* but maintained the eternity of the world. For Aristotle's conception, the thought of the early church fathers, and the scholastic tradition, see respectively, G.E.R. Lloyd, *Aristotle: The Growth and Structure of his Thought* (Cambridge: Cambridge UP, 1968); Jaroslav Pelikan, "Creation and Causality in Christian Thought," *Journal of Religion* 40 (1960): 246–255; David C. Lindberg, *The Beginnings of Western Science* (Chicago, University of Chicago, 1992).

¹⁴⁶ *De medicina nova*, 1:11: "Etenim momento eodem quo, ut haec existerent, iussit, tam variè omnipotente suo Verbo materiae partes miscuit at temperavit, tamque multiplicibus potentiis & dispositionibus distinxit & exornavit, quam variae multiplicesque formae in eadem subito apparverunt."

¹⁴⁷ *Ibid.*, 7: "Disertè namque dicitur, terram, id est, elementorum massam, inanem & vacuum extitisse, hoc est, formis istis compositarum rerum caruisse, quae simul atque Deus esse iussit, eodem illo momento perfectae extiterint."

¹⁴⁸ *Ibid.*, 15: "Quoniam potentia, quam tunc habuit solam, generalissima fuit, per quam ad rerum omnium creationem aequè idonea erat, ad nullam magis apta, quam ad aliam quamlibet."

must be called “creation” if it required divine agency for its existence. Erastus criticized what he described as the scholastic view of creation, which only viewed the first “type” of creation as creation *per se*; the second action of creating the various compounds of the world (i.e., the other five active days of creation) was only considered “adornment and definition” by God. Erastus placed two qualifications on this notion. First, to have been rightly considered a creation, the new creature or compound could not have originated out of its own innate power. Thus, when a seed grows into a tree, it is no “creation;” rather, the seed has simply developed out of its inborn potential. The second qualification was that it must have been made immediately and without movement or change.¹⁴⁹ In this second phase of creation, God transformed the *materia prima* of the first creation into composites: “Out of these elements before any alteration then,” claimed Erastus, “the same workman created diverse kinds of things through his omnipotent word.”¹⁵⁰

Seen in the light of Erastus’s interpretation of Genesis, Paracelsus denied both the initial creation *ex nihilo* as well as God’s role in the secondary acts of creation in giving composite materials their set forms. The Paracelsian notion that angelic or daemonic forces were at work in this separation of matter troubled Erastus, and he surmised that Paracelsus had really believed that Christ was one of these minor deities but did not have the courage to say it. In this connection, he accused Paracelsus of Arianism in placing the son in a subordinate position to the father.¹⁵¹

This condemnation of Paracelsus’s theory of creation, expressed as it was in an Aristotelian vocabulary, was ironic considering the fact that contemporary Paracelsians such as Dorn and Bostocke were hailing Paracelsus precisely for avoiding the pernicious influence of Aristotle and Galen. To them, Paracelsus had freed natural philosophy from the pagan ancient philosophers and had set forth a restored Christian natural philosophy.¹⁵² Meanwhile, Erastus continued in the tradition of the scholastics in explaining the doctrine of creation with an Aristotelian vocabulary

¹⁴⁹ Ibid., 6–8.

¹⁵⁰ Ibid., 7: “Ex his elementis deinde nulla prorsus alteratione praegressa diversas rerum species omnipotente suo verbo creavit idem opifex.”

¹⁵¹ Ibid., 24.

¹⁵² Gerhard Dorn, *De naturae luce physica ex genesi desumpta* . . . , in *Theatrum Chemicum*, ed., Lazarus Zetzner (Strasbourg, 1659–1661); [Bostocke], The difference betwene the auncient Phisicke . . . and the later Phisicke. On Dorn, see Kühlmann and Telle, eds. *Corpus Paracelsisticum*, 2:823–963 and Didier Kahn, *Alchimie et paracelsisme en France à la fin de la Renaissance (1567–1625)* [Cahiers d’Humanisme et Renaissance 80] (Geneva: Droz, 2007), passim.

and building a bastion around the concept of creation *ex nihilo*, though not restricting “creation” to solely *creatio ex nihilo*. Whereas Dorn and Bostocke regarded Paracelsus as the restorer of Godly natural philosophy, Erastus condemned him as “blinder than the heathens.”¹⁵³

Adam's Flesh and the Resurrection of the Body

At the 1571 Lenten Frankfurt fair, Erastus came upon a text which caused him to put the publication of the first volume of his anti-Paracelsian disputations on hold. This book was Toxites's *editio princeps* of Paracelsus's *Astronomia Magna oder die gantze Philosophia sagax der grossen und kleinen Welt*.¹⁵⁴ Erastus not only recoiled from the “horrible heresies” of the work, he also marveled that Toxites had been so “audacious” as to dedicate it to the pious Lutheran Elector August of Saxony. Erastus wrote a special refutation of the *Astronomia Magna* that he appended to the first volume of his *De medicina nova*.¹⁵⁵ He also dedicated the work to Elector August and wrote him a personal letter gently warning him of the numerous blasphemies contained in the *Astronomia Magna* and cautioning him of patronage seekers of ill-repute who would sully his glorious reputation.¹⁵⁶

Whereas Erastus's critique of the *Philosophia ad Athenienses* had focused on Paracelsus's conception of creation, here Erastus objected to Paracelsus's anthropology and its broader theological implications. First, Erastus rejected the three-part division of human beings that Paracelsus had outlined in the *Astronomia Magna*. According to Paracelsus, a human consisted of three components: elemental, sidereal, and divine. This notion related the composition of humans—the microcosm—to the composition of the universe—the macrocosm. Conceptualizing humans in this manner had clear utility for medical therapy. For example, the part of humans that was made of elements would respond to chemical

¹⁵³ *De medicina nova*, 1:25: “quo videas ipsis Ethnicis coeciorem fuisse.”

¹⁵⁴ A loose translation would be: Great Astronomy or the Complete Adept Philosophy of the Macrocosm and the Microcosm. Paracelsus, *Astronomia Magna: oder die gantze Philosophia sagax der grossen und kleinen Welt* (Frankfurt: Sigmund Feyrabend: 1571) [Sudhoff, *Bibliographia Paracelsica*, 219 (no. 131)]. For Erastus's reaction to the publication, see Appendix B, texts nos. 6 & 7.

¹⁵⁵ *De medicina nova*, 1:243–267.

¹⁵⁶ Erastus to Elector August von Sachsen, Heidelberg, Sept. 9, 1571. Sächsisches Hauptstaatsarchiv (Dresden), Geheim. Rat (Geheim. Archiv), Loc. 8523, Sechs unterschiedliche Bücher, Bd. 1; 1570–1574, fols. 186^r–187^v. See Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 2:227–228; 471–473.

medicines. Likewise, the sidereal or celestial part of humans was the part that was most under the influence of the powers of the stars. Finally, there were spiritual maladies that could only be treated by the divine physician.

As successful as this division may have been in explaining how the microcosm was related to the macrocosm and likewise harmonized with Paracelsian medical theory, Erastus recoiled from the heretical implications of what he considered to be a three-substance anthropology and interpreted this theory as an attack on the traditional Christian belief in the resurrection of the body.¹⁵⁷ Unlike Platonic thought, which had emphasized only the existence of the immortal soul in the afterlife, the New Testament writers taught that the human person, a union of soul and body, would itself be resurrected at the last judgment. While later Christian writers incorporated the notion of an immortal soul into their theology, nearly all held that the body would itself be materially resurrected at the last judgment.¹⁵⁸ In Paracelsus's conception, however, only the divine part of humans could be received by God into paradise. Paracelsus termed this divine aspect alternatively "living flesh," "heavenly flesh," and flesh "from the holy spirit" and maintained that it was given to humans in baptism.¹⁵⁹ Paracelsus argued that only things which have their origin in God can return to God. Alternatively, neither the elemental nor even the celestial part of humans could be resurrected.¹⁶⁰ At death the elemental part of humans returned to earth, the sidereal to the stars, and the divine to God. Erastus interpreted what Paracelsus termed the elemental and sidereal dimension of humans to be nothing other than the human body.¹⁶¹ Since such discussion suggested that actual human flesh could not be resurrected, Erastus concluded that Paracelsus's theory was a manifest denial of the Christian doctrine of the resurrection of the body. This

¹⁵⁷ Paracelsus did not speak of substances but of "parts" (*Theilen*) or "beings" (*Wesen*). *Astronomia Magna*, PI, 12:10.

¹⁵⁸ Oscar Cullmann, *Immortality of the Soul or Resurrection of the Dead?* (New York: MacMillan, 1964); Caroline Walker Bynum, *The Resurrection of the Body in Western Christianity, 200–1336* (New York: Columbia, 1995), 5–14. While St. Paul's discussion of the resurrection in 1 Corinthians 15 does emphasize the spiritual nature of the resurrected body (verse 12: "It is sown a physical body, it is raised a spiritual body"), it is also clear that he taught a continuity between the earthy body and the heavenly body (verse 53: "For this perishable nature must put on the imperishable, and this mortal nature must put on immortality."). Quotations from the *Revised Standard Version*.

¹⁵⁹ *Astronomia Magna*, PI, 12:308–309.

¹⁶⁰ *Astronomia Magna*, PI, 12:288: "doch so kompt nichts gen himel, weder der elementisch noch der siderisch leib, allein der mensch der ein geist ist und nemlich der geist der von got ist." *De medicina nova*, 1:245.

¹⁶¹ *De medicina nova*, 1:251.

threefold composition could have been more readily harmonized with Christian theology if one understood Paracelsus to mean properties or qualities of the human body that corresponded to earthly, celestial, and divine existence. Since Erastus interpreted Paracelsus from the perspective of Aristotelian categories, however, Erastus insisted that Paracelsus must here be understood to refer to substances rather than qualities.¹⁶² The fact that Paracelsus at other times taught that there were two bodies in man (mortal and immortal) rather than three parts (elemental, sidereal, divine) did not soften Erastus's criticism, since Paracelsus still maintained that the earthly body returned to earth while only the eternal body entered the kingdom of God.¹⁶³ Erastus offered the standard critique of the inconsistent and self-contradictory nature of Paracelsus's works and at one point counted the various ways that Paracelsus had divided the human person and exclaimed: "Thus you have a three-bodied monster of a man composed out of nine parts."¹⁶⁴

Paracelsus would not have accepted this accusation of heresy but would have asserted that he too believed in the resurrection of the body. In the *Paramirum*, Paracelsus had taught that human flesh could not enter the kingdom of God until it was regenerated. Erastus conceded that Paracelsus's conception of the sanctification of human flesh necessary for it to enter heaven was fundamentally orthodox in the *Paramirum*.¹⁶⁵ However, Erastus argued that Paracelsus's teaching in the *Astronomia Magna* went beyond the bounds of orthodoxy. Here, rather than maintaining that human flesh had simply to be sanctified to enter paradise, Paracelsus suggested that humans must receive new spiritual

¹⁶² In this light, it is interesting to observe Erastus's translation of Paracelsus's sentence, "So doch got zwei wesen im menschen gemacht hatt, das irdisch und das ewig und seind zusammen vermelet bis an die auferstehung?" with "Deus duas essentias in homine fecit, terrenam & eternam: quae coniunctae manent usque ad resurrectionem." In Erastus's translation, Paracelsus's "Wesen," which could suggest a number of nuances, has been translated with "*essentia*" which Erastus correlates with the Aristotelian category of "substance" or "ὀνεία." *Astronomia Magna*, PI, 12:10; *De medicina nova*, 1:251.

¹⁶³ *De medicina nova*, 1:251.

¹⁶⁴ Ibid., 261: "Sic monstrum tricorporeum hominis habebis ex partibus novem compositum." Regarding the competing anthropological conceptions in Paracelsus's work, see H.C. Erik Midelfort, "The Anthropological Roots of Paracelsus' Psychiatry," in *Kreatur und Kosmos*, ed. Rosemarie Dilg-Frank (Stuttgart: Fischer, 1981), 67–77; Gause, *Paracelsus*, 85; Kurt Goldammer, "Paracelsische Eschatologie: Zum Verständnis der Anthropologie und Kosmologie Hohenheims," in *Paracelsus in neuen Horizonten*, 108; Dane T. Daniel, "Invisible Wombs: Rethinking Paracelsus's Concept of Body and Matter," *Ambix* 53 (2006): 129–142.

¹⁶⁵ *De medicina nova*, 1:248.

flesh by the agency of the Holy Spirit. Paracelsus thus distinguished between two types of flesh: "Adam's flesh," which could not enter paradise, and flesh incarnate through the Holy Spirit, which, since it had its origin in God, could return to God.¹⁶⁶ Paracelsus apparently attempted to reconcile a Neoplatonic notion of the migration of the incorporeal soul to the divine with the Christian notion of the resurrection of the body. Kurt Goldammer has suggested that Paracelsus was torn between a spiritualist-dualistic pneumatology and an authentic faith in the resurrection. This led Paracelsus to adopt what Goldammer has termed a "paradoxical compromise-formula."¹⁶⁷ Although Paracelsus offered a plausible, if paradoxical, reinterpretation of the doctrine of the resurrection of the body, Erastus asserted that such a spiritualistic interpretation of the resurrection of the body with "heavenly flesh" substituted for "Adam's flesh" was tantamount to an outright rejection of corporeal resurrection. Likewise, Paracelsus's application of this distinction between heavenly flesh and Adam's flesh to his understanding of Christ opened the door to extensive criticism of Paracelsus's Christology and soteriology.

Erastus's attack on Paracelsus's Christology began with the depiction of the Virgin Mary's role in the incarnation. What follows is the passage from the *Astronomia Magna* which Erastus found most unsettling:

From the Virgin comes the new birth and not from woman. From this it follows, that the Virgin, from whom the new birth has proceeded and been born, has been a daughter of Abraham according to the promise and not from Adam; that is, she has been born from Abraham without male seed, in the power of the promise without all mortal nature. From the Virgin, who

¹⁶⁶ *Astronomia Magna*, PI, 12:306–310. Hartmut Rudolf suggests that this teaching was also present in Paracelsus's earlier theological work *De geneologia Christi*, a work which Rudolf maintains bears many resemblances to the later *Astronomia Magna*. Hartmut Rudolf, "Kosmospekulation und Trinitätslehre: Ein Beitrag zur Bezeichnung zwischen Weltbild und Theologie bei Paracelsus," in *Paracelsus in der Tradition* [SBPF 21], ed. Sepp Domandl, 32–47 (Vienna, 1980), 42.

¹⁶⁷ In contrast to Goldammer, Rudolf has asked whether Paracelsus actually held a negative view of the "earthly-material body." Rudolf suggests that it was the mortality of the body which Paracelsus held in low regard, rather than flesh and blood itself. I am inclined to agree with Goldammer that Paracelsus's notion is at least implicitly dualistic, since it would seem to preclude any real continuity between the "mortal flesh" which humans received as descendants of Adam and the "heavenly flesh" that they are given by Christ. The Paracelsian notion does not represent a simple material/immaterial dualism. For example, the sidereal part of humans is itself invisible, but, like the elemental body, it cannot be resurrected. Goldammer, "Paracelsische Eschatologie," 111; Rudolf, "Kosmospekulation und Trinitätslehre," 43.

thus is not from Adam, not from his seed, only out of his flesh, Christ was born, who was conceived by the Holy Spirit and was made incarnate from holy flesh, not according to the order of the mortal flesh, but according to the new birth which thus proceeds from the Holy Spirit. From this you should consider the fact that [he is] *out of* Adam's flesh in much the same way that you might consider wine which was stored in a vat; it is *out of* the vat, but it is not *of* the vat. From this it follows that that which is incarnate from the Holy Spirit is from heaven and will return again to heaven; that, however, which is not incarnate from the Holy Spirit, that will not return to heaven.¹⁶⁸

To save Mary from the blemish of original sin, Paracelsus argued that Mary was not descended from Adam but rather from Abraham and was thus not born of Adam's seed, though he does not explicitly deny that she still possessed Adam's flesh.¹⁶⁹ Erastus did not follow the full subtlety of this point and asserted that Paracelsus taught that Mary's flesh was not derived from Adam and therefore she did not possess normal human flesh.¹⁷⁰ Here was a rare occasion where Erastus as a Reformed Protestant could criticize a Catholic motif in Paracelsus's thought. Erastus, however, chose not to dwell on the exalted view of Mary that undergirded Paracelsus's theory and focused instead on the fundamental Christological issue. Like Mary, Christ was not born of Adam's seed but was made incarnate by the Holy Spirit in Mary's womb. To illustrate this theory, Paracelsus claimed that Christ had only dwelt in Mary's womb as wine filled a barrel.¹⁷¹ She had only been a channel for Christ's holy flesh; he became

¹⁶⁸ *Astronomia Magna, PI*, 12:308–309: “aus der jungfrauen gehet die neue geburt und nicht aus der frauen. aus dem folgt nun, das die jungfrau, aus der ausgangen und geboren ist die neu geburt, ein tochter ist gewesen von Abraham nach der verheischung und nicht aus Adam, das ist sie ist gewesen von Abraham on menlichen samen geborn, in kraft der verheischung on alle tötliche natur. aus der jungfrauen, die also von Adam nit ist, nit von seinem samen, nur aus seinem fleisch, ist geboren Christus, der empfangen ist vom heiligen geist und vom heiligen fleisch incarnirt/ nicht nach der ordnung des tödlichen fleischs, sonder nach der neuen geburt, die da gehet aus dem heiligen geist. darin verstanden aus Adams fleisch nich anderst, dann sovil als ihr verstehen möget von einem wein, der in ein faß gelegt wird, der ist auß dem faß, aber nicht vom faß. iezt folgt auf das, was von dem gist incarniert wird, das ist vom himel und kompt wider gen himel; das aber von dem geist nicht incarnirt wird, das kompt nit gen himel.”

¹⁶⁹ *Astronomia Magna, PI*, 12:307–309. At first sight it might appear difficult to understand why Paracelsus had argued that Mary was not born of Adam's seed, since he also maintained that Christ received no flesh from Mary but was made incarnate by the Holy Spirit in Mary's womb. This answer to this puzzle is that Paracelsus had taught that both Christ and Mary bore human nature only as a covering. In this sense, Mary shares more in common with Christ than normal mortals. Gause, *Paracelsus*, 45.

¹⁷⁰ *De medicina nova*, 1:255.

¹⁷¹ Paracelsus had earlier used this same analogy to illustrate how the Virgin Mary grew

incarnate in her, but did not assume her flesh.¹⁷² Since Mary had not been born of Adam's seed and Christ did not assume flesh from Mary, it would seem that Paracelsus had double-insulated Christ from the taint of original sin. While Paracelsus denied that Christ received flesh from Mary, he taught that Christ possessed "holy flesh" made incarnate by the Holy Spirit. Here Paracelsus's conception is rather close to that of the radical reformer Melchior Hoffman, who also argued that Christ did not possess "Adamic flesh" but rather a purely celestial nature.¹⁷³

In Erastus's view, to assert that Christ did not assume Adam's flesh was to say that he possessed some other type of flesh than that of normal humans; in short, that Christ was not truly human.¹⁷⁴ Erastus argued that not only did this clash with the Apostles' Creed, it also called into question whether Christ could have actually died for humans on the cross if he did not possess mortal flesh.¹⁷⁵ Thus, Paracelsus's attempt to apply his "spiritualist" natural philosophy to the doctrine of Christ necessarily called into question Jesus' ability to serve as an atoning sacrifice for humanity.

The idea that it was possible that all humans did not inherit their flesh from Adam led to many novel conceptions in Paracelsus's thought that Erastus considered to be strange heresies. Paracelsus taught that the blessed actually possessed two bodies: a mortal one, born of Adam's flesh, and an immortal one, made incarnate by the Holy Spirit. Following this distinction, he speculated that the apostles in New Testament times performed miracles by their "new bodies" rather than by their "old bodies." Such capacities did not only apply to the saints, and Erastus alleged that Paracelsus attributed immaterial bodies to nymphs, wild men, and giants.¹⁷⁶ Paracelsus had also suggested that the inhabitants of the New

in the womb of her mother St. Ann without receiving the stain of her fallen nature. Gause, *Paracelsus*, 44–45.

¹⁷² *Astronomia Magna*, PI, 12:309: "aus der jungfrauen, die also von Adam nit ist, nit von seinem samen, nur aus seinem fleisch, ist geboren Christus, der empfangen ist vom heiligen geist und vom heiligen fleisch incarnirt/ nicht nach der ordnung des tödlichen fleischs, sonder nach der neuen geburt, die da gehet aus dem heiligen geist. darin verstanden aus Adams fleisch nich anderst, dann sovil als ihr verstehen möget von einem wein, der in ein faß gelegt wird, der ist auß dem faß, aber nicht vom faß."

¹⁷³ Williams, *The Radical Reformation*, 495, *passim*.

¹⁷⁴ *De medicina nova*, 1:247, 252. Interestingly it was precisely this "heretical" notion of Christ's flesh that Valentin Weigel found attractive. See Moran, "Paracelsus, Religion, and Dissent," 69.

¹⁷⁵ *De medicina nova*, 1:255.

¹⁷⁶ *Ibid.*, 254; *Astronomia Magna*, PI, 12:113–114, 244–249, 362–363. See also *Liber de*

World were not necessarily descended from the Adam of Genesis but had perhaps descended from “another Adam.”¹⁷⁷ Later Spanish writers vehemently condemned this notion of Paracelsus when grappling with the question of whether American Indians were fully human. Like Erastus, they also asserted that Paracelsus’s suggestion, if followed to its natural conclusion, might well call into question the salvation of Western Christians as well.¹⁷⁸

The final error that Erastus cited in reference to “Adam’s flesh” was that Paracelsus’s theories were an attack on divine omnipotence. Erastus distilled this charge from Paracelsus’s description of how immortal bodies were created. According to Paracelsus, God the father had only been responsible for the creation of mortal flesh, like the flesh of Adam. However, the immortal flesh of those who enter heaven was created and given by Christ. Erastus considered the mere notion that God the father was unable to transform mortal flesh into immortal flesh an affront to divine omnipotence.¹⁷⁹

Erastus adeptly and for the most part honestly ferreted out the latent heresy of Paracelsus’s writings. That the first volume of *De medicina nova* was entirely devoted to the rejection of Paracelsus’s religio-magical universe gives a fair representation in itself regarding the seriousness with which Erastus took this dimension of his task. Erastus was generally perceptive in his treatment of Paracelsus, but he was not charitable. Like Paracelsus’s more sympathetic interpreter Bostocke, Erastus had been able to conceptualize ways in which the Paracelsian natural philosophy could be reconciled with an orthodox Christian position. Unlike Bostocke, however, Erastus chose to emphasize the cacophony and heterodoxy of Paracelsus’s teachings rather than their unity and orthodoxy.

nymphis, sylphis, pygmaeis et salamandris et de caeteris spiritibus, in *PI*, 14:115–151. For an English translation, see Paracelsus, *Four Treatises*, ed., Henry E. Sigerist (Baltimore: Johns Hopkins, 1941; paperback ed., 1996).

¹⁷⁷ *Astronomia Magna*, *PI*, 12:35: “und so mag ich nit underlassen, von denen ein kleine meldung zu tun, die in verborgen insulen gefunden seind worden, und noch verborgen sind, das sie von Adam zusein geglaubt mögen werden, mag sichs nit befinden, das Adams kinder seind kommen in die verborgen insulen, sonder wol zu bedenken, das dieselbigen leut von einem andern Adam seind; dan dahin wirt es schwerlich komen, das sie fleish und bluts halben uns gefreundt sein. und das ist auch wol zu gedenken, were Adam im paradeis bliben, es were villeicht ein anderer Adam worden, doch villeicht nit mit der bildtnus gottes, als dan die neuen insulen seind.”

¹⁷⁸ See Anthony Pagden, *The Fall of Natural Man* (Cambridge: Cambridge UP, 1982), 22–23.

¹⁷⁹ *De medicina nova*, 1:254–255.

Erastus's Rejection of Chemical Pharmacology: De auro potabili

In early 1576 Erastus composed yet another refutation of Paracelsianism entitled *Disputation Concerning Potable Gold* (*De auro potabili*) which Perna would print in 1578.¹⁸⁰ The work set forth Erastus's own rationale for the independence of medicine as a secular pursuit and issued an attack on Paracelsus's chemical pharmacology. *De auro potabili* was written in a dialogue form like most of Erastus's works. On this occasion, however, even the Paracelsian interlocutor, the same "Furnius" (man of the furnace) from *De medicina nova*, did not refrain from taking shots at Paracelsus. Within the first twenty pages Paracelsus was assailed as "the first enemy of medicine" and labeled "magician, atheist, and pig."¹⁸¹ Erastus had already committed himself to a universal rejection of Paracelsus in *De medicina nova* and he made no effort to present an even-handed treatment in *De auro potabili*.

Medicine as an Empirical Pursuit

Erastus took great pains in the book to distinguish his understanding of medicine as an empirical science from the prophetic-magical medicine of Paracelsus. What follows is Erastus's description of medicine, which will probably sound more like what one would expect from Paracelsus, according to textbook accounts of Paracelsus's attack on the obscurantism of the "scholastic" physicians. In Erastus's conception medicine had to have a basis in experience; it could not only be the study of classical texts. Thus, for a so-called medical Hellenist, he possessed a strong emphasis on the importance of observation. "The learning/doctrine of good physicians does not only consist in the knowledge of languages," asserted Erastus, "but is much more determined by the perception of causes, motions and the effects of nature."¹⁸² Erastus described medicine as a craft and made a comparison between medicine and agriculture.

¹⁸⁰ Thomas Erastus, *Disputatio de auro potabili, in qua accurate admodum disquiritur, num ex metallis opera chemiae, concinnata pharmaca tutè utiliterque bibi possint* (Basel: Pietro Perna, 1578; reprinted, Basel: Conrad Waldkirch, 1584; hereafter cited as *De auro potabili*). I have used the 1584 reprint.

¹⁸¹ *De auro potabili*, 6: "primus oppugnator medicinae" and 20: "magus, atheos, porcus."

¹⁸² *De auro potabili*, 3: "Bonorum Medicorum doctrina non in sola linguarum notitia consistit, sed multo magis perspicentia causarum, motionum, & effectuum naturae definitur."

Indeed, the good doctor is like the industrious farmer. In both cases success only comes to the person who does the necessary work. Just as God would not send a harvest to the farmer who had not taken the effort to sow his seed, success in medical treatment depended upon the conscientious labors of the practitioner. Though both the farmer and the physician must ultimately give thanks to God as the ultimate provider of their success, it was God's intention that no positive results could proceed unless the farmer and the physician did their part.¹⁸³ Likewise, medical effects came through skill and effort, not through arcane or prophetic knowledge. Erastus made a clear epistemological distinction between theological and medical knowledge. In opposition to theological knowledge, which was known through divine revelation, medical knowledge had to be experienced in nature. The human need for medicine was not a product of incomplete theological understanding; rather, the continuing practice of medicine was a part of God's plan. Erastus argued that accepting the fact that medicine lay under the sovereignty of God also implied that there were limits to medicine's effectiveness. God had never intended all sickness to be curable.¹⁸⁴

Erastus's vision of medicine as a scientific craft was accompanied by a deep appreciation for the antiquity of medicine. This long tradition was in part proven by the presence of doctors in the Scriptures. Since medical knowledge was experienced in nature, the body of medical knowledge grows over time. In this instance Erastus suggested a notion of cumulative advance or progress of medical learning and argued that the Paracelsians were simply foolhardy to reject centuries of medical learning.¹⁸⁵ Erastus portrayed Paracelsus as a reckless innovator who had abandoned accumulated wisdom of the physicians of antiquity to forge a new medical sect. Naturally this went against Erastus's reverence for medical tradition. Erastus continually complained about the audacity of Paracelsus, since he bragged that he was superior to all the physicians of antiquity. Of prime annoyance for Erastus were the new elements of Paracelsus, which Erastus thought to be clearly invalidated by experience and tradition. In this connection Erastus accused Paracelsus of being an atomist.¹⁸⁶

¹⁸³ Ibid., 14–15.

¹⁸⁴ Ibid., 10–11.

¹⁸⁵ Ibid., 13.

¹⁸⁶ Ibid., 7.

The central picture that Erastus outlined was of Paracelsus as a medical false prophet. The claim of secret knowledge or new revelation was Erastus's *bête noir* and this arcane aspect is the lead motif of Erastus's Paracelsus image. When Erastus attacked Paracelsus, this arcane image occupied the central position. Erastus attempted to prove that no medical revelation existed in the present. Since the Paracelsians claimed to have new or secret knowledge, these concepts must simply derive from the devil.¹⁸⁷ Erastus thought that Paracelsus had claimed to know more about medicine than God had ordained for humans. To Erastus, Paracelsus's hubris was in clear contradiction of the Bible, and with something of a scholastic twist, Erastus asserted that Paracelsus had been guilty of a capital crime for claiming to know more than God had intended humans to know.¹⁸⁸

Medicine and Nutrition

Erastus's reaction to Paracelsian metallic therapy was closely related to his Galenic theory of nutrition. Digestion in the strict Galenic sense was achieved when the food was transformed in the blood by inner heat. Erastus insisted that there was a direct connection between the power of nutrition and the power of medicine. This meant that unless a potential medicine had nutritional value, that is, that it could be digested, it could not serve a medicinal purpose. Erastus's scheme lies well within the tendency of Galenic theory to closely associate health with nutrition. Furthermore, Erastus distinguished between the *forma* of a sub-

¹⁸⁷ For example, when speaking of Christ's apparent approval of the vocation of physicians in his era, Erastus comments, "At Paracelsica nondum erat in Tartaro fabrica." Ibid., 10.

¹⁸⁸ Ibid., 19–20: "Caeterum qui vel cogitare apud se audet, Paracelsum Deo rectius stauisse, non tantum est impius, sed capitali supplicatio dignus." It should be noted that this charge is made by the interlocutor "Furnius." Gilly has recently focused attention on Erastus's "dear wish" to apply the death penalty to Paracelsians. Ironically, Erastus was here developing Weyer's claim that learned magicians who accessed demonic power warranted the death penalty more than gullible witches. (See Weyer, *De praestigiis daemonum*, book 6: "De magorum infamium, laminarum, et venificorum poenis.") To modern readers, Erastus in this case unhappily picks up Weyer's negative influence in stressing the culpability of literate magicians without embracing his more salutary call for clemency for uneducated female practitioners who rather naively thought they could access diabolical power (see chapter 9 below). While Erastus's assertion here is disquieting, it is essentially rhetorical. Carlos Gilly, "Capital Punishment for Paracelsians: A Dear Wish of Thomas Erastus," in *Magia, alchimia, scienza dal '400 al '700*, ed. Carlos Gilly and Cis van Heertum (Florence, Centro Di, 2002): 247–251.

stance and its *potentia* or *facultates*. In Erastus's conception there was a residue of *potentia* or *facultates* after the destruction of the *forma*. It was this residue which gives medicines their power. However, these *facultates* always depended on the *tota substantia* of the material from which they were derived. Erastus's view left little room for a significant role for chemists in the preparation of drugs. If a chemist could change the total substance of metals, metals might possess a wider pharmacological usage; however, humans are only able to mix and blend the substances that God has created. A chemist can purify a substance for use in medicines but cannot change the *tota substantia* of the *forma*. Thus, all potential medicines are very much restricted to their original form. The consequences of this very restricted understanding of chemical change based on Aristotelian distinctions had a severe impact on Erastus's receptivity to the pharmacological innovations introduced by the chemical physicians.¹⁸⁹

Metallic Therapy

Although the book in which Erastus dealt with medicines made from metals is ostensibly about potable gold, the book is primarily preoccupied with the possibility of metallic cures and spends little time on the specific topic of *Trinkgold*. Erastus compared the substance of metals and the substance of humans within a traditional Galenic conception of temperament. Metals are naturally hard and dry, whereas the human body is soft and wet. For this reason the introduction of metals into the body could lead to a destruction of the harmony of the humors. This loss of harmony meant the loss of health in the Galenic system. Erastus also compared the material complexity of metals with that of the substance of the human body. Material complexity corresponded to the complexity of the form. While metals are chemically simple, the material complexity of human substance corresponds to the high position of humans in creation.¹⁹⁰

After making his point concerning the differences between humans and metals, Erastus returned the argument to the question of nutrition. He suggested that such a complex being as the human cannot receive nourishment from completely simple substances such as metals. Not only were metals too simple, they were inanimate (non-organic), and all

¹⁸⁹ Ibid., 29–42.

¹⁹⁰ Ibid., 44–49. See Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 2:522.

nutrients must stem from living material. Organic material can only be constituted from other organic materials. Metals were never alive, and therefore they cannot be nutritional. Since Erastus had already asserted the necessary interrelation between nutrition and medicine, it followed that non-nutritious metals have no proper medical use. The only apparent exception was the use of metals for the treatment of stomach ulcers. Erastus explained that medications for stomach ulcers were not normal drugs, since in this case the medicines were not actually digested. Rather, they only moved through the stomach, before passing undigested out of the body. While such a distinction might appear facile, the distinction was critical for a Galenist. Since metals were not digestible, they could not improve the patient's humoral condition, and therefore Erastus insisted that they should not be thought of as genuine medicines.¹⁹¹

It should be obvious from this discussion that Erastus has basically precluded the possibility of metallic drugs. He nevertheless continued with philosophical speculations concerning the characteristics of liquid metals. It appears that Erastus thought that metals were truly immutable. Thus, even if metals appeared to have undergone a temporary liquefaction, these liquid metals must return to their former dry condition. Since they must return to their normal solid state, liquid metals possess no great advantage over normal metals as drugs.

Erastus also engaged the theory that incorruptible metals like gold have a special ability to prolong human life. Although this theory is basically inconceivable from his philosophical standpoint, he entertained its possibility for the sake of argument. Once again he returned to his emphasis on nutrition. If gold is not digestible by our bodies, such a therapy made no sense, since the gold would have no opportunity to influence our bodies. If gold were digestible, however, it would also be corruptible, and thus it could not help the corruptible body. Thus, in Erastus's mind the popular fixation with discovering an alchemical elixir which would prove to be a universal panacea was completely irreconcilable with sound medical theory.¹⁹²

De auro potabili offered both more and less to its readers than it advertised. It was not really the exhaustive investigation of potable gold that its title indicated. Alternatively, it contained a great deal of information on Erastus's overall philosophy of medicine. As a weapon in the anti-Paracelsian arsenal, it may have been even more effective than *De medi-*

¹⁹¹ Ibid., 58–66.

¹⁹² Ibid., 70–72.

cina nova since it was more narrowly focused on a key aspect of Paracelsianism's popularity without the extraneous biographical bits and the long digressions into theological questions. Likewise, its readers received a shrill warning concerning the false claims of the Paracelsians and heard a biblical rationale as to why Paracelsus's innovations were medical heresy rather than a longed for medical reformation.

The Impact of Erastus's Anti-Paracelsian Writings

Erastus's comprehensive repudiation of the Paracelsian system hardly stemmed the new wave of enthusiasm for the spagyric master. Indeed, it is likely that Erastus's work only fanned the flames of the Paracelsian revival. New editions of Paracelsus continued to flow from the presses, and the academic establishment began to take Paracelsus's ideas more seriously. One beneficiary of this interest was Perna, the publisher of Erastus's anti-Paracelsian opus. Perna was an Italian exile who, along with favoring Paracelsians in his presses, had a penchant for dissident and heretical writers such as Sebastian Castellio and Bernardino Ochino.¹⁹³ Recent historians have made Perna out to be a signal example of late humanist radicalism with his promotion of "Paracelsianism, Hermeticism, and Heresy."¹⁹⁴ Given that publishing Erastus seemed to go against the grain of Perna's editorial policy, historians have speculated about what motivated Perna's decision. Antonio Rotondò suggested that he may have done it to keep his imperial printing privilege, since he may have feared that the imperial physician Crato was going to take action against him.¹⁹⁵ Given the fact that Perna had arbitrarily censored Crato's attack on Paracelsus in a book issued from his house, Rotondò's suggestion is not entirely implausible. Regardless of Perna's initial motive, there would seem to be no reason to think that Perna was compelled to print

¹⁹³ See Hans Rudolf Guggisberg, "Pietro Perna, Fausto Sozzini und die Dialogi quatuor Sebastiani Castellii," in *Studia bibliographica in Honorem Herman de la Fontaine Verwey*, ed. Menno Hertzberger, 171–200 (Amsterdam, 1967), especially 177–179; Antonio Rotondò, "Pietro Perna e la vita culturale e religiosa di Basilea fra il 1570 e il 1580," in *Studi e ricerche di storia ereticale italiana del Cinquecento*, 1:273–394 (Turin: Giappichelli, 1974), see especially, 363; Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 2:729–733; Leandro Perini, *La vita e i tempi di Pietro Perna* [Studi e testi del Rinascimento europeo 17] (Roma: Edizioni di Storia e Letteratura, 2002).

¹⁹⁴ Gilly, "Zwischen Erfahrung und Spekulation," *Basler Zeitschrift für Geschichte und Altertumskunde* 77 (1977): 72.

¹⁹⁵ Rotondò, "Pietro Perna," 375.

additional works of Erastus. Given Erastus's struggle against the Calvinist disciplinary regime in Heidelberg, Perna may have seen Erastus more as a brother in dissent than as a fixture of the establishment. Sudhoff's assessment of 1894 that "Perna favored Paracelsianism solely on account of considerations of the book trade" more adequately captures the economic basis that no doubt influenced Perna's editorial decisions.¹⁹⁶ Given that Perna had a certain investment in Paracelsus, he likely calculated that an anti-Paracelsian work would foster debate and perhaps enhance the sales of his Paracelsian titles.¹⁹⁷ Though it is difficult to quantify the direct impact of Erastus's work, judging from the number of editions of Paracelsus's works, it appears Perna's investment in an anti-Paracelsian title only increased demand for further Paracelsian books.¹⁹⁸

Though Erastus could not stop the spread of Paracelsianism, he made a definite impact on its reception. While Toxites might comment that Erastus's work had caused him to be "disdained" by learned society, he knew that Erastus's work had been read seriously by many.¹⁹⁹ Jole Shackelford has argued that Erastus's refutation of Paracelsus had a profound effect on the Danish Paracelsian Petrus Severinus (1540/2–1602). Severinus was the author of perhaps the most cogent synthesis of Paracelsian medical ideas. Although Erastus did not mention him by name, he attacked Severinus's ideas in *De medicina nova*, 2, by directly citing Severinus's text in order to refute him. Erastus was not as circumspect in his private correspondence. In a letter to Bullinger he exclaimed: "And now there is one who, by coloring impiety with pretty speech and defending absurdity (an abominable endeavor!), has dared to publish a book, the *Idea of Philosophical and Paracelsian Medicine etc.*,"²⁰⁰ by which he has deceived, deceives, and will deceive many people, etc."²⁰¹ In short, Erastus was alarmed by Severinus's book, since unlike Paracelsus's own work, it was both eloquent and internally coherent. Severinus was appalled in turn by what he considered an overly theoretical and sophistic attack by

¹⁹⁶ Sudhoff, *Bibliographia Paracelsica*, 247: "Perna pflegt den Paracelsismus natürlich allein aus Buchhändlerücksichten."

¹⁹⁷ Rotondò, "Pietro Perna," 375.

¹⁹⁸ Sudhoff, *Bibliographia Paracelsica*, particularly, 60–365.

¹⁹⁹ Toxites to Leonhard Thurneisser, Dec. 7, 1576: "glerte leut Erastum darum verachten." Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 2:448–451 (text No. 65); 454–456 (analysis).

²⁰⁰ Severinus, *Idea medicinae philosophicae fundamenta continens totius doctrinae Paracelsicae, Hippocraticae et Galenicæ*.

²⁰¹ Erastus to Bullinger, Nov. 2, [1571], StAZ, E II 361, fol. 74. See Appendix B, text no. 10.

Erastus, a “philosopher of words,” on his view of elements, a theory that to Severinus’s mind was not based on scholastic speculation but on the study of nature and experience of the furnace. Stung by Erastus’s attack in the pages of *De medicina nova*, Severinus suggested that he would abandon the controversy if other authorities in Germany were impressed with Erastus’s refutation.²⁰² Though Severinus defended himself convincingly in his private correspondence (and his friend Tycho Brahe likewise did not mind aiming a barb at Erastus),²⁰³ he did not venture to counter Erastus’s refutation in print. In fact, Severinus never published another work after his *Idea medicinae*. For all intents, Erastus had driven Severinus from the field.²⁰⁴

Debus likewise argued that Erastus’s works had a significant impact on the reception of Paracelsian ideas in England. Debus noted that chemical medicine arrived in England without an explicit connection to Paracelsus, and by and large there was an openness to his chemical cures. Debus was convinced, however, that many learned Englishmen actually first learned of Paracelsus’s larger medical philosophy from Erastus as opposed to directly from Paracelsus. He theorized that the chief reason Erastus’s work received a ready reception in England was that it was written in Latin rather than Paracelsus’s idiosyncratic German. This would seem to be a large claim to make on the basis of Erastus’s *De medicina nova*, which was printed once and in Basel. Although the *De medicina nova* did not go into multiple printings, it was by no means rare and enjoys a wide distribution in modern European libraries. Regarding

²⁰² Shackelford, “Early Reception of Paracelsian Theory,” 130–131.

²⁰³ See Thorndike, *History of Magic and Experimental Science*, 5:656.

²⁰⁴ In the mid-seventeenth century, Ambrosius Rhodius would return to Erastus’s critique of Severinus in his *Disputationes supra Ideam medicinae philosophicae Petri Severini* ... (Copenhagen, 1643). See Shackelford, *A Philosophical Path for Paracelsian Medicine*, 377–402, especially 395–396. In his article on Severinus and Erastus, Shackelford suggested that Severinus’s quotation, “we have suffered on the account of the theologians in these times,” likely referred to the theologically oriented critique of Paracelsianism offered by Erastus and Johann Weyer. While this interpretation is not impossible, it must be remembered that while both Erastus and Weyer handled theological topics, neither was a theologian in a strict vocational sense. This point needs to be emphasized, since Erastus is often incorrectly described as a “professor of theology” in the secondary literature—a position he never held. We have also seen that because he was not a theologian, he was prohibited from discussing theological questions after the church disciplinary controversy. It is likewise worth noting that, their differences on Paracelsus aside, both Erastus and Severinus faced the hostility of Gnesio-Lutherans; in the controversy over the Lord’s Supper, Erastus was actually allied with many of Severinus’s Philippist co-religionists. Shackelford, “Early Reception of Paracelsian Theory,” 131.

Erastus's impact in England, Debus has concluded, "the Paracelsian mystical universe was introduced by the way of a major attack on it, and with very few exceptions this alchemical cosmology became the object of distrust and suspicion during the Elizabethan period."²⁰⁵ Erastus did not halt the flow of Mosaic philosophy to England, however, and Paracelsus eventually found avid disciples in England, such as Bostocke and Robert Fludd.

Erastus also had an impact on the reception of Paracelsianism in France. Among Erastus's most eager readers were, ironically enough, the Catholic theology faculty of the University of Paris. The fact that Erastus's name was on the *Index* does not seem to have undermined their interest in his anti-Paracelsian work. Didier Kahn has undertaken a thorough investigation of the fifty-nine theses against Paracelsus which the Sorbonne faculty issued on October 9, 1578. The vast majority of the theses, entitled "Impieties and Errors of Paracelsus, gathered from the books of the same and from Erastus and Dessen," stem directly from Erastus, with only a few from either Paracelsus's works or Dessen von Kronenburg. In short, the Parisian theologians endorsed Erastus's diagnosis of Paracelsus's heresy wholesale.²⁰⁶ Debus was also able to uncover a number of French writers who were influenced by Erastus's work.²⁰⁷ Erastus remained influential in France into the seventeenth century and had a significant impact on the thought of the famed mathematician and scientific impresario Fr. Marin Mersenne.²⁰⁸

An intriguing episode which revealed something of the changing fortunes of Paracelsianism in academia as well as the impact of Erastus's rebuttal of Paracelsus occurred in Basel with the promotion of Thomas Moffet under Theodor Zwinger (1533–1588).²⁰⁹ Zwinger played a major

²⁰⁵ Debus, *The English Paracelsians*, 49.

²⁰⁶ Didier Kahn, "Cinquante-neuf thèses de Paracelse censurées par la Faculté de théologie de Paris, le 9 octobre 1578," in *Documents oubliés sur l'alchimie, la kabbale et Guillaume Postel: offerts, à l'occasion de son 90e anniversaire, à François Secret par ses élèves et amis*, ed. François Secret and Matton Sylvain [THR 353] (Geneva: Droz, 2001), 161–178 (The theses themselves are printed on pp. 170–178). See also idem, *Alchimie et paracelsisme en France*.

²⁰⁷ See Allen G. Debus, *The French Paracelsians* (Cambridge: Cambridge UP, 1991). Among these, Nicolas Guibert and Toussaint Ducret deserve special mention. See the bibliography.

²⁰⁸ Regarding Mersenne, see Robert LeNoble, *Mersenne ou Naissance du Mécanisme* (Paris: Librairie Philosophique J. Vrin. 1943), 211–217.

²⁰⁹ Regarding Zwinger, see Gilly, "Zwischen Erfahrung und Spekulation." Erastus seems to have been on friendly terms with the medical professor Isaak Keller as well, though I have found no surviving correspondence between them. Erastus passed many greetings

role in the reevaluation of the medical philosophy of Paracelsus that occurred after 1570. Like Erastus, Zwinger's initial reaction to Paracelsus was negative. In an early work Zwinger used Paracelsus as an example of a braggart and had nothing positive to say about his medicine.²¹⁰ More significantly it appeared that Zwinger played a role in getting the Paracelsian Bodenstein expelled from the Basel medical faculty in 1564. Zwinger's opinion of Paracelsus was to change, however, ironically enough through his study of Hippocrates. By the late 1570s Zwinger had undergone a complete reversal of opinion regarding Paracelsus and was now corresponding with Paracelsians like Severinus and building his own chemical laboratory.²¹¹

The doctoral theses of the English student Thomas Moffet (1553–1604) in 1578 proved to be a contest between Zwinger's enthusiasm for Paracelsian medicine and his reluctance to make an enemy of Erastus. Moffet, who clearly allied himself with the Paracelsian faction, later earned renown as a pioneer in the field of entomology.²¹² For these accomplishments, he was immortalized in a nursery rhyme ("Little Miss Muffet sat on a tuffet ..."). Without the permission of the university, Moffet took the liberty of printing his doctoral theses, which amounted to a spirited defense of Paracelsianism as well as a stinging attack on Erastus.²¹³ Since Erastus had written the most famous rebuttal of Paracel-

to Keller by way of Grynaeus. Keller was likely close to the Grynaeus clan, as Samuel Grynaeus (son of Simon Grynaeus, the elder) served as his counsel in the financial scandal in which he was involved in 1579. Thommen, *Geschichte der Universität Basel*, 1532–1632, 214–217. Both Erastus and Zwinger were among the better known physicians in German-speaking lands and shared many common friends (Crato, Gessner, and Peter Monau). It would not appear likely that they had become acquainted during Erastus's school days in Basel, since Erastus was some ten years older than Zwinger and had already begun his medical studies in Italy before Zwinger enrolled in the university. Their surviving correspondence is meager (only four letters from Erastus to Zwinger and one from Zwinger to Erastus), likely due to the fact that Erastus delegated many tasks in Basel to Johann Jakob Grynaeus.

²¹⁰ He also indirectly congratulated Weyer for taking a position against Paracelsian medicine. See the letter from Zwinger to Weyer printed in Weyer's *De praestigiis daemonum* (1577), cols. 901–902.

²¹¹ Gilly, "Zwischen Erfahrung und Spekulation," *Basler Zeitschrift für Geschichte und Altertumskunde* 77 (1977): 95–96; Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 2:101–105; 756–757; 767–822.

²¹² Thomas Moffet, *Insectorum sive minimorum animalium theatrum* (London, 1634). Diane Simpkins, "Thomas Moffett," in *DSB*, 9:440–441; Victor Houliston, "Moffet [Muffet, Muffet], Thomas [T.M.] (1553–1604)," *Oxford Dictionary of National Biography* (Oxford: Oxford UP, 2004).

²¹³ Thomas Moffet, *De anodinis medicamentis eorumque causis et usibus physica* &

sianism, it was natural for this young alchemist to attack Erastus, which he did with great zest. He criticized Erastus for his superficial refutation of Paracelsus, which dealt only with arguments over words and not the substance of Paracelsian therapy. Moffet asserted, "Erastus's authority is not so exalted today that he can dispense with these authors, who were experts in the particulars of these medicines, with one word."²¹⁴

Unfortunately for Moffet, he had misjudged the degree of freedom of expression at the University of Basel, as well as Erastus's reputation in the Basel intellectual community. The medical faculty took action to censor Moffet for his work in which he "excessively belittles the physician Erastus and also attacks Galen." His theses were confiscated by the order of the faculty and he was forced to alter his work so radically that the edited version was only half as long as the original version. Naturally the personal attacks on Erastus were eliminated, as well as some of his more pointed critiques of the Galenic system.²¹⁵

Moffet was greatly offended that his theses were suppressed and suggested that this would not have happened in mother England where academic freedom reigned.²¹⁶ Moffet would not remain silent concerning his distaste for Erastus's brand of Galenism and named his anti-chemical interlocutor "Philerastus" in a work published after Erastus's death.²¹⁷ On

medica consideratio in Theses aliquot digesta ... (Basel: Brylinger, 1578). See Blaser, Robert-Henri, "Ein mutiges Bekenntnis zu Paracelsus in Basel," in *Paracelsus in Basel*, 200–210 (Muttentz /Basel: St. Argobast, 1979). Also published in French as "Un rare témoignage de fidelité envers Paracelse a Bale: Les 'Theses de anodinis medicamentis' du medicin anglais Thomas Moffet (1578)," in *Current Problems in History of Medicine*, ed. R. Blaser and H. Buess (Basel: Karger, 1966), 502–512. Blaser includes translations of some of Moffet's assertions against Erastus.

²¹⁴ Moffet, *De anodinis*, thesis 97: "Verum non tanta est Erasti hodie auctoritas, ut quae praedicti Autores in anodinis istis peculiaribus erant experti, ipse verbo unico dissolvat." See Blaser, "Ein mutiges Bekenntnis zu Paracelsus in Basel," 208.

²¹⁵ Gilly prints the medical faculty's decree regarding the theses on p. 109: "Decembris die 16. Thomas Moufetus Anglus disputaturus publice pro gradu, theses inscio Decano imprimi curavit in quibus Erastum Medicum nimis temere perstringebat et Galenum quoque insectabatur."

²¹⁶ Gilly, "Zwischen Erfahrung und Spekulation," *Basler Zeitschrift für Geschichte und Altertumskunde* 77 (1977): 110–111. Moffet recovered from his disappointment and remained in contact with Zwinger after leaving Basel.

²¹⁷ Thomas Moffet, "De Jure et Praesentia Chemicorum Medicamentorum," in *Theatrum Chemicum*, ed. L. Zetzner (Strasbourg, 1659). First published in Frankfurt in 1584, this work includes a dialogue between Philerastus (i.e., phil-erastus, representative of traditional Galenic medicine) and Chemista, an advocate of chemical medicine. Allen G. Debus, *The English Paracelsians* (New York: Franklin Watts, 1966), 72; Shackelford, *A Philosophical Path for Paracelsian Medicine*, 253–255.

the other hand, it does not appear that Erastus was much agitated by Moffet's attack. At least he claimed that he was unconcerned by it after the theses had been suppressed. Erastus's primary response was gratitude that the Basel faculty would take such firm action on his behalf.²¹⁸

Erastus was even more successful in implementing an anti-Paracelsian program at the University of Heidelberg. At the request of Frederick III, Erastus proposed an amendment to the faculty's bylaws that prohibited "sophistic and seditious disputations" (perhaps a veiled reference to the Paracelsians). More importantly, the amendment prohibited the use of "metal remedies out of mercury [or] antimony" by the university faculty. These two amendments would officially enter the medical faculty's bylaws under Ludwig VI and remain in effect until 1655.²¹⁹

Conclusion

In the cases of both Erastus and Reußner, orthodox Protestant physicians were at least as exercised at the religious heresy of Paracelsianism as they were at the novelty of Paracelsian medical theory. This accusation of heresy had first been advanced by Gessner and Crato but was put forward in a much more definitive and explicit manner by Erastus. Like Reußner before him, Erastus directed much of his animus against the likely pseudo-Paracelsian *Philosophia ad Athenienses*. Thus, it is clear that the more Hermetic orientation of the pseudo-Paracelsian corpus made the reception of Paracelsian ideas by mainstream Protestant natural philosophers more problematic.²²⁰ However, not only the Neo-Platonic or Hermetic themes irritated Erastus; Paracelsus's own idiosyncratic theological vision was equally distressing. In the case of the *Astronomia Magna*, Paracelsus had offered a radical reinterpretation

²¹⁸ Erastus to Grynaeus, Jan. 14, (15)79, Basel UB, G II 4, fol. 233. Grynaeus kept him informed of the affair and promised to send him a copy of Moffet's theses.

²¹⁹ Wesel-Roth, *Thomas Erastus*, 8; Stübler, *Geschichte der medizinischen Fakultät der Universität Heidelberg 1386–1925*, 61.

²²⁰ Here I follow the suggestion of Webster that "A more hermetic view of the magus ideal of Paracelsus derives from the corpus of doubtful or spurious writings attributed to Paracelsus, and to the works of early Paracelsians, sources which have deeply influenced historical accounts of Paracelsus himself and which prove that the Paracelsian movement was swept up in the hermetic tide which engulfed Europe in the late sixteenth century." Charles Webster, *From Paracelsus to Newton: Magic and the Making of Modern Science* (Cambridge: Cambridge UP, 1982), 57. See also Kühlmann and Telle, eds., *Corpus Paracelsisticum*, 2:28.

of human anthropology, the nature of Christ's flesh, and the resurrection of the body. Although animated by a unique, largely biblical, spiritualistic vision, by almost any sixteenth-century standard, Paracelsus was a heretic many times over.²²¹ Although Erastus was generally an honest critic of Paracelsus, his tendency to examine Paracelsus's teaching through Aristotelian lenses compounded the difficulty of reconciling Paracelsus's natural philosophy with mainstream Protestantism. As Pagel asserted, "Erastus spared no effort in marshalling an imposing array of argument which must have appeared unanswerable to his colleagues."²²² While Erastus's work only offered a blunt "No!" to Paracelsus's entire system of natural philosophy, the end result of his exchange with the Paracelsian corpus was likely more productive. In delivering an acid critique of Paracelsus's religious and magical concepts, he paved the way for the future separation of Paracelsus's progressive medical and pharmacological ideas from their original heretical milieu through later writers like Andreas Libavius and Daniel Sennert.²²³

While Gessner's relationship to Paracelsian medicine has been characterized as ambivalent, there was no neutrality on Erastus's part. Gessner could label Paracelsus a magician and still say he approved of much of Paracelsian medicine. Although Erastus paid lip service to the virtues of chemical preparations, he was fundamentally closed to Paracelsian chemical therapy. At heart Erastus was a Galenist's Galenist who had an overwhelming preference for botanic medicines. In Erastus's conception, health was largely a matter of nutrition, and since he did not think metals were digestible, he concluded that they could not function as true medicines.²²⁴ Thus, unlike Gessner's precocious willingness to try various cures, whatever their origin, Erastus was unreceptive to Paracelsian pharmacology for medical-philosophical reasons. Erastus could genuinely praise Paracelsus for reviving the "art of preparing and distilling," but by this he meant purifying substances to their undiluted essences, not chemical transformation.²²⁵ Erastus comes close to totally rejecting the possibility of chemical change in *De auro potabili*, arguing that humans can only blend, mix, or purify what God has made, not transform one

²²¹ See Walker, *Spiritual and Demonic Magic from Ficino to Campanella*, 164.

²²² Pagel, *Paracelsus*, 330.

²²³ See Debus, "Guitherius, Libavius and Sennert: The Chemical Compromise in Early Modern Medicine" and Bruce Moran, "Libavius the Paracelsian?" in *Reading the Book of Nature*, 67–79.

²²⁴ *De auro potabili*, 22–29, 44–48.

²²⁵ *De medicina nova*, 1:B.

substance into something different.²²⁶ Thus, in comparison to Gessner, Erastus did not merely reject Paracelsus's alleged heresy and magic, but directly assailed chemical pharmacology.

Erastus's refutation of Paracelsus was most strident at the point where religion and medicine intersected, and the Paracelsus that most deeply animated Erastus was that of a medical false prophet. Weyer had sounded this theme of warning against medical false prophets earlier. After reviewing biblical passages in an attempt to assert the antiquity of medicine, Weyer had exclaimed, "And there is nothing here about the coming in the last days of the 'Monarch' and discoverer of medicine Theophrastus Paracelsus."²²⁷ This may appear to be an elusive insight, given that Erastus himself employed theological arguments to make this point. Neither Erastus nor Weyer attempted to draw his medicine from the Bible, however. Rather, they maintained that the Bible upheld medicine as an ancient and independent vocation. In Erastus's conception, medicine is like farming in that results come from hard labor and skills are accumulated over time. Medical knowledge is not an issue of special revelation or secret wisdom, but must be garnered through observation.²²⁸ Physicians such as Weyer and Erastus felt the fundamental integrity of medicine as a secular pursuit was threatened by the Paracelsian *arcana*. Here one may perhaps be surprised to find that Renaissance physicians such as Erastus and Weyer, who are sometimes labeled "schoolmen" or "medieval," employed the argument of experience against the Paracelsians. To defend his own tradition of medicine, Erastus portrayed the Paracelsians as a group of medical Gnostics who claimed divine illumination for their craft.

The sixteenth century was not an era of scientific revolution but of "scientific Renaissance." Various trends within the scientific Renaissance would stimulate the scientific revolution, but full-blown modern science with its use of hypotheses and insistence on quantification awaited the great virtuosi of the seventeenth century.²²⁹ Both Erastus and Paracelsus have their place within this scientific Renaissance. Indeed Erastus, with his devoted medical Hellenism, in many senses was a more representative

²²⁶ *De auro potabili*, 67–68.

²²⁷ Weyer, *De praestigiis daemonum* (1568), 197: "Nihil hic de venturo in extremis diebus medicinae Monarchia & inuentore, Paracelso Theophrasto." Quoted from Mora, *Witches, Devils and Doctors*, 154.

²²⁸ *De auro potabili*, 13–14.

²²⁹ On these distinctions, see Debus, *Man and Nature in the Renaissance*.

figure of the medical Renaissance than Paracelsus. Paracelsus, however, as a great proponent of chemical experimentation and through his ability to theorize new conceptions of health and disease, was clearly a more significant force than humanists like Erastus in pointing toward the seventeenth century advances among individuals like Joan Baptista Van Helmont and Robert Boyle. Nevertheless, the tendency represented by Erastus, with its similar emphasis on observation and its more disenchanted and rationalistic view of the world, also represented a progressive trend in the history of medicine that Temkin and others have recognized. Even Pagel, perhaps Paracelsus's most adept modern expositor, conceded that "belief and personal religious experience formed the nucleus of Paracelsus's world, whereas superstition and credulity are but a sideline in Erastus's critical and logical reasoning."²³⁰ Despite Erastus's proto-empirical tendencies, however, his Aristotelian-Galenic framework blinded him to some of the more innovative features of Paracelsus's system. Both Erastus and Paracelsus had their limitations, and both were more speculative than empirical thinkers.²³¹ Neither Erastus's Protestant vision of medical Hellenism nor Paracelsianism itself represented the future of medicine. Rather, the new medical and chemical innovations that arrived in the seventeenth century owed as much to the dialectical relationship between the two tendencies as to either trend individually.

Erastus's anti-Paracelsian works must not only be seen as an attack on Paracelsus but also as an attempt on Erastus's part to redefine himself. In this case the contrast between the standard depictions of Erastus in the history of science literature and in church historical accounts is instructive. For those who know Erastus from the perspective of the church discipline struggle, it would not be difficult to believe that he actually shared some of the radical opinions of the Antitrinitarians Johann Sylvan and Adam Neuser. Those who know him chiefly from the anti-Paracelsian works, however, have tended to view him as an unbending champion of religious and scientific orthodoxy. That Erastus was able to forge this orthodox image is no doubt a testament to his success in reinventing himself in the wake of the Antitrinitarian debacle. Ironically, the image that he was unable to secure in Heidelberg in the 1570s has largely triumphed in the historiography of science. It is particularly noteworthy that nearly all of the negative features of his portrait of Paracelsus were allegations

²³⁰ Pagel, *Paracelsus*, 331.

²³¹ This is precisely the point regarding Paracelsus that Weeks has stressed in *Paracelsus: Speculative Theory and the Crisis of the Early Reformation*.

that had previously been lodged either against him or his close scholarly allies.²³² Thus, in tackling these accusations and pinning them one by one on Paracelsus, Erastus was apparently engaged in a bit of self-exorcism. It may well have been an unconscious process, but conscious or not, Erastus staked a claim to be far more orthodox than his condemned friends, and modern historians, with few exceptions, have believed him.

Afterword

Since an earlier version of this study was published in *Analecta Paracelsica*, Carlos Gilly has challenged some of its fundamental assertions in a learned short article.²³³ In brief Gilly has argued that Erastus's motivation for refuting Paracelsus was likely a internal debate with Jakob Curio, his senior colleague on the medical faculty; that Crato was not a major inspiration for Erastus; and that Erastus was under no danger during the time that he undertook the refutation, so defending his own status should not be seen as a primary motivation of Erastus's anti-Paracelsian works. First, Gilly's discovery of the pro-Paracelsian / anti-Galenic position of Erastus's senior medical colleague is a significant contribution to our understanding of the Heidelberg context. While future researchers should probe this connection more fully, they will look in vain in Erastus's correspondence for evidence of a festering resentment toward Curio. Since Erastus was hardly reticent in his criticism of his colleagues in his letters, this gap is difficult to explain if Erastus had in fact been engaged in a long running feud with Curio. Thus, while a rivalry with Curio together with an implicit defense of Galenism might have been a factor in Erastus's decision to refute Paracelsus, it is difficult to see hostility with Curio as a primary motivator for opposing Paracelsus. Second, given the direct impact of Crato's anti-Paracelsianism on Erastus and the degree that

²³² Above, p. 303. The bulk of these charges would have been leveled against his heretical antidipluinist partisans Neuser and Sylvan, though some of the accusations also concern Simon Simoni and Wilhelm Xylander. I have in mind the accusations of drunkenness against Neuser and Xylander, the denial of creation *ex nihilo* that was lodged against Simoni, the fascination with alchemy and magic, which was alleged of Sylvan, and the charge of the Arianism, which was lodged against almost all of Erastus's associates. When Neuser was in Istanbul, he would be accused of dabbling in magic in the attempt to produce money, a claim reminiscent of the stories of Paracelsus's full purse. See Horn, "Johann Sylvan," 256; Burchill, *The Heidelberg Antitrinitarians*, 18–19.

²³³ Gilly, "Capital Punishment for Paracelsians: A Dear Wish of Thomas Erastus," 247–251.

Erastus emphasized Crato's involvement, it also seems Gilly has undervalued the significance of Crato's encouragement upon the project. However, I accept Gilly's critique that Crato's concrete influence on Erastus's decision to refute Paracelsus may have been amplified after the fact to capitalize on Crato's celebrity.²³⁴ Whereas Erastus and Crato had not been in close contact prior to 1570, afterward Erastus can fairly be considered a member of the larger Crato circle. In short, the extant sources reveal a much more positive stimulus and encouragement from Crato for the anti-Paracelsian writings than Gilly allows and are nearly silent on any motivating hostility toward Curio. Finally, Gilly's assertion that Erastus's position was not in jeopardy in the early 1570s because of the influential backing of the Zurich church is belied by the tremendous hardship and persecution that Erastus and his associates faced from 1570–1576 as discussed in detail in chapter 7.

²³⁴ Tilmann Walter has also noted that Erastus's self assertion of close connections with Gessner and Crato were part of his "rhetorical strategy." Tilmann Walter, "Paracelsuskritische Haltungen oder 'Antiparacelsismus'?, 1570–1630," *Würzburger medizinhistorische Mitteilungen* 27 (2008): 381–408 (here p. 391).