



## Book Review

*The Antiquity of Man: Artifactual, Fossil and Gene Records Explored* by Michael Brass.  
Publish America (2002), pp. 220, ISBN 1-59129-385-5.

Reviewed by Enzo Ferrara

Paradigmatic shifts, such as those initiated by Copernicus, Darwin, Freud, and Einstein, stand as historical discontinuities, or leaps of cultural development, able to call into question human identity, self-awareness, and the common mapping of reality. A sense of apprehension and uncertainty accompanies and resists any further step beyond the rupture points, while the boundaries between nature and the social and spiritual world are rearranged. When a change in the conventional scientific and cultural paradigm is theorized, the whole community engages in debate and scrutiny, in order to integrate, correct, or rebut the new theoretical elaboration. During these periods a definitive assessment cannot be given, and a time deadline for the acceptance or rejection of the new ideas cannot be set. Rather, trust in a theory must rely upon its capability to offer the best affordable account of the observed and investigated phenomena. Recurring irrational and reactionary responses have to be expected. But, only the ordered collection and exposition of facts and evidences is suitable for critical discussion and to better delineate the theme under debate.

Above is the message coming out of the pages of *The Antiquity of Man* by Michael

Brass, which is, in summary, a ‘deconstructionist pamphlet’ aimed at clarifying how antievolutionist views, even the most renowned and well-publicized ones, do not possess any of the qualities, proofs, and matters-of-fact that typically support empirical research and the formulation of scientific hypotheses and theories.

Unfortunately, what characterizes the current historical juncture is great complexity arising from the involvement of different contexts (e.g., religious, technological, political, and economic) with contemporary issues of culture and science. Within this framework, a crew of ingenuous or badly informed individuals have found the opportunity to advance their peculiar, eccentric views, utilizing scientific terminology and out-of-context information to make their ideas appear scientifically supported.

In *The Antiquity of Man* Michael Brass refers to *Forbidden Archaeology* (1993), and *The Hidden History of Human Race* (1999), two volumes written by the Hindu creationists Michael A. Cremo and Richard L. Thompson. These voluminous books, which have met with some remarkable public success and notoriety, depict what the authors claim to be ‘anomalous archaeological artefacts’. Like the first creationists, who tried to accommodate science to the

Bible, Cremo and Thompson dismiss evolution and strive to harmonize science with the sacred Vedic scriptures. These indicate that men and women have lived on earth, in their current forms, for a period of time dating back to several million years ago.

Brass warns us not to mix the terms *theory*, “applied to explain the existing data”, and *facts*, “that are the observable and testable events” (Scott and Kitcher, p. 8-9) and remarks on the importance of assessing, openly, evolutionist concepts within a cultural and scientific framework accessible to everybody. His efforts are devoted to the analysis of different patterns within creationist and evolutionist rationales, while his writings map and examine the vast array of evidence which illuminates the progress of evolutionary research and theory. Brass concludes that “creationism reveals its stark lack of scientific evidence” and its “general disdain for scientific procedures, through wanting the legitimacy of scientific findings without the responsibility of the scientific method” (p.13).

The first section of the book, “Evolution and its pseudo-science Hindu creationist counterpart” (Chapter I, p. 17-44), deals with the complex scenario of human evolution that has been brought to public examination. In the following part, “The emergence of the first Hominins” (Chapter II, p. 45-74), the sequence of the hominid series is developed, from *Ardipithecus ramidus* and the contentious *Orrorin tugenensis* to *Homo sapiens neanderthalensis* and *Homo sapiens*. Discussion focuses around speciation and the role of Homeobox genes in evolution, with references to gene pattern and human morphology. In these chapters, as a regular strategy, the book first spots and unveils each of the creationist leitmotifs, then develops a deconstructive breakdown using a collection of integrated knowledge and proofs (e.g. from archaeology, physics, chemistry, and genetics). The examination relies extensively on the deeper insight that instrumental analysis has been offering since the late 19<sup>th</sup> century, and

demonstrates how the interaction of otherwise discrete disciplines provides reliable dating, provenance, and reconstruction of skeletal, artefact and organic remains. As a result, the reconstruction of the hominins’ evolutionary sequence emerges with firm support.

Subsequently, “The Pleistocene Florescence” (Chapter III, p.75-118), and the last section, “The Origins of Modern Human Behaviour” (Chapter IV, p.119-189), reveal the trove of pre-human findings that, dating back to the Pleistocene, concentrate in Southern Africa. The reference scenario is used to address the origin of cognitively modern behaviour. One section, “The power of the mind” (p.110-118), is dedicated to the emergence of culture-related human activities.

The creationist shortage of means is amply displayed, and various tactics are analysed, such as reference to out-of-context discoveries and the extensive use of selective citation. Frequently cited examples are the now disappeared Foxhall human jaw specimen that was discovered in 1855 and ascribed to the late Pliocene, the Eoliths (p.67) that were hypothetical stone tools from extremely ancient deposits, and the Meister print (p.48), a supposedly shoe-like footprint associated with trilobite fossils of the Cambrian period.

Questioning the behavioural aptitudes of the Southern African Middle Stone Age hominids, Brass addresses the growth of cultural expressions through innovative typologies of activity and organisation, including phenomena such as: the increasing variety of and standardization of artefact types, blade technology, worked bone and organic materials, personal ornaments and art images, structuring of living spaces, burial ritualism, economic intensification, exploitation of aquatic resources, enlarged geographic range and expanded exchange networks along with the increase in population numbers. Rock art emerges among these as the earliest visual communication form: ancient engravings and petroglyphs on stone present massive information about the spiritual world of their creators.

Brass recognizes the need for continued progress in evolutionary anthropology through the integration of refined investigative methodologies and argues that the open and self-correcting character of scientific enquiry stands in stark contrast to the approach of “creation science” as uncovered in his investigations.

In conclusion, *The Antiquity of Man* successfully accomplishes its key intentions: to provide evidence for the evolutionary sequence of human phylogenesis and to contrast the scientific account of events with that favoured by some of its opponents. Unfortunately, the poor layout

and some typographical errors as well as the loose-leaf strategy chosen sometimes obstructs a plain reading of the text. The lack of figures, comparative schemes, and tables also diminishes the impact and utility of the book. However, Brass exhibits knowledge of contemporary advances in palaeo-anthropology, and writes with a forceful style and a wide perspective.

Enzo Ferrara, Research Scientist, Istituto Eletrotecnico Nazionale Galileo Ferraris, Torino, Italy. Email: [ferrara@ien.it](mailto:ferrara@ien.it).