Anaximander
Marvelous... A wonderful book. — Humana.Mente

Rovelli is the dream author to conduct us on this journey. — Nonfiction.fr

At this point in time, when the prestige of science is at a low and even simple issues like climate change are mired in controversy, Carlo Rovelli gives us a necessary reflection on what science is, and where it comes from. Rovelli is a deeply original thinker, so it is not surprising that he has novel views on the important questions of the nature and origin of science. — Lee Smolin, founding member and researcher at the Perimeter Institute for Theoretical Physics and author of The Trouble with Physics

Winner of the Prix du Livre Haute Maurienne de l'Astronomie

Carlo Rovelli, a leading theoretical physicist, uses the figure of Anaximander as the starting point for an examination of scientific thinking itself: its limits, its strengths, its benefits to humankind, and its controversial relationship with religion. Anaximander, the sixth-century BC Greek philosopher, is often called the first scientist because he was the first to suggest that order in the world was due to natural forces, not supernatural ones. He is the first person known to understand that the Earth floats in space; to believe that the sun, the moon, and the stars rotate around it seven centuries before Ptolemy; to argue that all animals came from the sea and evolved; and to posit that universal laws control all change in the world. Anaximander taught Pythagoras, who would build on Anaximander’s scientific theories by applying mathematical laws to natural phenomena.

In the award-winning The First Scientist: Anaximander and His Legacy, translated here for the first time in English, Rovelli restores Anaximander to his place in the history of science by carefully reconstructing his theories from what is known to us and examining them in their historical and philosophical contexts. Rovelli demonstrates that Anaximander’s discoveries and theories were decisive influences, putting Western culture on its path toward a scientific revolution. Developing this connection, Rovelli redefines science as a continuous redrawing of our conceptual image of the world. He concludes that scientific thinking “the legacy of Anaximander” is only reliable when it constantly tests the limits of our current knowledge.

Book Information

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This stimulating and entertaining book opened up for me the remarkably advanced science of the Ionian Greeks and the life in their independent cities that first birthed and nourished the scientific spirit. Along with so much else. Besides being enjoyable to read the book is profoundly thoughtful: reflecting on what is essential in the rational/empirical tradition and the community that follows it, as well as on what was unique in Anaximander’s revolutionary contributions. Rovelli has firsthand insight—he’s one of today’s most creative theoretical physicists. You get the feeling that he has been where Anaximander was.

update=There’s an online essay by Rovelli at the Scientific American website that can serve readers as additional background or introduction to the book. It lets you know where this book about Anaximander and the beginnings of science is coming from. The essay is titled “Science as perpetual revolution, from its earliest beginnings to quantum gravity”. To get it just google "sciam rovelli". Today’s quantum gravity researchers, as they rethink time, space and the workings of a (now quantum) universe do have something in common with those 6th Century BC Ionians who began our geometric explanation of the heavens’ motions. There is a clear lineage joining them and I think Rovelli is right to examine the parallels. Much is to be learned as well about the scientific enterprise as a whole by exploring this key period of history.

This book was not what I expected. Despite its title, there is very little here about Anaximander the person and his life - only some (mostly) second-hand information on his writings, a bit about the times in which he lived and how they were appropriate for the birth of modern scientific thought. Most of the book is on the history and philosophy of science as well as the nature and evolution of religious thought. In fact, the book’s main theme is how scientific thinking was liberated from mythic-religious thinking. This is centered on Anaximander since it is believed that he played a key role in this revolution, having lived in the appropriate period. Although I was not expecting such content in this book, I did find it quite enjoyable. Despite the potential difficulty of this book’s subject matter, the author expresses himself quite clearly and in a style that makes the book accessible to a
fairly broad interested readership. Those who would likely enjoy this book the most are those with a passion for the history and philosophy of science and the birth of modern scientific thought.

A brilliant beautiful book! I will read it again in a month...and only three other books in my life have made my read again list...I loved it! The reviews here state clearly why it is such a valuable book. I completely agree, and I recommend the book with no reservations.

Ever since philosophy was broken down to various disciplines (shortly after Aristotle who established the various fields of thought we see in modern universities) an artificial gap between so called natural and social science arose. So unfortunately, we see natural scientists with almost zero grounding in humanities and the other way around. Of course these two fields are naturally unified within modern mathematics, but for most of society they are almost disconnected. This very encouraging book is written by a scientist that writes about societal dynamics. As such has some powerful positives: clarity of thought, a deep appreciation of Hellenism (i.e., the dominant benevolent cultural stream within our western culture) and a beautiful sense of respect that a command of the principles of Hellenism implies for all other cultural streams around the globe. As such I would very much recommend this book to all young people out there that want to learn a bit more about the spirit of scientific thought. Some particularly strong points: a clear and forceful rejection of relativism (which is by far the most misleading/unfounded idea within current western culture) and of its opposite, the absolute truth of monotheistic religion. Only for these two points one should read and **love** this book. Also correctly the author stresses that the so called "antiscientific" Plato is an exaggerating statement not taking into account the immense elements of scientific thought present in Plato; his discussion of the greek alphabet also excellent and so on. Kudos for stressing also the role of arabs and early Islam in preserving the classical inheritance of the west, something overlooked (conveniently?) nowadays. I did not give it five stars because it could be improved. There are scholarly erudition that is missing here and there that could rectify some (at places) oversimplification of things. For example, the scientific revolution in ancient Greece was a natural progression from earliest Greek thought. Before Anaximander there was a worship of nature which was identified with the divine. The earliest Greek conception of the divine was presenting it as integrated with nature subjected to its workings (i.e., the divine gives in to anagke (=necessity)). This remarkable absence of a belief system is very much an essential aspect of science already. What Thales did is to dispense with the anthropomorphism/social view of nature as a real, rational process of balancing wills and replace it with that of a mindless machine. Because of the affinity of these
views in terms of a common naturalistic and rational account of reality, science flourished in Greece and was seriously attacked ONLY when the power of the state start functioning according to Christian beliefs. There are elements of this view in the book but not so clear I think. Same for a few other topics. Also it is failed to be mentioned that at the time of Anaximander the greek civilization was already 2.5 thousand years old (Crete-Mycenae as two options of the Aegean civilization that Miletus was continuing further) and so the peak of this civilization was a tip of an iceberg that history and archaeology just start revealing. Overall a wonderful book; I thought it would have been much better if it was written in collaboration with a classics scholar.

Carlo Rovelli describes his own fascination with scientific way of thinking started in Greece by naturalists like Anaximander. The text is written with wit and finesse in excellent English. Author, physicist himself, like his Renaissance ancestors in Italy, impresses reader with understanding of subject, easy to follow examples and in depth knowledge of history and philosophy of science. It is very optimistic that in commercialised book market the editor found place for this masterpiece... In spite of serious subject surprisingly easy reading. Thank you!

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