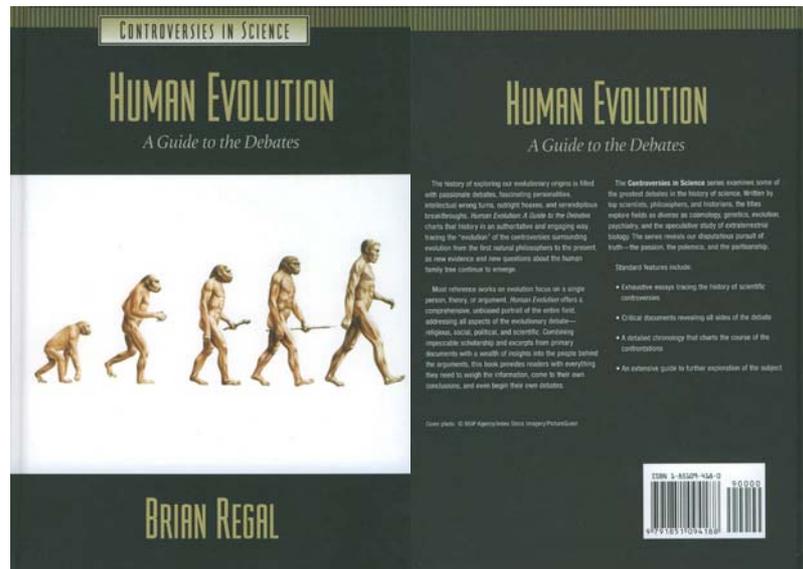


## Regal, B. 2004. Human evolution. A guide to the debates. – Santa Barbara CA, ABC-CLIO

Book review by M.P. Schaap



‘Human evolution. A guide to a debates’ is, as the author puts it (p. 228): “a long discussion, not so much about evolution itself, but about how humans react to it”. And indeed, the story about human evolution is told by telling the stories of all those people who took and take part in the processes surrounding the search for human origins. This book traces the ‘evolution’ of the controversies surrounding (human) evolution from the first natural philosophers to the present scientists of different disciplines engaged in evolution issues.

Since all chapters are very elaborate and filled with details, I will restrict myself to the main lines. Starting at the 19<sup>th</sup> century, at the rise of the evolution theory of Charles Darwin and the controversies between science and religion, the book continues in a basic chronological order covering the issues, personalities, and discoveries that are central to the questions and controversies surrounding human evolution. Although ‘science versus religion’ topics are comprehensively addressed (mainly in chapter one and ten) the core focus of the book is on the controversies between the scientists and their contradicting theories. Besides the scientific debates, the author also attends to historical conditions like politics, war, coincidences, forgeries, relationships etc., and how all those circumstances lead to the finding or disappearing of important fossils, or even led to complete new theories. For example, chapter two gives a comprehensive description of the excavations of the Chinese fossils, their disappearance during World War II, the scientific climate in China under the reign of Mao Tse-Tung and his influence on the search for human origins.

From chapter two to chapter nine, the author proceeds from the first finds of human fossils (Neanderthal bones, Feldhofer Cave, Germany) and all the (new) theories, debates and controversies that came along with it, to (quite recent) fossil findings in Asia, Africa and the rest of the world. Along with the discoveries, the backgrounds of the scientists, amateur archaeologists, or any other person involved with it, are depicted in various degree of detail. Also places, ins and outs of the digging sites and dating of the fossils are extensively discussed.

With every new fossil, a new theory comes along, old theories are rejected, and, very important, new questions arise. One of the major questions that is discussed is: where did the human lineage start? With the discovery of the Asian fossils, for long time, Asia was the favourite cradle of humankind. However, with the finds of many, much older hominid fossils in Africa, the cradle moved permanently to this formerly called ‘dark continent’. Following important questions that are thoroughly addressed are:

- What is the relationship between all those hominids and the debate between scientists on this topic, with special focus on the Multiregionalist view versus the Single-Origin theory in chapter nine
- How and when did those hominids occupy the rest of the world (e.g. chapter six is completely devoted to the peopling of the Americas)
- When can a hominid be called ‘Homo’, or what is the measure for humanness? Since morphological features cannot tell the whole truth, some scientists developed a growing interest in behaviour, speech and cognition and concrete proof of early human intelligence like ancient tools and works of art (chapter five).

In chapter nine, the author (p. 261) concludes with the statement that “in the opening years of the 21<sup>st</sup> century, much had been learned about humanity’s ancestors”. By now, it is commonly accepted that the earliest hominids appear millions of years ago, and the Single-Origin or Replacement theory, advocated by Chris Stringer, is considered to be the most applicable to human evolution. However, questions still remain as do alternative theories and chapter eight is entirely devoted to non-scientific, alternative theories like Eugenics, The Aquatic Ape theory, Bigfoot and the Anomalous Primates and so on. In the field of science, new theories are also launched: it seems that a form of neo-Asia hypothesis is appearing. Besides the ongoing controversies between all the more or less scientific theories, also religion mingles into the discussion again. The last chapter of the book (chapter ten, ‘The elusive hand of God’) is all about the evolution versus creation debate in the 20<sup>th</sup>/21<sup>st</sup> century, with special focus on ‘Intelligent Design’ and the USA. Given this, the author concludes his book (p. 294): “Although the exact course human evolution took, or how our ancestors lived may remain elusive, the search as well as the controversies go on”.

Contrary to most work on this topic, this book does not focus narrowly on one individual, theory or debate. With this book, Brian Regal aimed to provide the reader with comprehensive and detailed information drawn from a wide range of sources, in order to allow the reader to form his or her own opinion on this subject. The book is written fluently and it is refreshing that the author is not trying to convince the reader of the rightness of one theory. However, in order to give the reader as much details and information as possible, the reader has to digest an overload of persons, names, fossil codes, places, dates and many, many small facts, which makes it not always easy to read.

Besides the elaborate chapters, the book also contains recommendations for further reading at the end of each chapter, a timeline with important events and scientific breakthroughs, an elaborate bibliography, index entry and excerpts of some important, cited articles or book passages. On the one hand this is great, it provides the reader with an extensive starting point to explore the world of human evolution, on the other hand, to my opinion this load of information has a negative effect on the readability of the book, simply because it is too much to process. However, this book is great to have as a basic book of reference.

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