



## When a rural community defines itself through an archeological site: the case of Melka Kunture (Ethiopia)

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**ABSTRACT** - Melka Kunture is a cluster of Pleistocene sites discovered in 1963, located 50 km south of Addis Ababa on the Ethiopian highlands. Since then, annual archeological research has always involved a number of local workers from the nearby village of Awash. This collaboration led to the development of a team of workers specialized in archeological investigations. Meanwhile, a deep sense of pride and awareness also developed the local community at large, that has borne fruits in terms of recognition and protection of the archeological site. A small museum was built and eventually expanded, and some archeological areas were also left open for visitors. The candidature of the site to World Heritage List will be discussed by the UNESCO Committee in 2024. Expectations run high in the Awash community, which proudly recognizes the archeological site as a means to improve the importance and visibility of the area.

**Keywords:** Melka Kunture, archeological excavations, Prehistory, museology, local communities

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### 1. INTRODUCTION

Melka Kunture, located approximately 50 km south of Addis Ababa, is a cluster of prehistoric sites at 2000 m above sea level on the Ethiopian highlands, along the upper course of the Awash River (Fig. 1) (Chavaillon and Piperno, 2004; Mussi et al., 2022). It was discovered in 1963 by Gerard Dekker, a Dutch hydrogeologist, who reported the artifacts he had found to the Ethiopian Institute of Archaeology. Arrangements were made, and shortly afterward Gérard Bailloud, a French prehistorian, systematically surveyed the area, collecting thousands of lithic artifacts and paleontological remains. Then, in 1965, the French archeologist and geologist Jean Chavaillon (1921-2013) started investigating the area and was soon impressed by the extent and richness of the prehistoric deposits. More than 70 archeological outcrops, over an area of about 80 km<sup>2</sup>, have been tested or excavated to-date, providing evidence of human evolution over 2 million years (Ma). Oldowan, Acheulean, Middle Stone Age (MSA), and Late Stone Age (LSA) horizons are all documented - i.e., the archeological sequence spans most of the Lower Pleistocene, Middle Pleistocene, Upper Pleistocene, and Holocene. The discovery immediately aroused scientific interest. At that time these eras were

the foci of major research on human origins, which was starting to focus on Africa, but Paleolithic sites were little known in Ethiopia. Melka Kunture soon ranked amongst the most important, and many scholars such as Mary Leakey, Louis Leakey, and Glynn Isaac paid a visit. The government's attitude was benevolent and even openly favorable, even if there was at first some resistance from the local Coptic clergy, which was eventually overcome. Emperor Haile Selassie himself showed an interest in Ethiopian prehistory out of personal curiosity and of national prestige, visiting the excavations in 1970 (Fig. 2). The following year, the emperor presided over the VIIth Panafrican Congress of Prehistory and Quaternary Studies, organized in the Ethiopian capital. A scientific excursion was organized allowing the congress participants to visit Melka Kunture.

The archeological mission at Melka Kunture, French-led and headed by Chavaillon, officially started in 1967. It was international and interdisciplinary, cooperating with Ethiopian institutions. This facilitated the acquisition of some privately-owned archeological areas for the public domain. The French mission, active until 1999, was only interrupted during the period of the Derg (1982-1993). The socialist regime banned archeological excavations by foreign institutions and research focused instead on

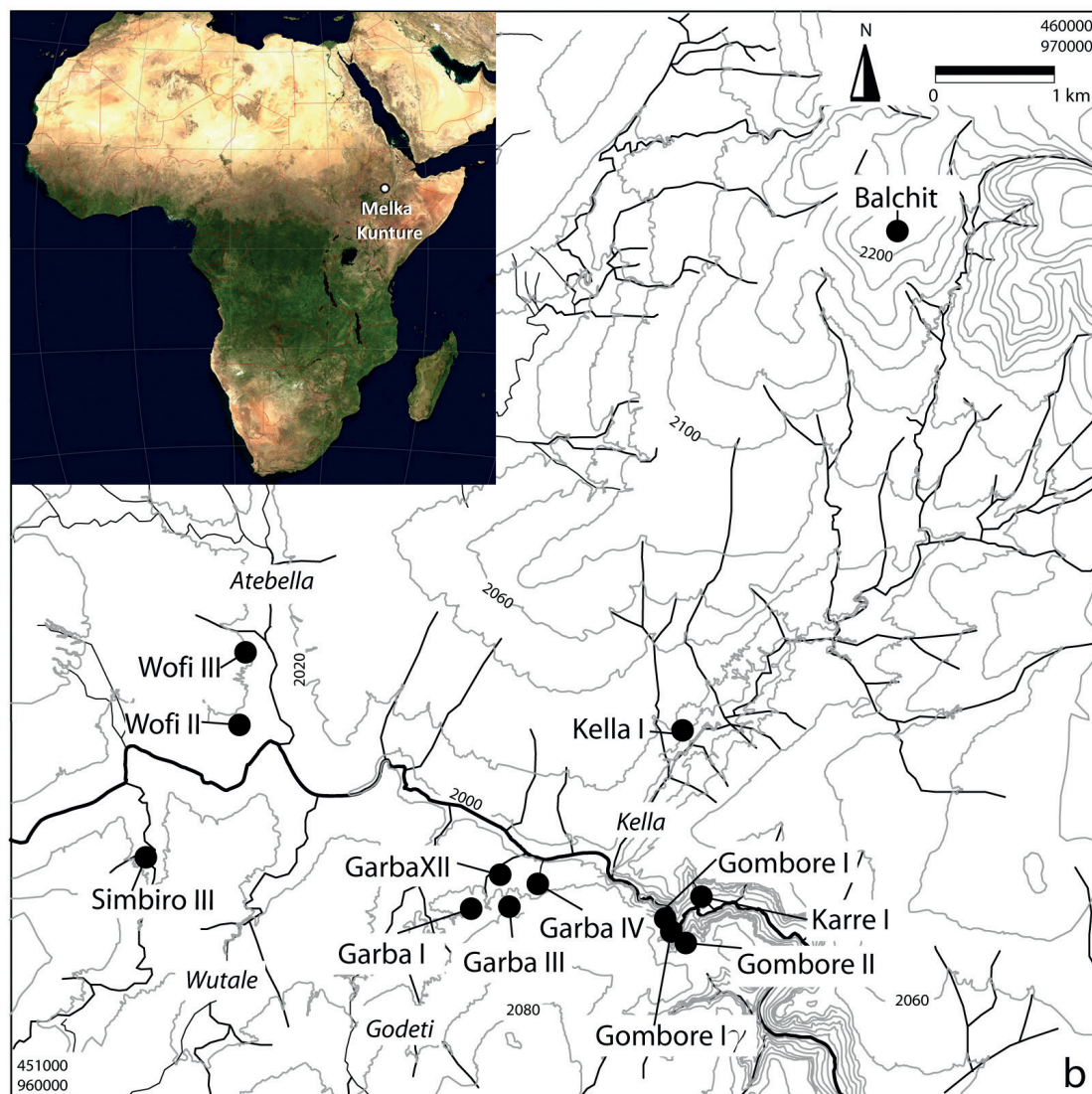


Fig. 1 - Location of Melka Kunture and of its main archeological localities.

the collections kept in Addis Ababa. Marcello Piperno, who had long collaborated with Chavaillon, started the Italian archeological mission that year. At the time he was a professor at Università Federico II of Naples, but in 2001 he moved to SAPIENZA Università di Roma. Since 2011, the mission has been directed by Margherita Mussi, also of Roma Sapienza, in cooperation, more recently, with Joaquin Panera and Eduardo Mendez-Quintas, both colleagues from Spanish institutions (Italo-Spanish Archeological Mission at Melka Kunture and Balchit). The mission, financed on the Italian side by grants of Roma Sapienza and of the Ministry of Foreign Affairs, and more recently by the Palarq Foundation on the Spanish side, regularly makes fieldwork during a month or more in the dry season, which in the highlands lasts from the end of October to early March. Time is also spent at the National Museum of Addis Ababa to study the collections.

Ever since the 1960s archeological investigations have been carried out following rigorous scientific protocols. The sites have been named with reference to the place of

discovery, i.e. generally along the gullies that the seasonal streams, affluents of the Awash River, cut through Pleistocene deposits. The name of the stream, as Garba, Gombore, Kella, Simbiro, etc. is followed by a Roman number referring to the sequence of discoveries. The excavations, some extending over hundreds of square meters, strictly follow the stratigraphy, with grids ordered according to an alphanumeric system or cardinal points. Already in Chavaillon's time, all archeological materials were systematically ink-marked, meticulously described, and recorded graphically and photographically. Nowadays, photogrammetry and laser scanning are also used. The well-kept archives allow the information from excavations made decades ago to be updated, testing known stratigraphic succession and re-studying collections.

The complex record from the many sites includes an impressive amount of lithic industry, made from a variety of volcanic raw materials, paleo-botanical evidence, and fossil fauna. Hominin remains were discovered in sealed



Fig. 2 - Emperor Haile Selassie at Melka Kunture in 1970 (archive of the Italian-Spanish Archeological Mission at Melka Kunture and Balchit).

contexts during archeological investigations - which is far from the rule in Africa, where most fossils are found during controlled surface collections - in direct association with Oldowan, Acheulean, and MSA techno-complexes (Chavaillon and Piperno, 2004; Mussi et al., 2014, 2022; Di Vincenzo et al., 2015; Profico et al., 2016; Gallotti and Mussi, 2018; Le Cabec et al., 2021). In recent years Pleistocene fossil footprints have also been discovered, which vividly document the presence and habits of mammal species, birds, invertebrates and hominins between 1.2 and 0.7 Ma (Altamura et al., 2018, 2020a). Most archeological layers belong to fluvio-lacustrine succession, often interbedded with volcanic products. A sound chronological framework is being built, based on both radiometric methods - Ar/Ar, ESR, and C14 for the most recent deposits - and magnetostratigraphy (e.g., Morgan et al., 2012; Perini et al., 2021).

## 2. THE ARCHEOLOGICAL CAMP AND MUSEUM

After the pioneering years when the researchers were camping under tents (Fig. 3), a proper camp was built next to the Garba gully and not far from the Gombore gully, where important sites were under excavation. A more settled life was arranged, thanks to the collaboration between European research institutes and the Ethiopian authorities (notably the National Authority for Research and Conservation of the Cultural Heritage and the Culture and Tourism Bureau of the Regional State of Oromia). Two buildings are already noted in the first topographical map of the area, which was drawn in 1971 (Egels, 1971): a rectangular building and a circular tukul, i.e. a traditional building with half-timbered walls plastered with clay and a conical roof of dry grass. The archeological camp gradually expanded with new buildings for researchers

and staff accommodation, as well as a laboratory and warehouses. Currently, there are 12 in all: three circular tukuls, seven rectangular buildings with corrugated iron roofs, and two latrines (Fig. 4). They were built by local workers following traditional styles and techniques (Chavaillon and Piperno, 2004; Altamura et al., 2017), which continue to evolve through time as evidenced by the rectangular dwellings.

Even during the times of Jean Chavaillon, much attention was given to the scientific dissemination of the archeological results. At the time of the VIIth Panafrican Congress in 1971, a large part of the excavations at Garba I (ca. 0.6 Ma, see Sánchez-Dehesa Galán et al., 2022) was planned to become an open-air museum, incorporating Melka Kunture into a nature park. This project eventually did not prove to be feasible, but in the following years, a tukul of the archeological camp was used to store and display a small collection. This museum was kept, with an additional second building, until the early 2000s. There were explanatory panels and a multilingual (English/French/Italian/Amharic) guidebook (Berthelet et al., 2001; Chavaillon and Piperno, 2004) was also available, which was reprinted in 2007. The project of an open-air museum was eventually revived by Marcello Piperno, who selected the area of Gombore (Fig. 5). Between 2001 and 2003 the whole area from the archeological camp to the Gombore gully was fenced off and a protected green zone was established, where native trees of the highlands were reintroduced (Fig. 4) (Chavaillon and Piperno, 2004). Wild animals, such as hyenas, antelopes, servals, monkeys, etc. are now thriving there. Part of the large Gombore II site, dating back to ca. 1Ma (Gallotti et al., 2010; Méndez-Quintas et al., 2019), was purposefully exposed over approximately 40 m<sup>2</sup> and named Gombore II OAM (Open Air Museum). It is a fluvial deposit of



Fig. 3 - The archeological camp in the 1960s-1970s (archive of the Italian-Spanish Archeological Mission at Melka Kunture and Balchit).

pebbles and cobbles, where hominins settled and left artifacts and faunal remains. The rectangular area was covered with a massive roof in the local style (which at the time held a record for size), supported by perimeter pillars; a strip was saved around the excavation allowing visitors to walk around and look at close range to the archeological level and standing stratigraphic walls (Fig. 6). Next to Gombore II OAM, Gombore II-2, the so-called “hippopotamus butchering site” dated at 0.75 Ma, was also rearranged for tourist use: casts of materials discovered during previous excavations were replaced on the archeological surface (Altamura et al., 2020b). At both sites panels in Amharic and English illustrate issues and finds (Piperno and Gallotti, 2003; Chavaillon and Piperno, 2004).

To host a new museum, four traditional style tukuls were built just at the entrance of the path leading to the

open-air museum. This museum opened in 2006 and focuses on general and local prehistory and geology. The project was directed by the mission’s archeologists and funded by the European Union (Culture 2000 Project), while the management is under the care of the Oromia regional authorities. The visits are conducted by Ethiopian guides, selected after a public competition among young graduates in historical and cultural subjects. The whole area is a tourist attraction with ca. 3000 visitors per year, both foreign and Ethiopian: mainly schoolchildren (Fig. 7).

The interest of the Ethiopian authorities has been growing in recent years. Funding from the World Bank allowed the construction of a large masonry museum outside the fenced area, not far from the river gorges and near Awash village, which still needs to be completed, while local accommodation facilities are being upgraded. However, much remains to be done on this, as well as on the maintenance and cleaning of the sites, which is carried out on an occasional basis, raising problems for the preservation of the archeological artifacts displayed at the Open Air Museum.

### 3. ARCHEOLOGISTS AND THE LOCAL POPULATION

In the mid-1970s, Ethiopia, and therefore the area of Melka Kunture, underwent major land redistribution. The vast estates which had been the property of the Imperial family, wealthy landlords, and the Coptic Church were fractioned. The outcome was - and is - an extremely parceled agricultural landscape, dotted with small clusters of structures inhabited by families raising goats and cattle and growing wheat, sorghum, teff, and maize with little agricultural machinery (Fig. 8). The recent village of Awash grew close to the archeological site and next to the



Fig. 4 - The archeological camp, the museum and the open-air site displays from a satellite view (modified after Google Earth).

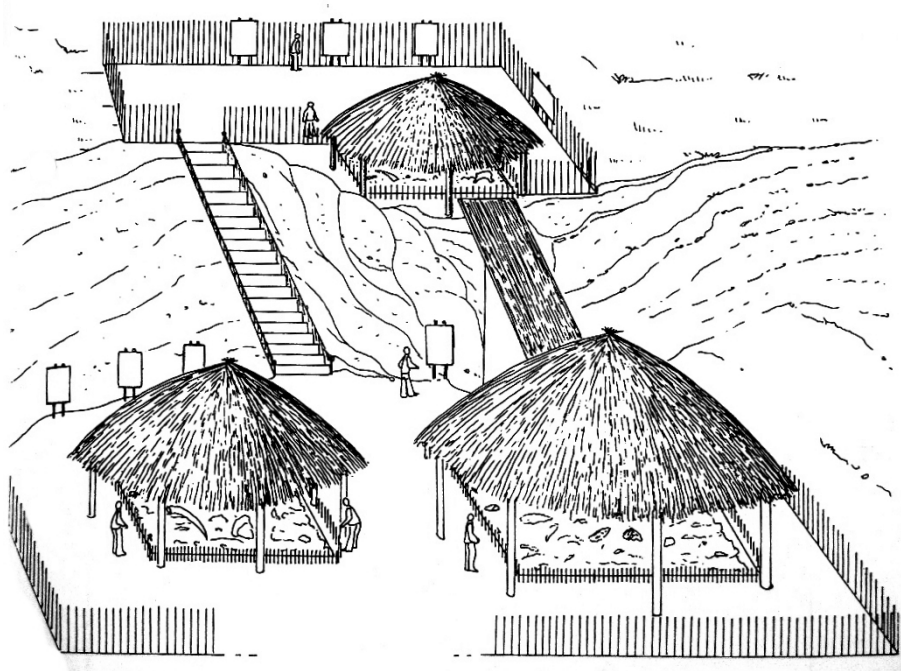


Fig. 5 - Sketch of the project of the musealized area of Gombore II, as planned in 2001 (archive of the Authority for Research and Conservation of the Cultural Heritage, Addis Ababa).



Fig. 6 - The musealized area of Gombore II Open Air Museum, with the Acheulean level *in situ* (photo K. D'Août).

ford which had traditionally been used to cross the Awash River along a path connecting central and southern Ethiopia. A large bridge was eventually built and the road is now paved. Awash village, with 5000 inhabitants, currently is a cluster of masonry buildings and traditional huts, with a church, a school, small commercial activities, and an open-air market that twice a week attracts people from the surroundings (Fig. 9).

Ever since the 1960s, workers were hired by the archaeological mission following the advice and similar experience of the Leakeys at Olduvai. Each year some

thirty people are involved during 1-3 months in camp maintenance, cooking, guarding, water transport, etc., and as workers for archaeological excavations (Figs. 10-12). The salaries are a welcome addition to a largely subsistence economy, with a rather limited circulation of cash.

Hiring local farmers for research activities have proved the right choice. Some of the elder workers started collaborating in the 1970s. They accumulated considerable expertise in archaeological excavation techniques, and now help training younger people progressively entering



Fig. 7 - Schoolchildren visiting the museum (photo M. Mussi).



Fig. 8 - Traditional farm in the countryside next to Melka Kunture (photo F. Altamura).

the team. Many of them are regarded as “specialized”, and the archeologists rely on their technical skills and knowledge. This is most important in large excavations, which could be hampered by the limited time available to European researchers. Over the years, friendly relations have developed, together with mutual cultural enrichment. The archeologists provide information on archeology and human evolution. In turn, they are included in the social life of the village, chatting after

working hours in the little local bars and participating in funerals, weddings, festivals, sacrificial rites, blessings, religious speeches, etc.

Elder staff are the “living memory” of fieldwork and have helped to relocate or reconstruct the history of sites investigated long ago. The camp and field staff, for example, collaborated on an ethno-archeological study, an archeological excavation carried out where a tukul once stood before being pulled down in the early 1990s. The



Fig. 9 - The thriving Awash village in recent years (photo M. Mussi).



Fig. 10 - Fieldworks during the excavations of the Acheulean site of Garba XII in 1977 (archive of the Italian-Spanish Archeological Mission at Melka Kunture and Balchit).

aim was documentation of the remains and stratigraphy of a demolished hut made of perishable materials. The older workers collaborated in the excavations and provided valuable memories of the activities and use of the traditional dwelling structure, enhancing the scientific results (Altamura et al., 2017).

Local people are critically needed as guides during the surveys needed to produce geological or archeological maps (e.g., Märker et al., 2019). They also mediate and help find agreements to access distant localities outside the core area of the archeological camp, e.g. Atebella, Simbiro, etc.

Over the years, in an area devoid of any major cultural landmarks, pride for the archeological sites and a feeling of belonging have been growing in the population, which sees tourists and schoolchildren flocking to visit Melka



Fig. 11 - Fieldworks during the excavations of the Acheulean site of Gombore II-1 in 1970 (archive of the Italian-Spanish Archeological Mission at Melka Kunture and Balchit).



Fig. 12 - Maintenance of a tukul at the archeological camp (photo K. D'Août).

Kunture. Both the workers and the other inhabitants feel involved and actively report any outcropping archeological materials. This collaboration is invaluable for site preservation when foreign researchers are not around - i.e. during most of the year - and even more so in times of political instability. Guardians hired by the Oromia authorities and, above all, the widespread sense of responsibility of the local citizens, have curbed the pillaging of fossil and lithic artifacts outcropping almost everywhere, which, decades ago, were offered as souvenirs to tourists in exchange for small donations

(Chavaillon and Piperno, 2004). Quarrying is another threat to site preservation as sand is in high demand in Addis Ababa, the fast-growing capital. Quarrying is now illegal, and any offender is under the rule of law. However, quarrying activity has continued, typically by outsiders, affecting archeological stratigraphies, especially in the area of Simbiro, where local people are now fighting it.

In turn, the archeological team reciprocates when asked to support local interests. This was the case when industrial spills from the outskirts of Addis Ababa kept entering the Atebella, a tributary of the Awash, heavily



Fig. 13 - A meeting to discuss the pollution of the Atebella and Awash rivers (photo M. Mussi).

polluting both rivers. After discussing the matter internally, the local community sought the backing of the archeologists (Fig. 13). The regional authorities were then contacted, which identified the breweries and tanneries contaminating the water. A new regulation was issued, making water treatment compulsory before discharge. Water quality has improved in recent years thanks to the joint efforts of a local community and the prestige of archeological research.

#### 4. MELKA KUNTURE AND THE UNESCO TENTATIVE LIST

The Ethiopian authorities have included Melka Kunture in its Tentative List within UNESCO's World Heritage List, together with Balchit, the nearby locality where obsidian outcrops, a widely-used raw material ever since the Oldowan (<https://whc.unesco.org/en/tentativelists/6443/>). The full candidature has been already submitted and will be discussed by the World Heritage Committee in 2024. The files refer to the following of UNESCO's criteria designed to assess the Outstanding Universal Value of a site:

Criteria (iii) to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization that is living, or which has disappeared.

Criteria (iv) to be an outstanding example of a type of building, architectural or technological ensemble, or landscape that illustrates (a) significant stage(s) in human history.

Criteria (v) to be an outstanding example of a traditional human settlement, land-use, or sea-use which

is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.

Criteria (viii) to be outstanding examples representing major stages of earth's history, including the record of life, significant ongoing geological processes in the development of landforms, or significant geomorphic or physiographic features.

This is further evidence of the value of the archeological heritage. Understandably, expectations are running high in the local community, which feels empowered by the preliminary designation, and looks forward to a possible surge in tourism which would allow the development economic activities (Figs. 14–15).

#### 5. CONCLUSIONS

The village of Awash, where small-scale farming and herding provides to the basic needs, is a recently formed community in a territory devoid of landmarks and tourist attractions. Melka Kunture fosters identity and is a working opportunity for local families, providing an income which trickles down into commercial and economic activities. Furthermore, it attracts visitors from the capital and from distant countries, making it a source of local pride. The archeological complex is felt as belonging to the place and people and is expected to provide more opportunities if tourism develops. This strengthens the link between protection of the archeological site and local development.



Fig. 14 - Oromo horsemen during the visit of the UNESCO delegation at Melka Kunture in 2011 (photo M. Mussi).



Fig. 15 - Children choir welcoming the UNESCO delegation at Melka Kunture in 2011 (photo M. Mussi).

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