

## PREFACE

We should realise that if we are victimised by a discourse, we are in need of a new discourse and that we are ourselves responsible for creating a liberating language which structures the world in which we live in a new way.

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This book is about medical science and clinical practice. It is also about philosophy, theory of literature, evolutionary theory, and the theory of complex systems. Why would a practicing physician, what in the USA is called an internist, try to write on such diverse and specialized fields that, at first glance, have nothing to do with one another?

One reason is my belief that the practice of any profession, as well as the practice of any scientific discipline, involves more than just scientific and professional knowledge. It also involves complex sets of assumptions. Professionals are mostly unaware of these assumptions and their role in our professional thinking and doing. Medicine is no exception. Clinical practice is not simply the application of “scientific medical knowledge” to “a clinical problem.” A clinical problem is constructed in terms of an underlying philosophical point of view, a paradigm. The clinical method which we were taught, and which we apply every time we face a patient, is the formalized manner by which we construct the clinical problem in terms of such a paradigm. In our clinical and scientific training we are not made aware of the paradigm-dependence of our scientific and professional knowledge and practice.

The first part of the book sets out the structure of the paradigm that underlies medical science (research) and professional practice (the clinical method). This paradigm is usually referred to as “the biomedical paradigm,” and the type of medical and scientific practice that the paradigm gives rise to, is called “biomedicine.” Medical researchers see themselves as natural-scientists. We as clinicians see ourselves as applying the findings of natural-science research. We might even see the clinical method as replicating “the scientific method” of hypothesis formation and verification. The biomedical paradigm is the natural-science paradigm applied to the medical field. I outline the origins, strengths, and weaknesses of the biomedical paradigm. I postulate that the wide spectrum of problems besetting our profession in research and clinical practice, is related to the nature and limitations of the biomedical paradigm. These problems cannot be addressed with more science. They require a different type of science. We cannot transform the biomedical clinical method without a change in the underlying paradigm.

This book is intended as a contribution to the interdisciplinary debate on such a transformation of paradigm and clinical practice. The basic thesis is that, in order to address the full reality of the patient in health and illness, we need a transformed view of science, as well as a transformed view of the nature of reality. These two transformations should enable us to develop a more complex understanding of the nature of the human person (consciousness) than is possible within the limited discourse made available to us by the natural sciences and the natural-science paradigm. The book is not only a critique of biomedicine and the biomedical paradigm. I also propose alternative models by which we can understand science, reality, and human consciousness. I hope that these models can make a positive contribution to the interdisciplinary debate between the natural and social sciences, and between health professionals and patients, about a transformed clinical practice which strives to be both scientific and humane.

The reality which we claim to understand in our science, and which we try to influence in our clinical practice, is a complex system. The terms “complex system” and “complexity” feature prominently in this book. In Complexity Theory they have become technical terms. They mean more than “complicated.” Science has only recently become sensitive to this new type of reality and its unique features. No single discipline can grasp the rich texture of a complex reality. Science is essentially a multidisciplinary and interdisciplinary activity. The multiplicity of disciplines required to understand the full reality of our patients includes, among others, the human and social sciences, ethics and philosophy. The day-to-day pressures of research and clinical practice force us into concentrating on our little neck of the academic and professional woods. But in order to lead integrated lives, to be reflective practitioners who can deal comprehensively with the full reality of illness and health, we need continuously to peep over the fences of our own disciplines to see what is going on “out there” in the wide world of thought.

This book is a personal witness to what I have seen in peeping over the fences of medicine. It is an invitation to my colleagues in the various medical disciplines to reconsider our standard medical practice. By participating in an interdisciplinary dialogue, I hope that the book will encourage an awareness of the importance of non-medical perspectives for our medical theory and practice. It is also an invitation to colleagues in other disciplines to contribute to our self-understanding.

But we in medicine are not the only professionals that are struggling to define our position in relation to the totalitarian claims of the natural-science paradigm, or to extricate our thinking from the limitations of that paradigm’s assumptions regarding the nature of science, the nature of reality, and the nature of the human person. This type of analysis is also of importance for nursing and the other health professions, for theologians, educationalists, veteri-

narians and other life-scientists, for environmentalists, architects, and for the various engineering professions.

In Peter Høeg's novel, *The Woman and the Ape*, Dr. Alexander Bower, a senior veterinarian, reflects on his professional life.

He had made up his mind to become a vet and had then gone to university. And there he had learned that animals are machines. Delicate machines, to be sure, with an ingenious biological mechanism, but still – when all was said and done – machines. And faced with this revelation his mind had, for the first time, split in two. Alongside the original Alexander, he developed a scientific *alter ego*. Now, when he stroked a dog's head, this onlooker would think: what is happening here, the feelings of warmth and kindness that I am experiencing are but illusions, emergent phenomena made up of millions of processes all of which, taken singly, are quite banal and fully explained. (Høeg 1996, p.109)

In terms of this world-view, so Dr. Bower realized, all actions were fundamentally chemical in nature and thus quantum-electrical, causal, and deterministic. This world-view guided his professional practice. It also affected his personal life.

One grey morning he woke up to the realization that since there is, after all, nothing behind the physical universe except a handful of elementary particles and a standard formula for explaining the interplay between the forces of nature, one might as well go all the way, and this he did – that is to say, all the way into a world which is a little – but not much – simpler than that of physics, namely the world of finance, founded upon a few basic monetary units and the four arithmetical operations. (Høeg 1996, p.109)

Having read the Editorials by Anton van Niekerk and Sam Fehrsen, the reader will recognize all the themes in this quotation. Høeg could have been describing the spiritual journey of any medical student, or any of the other professions mentioned above. I too, struggle with these themes in this book.

I hope that the analysis presented here will assist others, who, like myself, feel victimized by the limitations of the language of the natural-science paradigm. Together we need to develop a new, liberating language which will structure the professional world in which we live and work, in a joyful and professionally fulfilling way, for us as well as for our patients.

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