

## **Paleoanthropology**

# **The hominids of Melka Kunture.**

## **Some general reflections**

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It is an honor and a pleasure for me to contribute, even if only in this modest way, to the highly significant publication of the first monograph on the site of Melka Kunture.

I was indeed lucky to be able to experience the epic story, following the discovery of the site by G. Dekker, of the excavation of multiple archaeological paleosurfaces situated on a surprising succession of overlapping levels, which were disturbed by neo-tectonic displacements. The different periods of excavation extended from the first “clearing out” by Gérard Bailloud to the long years of excavation by Jean Chavaillon and by his successor Marcello Piperno.

Jean Chavaillon, the prehistorian active during my expeditions of the period 1967-77 in South-West Ethiopia, asked me to serve as the paleoanthropologist of his team. And in this capacity I received from him a number of human remains which were exceptionally interesting, since they were associated with well-defined lithic assemblages.

It was not unusual that living floors did not yield skeletal remains of their inhabitants. These populations had no reason to keep the dead bodies of their members in the places where they lived, even if their living floors were only temporary. Nonetheless, the quantity of work that was done and the large mass of cubic metres dug up by prehistorians resulted from time to time, as might be statistically anticipated, in the discovery of a bone fragment of one of the inhabitants: a distal fragment of a humerus at Gombore I, a postero-superior fragment of a left parietal bone and a fragment of the frontal bone on the same side of a same calvarium at Gombore II, several fragments of another skull at Garba III, an important fragment of a child's mandible at Garba IV, studied by Silvana Condemi and colleagues in this volume.

Beyond the unquestionable anatomic interest of each of these pieces, their association with a culture stimulated my own awareness at a certain moment of the difference in the rates of biological and of technological evolution, and of the significance of this difference, a phenomenon I have been able to confirm many times since then.

At Olduvai, the oldest Oldowan industry is probably the work of *Homo habilis*, and the association of this species with this type of lithic assemblage repeats itself at least 11 times.

At Gombore I the same Oldowan industry, 1.6 Ma old, may very probably be associated with *Homo erectus* (the humerus of this specimen, typical of the genus *Homo*, is much too robust and strong to be attributed to *Homo habilis*).

Even more predictably, the evolved Oldowan industry of Garba IV is also associated with *Homo erectus*. Without much hesitation, the young jaw may indeed be attributed to this species.

At Gombore II, the thick cranial fragments are linked to a Middle Acheulian lithic complex dated at 0.8 Ma, which can only have belonged to *Homo erectus* (weak curving of the vault, simplicity of sagittal and lambdoid sutures, only slightly ramified marks of the middle meningeal artery).

At Garba III, while the Acheulian industry continues until its so-called final form, quite thin cranial fragments of parietal bone have been discovered. They are so thin that I have proposed relating them to *Homo sapiens*.

This exceptional illustration of the history of humanity and of human cultures shows us how nature rapidly pursued its evolutionary course, leading to the elaboration of a series of human forms (*Homo habilis*, *Homo erectus*, *Homo sapiens*), while the progression of culture was slower and less direct. *Homo habilis* produced Oldowan tools, the first *Homo erectus* also; the same *Homo erectus* later invented Acheulian industry, but the first *Homo sapiens* did not do otherwise, and it is a commonplace to say that *Homo sapiens* no longer changed (or did not change very much), whereas its technological development took off. This is a beautiful demonstration of the retroactive effect of culture on nature, of the time that the former took to catch up with the latter, to slow it down and to stop it (or almost) and of course to overtake it at an ever faster pace. This inversion of rates of progression (which I termed the reverse point) took place only a few hundred thousand years ago, and with it the inauguration of free and responsible thought among humanity. We also thank Melka Kunture for having permitted us to account for this development.