Book Review

## Italian Stories of Archaic Human Forms. Book Review: Manzi, G. *Antenati. Lucy e altri racconti dal tempo profondo*; Il mulino: Bologna, Italy, 2024; ISBN: 9788815388018

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Italian paleontologist Giorgio Manzi (b. 1958), professor of anthropology at La Sapienza University of Rome, like other researchers of his generation is also a popularizer of science. For this reason, he has received some awards. However, the importance of popularization is not exclusively related to the activity of communicating data and research activities addressed to a wider audience than the scientific community. Discursive representation such as iconic representation (e.g., in realistic reconstructions of hominids exhibited in natural science museums) is a narrative that starts from a "real" fact of knowledge in which, as in the case of this book, the researcher or the author of a discovery not only presents results or hypotheses but provides meaning and perspectives for research activity itself. Therefore, it also becomes useful for colleagues in the same discipline or in related fields of research.

At the beginning of the book Manzi adopts a narrative device. The author imagines that in the future an alien civilization explores our planet after a mass extinction event. Surviving documents demonstrate how Earth's population knew about evolution, discovering the secret of its origins. Although humanity possessed necessary knowledge and resources to cope with epochal changes and transitions, its political and economic divisions prevented the solution of a global crisis causing the extinction of the human species (Manzi, pp. 11–13).

Researchers are not always accomplished storytellers, and this narrative idea appears disconnected from the central axis of the book, where "stories from deep time" are far more convincing accounts in style and by the exposition of scientific data.

I have selected three of the paleoanthropological stories described by Manzi. They are set in the territory of the Italian peninsula, where the fossil finds of Ceprano skull, Monte Circeo skull, and Altamura skeleton (all in centralsouthern Italy) are very notable. The choice of these stories over others well known to the public (Olduvai, Lucy, Turkana, Flores), is also motivated by the fact that they are related to the tradition of research of the Roman school of paleontology during the twentieth century. Manzi is an heir and ideal continuator of this school. He carried out field research at prehistoric sites in Italy and abroad (Tanzania, Ethiopia, Libya and Spain) and paid special attention to the origins of Neanderthals (such as the archaic specimen from Altamura).

The transition process of evolutionary forms is one of the most interesting aspects in Manzi's research activity and one of the main themes focused in the "stories" of this volume.

At the origin of the discovery of Ceprano skull, as in many other events of paleontology, there was the adventure of a "fossil collector," an enthusiastic amateur that for years explored the countryside in the region south of Rome, mapping it and identifying traces of very ancient human presences. Mr. Italo Biddittu found fossil remains of extinct animals that lived in the region during the Pleistocene, as well as stone artifacts from the Paleolithic (Olduvaian and Acheulean cultures). In March 1994, during road construction work, soil movement revealed the fragment of the cranial vault of a human being with apparent archaic forms (Manzi, pp. 129–131). The finding was fortuitous and offered to the scientific community the upper part of a human skull denoting an encephalic volume at the lower limits of current human variability.

The exceptional discovery aroused the interest of the Italian Institute of Human Paleontology, with A. Ascenzi, A. Bietti, P. Cassoli, E. Segre Naldini, and A. G. Segre. Manzi writes (p. 136) that the interpretation of the finding was perhaps done too quickly and initially the skull was dated 900,000/800,000 years ago. Therefore, it could have represented the first humanity to have lived north of the Mediterranean. A few months after Ceprano there was the discovery of Atapuerca, which seemed to disprove the hypothesis that the first peopling of Europe began no earlier than 500,000 years ago. At first Ceprano was classified as late Homo erectus (1996). Then, based on the Atapuerca fossil specimen, as Homo antecessor (1997). Finally, Manzi identified it as an archaic variant of Homo heidelbergensis (2005). The proposal to call it by a new species name (Homo cepranensis) was unsuccessful.

What is most interesting in Ceprano skull is that it could have been an ancient ancestor of later human varieties, that is, the last common ancestor of evolutionary forms in Europe, Africa, and Central Asia: Neanderthals, Sapiens, Denisova (Manzi, p. 142). Subsequent investigations and systematic excavations of the area between 2001 and 2010 refined dating and analysis of the Ceprano calvarium. Despite its archaic morphology it would date to about 400,000 years ago (Manzi, p. 144) and no longer corresponds to the earliest peopling of Europe, but rather reflects the possible variability of human populations in the Middle Pleistocene. This confirms the coexistence on the continent of archaic morphologies with more derived (Neanderthal-type) ones, as in the case of Atapuerca (Sima de los Huesos). But Ceprano does not show Neanderthal morphological traits. This confirms the complexity of evolutionary history with the presence of ancestral human forms favored by isolation. The Italian peninsula surrounded by the Mediterranean and separated from the rest of the continent by the Alps was a kind of ecological refuge for these archaic forms. Manzi notes that this indicates how Ceprano may constitute "the best possible representative of the archaic form of a large continental species that lived in the Middle Pleistocene": Homo heidelbergensis (Manzi, pp. 146–147).

The second "story" is territorially close. Not far from Ceprano, inside a cave on the promontory of Mount Circeo, southeast of Rome, a fossil human skull was found in February 1939. Immediately it was submitted to the analysis of the Roman paleontologist and geologist Alberto Carlo Blanc, son of Gian Alberto, founder of the Institute of Human Paleontology in Rome, and discoverer of the archaic Neanderthal skull called Saccopastore 2. Circeo skull belonged to a Neanderthal but what mostly animated the debate was that it was found in a small cavern with a very low vault, resting on the ground among some blackened stones believed to be arranged in a circle. The skull was not intact with fractures. In the cave there were also numerous broken animal bones. Blanc supposed the evidence of ritual cannibalism (cerebrophagia) (Manzi, pp. 162–163).

This hypothesis was immediately accepted fueling a narrative that over the decades has been conclusively disproved. The cave was in fact simply a den of hyenas feeding on carrion, as attested by the massive presence of hyena feees. Even on the skull there were no signs of human cutting or handling. The circle of stones was not the only one on the ground, as it was random. But a refutation of the ritual hypothesis, however, does not seem sufficient to affirm, as Manzi points out (p. 161; p. 171), that Neanderthals did generally nothing ("or rather: almost nothing") to manifest a symbolic mind and characteristics of "cultural modernity" (or even "self-awareness"). Indeed, the author is very puzzled about the presence of conceptual thinking in Neanderthals like that of the "sister species" Homo sapiens (Manzi, p. 161). This is not a prejudice against Neanderthals (science rejectes prejudices), but certainly a deep-rooted objection that finds confirmation in this "story" from deep times.

The third "story" is still Italian: Altamura Man, discovered in Puglia, a region in southeastern Italy, in October 1993. The discovery came because of speleological exploration in the Alta Murgia region, known for its karst terrain (Manzi, pp. 175–176). The human skeleton, at least 150,000 years old, was embedded in the limestone of the Lamalunga cave in a space that was very difficult to reach, a kind of crypt whose size is the passenger compartment of a van. The position of the fossil remains indicates that the man before his death was squatting, with his head reclined, past his knees and into his arms. The best guess is that he fell into a fracture in the ground, suffered trauma, and was no longer able to get out of the cavity (Manzi, p. 182). Eventually, having lost all hope, he perhaps consciously gave himself up to death.

Archaic features testify that Altamura Man was an ancestral form of Neanderthal, a fact confirmed in 2009 by the study of small portions of DNA obtained from a skeleton fragment (which cannot be entirely extracted from the rock). Altamura is a complete skeleton of extraordinary significance (Manzi, p. 179). A recent dating of the remains conducted by a team led by G. Manzi [1] confirms their antiquity (three times older than typical Neanderthal specimens) and explains the mosaic nature of its traits, confirming the recurring hypothesis in the "stories" of this book. Namely, that in the Middle Pleistocene, human groups in Europe, Africa, and mainland Asia exhibited, in the range of H. heidelbergensis, distinctive features more clearly and diffusely expressed in later humanity.

Altamura Man, with his accumulation of characters "in the middle range" (between Heidelbergensis and Neanderthal), testifies with his archaic traits the progressive transition from the ancestral species to the later stages

(Manzi, pp. 186–187). Recent studies using digital imaging techniques have confirmed this [2]. Therefore, the Italian peninsula with its variety of climatic, geomorphologic and vegetation contexts, was an ideal bridge between the Mediterranean and the rest of the European continent and provided the most suitable habitat for this evolutionary phenomenon.

The presentation of these specific research perspectives is one of the main merits of Manzi's book because it opens epistemic horizons for scholars and for those amateur experts who have often favored in the recent past fascinating findings about human origins.

## References

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