

An overhyped book that drifts from subject to subject

Human Universe

Brian Cox and Andrew Cohen

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Author Brian Cox is identified as a particle physicist and professor at the University of Manchester. He performs experiments at the Large Hadron Collider in Switzerland, and also is a science broadcaster. He pairs up with Andrew Cohen, who is Head of the BBC (British Broadcasting Corporation) Science Unit.

My own fields of science are geology and biology, not astronomy or physics. For this reason, I write this review from the viewpoint of an outsider, and make no attempt to evaluate the veracity, or otherwise, of the authors' technical points in astronomy or physics. However, it should also be stressed that this book is geared to the non-specialist (except for the fairly technical ending), and that most of the content of this book is unrelated to astronomy and physics. In fact, it includes discussion of subjects as diverse as UFOs, the search for extraterrestrial life, dinosaur extinction, manned spaceflight, Earth-crossing asteroids, nuclear war, supposed man-caused global warming, organic evolution, human evolution, the significance of culture and writing in human cultural evolution, and more.

This work includes some interesting and seldom-known information. For instance, against those who had argued that the U.S. Apollo manned lunar exploration program had been a waste of money, the authors point out that each dollar spent has been

returned sevenfold into the economy (p. 237). This came from the new technologies that had been created and the trained personnel whose skills became applicable to fields outside of manned lunar flight.

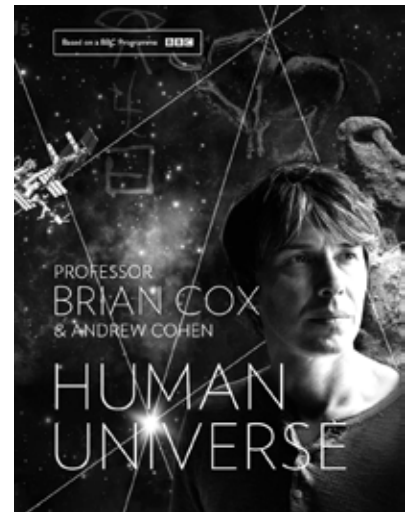
Unfortunately, this book comes across as a hodge-podge of disparate contents. In fact, the sheer variety of subjects brought up in this book makes it almost seem as if the authors are inventing things, to write about, on the fly. This also makes it difficult to summarize the contents of the book.

What about God?

Cox and Cohen hardly ever mention God or religion. They treat the idea, of Stephen Jay Gould, on science and religion being non-overlapping magisteria, as a controversial one (p. 52), but do not elaborate. However, they reveal their disdain for religion as they talk about, "The division into hundreds of countries whose borders and interests are defined by imagined local differences and arbitrary religious dogma ..." (p. 114). This shows a gross ignorance of religions and the basis for the differences between them. In addition, their attitudes smack of extreme internationalism. Do I hear, from the authors, an endorsement for a New World Order?

The authors present a contrived dichotomy between theology and astronomy, saying that the latter means less terror but zero comfort. They prefer what they consider the elation of the latter (p. 3), as if religion could not be a source of elation.

What about God as the First Cause? The authors seem to be ambivalent about that. On one hand, they brush off the "fine-tuned universe" consideration as not needing a



God-of-gaps explanation, owing to the (presumed) existence of multiple universes (p. 199). They support an ongoing inflationary expansion of the universe, that is constantly creating new universes. Ironically, this concept does, in some sense, allow for a First Cause of our universe, though not necessarily one that involves God. They ask:

"Did the whole universe have a beginning, an essential, external cause in the spirit of Leibniz's God? We still don't know. Possibly there was a 'mother of Big Bangs', and, if so, we will certainly need a quantum theory of gravity to say anything more. What does this mean? The wonderful thing for me is that nobody knows, because the philosophical and indeed theological consequences of eternal inflation have not been widely debated and discussed" (p. 207).

The authors spend much time discussing SETI, which involves an attempt to decipher intelligent signals from some advanced extraterrestrial civilization. In common with most evolutionists, the authors fail to see the delicious irony of attempting to ferret out intelligent design in distant signals, while ignoring the intelligent design that is so obvious in the living things in front of their faces.

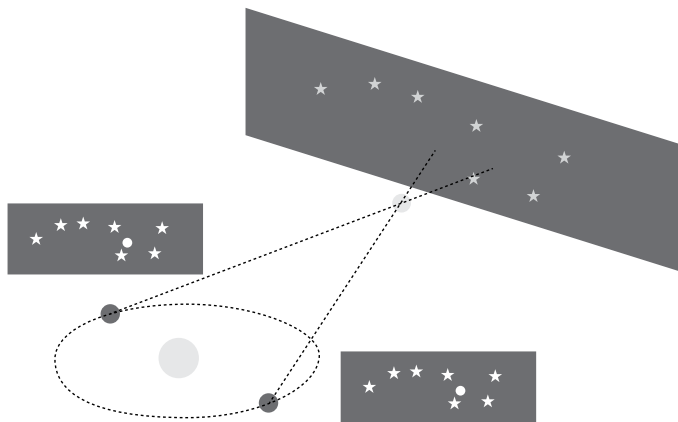


Figure 1. The stellar parallax provided conclusive proof that Earth indeed does move in space. Its discovery came centuries after Galileo.

Revealingly, Cox and Cohen adopt a rather nihilistic view of everyday existence. They note how improbable it is that a particular sperm and particular egg combined to form us as the specific individuals that we are. However, they would have us believe that our individual uniqueness is no more significant than the fact that each snowflake is unique, and probably unlike any other snowflake.

The authors' condescending attitudes

Some of what the authors write can easily alienate the reader. Consider two examples.

Cox and Cohen indulge in a form of chronological snobbery. They refer to the prevalent thinking, before Galileo, as “centuries of autocratic idiocy” (p. 39). This, if nothing else, shows an abysmal ignorance of the scientific achievement and learning that took place during the Middle Ages. Besides, it does not consider the *really* “autocratic idiocy” of modern totalitarian movements, all of which were non-religious or anti-religious.

The authors express their disdain for those who question man-caused global warming, by stating that perhaps the flooding of Miami and Norwich by rising sea levels would silence them (p. 114). Ironic to their supercilious and rather arrogant

verbalization, there is no consensus regarding the degree of inferred sea-level rise, even if human-caused global warming is true, much less that it would be anywhere near extreme enough to flood coastal cities!

The Galileo affair: not black and white

The authors part ways with those who would unilaterally paint the church as the bad guy and Galileo as the courageous, persecuted independent thinker. First of all, they point out that the church did not consider Copernicanism itself heretical even in 1600, which was 30 years before Galileo (p. 5).

Cox and Cohen realize that the antagonism stemmed not so much from what Galileo said, but the way he presented it—as a frontal attack on the church. They comment:

“Galileo, in what was certainly an ill-judged move, decided to move beyond reporting his scientific observations and instead champion a particular theological and philosophical interpretation of the data—namely that the church was wrong and that the earth was most definitely not the center of the universe. This he seems to have done because he wanted to be famous, and famous he became . . . Many historians characterize

Galileo as a bit of an egoistic social climber who brought it all on himself, which is partly true and yet also desperately unfair. He was undoubtedly a great scientist and a supremely talented astronomical observer” (p. 39).

Given the knowledge of the time, the matter was not nearly as cut-and-dried as Galileo used in his invectives against the church. If Galileo was unreservedly a great scientist, should he not, of all people, have been the *first* to be aware of the limitations of the evidence? Every good scientist does exactly that.

Consider Tycho Brahe, whom the authors describe as the greatest astronomical observer before the invention of the telescope. He did not unreservedly accept the sun-centred solar system owing to the fact that he found the evidence for Earth being in motion, unconvincing—particularly the (apparent) fact that the stars never changed their positions relative to Earth (pp. 9, 20). It was not until the 19th century—some 300 years *after* Galileo—that it was discovered that Earth does move, relative to the stars, in what is known as stellar parallax (figure 1). The movements were not discovered earlier because they are extremely small—measured in arcseconds (1/3600 of a degree)—owing to the great distances of stars from Earth (p. 22).

The standard evolutionary storytelling

The authors go on an imaginative excursion as they write:

“The first population of living things whose descendants survived to the present day is commonly known as LUCA—the Last Universal Common Ancestor. . . . LUCA may have been unrecognizable when compared to today’s life—they may not even have been cellular in nature, but rather a collection of biochemical reactions involving proteins and self-replicating molecules, possibly contained inside

rocky chambers around deep-sea hydrothermal vents” (p. 104).

In the eye of evolutionary imagination, anything is possible.

Cox and Cohen then repeat the serial endosymbiosis scenario. In fact, they embellish it by dramatizing it as a saga: “Somewhere in some primordial ocean, this simple prokaryote managed to swallow a bacterium—a trick that neither cell possessed before—and against terrific odds the pair survived and multiplied” (p. 110). Brave little fellow! And it lived happily ever after, and so have its descendants—us.

The remainder of the author’s recounting of evolution merely repeats the standard accounts about how it supposedly happened. There is, of course, not a glimmering of questioning it. However, to their credit, when the authors discuss the australopithecine Lucy, they are candid about the fact that not all scientists believe that it was bipedal (pp. 130–131).

The authors focus on the origins of human agriculture and human writing. They believe that such events were decisive in allowing the emergence of modern thinking. Agriculture facilitated a relatively stable society and a relatively constant food supply. Writing made it possible for the wisdom or discoveries of one individual to be recorded and used by others, including those who lived long after the contributor had passed away.

Conclusions

This book presents a fairly good history of astronomy, notably the discovery of stellar parallax. It also raises an astonishing variety of subjects, making it quite disjointed. For this reason, it may not hold the reader’s interest.

Otherwise, this work is much the same standard evolutionary fare. It does not even begin to do justice to the implications of religion in general and the Christian faith in particular.