

*Book Report on*

**KORE**

by **Andrzej Szczeklik**

*On sickness and the search for the soul of medicine*

**Basic facts**

This work of non-fiction, written in Polish, is most simply categorised as popular science. It is about many aspects of medicine, especially in relation to art and culture. It ranges from technical details of genome research, for instance, to ancient myth, quoting a wide range of sources from various disciplines within both the humanities and science. Written in an anecdotal style, it describes the work of many Nobel prize-winning scientists as well as of great artists and writers in relation to medicine, and also the author's personal experience as a doctor. In short, it is fascinating, beautifully written and of wide general interest.

This book follows on from Szczeklik's first publication, *Catharsis* (Chicago UP, 2005), has similar aims and takes a similar approach. *Catharsis* received excellent reviews and was reissued in 2007 in paperback. In places this book is perhaps more scientifically detailed, while always remaining accessible to the non-scientist, but it is essentially Volume Two of *Catharsis*.

Professor Andrzej Szczeklik heads the Department of Medicine at the Jagiellonian University in Krakow, where he runs a public hospital. He has won international awards for his work on asthma and heart disease, and is highly regarded in his field. A Polish weekly recently identified him as "Poland's top doctor". Privately he is also a concert-standard pianist and performs at a famous satirical cabaret in Krakow. In communist Poland's martial law period in the 1980s he was fired from the university for actively supporting Solidarity. One reviewer of *Catharsis* aptly described him as a "Renaissance polymath".

**Contents summary**

The book is in twelve chapters, each about 20 pages long. First there is an introduction by Polish poet Adam Zagajewski, who describes Szczeklik's writing as "combining sensitivity and humanist erudition with an admirable expertise in the exact sciences". Zagajewski laments the rarity of a doctor who is also a humanist in the present day.

**Chapter One: Symptoms and Shadows**

The chapter starts with a description of Raphael's painting of his lover, and how thanks to advances in knowledge, a doctor could now identify signs of breast cancer in it. It moves on to the life and work of a 19<sup>th</sup>-century neurologist and how he examined his patients, then talks about how a doctor perceives and identifies symptoms, with clinical examples, and how illnesses can deceive them. Szczeklik describes an incident from his own early career when he acted on an uncertain intuition that caused him great anxiety but proved not entirely incorrect.

## **Chapter Two: About the Brain**

Starting by telling how as a student the author smuggled a brain home to study it in the kitchen, the chapter continues to tell some of the history of attempts to understand the brain. This includes the development of phrenology, some features and functions of the brain, including some anomalies, how injury and surgery might modify it, how memory works, the role of the brain in various illnesses, how telepathy may work, the characteristics of a musician's brain, the scientists who have researched the brain, how they did it and what they found.

## **Chapter Three: In Search of the Soul**

First come ancient Greek ideas on the soul, illustrated by myths, followed by beliefs about the soul from various cultures, and how the Greeks believed the soul was inside the body, visible in the pupil of the eye as the figure of a girl, "Kore". It describes how shamans treated illness by temporarily releasing the soul from the body, the experiences of mystics, and ideas suggested by mathematician and theologian Blaise Pascal. It asks where we should look for the soul, and describes old and new attempts to identify it as something material.

## **Chapter Four: The Reflected World Inside Us**

This chapter is about the history of identifying and curing allergies. It includes personal clinical examples (such as a man who was allergic to horsehair from an incredible distance), historical cases (such as the tyrant Mithridates who ate poison to develop immunity and then couldn't kill himself with it), research by Nobel prize-winners, focusing on asthma (which is Szczeklik's speciality). It discusses whether asthma is genetic, how variable it can be, and describes some developments in immunology (e.g. using animal antibodies) in some technical detail, especially on the work of Neils Jerne to develop diphtheria inoculations.

## **Chapter Five: The Arcana of Art and the Rigours of Science**

The author starts with the history of human understanding of nature, going back to Thales of Miletus who produced the first theory on the unity of the universe, Heraclitus and Hippocrates, for whom medicine was the best source of knowledge on nature. It describes general human indifference to the sort of suffering medics have to deal with. A digression tells how when the author fell foul of the communist authorities in the martial law period in Poland, a potential enemy protected him, which illustrates the unpredictability of human nature. He discusses how scientific advances have led to greater knowledge of the connections between biology and the laws of physics, and some attempts at finding unifying patterns within nature as well as links between medicine and art.

## **Chapter Six: Genetics and Cancers**

This chapter is about some aspects of genetics, including the history of its development and recent advances in genome research and DNA decoding. It goes into scientific detail, explaining the biology of how physical features are genetically inherited, with examples to illustrate, then discusses to what extent cancer is hereditary, with descriptions of some of the research projects that have advanced our knowledge of what causes cancers and how they develop, including the genetic mutations that produce them. He also comments on the fact that meanwhile cancer treatments have not made much progress and are likely to depend on surgery, chemotherapy and radiotherapy for some time to come; they aim to

stop and remove cancers, but do not address their causes. The chapter ends by mentioning how discoveries in genetics have led to progress in treating some other illnesses.

### **Chapter Seven: The Truths of Biology and Faith**

This chapter is about evolutionism versus creationism, and describes various historical beliefs about the origins of life. It starts by telling how Darwin built on the work of predecessors and how, within the creationist establishment of his day, he was afraid to publish his conclusions until another scientist called Wallace, who had reached the same results, contacted him. The author lists the four main pillars of biology and medicine: the cell, genes, the idea that life processes can be seen as chemical reactions, and evolution. He discusses how man thinks of himself as being at the top of the evolutionary tree and refers to Dawkin's "selfish gene" theory, asking how altruism fits into that concept and what its biological sources may be. It also mentions Christian views that say evolution is not in conflict with religious faith.

### **Chapter Eight: The Borderlands**

This is about viruses and whether they are living organisms or not, their possible origins, the risks they pose and how we try to counter them, with reference to Spanish flu, HIV and hepatitis. It illustrates how a succession of scientists have gradually pieced together our understanding of viruses over the centuries, up to present-day research on connections between viruses and DNA. The discussion also covers attempts to define what life is, theories on how it first emerged, efforts by scientists to produce life synthetically, and finally how without knowing the elusive fundamental laws of biology it is impossible for us to define life.

### **Chapter Nine: On Dying and Death**

First Szczeklik contrasts traditional fears of sudden death with slow, drawn-out death. He discusses attitudes to whether coma patients should be artificially kept alive or not, citing some recent cases. Then he tells us how the criteria for defining death have altered and how a doctor tests to make sure. Then there is more on resuscitation and human dreams of resurrecting the dead, as depicted in the arts, followed by the history of autopsies, then methods for preserving bodies for display. The author discusses how in mediaeval times death was man's constant companion, inspiring many images, but nowadays we prefer to forget and ignore it. He describes how old age is a gradual preparation for death, but in fact cells start dying before birth. He refers to some famous deaths, eg of Socrates, and how the dying person behaved, ending with long, slow deaths and citing the example of John Paul II, who showed us how to die with dignity.

### **Chapter Ten: Promethean Ambitions**

This chapter is about human aspirations towards overcoming illness and even death, and describes attempts to create human life. It starts with efforts to regenerate damaged cells in e.g. heart-attack victims, and how stem cells are regarded as the potential key to such problems. It describes how stem cells are sourced, what happens in cloning and the legal limitations that apply to it. Then come ideas about life emerging from lifeless or dying matter, in ancient theories and myths as well as in the work of 16<sup>th</sup>-century doctor Paracelsus, followed by stories of creating life including Faust, the Jewish Golem and Frankenstein. Finally come some examples from Greek myth of those punished for overstepping the limits of human freedom, and how this idea applies in modern questions about biotechnology.

### **Chapter Eleven: Love Spells**

This is about how love has been regarded as an illness, and medical efforts to help those afflicted from the fourth century BC onwards. Then it describes attempts to create love potions, and the traditional power of herbs including the legendary mandragora. Here we find a modern scientific attempt to analyse the love potion drunk by Tristan and Isolde, and how composers have tried to reflect the sensations of passionate love, as well as other cultural associations between music and love. Then come ideas about the seat of love in the body and the scientific evidence of what physical changes it produces, myths on how love can conquer death, and the creative power of love.

### **Chapter Twelve: Conjunction**

This chapter is about symbiosis, including the relationship between doctor and patient and how their lives are linked. The author explains symbiosis with examples from nature, then discusses how a doctor should approach the patient and how in our commercialised world not every doctor gets it right, including how much a patient should be told about his condition and how those facts should be communicated with sensitivity. He rejects the idea that the qualities of a good doctor can be defined in simple terms, and discusses how medical advances have brought doctors some tricky ethical questions, e.g. involving euthanasia. Then he describes how pain works in the body, how life expectancy has increased, and how human cells can continue to divide in artificial conditions outside the body for many years, a step towards immortality. He ends with the soul again, and how as the doctor promises to stand by the patient he sees Kore, the image of the soul, in his eyes.

### **Notes**

The text is followed by notes identifying the sources of all the quotations in the book.

### **Assessment**

This book is fascinating, entertaining and informative. It covers a huge range of topics, illustrated by examples from all sorts of disciplines. It is an absorbing read, offering something of interest to everyone, whether artist or scientist.

Some chapters are more technical than others (e.g. Chapter 6), going into scientific detail, without being inaccessible to the non-scientist, but rather offering him a clear explanation of things we hear about, but don't really understand, such as genome research, sourced from academic journals and texts. In this way the book bears comparison with the works of Oliver Sacks, who also writes about medicine in a humanist, accessible way. Other chapters are much more focused on ideas and their expression in art as well as their relationship to medicine (e.g. Chapters 3 and 11).

Szczeklik writes with excellent clarity, offering his ideas and facts through digressive discussion. He is very skilled at building around a central theme, taking diversions from it to tell anecdotes and give illustrations, and then smoothly coming back to it, developing it imperceptibly without ever stopping on the same point for too long. By presenting his information in bite-sized chunks, he sustains the reader's interest even when discussing tricky and unfamiliar topics. He goes back to the ancient roots of the ideas and practices he describes, then follows their historical development right through to the present day and possibilities for the future.

The illustrative stories and examples are highly entertaining, and cover a wide range. For example, we learn about the personal lives of artists including Raphael, Caravaggio and Goya, with vivid descriptions of some of their paintings. We also hear about composers and writers, and the text is peppered with quotations from literature and poetry, ranging from Aeschylus to Heaney. As we might expect, there are many quotes from Polish poetry, classic and modern. There are Greek, Irish and other myths. There are concise descriptions of the work and discoveries of a large number of Nobel prize-winning scientists, mainly in biology but not only, which unravel all sort of mysteries for the non-scientist reader. There are plenty of medical case studies involving ordinary people, something everyone enjoys reading about, such as the recent example of the man who came out of a coma after twenty years. There are charming personal stories from the author's family life, as well as from his experiences as a medical student and as a qualified doctor, both triumphs and failures. The personal tales are particularly appealing, as the author is a very engaging character who never loses track of the human side of his work. There is plenty of humour and gentle irony and in the book, including jokes from literature and life. Each chapter starts with an illustration that anyone can relate to, whether from art or real life.

In short, the book is written with a light touch and a skilful way of finding connections throughout history and culture, putting various eras and places in parallel by examining attitudes to common aspects of human existence. He can see illuminating analogies between medical features and more familiar things, such as comparing the vocal cords to the strings of a harp.

The writing style is unpretentious but of a high literary quality, offering the translator few problems, except the tasks of checking technical terms and the sources of quotations for versions already existing in the target language.

This book could be enjoyed in various ways, either read straight through or dipped into. It will appeal to doctors and their patients, scientists, artists, writers, and anyone who likes good stories and interesting information.

The Polish edition is illustrated with a colour plate at the start of each chapter, featuring a painting that is somehow relevant to the subject. There are also line drawings within the text, in the same style as those in the English edition of *Catharsis*.