

General introduction

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General introduction

History of excavations at Melka Kunture

Jean Chavaillon¹, Marcello Piperno²

Jean Chavaillon was responsible for the excavations and research at Melka Kunture from 1965 to 1981, and from 1993 to 1995. Since 1999, activities on this site have been undertaken under the responsibility of Marcello Piperno.

History of Chavaillon's activities at Melka Kunture (J.C.)

Discovery - 1963

In 1963, the prehistory of Ethiopia was not well known and was unexplored beyond the 100,000 year-old threshold. Briefly, recent periods were grouped into the Late Stone Age, the equivalent in Eastern Africa to the end of the Upper Paleolithic and the beginning of the Neolithic. Some older sites were attributed to the Middle Stone Age (MSA), including localities in the Gondar region such as Gorgora Shelter that was excavated by Colonel F. Moysey. Middle Stone Age and Late Stone Age (LSA) industries had been studied by Louis S.B. Leakey, and the sites of Harar such as Porc Epic Cave had been described (Breuil *et al.* 1951). A robust human mandible from the MSA level was found during excavations in this latter cave, but the stratigraphy of these deposits was undifferentiated and poorly developed and was made even more uncertain by the presence of several holes made by burrowing animals. The industry was attributed to the Middle and Late Stone Age.

The only sites that had interested researchers like Father R.P. Azais (Azais and Chambard 1931) were the rock engravings and paintings at Harar and Dire Dawa, and the steles of the Guraghe region and the Sidamo and Konso. In 1940, a British soldier brought some handaxes, probably from the Late Acheulian, back to Addis Ababa in his rucksack. His name was John Desmond Clark. Lastly, we must remember the discoveries by Alberto Carlo Blanc in the Shoa, in particular of Middle and Late Stone Age industries on terraces of the Mojo River, south of Addis Ababa (Blanc 1938).

Twenty to thirty years later, on the advice of Joseph Tubiana, the prehistorian Gérard Bailloud did an assessment of the prehistory of the Horn of Africa and mainly of Ethiopia (Bailloud 1959), following the major volume written by J. D. Clark (Clark 1954). Bailloud's book was a prelude to new research on rock

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paintings and engravings in the Harar region. In 1963, Gérard Bailloud was thus in Addis Ababa, ready to start his mission in Eastern Ethiopia. He had received authorisation from the Institute of Archaeology and the Minister of Culture, Ato Kebede Mikael, who was a relative of Emperor Haile Selassie. French speaking, he had written a few plays which were performed in Paris.

Around the same time, Gerard Dekker (Fig. 1), a hydrologist from the Netherlands with a passion for prehistoric research and a friend of L.S.B. Leakey, was living in Addis Ababa. He spent his weekends driving through the countryside, hoping to discover an archaeological or prehistoric site, and he did so at the Awash ford named Melka Kunture, located 50 kilometres south of Addis Ababa (Fig. 2). This place, as well as that of Melka Garba, was mentioned by Father R.P. Azais in his report on excursions (Azais and Chambard 1931) from Addis Ababa to Butajira. Before reaching the Awash village (which became Awash-Melka Kunture), Dekker had spotted the eroded banks of a small tributary where the alluvium seemed interesting and promised good discoveries. This was the Kella locality ('customs' in the Oromo language), that was in fact a toll between the Guraghe and the Addis Ababa region. Dominated by a mound a few metres high, the surface of the erosion terrace overlooking the dry bed of the small stream was covered with many handaxes, cleavers and other less spectacular flakes. They were the remains of a Middle-Upper Acheulian unit that was remarkably rich in stone tools.

Gerard Dekker was enthusiastic about his discovery and his first thought was to protect the site. He immediately informed the Ethiopian authorities in Addis Ababa. The Institute of Archaeology, run by Ato Admassu Shiferaw, benefited from the permanent presence of a French expert, Francis Anfray, an archaeologist who had excavated and studied sites such as Axum, Yeha and Matahara and the steles at Guraghe and Sidamo. This is how Gerard Dekker, F. Anfray and the authorities of the Institute of Archaeology came to Melka Kunture with Gérard Bailloud for the first time. Their visit confirmed the interest of the site and the great abundance of Stone Age artefacts that were unknown in this country until then. They located new sites on the other bank at Gombore and Godeti. This latter locality we called the Garba site, Godeti being reserved for an area located up-stream around a few houses on a hill, above the Melka Kunture fault.

First surveys - 1964

Realising that what Dekker had discovered was exceptional and new, Gérard Bailloud gave up a planned project in the Harar and dedicated himself to the survey of this site (Bailloud 1966). He collected several thousand pieces from the surface. Apart from Kella, he discovered the Gombore Acheulian site (now Gombore II, locality 1) on the left bank, and the Upper Acheulian unit at Godeti (now Garba I). He collected artefacts exposed on the surface, occasionally *in situ*, and in natural sections. He classified the lithic assemblages using the Stone Age terms Stillbay and Magosian for the more recent periods, although this terminology is no longer in use in Ethiopia today, and published the first results in a small book edited in Addis Ababa (Bailloud 1966).

A geologist, R.W. Seymour, then at the University of Addis Ababa and with an interest in geology as well as in prehistory, meant well by asking well-known researchers working in Kenya to come to the site, but he did so without passing through official channels. So, in good faith, Mary D. Leakey and Glyn Ll. Isaac, preceded by Seymour, established themselves at Melka Kunture to study the geology and excavate several small geological and archaeological test pits. During this short stay they met the Ethiopians in charge, as well as Gérard Bailloud. After the necessary explanations, the survey of the Melka Kunture site remained with the original team.



Fig. 1. The hydrogeologist Gerard Dekker who discovered Melka Kunture on 1963.



Fig. 2. Location of Melka Kunture in a 1992 Ethiopian map.

The first excavations - 1965

Gérard Bailloud was at this time a specialist in the French and European Neolithic. Assuming that Melka Kunture would lead him into long and demanding fieldwork and excavations, he chose to withdraw. The foreign excavations Commission, with Jean Leclant and Francis Anfray in charge in Ethiopia (Axum, Matahara, Yeha), had listed Melka Kunture in its program of activities. Then André Parrot, President of the Commission of excavations for the Foreign Office, asked Jean Chavaillon to go on a one-month mission to Ethiopia to report on the scientific interest of the site, its extent, the Stone Age periods represented and what funds would be needed if there were good reasons to follow up on the original investigations.

The mission was planned for 1965, after the summer rainy season. When L.S.B. Leakey learned that Chavaillon was coming to Ethiopia, he suggested that he extend his stay in Eastern Africa and spend a fortnight in Kenya to visit, among others, the Tanzanian site of Olduvai Gorge.

This reconnaissance and investigation was the first survey and excavation campaign at the prehistoric site. The funds awarded were very modest, but J. Chavaillon benefited from the genuine cooperation of the Institute of Archaeology, Emperor Haile Selassie being interested in this project. Because people in the area spoke mainly Oromo and sometimes Amharic, he was accompanied during this mission in the Shoa by Ato Kebede Bogale, a French-speaking photographer working at the Institute, who also functioned as the representative of the Ethiopian Government. In addition to being the representative and photographer of the mission for several years, he has remained a friend.

It was quite difficult at the beginning. Chavaillon had the approval of the Ethiopian administration to do test excavations in the Pleistocene deposits of the Awash Valley, upstream from the ford on the Awash River, but two opponents appeared. One was the Head of the village orthodox church, for whom this research amongst the remote indigenous community of the Awash Valley was heresy. However, the situation was quickly clarified. The others were Ato Gabries and Ato Gebre-Selassie Odda, owners of the Garba land where the excavations were to take place. There had been a small guerrilla administration for several years, and the two men had recently been honoured with the Haile Selassie Industry prize for the development of the Butajira-Addis Ababa road, and the toll was at the Melka Kunture bridge! After five years, thanks to the personal intervention of the Head of State, a fair solution was found to the neighbourhood quarrels regarding the rights of the individual over the administration. Ato Gabries Odda had created a model stock breeding farm just near the archaeological camp site. The relationship between researchers and Ato Gabries, his family and his employees then became as pleasant as humanly possible and very efficient scientifically. The relationship remained so up to the time of their departure and their death, despite the changes involved with land nationalisation in 1974.

From the scientific viewpoint, these few weeks spent at the Melka Kunture site were very productive. A rapid assessment of the geology indicated a sedimentary basin bordered by a fault to the west. Fluvial sediments were frequently interrupted by deposits of more or less pure volcanic origin (ash, ignimbrite and pumice). Then it became obvious that the terrace system was often superimposed; for this reason, the oldest deposits did not dominate the valley but were, to the contrary, found at the level of the present river bed. Dekker and Bailloud had surveyed the rich units of the Middle Acheulian observed at Gombore II and Kella. G. Bailloud was involved in the more recent lithic industries such as those of the Middle Stone Age and Late Stone Age. A geological study, like that of the topography, often leads to the discovery of new sites, as was the case during this mission. Other sites were discovered at Ouaraba, Gombore, Garba, Tuka, Tcharri-Aroussi, Gotu and, later, at Wofi and Simbiro (Fig. 3). All had Middle-Upper Acheulian material. However, Chavaillon was lucky to discover a stratum of rounded pebbles mixed with large mammal bones, some roughly flaked pebbles and very few flakes at the bottom of the small gully at Gombore, close to the river

and 1.5 m above the water level. Artefacts and bones formed a layer of pebbles in a sandy-clayey cement, covered by an impressive mass of clay topped by sediments containing the Acheulian units. He named this archaeological level «Gombore I» and placed it as pre-dating the Middle Acheulian chronologically. The 1967 excavations confirmed its antiquity and that it belonged to an Oldowan level similar to those excavated by Louis and Mary Leakey at Olduvai Gorge. Melka Kunture thus showed an exceptional succession of archaeological levels with living floors that revealed characteristics similar to those of the Tanzanian site.

Apart from an overview of the geology (Fig. 4), Chavaillon excavated two test pits during this first season, and a small excavation that was continued until 1975.

At the Kella site, 4 square metres test pits were dug at the top of the mound dominating the terrace where Dekker had seen the Acheulian material of Melka Kunture. A layer of gravel and clayey sands, 20 metres above the present bed of the Awash, had been covered by black clayey sediments of Black Cotton Soil. This layer, Kella I, contained *in situ* remains of the Late Stone Age. The lithic industry comprised obsidian blade and bladelet cores, flakes, many burins of various types, side-scrapers, awls, end-scrapers and utilized flakes. Associated with these remains were fragments of ceramics that were usually small, rather rough and very seldom decorated.

The second test pit location selected at Gombore was on the right bank of the Awash. It was a layer that can be located chronologically in a period a little more recent than that of the “Butchery site” at Gombore II, that is to say around 0.7 Ma. This site, Gombore III, yielded a group of handaxes and Acheulian cleavers, mostly of lava (trachyte or basalt), in a bed of consolidated sands and gravel. It was an Upper Acheulian industry older than that of Garba I.

The third location was the Garba I site exposed in the cliff section by erosion created by the present Garba gully, forming a remarkable line in which basalt tools and mammal bones could be seen. The work seemed promising, and indeed it was. During this first campaign, about ten square metres were cleared and excavated. Apart from a very large collection of cleavers and handaxes, there were small tools on obsidian

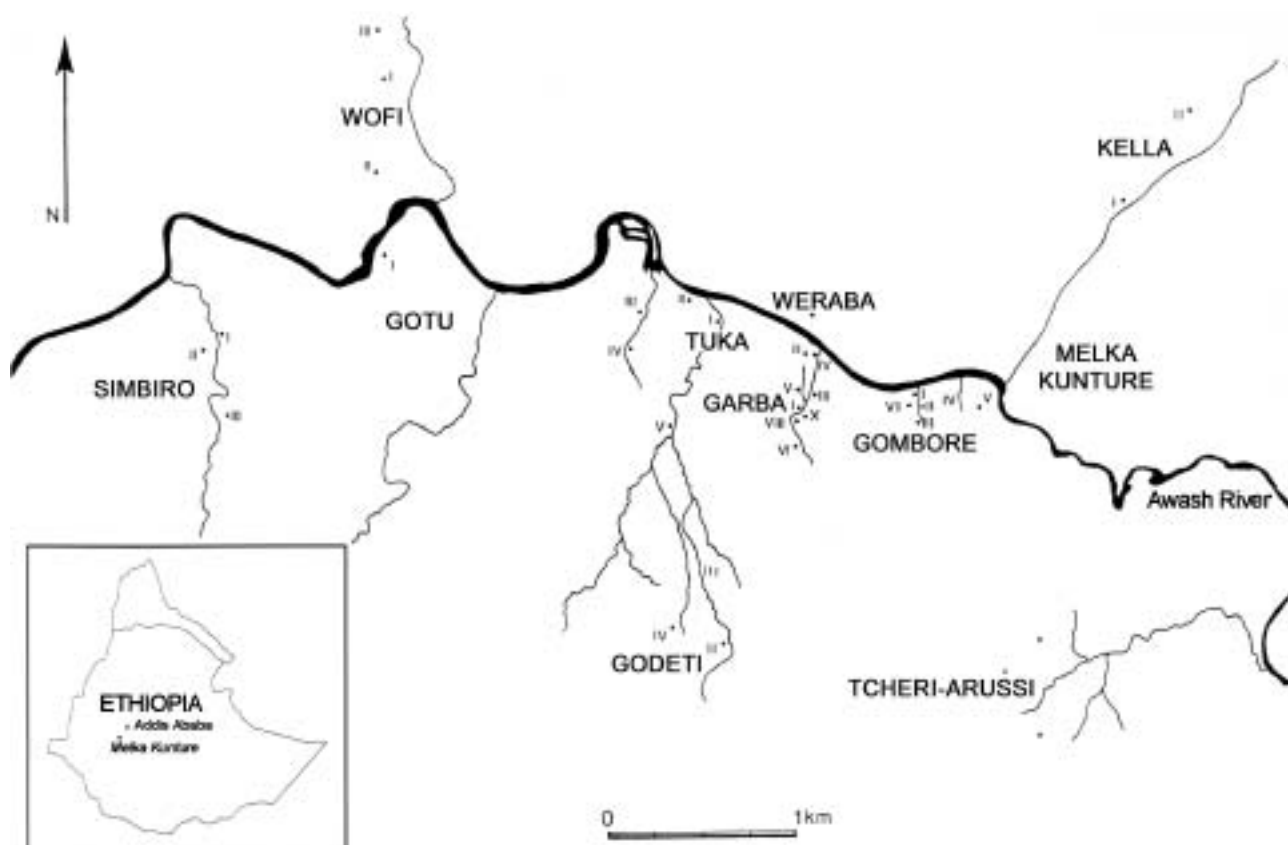


Fig. 3. Locations of different archaeological sites of Melka Kunture.

flakes as well as choppers, polyhedrons and end-scrapers on pebbles. The remains of a savannah fauna (bovids, antelopes and equids) were present but in a rather poor state of preservation.

Excavations and researches in Ethiopia - 1966-1981, 1985-1987 and 1993-1995

To conduct such an operation properly, it was necessary to have a sizeable budget to allow for the establishment of a camp site, a laboratory, a museum, and an interdisciplinary team of researchers. Lastly, the administration necessary for the preservation of the site had to be planned quickly to avoid pillaging. These tasks were tackled quite well, but at various times.

During the first stage between 1965 and 1982, several excavations were run concurrently. In 1982, the Ministry of Culture forbade foreign archaeological missions to work in Ethiopia until further notice. Excavations were then suspended until administration resumed in 1992. During this period the material was studied in Paris and Rome.

The second stage covers 1985, 1986, 1987 and 1992 when, during summer, a small group of prehistorians, Arlette Berthelet, Jean Chavaillon and Marcello Piperno, studied and catalogued a large part of the Melka Kunture collection that was stored in the laboratory built in 1975 to house the lithic artefacts and faunal remains from the site.

The excavations resumed in 1993. This third stage was restricted to the study of Gombore II (the main site and the more recent hippopotamus “Butchery site”) and to the partial restoration of the archaeological camp site. There were only a few participants: A. Berthelet, J.-L. Boisaubert, J. Chavaillon and M. Piperno.

In 1999, Marcello Piperno became responsible of the archaeological mission at Melka Kunture and since then has conducted the necessary fieldwork and laboratory studies with an Italian and French team to prepare an exhaustive publication and to organize an Open Air Museum in the site.

Preservation of the site

Since the discovery, and well before the first test excavations in 1965, amateur prehistorians and fossil collectors were alerted. In Addis Ababa among European and American communities it was considered good taste to have a handaxe, a hippopotamus tooth, or any other object coming from this site, on the mantle-piece. From 1965, signs forbidding collecting were put up at the village and entrances to the site. The response was indifferent. The local police, although informed, had much trouble preventing clandestine collecting and disturbance at the site, and local children were selling obsidian and pieces of bone to interested tourists. Even when we were on the site, visitors or clandestine operators tried to take a souvenir.

One solution was to appoint a guard at the camp site and at the site, but of course, although satisfactory, it was insufficient. In 1974, part of the Gombore site and the archaeological camp site at Garba were nationalised and assigned to the Ministry of Culture, which led to a permanent guard and installation of a fence. The pillaging was reduced, but it is only since 1993, and particularly since 1999, that real political protection has been achieved with the cooperation of the Centre for Research and Conservation of Cultural Heritage (Ministry of Youth, Sports and Culture), and mainly with active participation in the development of the site by the Oromo authorities presently in charge of protection.

A multidisciplinary team

To achieve the best results at such a site (4 to 5 km along the Awash and 2 to 3 km from one bank to the other) it was necessary to call on many specialists and to put together a team of Oromo workers. In

1966, J. Chavaillon asked Maurice Taieb, a geologist, to come to the site with a view to preparing a thesis on the Quaternary geology of the Awash Valley. At the same time, another researcher, Raymonde Bonnefille, a palynologist, also with a view towards a thesis, studied the pollens of the present flora and the fossil pollens. Nicole Chavaillon, prehistorian, and Jean Gire, illustrator at the Institute of Archaeology, took part in this first team (Fig. 5). Over the following years, other prehistorians took specific responsibilities: Claude Brahim, Francis Hours, Françoise Hivernel, Ouardia Oussedick, Grazia Maria Bulgarelli-Piperno and Marcello Piperno were joined in 1975 by Jean-Luc Boisaubert, illustrator and prehistorian, then by Arlette Berthelet, prehistorian. A polytechnician and researcher at the Institut Géographique National in Saint-Mandé, Yves Egels, did an altimetric survey of the site and produced a kind of topocadastral map with contours every metre. The map was published. It covered the Gombore and Garba regions and in 1976 was extended to other sites (Simbiro, Ouaraba, Gotu, Kella, etc.) with the help of Henry Gory who was also at the I.G.N.

Other researchers, even if they only came for a few field seasons, have also assisted, either on the excavation or with the study of particular aspects. They include, for example, Caroline Chavaillon, Catherine Chavaillon, Marie-Dominique Fallet, Sami Karkabi and, on occasion, Bernard Aubineau, Christian Chauveau, Lionel Colbert, Eric Godet, Michel Locko, Pierre Marchal, Joëlle Soulier and Philippe Soulier.

Finally we must mention several palaeontologists who identified and studied the microfauna (Jean-Jacques Jaeger, Robert Sabatier), the macrofauna (Denis Geraads in particular who contributes a detailed study to this volume, and François Poplin); and finally, those who studied the hominid remains: Yves Coppens, Brigitte Senut and Silvana Condemi. Particular mention is due to Philippe Cressier who submitted a thesis on the palaeo-magnetism of the Melka Kunture site in Strasbourg.

Many publications, reports, theses and articles relate to more than thirty years work on this Ethiopian site.

Research theme and excavation policy

From 1966, Chavaillon chose to manage two or three excavations or test pits at the same time. As the site is very extensive and the time period particularly long, it seemed interesting to be able to study and to

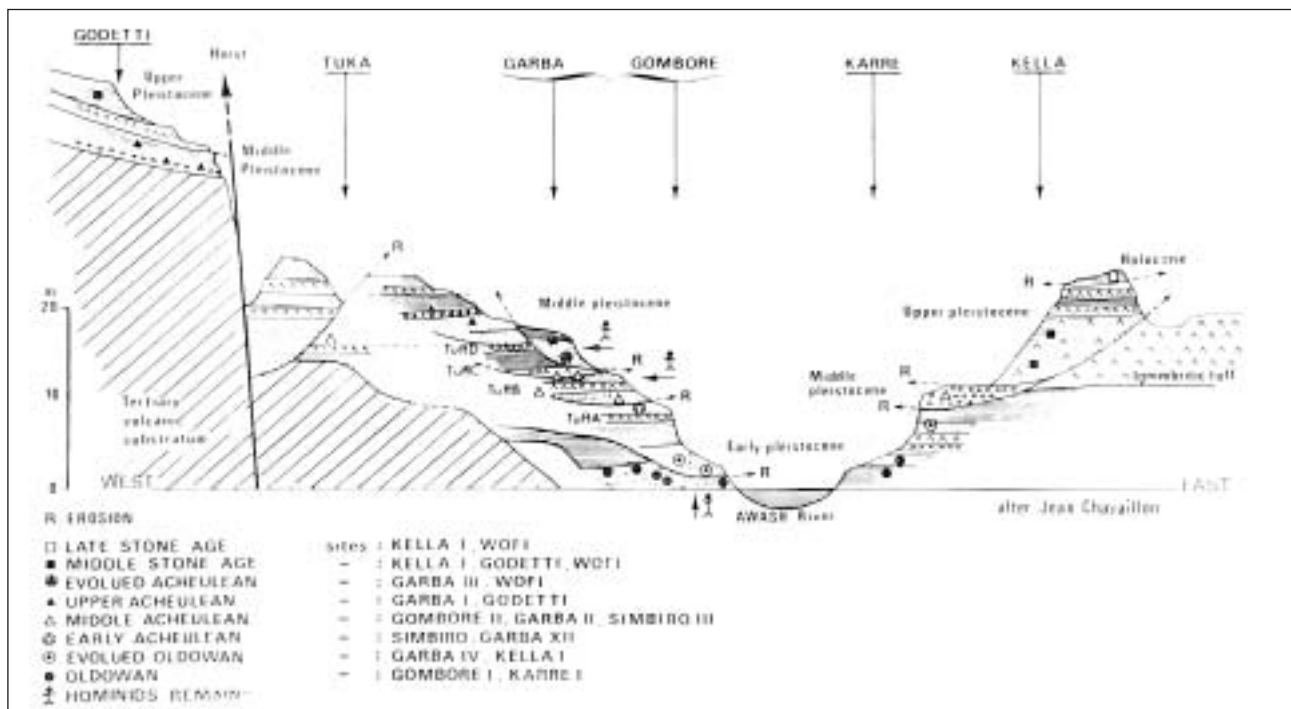


Fig. 4. Schematic section of Melka Kunture after Chavaillon (1979).



Fig. 5. The team of Melka Kunture on 1976.

compare the results of two or three sites of different ages that were widely spaced in time. That is why in some years excavations were conducted at the Oldowan sites of Gombore I and Garba IV, in parallel with those at the Acheulian sites of Gombore II, Simbiro III or Garba I, and even with that at Garba III (Final Acheulian/Middle Stone Age). In addition, this policy had the advantage of increasing the possibility of new discoveries but had the inconvenience of extending the duration of each excavation. Fortunately we were not short of time.

The particularly long duration (1966-1981) of excavations at Gombore I may seem surprising. In 1966 only a small test pit, hardly one square metre, was dug at the bottom of the gully, and there were long field seasons between 1967 to 1974. The following year the site was not opened as we began a large excavation at the Acheulian site of Garba I. Gombore I was resumed in 1976 and the testing might have stopped that same year, but an event decided otherwise: the discovery of a fragment of a hominid humerus in the deposits at the main site (Chavaillon *et al.* 1977). Given the position of this fossil that was found a few centimetres from the artificial limit where the excavation ought to have stopped, it seemed incongruous for this limit to be definitive. It was therefore decided to extend this excavation that had already yielded a huge number of lithic objects, at least for the duration of one field season. But, in November 1977, the waters of the Awash River flooded the excavation site. It was decided to abandon the re-opening of Gombore I and to begin another excavation on the Lower/Middle Acheulian site of Garba XII. This new excavation continued in 1978 and came to an end in 1979. Thus, it was only in 1980 that the Oldowan site was re-opened for the duration of one field season, and it closed the following year in 1981. In the end, eleven years were needed to clear and excavate about 240 square metres and collect some 10000 artefacts in often difficult conditions.

The excavation policy was aimed in two directions. One was vertical and chronological to allow information on typological and palaeo-ethnological evolution to be collected at sites representing different periods of Melka Kunture prehistory, and to compare one site with another, particularly among the occupation horizons of Gombore I, Karre I and Garba IV (Oldowan), Garba XII and Simbiro (Lower/Middle Acheulian), Gombore II (Middle Acheulian), Garba I (Upper Acheulian) and Garba III (Final Acheulian-

Middle Stone Age). An initial comparative assessment was made and published (Chavaillon *et al.* 1978, 1979). The second direction was horizontal to illuminate particular characteristics of parallel evolution at different sites; we could also compare the artefacts (inventory, characteristic typology or function) and layout or habitat structure of sites that could have been more or less contemporaneous, even if located in different regions or even distant countries.

A difficult final aim remains at stake: to discover the structures, artefacts or weapons of prehistoric people at Melka Kunture, to reconstruct the natural environment and the climate of the Ethiopian high plateau during the Early Stone Age, and lastly to try to know something about, if not understand, the behaviour of these semi-nomad populations living on scavenging, hunting and gathering.

Administration and funding

No excavation can be undertaken without authorisation. This is true in France, in Italy and naturally in any foreign country. In Ethiopia, it was easy in the beginning because Emperor Haile Selassie and his government were interested in prehistoric research as, for example, at Melka Kunture, and also in the Omo where he wanted the international mission to begin in the summer of 1967. Haile Selassie was a curious and enterprising Head of State. He required reports, attended talks on Melka Kunture and, later, on surveys in the Omo Valley. In December 1970, he himself went to the site of Gombore (Fig. 6) during excavations at Melka Kunture. The following year, the VIIth Panafrican Congress of Prehistory and Quaternary Studies, which he chaired, took place in Addis Ababa (Figs. 7-10). All this demonstrated the interest the Emperor took in research carried out in his country on human origins.

From the beginning, we had the support of Prime Minister Ato Aklheou, who visited Melka Kunture several times, and of Ato Kebede Mikael, Minister of the Institute of Archaeology. However, with the latter, there were some reservations linked to his Catholic faith and these led to many discussions on human origins. Father Pierre Teilhard de Chardin's written works helped to relieve our Minister's metaphysical worries. We were also indebted to the Head of the Institute, Ato Admassu Shiferaw, for efficient and unrestrained support.

One person must be particularly thanked. Ato Tekle Tsadik Mekuria gave efficient assistance, accurately and without reserve, and at the beginning of the Revolution facilitated the continuation of excavations during a troubled period. The Government succeeding that of Haile Selassie created a large Ministry of Youth, Sports and Culture, for which Ato Tekle Tsadik was the Minister. He supported the nationalisation of the excavation area at Melka Kunture, established a guard answerable to the Ministry, and facilitated the visits of foreign researchers during this difficult period. He visited us at Melka Kunture and had discussions with researchers, and Chavaillon found him always attentive and anxious to see work done under the best conditions.

Among the Heads of the Centre for Research and Conservation of Cultural Heritage, we must cite among others Dr. Berhanou Abebe, Ato Tadesse Tarfa, ethnologist, Ato Kassaye Begashaw who wrote a thesis on Ethiopian Archaeology at Paris I University, and Ato Jara Haile Mariam.

All foreign excavations must have a national Representative to control the progress of operations, fix national and local administration problems and act as an interpreter in the frequent interactions with the community and workers. Among those who have represented the Institute of Archaeology and then the Ministry of Culture at Melka Kunture for many years, we cite mainly Ato Kebede Bogale who acted also as a photographer, Ato Daniel Touaffe who was one of the Directors of the National Museum, Ato Afework, Ato Yoannes Zeleke, who took his leisure time to teach Amharic to Oromo workers, and Ato Shitaye Makasha. Most recently, Dr. Solomon Degefa and Ato Temesgen Makonnen represented the Oromo Authority.

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Fig. 6. Comments of Emperor Haile Selassie during the visit to the site on 1970.

“The findings of artefacts at Melka Kunture by professional researchers of ancient history gave us great pleasure.”

Finally, we cannot forget Francis Anfray, archaeologist seconded to the Institute of Archaeology, who faithfully and with his usual efficiency smoothed away difficulties and opened the doors of the review «Annales d’Ethiopie» for us where detailed reports about the excavations were regularly published. We are also reminded of the friendship of two researchers of the Archaeological Centre, Roger Schneider and Eric Godet, the latter having generously put part of his house at the disposal of the team.

However, this work would not have taken place if administration authorities in France and in Italy had not recognised the interest of the site and given the financial means necessary to carry it out. Two French organisations gave their assistance. One was the Commission of Excavations at the Foreign Office. We must mention among others professors, André Parrot, Jean Leclant, Georges Vallet, all archaeologists, as well as R. Guillemin, Yves Saint-Geours and Jean-Claude Jacq. For many years this organisation subsidized the excavation projects at Melka Kunture. Other assistance came from the National Centre for Scientific Research (CNRS) through its successive organisations such as the Quaternary Geology Laboratory, then the R.C.P. 230, and from the laboratory for Research in Eastern Africa, that was first linked to the Centre of Archaeological Researches (CRA) and then became a CNRS Laboratory. The «Abbey» review, edited by the CNRS, produced and published work on the History and Prehistory of Ethiopia, particularly that emanating from this laboratory. Finally, since 1972, the mission at Melka Kunture benefited from the very useful assistance of the Italian Minister of Foreign Affairs, of the Italian Institute of Human Palaeontology, of the University of Naples “Federico II”, then of the IsIAO, and finally the University of Rome “La

Sapienza". We must also insist on acknowledging the help we always received at the French and Italian Embassies and particularly the profitable relationships we had with the Ambassadors and their cultural services.

Organisation of the excavations

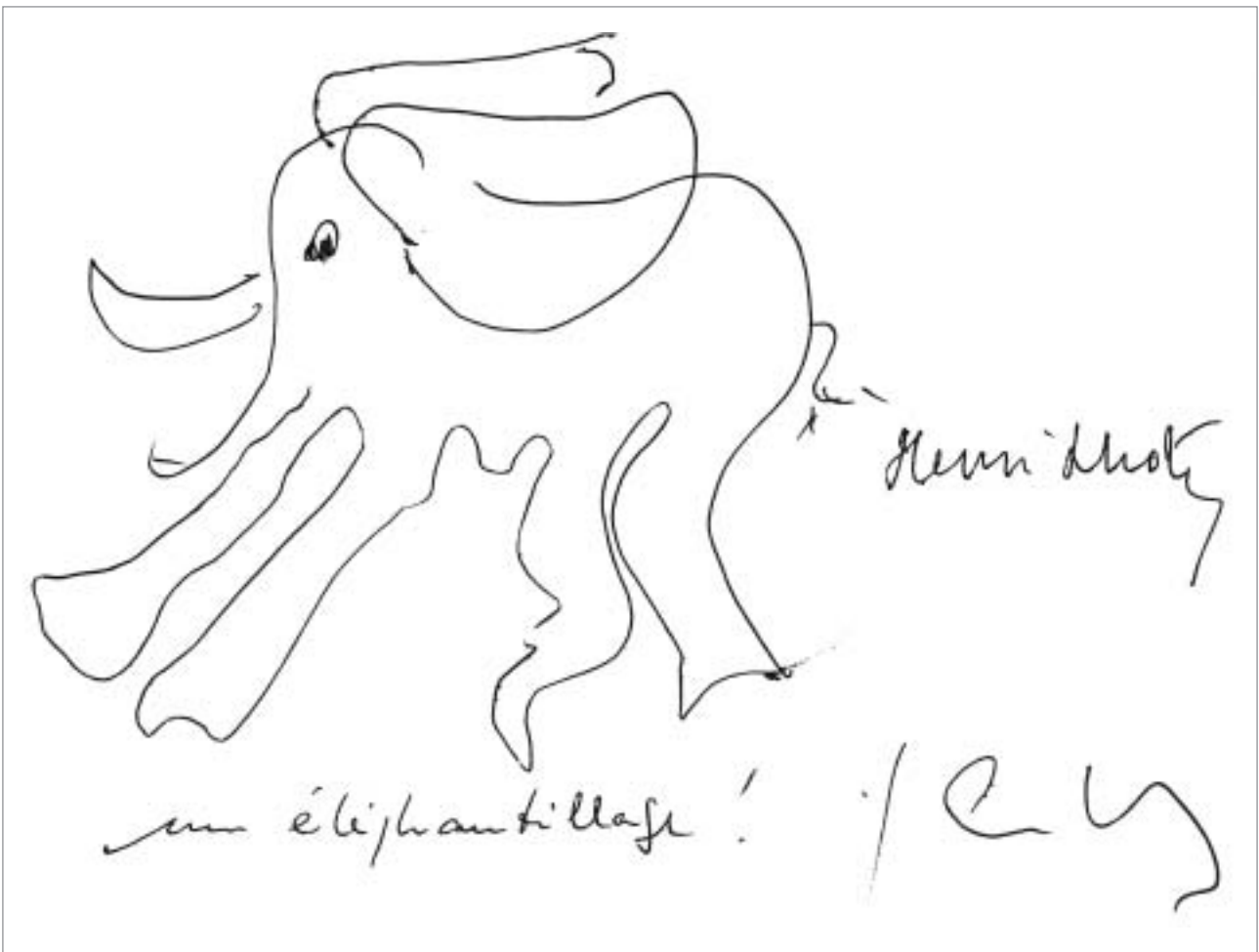
Excavations in Africa or other foreign regions cannot be undertaken in the same way as they are done in Europe. The cost of travel limits the number, and student manpower from France or Italy cannot be used in these regions. On the advice of L.S.B. Leakey, and following his example, J. Chavaillon trained Oromo workers to specialise in prehistoric excavation. Very soon some of them showed real aptitude for this meticulous work and participated in the excavation season each year. One of them, Ato Rorissa Bogassa, begun with Chavaillon in 1965 and he was still a team member with Piperno in 2002.

Another aspect was the organisation of the excavation. Once a site had been located, usually as the result of a geological or topographic survey, we did a very small test pit (Gombore III, Balchit) to decide whether or not to continue excavation. Sometimes this test pit looked like a small 3 x 4 m excavation, like the Karre I Oldowan site, the Simbiro III Lower/Middle Acheulian site, or the Kella I Late Stone Age site.

It has been most enjoyable & stimulating
to myself & myself to have been able to
come to Ethiopia & to see the remarkable
contribution that you & your collaborators
have been making towards unravelling
the remote past of mankind in this
staggering part of Africa
Raymond C. Dart
Dec. 8. 1971

A visit memorable for prehistory stratigraphy & bonhomie.
Glynn Isaac

Figs. 7 and 8. Comments of Raymond Dart (top) and Glynn Ll. Isaac (bottom) during their visit at Melka in 1971.



Très heureuse d'avoir pu revenir à Melka Koutouké,
 3 ans après mon premier passage, et d'avoir vu
 réalisées pleinement toutes les espérances de 1967.
 J'espère de nouvelles et plus passionnantes découvertes
 encore - Ces réalisations comblent les vœux que
 je formais lors de nos randonnées sahariennes
 d'avant 1960

Henriette Alimen

Figs. 9 and 10. Comments of Henry Lhote and Yves Coppens (top) and Henriette Alimen (bottom) during their visit at Melka in 1971.

Usually, however, we did a wide horizontal scrape, a method used and recommended by André Leroi-Gourhan. We cleared a surface over several square metres and after taking photographs and making a horizontal sketch plan of the deposit, we «dismantled» it object by object, noting the coordinates and altimetric data. This could then lead on to the excavation of a different test trench each year. The test pits were subject to the same rules.

Typological study of the lithic objects was done during or after each field season. For each item, various data were entered into an inventory book and transferred to a card with other information and a drawing. The same applied to faunal remains. During the early years, this work was done at the laboratory in France. Then, at the request of the Ethiopian authorities, it was carried out on the spot or in Addis Ababa.

In the Ministry of Youth, Sports and Culture in Addis Ababa, a Laboratory was built with French funding (Commission of Foreign Excavations) to house the Melka Kunture collections. The building was presented to the Centre for Research and Conservation of Cultural Heritage in 1975. It comprises a laboratory of about 250 square metres and several rooms that were used as offices and for storage and study.

Another achievement was the establishment of an archaeological camp on the site of Melka Kunture. Various buildings, rectangular houses, round houses, a kitchen, common room, guardhouse, etc., were built at Garba in local style. This developed progressively from 1970 and is still in progress.

Finally, a project that dates from the early years but that has been constantly postponed and questioned, has been the building of an Open Air Museum at Melka Kunture. This is in the process of realisation thanks to the will of M. Piperno and to the encouragement and assistance given by Ethiopian and Oromo authorities.

History of Piperno's activities at Melka Kunture (M.P.)

After the end of 1995, the last year of the French mission at Melka, there was a period of stasis in the research because Chavaillon found it impossible to continue directing the project for the CNRS.

However, many things remained to be completed and, most of all, both Chavaillon and I felt a moral duty to publish at least part of the large amount of data collected by the French mission. Such data, however, needed to be at least partly revised at the level of graphic and photographic documentation; it was also necessary to check stratigraphic controls in the field before final publication.

The plan was to undertake a further mission to complete the previous research before starting new excavations. Two attempts were made, a French one directed by Denis Geraads and an Italian one directed by myself, with the idea of sharing the various tasks. They failed because of the lack of funding on the French side, and because of the paucity of definitive publications. It was a kind of vicious circle: publication of the excavations at Melka Kunture required several years of further fieldwork with different specialists, but these activities were not funded by the French because the previous research had not been published.

It was therefore decided to start an Italian Archaeological Mission with the above-mentioned goals and this was facilitated by the intervention of many people who must be acknowledged here.

Firstly, Chavaillon himself, with a touching letter to the Ethiopian authorities, suggested and supported the transition. Secondly, I would like to stress that the Ethiopian authorities behaved very correctly when Ato Jara Haile Mariam, Head of the Centre for Research and Conservation of Cultural Heritage of the Ministry of Youth, Sports and Culture and Dr. Yonas Beyene, Director of the Department of Archaeology of the same Centre, asked Chavaillon for his permission before authorizing the new mission to Melka Kunture.

On the Italian side, the Mission began with unexpected approval from several quarters, such as the Ministry of Foreign Affairs, initially at the suggestion of Councillor Eugenio Campo who supported the project from the start, and then with the fundamental assistance of the former Italian Ambassador to Ethiopia, Maurizio Melani, without whom nothing could have started. Later we had the equally important support of the Ambassador Marcello Ricoveri and of the present Ambassador Guido Walter La Tella.

Between 1998 and 2001, the continued good offices of the chancellor of the University of Naples "Federico II", Prof. Fulvio Tessitore, were just as helpful. It is only thanks to him that the Italian Archaeological Mission could rely on sufficient funding to meet its goals from the beginning.

Since 1999, the presence of the representatives of the Oromia Culture and Tourism Commission, in particular Dr. Solomon Degefa and Ato Temesgen Makonnen, has been a very important factor in the development and successful progress of the mission.

1999

The first Italian mission was conducted between January 26th and March 3rd 1999. The participants for various periods were the geologists of the University of Naples "Federico II" (Paola Romano and Antonio Santo), collaborators at the same University (Ornella Cuomo) and a final year student Rosalia Gallotti, Grazia Maria Bulgarelli of the National Museum "L. Pigorini", Ivana Fiore collaborator of the same Museum, and Silvana Condemi (CNRS). Among the French researchers were Jean Chavaillon, Arlette Berthelet, the geologist Jean-Paul Raynal (University of Bordeaux, CNRS) and the volcanologist Guy Kieffer (University of Clermont-Ferrand, CNRS).

In addition to an accurate re-analysis of the geomorphological, sedimentological, lithological and volcanological aspects of the site, the mission permitted the study of the mandible of the *Homo erectus* child recovered in the 1982 sounding in Level E at Garba IV, the beginning of the archaeozoological study of the materials from the sites of Gombore I and Garba IV, and a revision and improvement of the graphic documentation of the materials from the Oldowan and Developed Oldowan sites.

For the first time, the Ethiopian authorities allowed the export of samples for petrological and sedimentological analyses, starting a procedure that later became common.

During the mission, several meetings with the Ethiopian authorities, both at Addis Ababa and Melka Kunture, were devoted to the possibility of planning an Open Air Museum in the site of Melka Kunture following a preliminary project (with later substantial modifications), already proposed by Chavaillon in the 1970s, to transform the site itself into an Archaeological Natural Park open to visitors (Piperno 1999a, 2001a, 2003).

The draft document resulting from these meetings was circulated to the Ethiopian authorities in the Ministry of Youth, Sports and Culture, to the French, Italian and Swiss ambassadors and to the director of the Centre Français des Etudes Ethiopiennes; in April 1999 the executive version of the same proposal was prepared and sent to the same authorities.

2000

The second Italian mission was carried out between January 18th and February 25th, 2000, with the aim of continuing the documentation and the final study of the Oldowan sites that represent the main focus of this monograph on Melka Kunture.

Almost the entire Melka Kunture camp (rooms, laboratories, kitchen) underwent quite extensive restoration. In particular, a new entrance to the camp was organized with a wrought iron gate and two

didactic panels, one placed at the junction of the road to Butajira and the trail leading to Melka, and a second one at the entrance of the camp. The building within the camp that was meant for the Museum was completely restructured, and was followed by a new display on the material from Melka Kunture, integrated with posters and panels with captions in English, Amharic and Oromo.

Inside the camp a reforestation program using local species began and continues until the present, thanks to the particular interest and eager collaboration of the representatives from Oromia National Regional Government and, through the years, of the five guards in charge of security at the site.

On the scientific side, since 2000 the geological and volcanological revision of the site was undertaken exclusively by the French researchers, Jean Chavaillon, Jean-Paul Raynal and Guy Kieffer, with the addition of a final-year geology student at the University of Aix-Marseille, Guillaume Bardin. The paleontologist Denis Geraads completed the analytical study of all the paleontological materials of Garba IV and a revision of the fauna from the other sites.

Silvana Condemi completed the palaeoanthropological study of the hominid remains from Melka Kunture, while Ivana Fiore started to extend the archaeozoological analysis of the remains from Gombore I.

The archaeological materials were controlled by Jean Chavaillon and myself, as well as by Arlette Berthelet and Grazia Maria Bulgarelli, with the essential contribution of Massimo Pennacchioni, who revised hundreds of old drawings to complete a huge amount of graphic documentation.

In the same year a professional photographer, Lorenzo De Masi, an expert in the photography of prehistoric materials and with particular reference to the lithic assemblages and faunal remains, established an archive of several hundreds images of materials from almost all the excavations of the French mission and with particularly good pictures of the Awash River and the camp at Melka Kunture.

A small publication with images (Bulgarelli and Piperno 2000), mainly drawn from this new archive, was published in the same year and dedicated to the long association of Jean Chavaillon with Melka Kunture.

One of the activities that lasted through most of the 2000 mission, was the preparation of the text and the selection of illustrations, some of which were from the personal archive of Jean Chavaillon, for the publication of a Guide dedicated to the most ancient Prehistory of Ethiopia and to Melka Kunture. The Guide (Berthelet *et al.* 2001), composed of 32 cards with texts in Italian, English, French and Amharic, was published in December 2001 and represented probably the first tangible result of the activities of the Italian Archaeological Mission.

For some years, as part of the activities carried out at the University of Naples “Federico II”, especially by Rosalia Gallotti during the 2000 mission, it was possible to complete the development of a complex GIS application for the archaeological Levels C and D at Garba IV. Thanks to the help of Andrea D’Andrea of the University of Naples “L’Orientale”, the work has been presented at several scientific meetings in Italy and abroad since 2000. As an innovation in the taphonomic interpretation of large prehistoric sites that have been excavated over a wide area, the GIS mapping of Garba IV represented a significant turning point for the interpretation of the site and its final publication.

The usefulness of the results obtained was so evident that it was decided, together with Jean Chavaillon, to extend the GIS application to the site of Gombore I. Residual funding from Chavaillon made it possible to allow for GIS mapping to be completed at Garba IV, Gombore I and Karre by the end of 2001. It was then possible to elaborate and study a theoretically infinite number of thematic maps and to obtain a comprehensive taphonomic interpretation of these large Oldowan sites. Such interpretations represent in fact an important part of this monograph.



Fig. 11. The restoration of the Gombore II “Butchery site” in 2001.

this area to the Awash River that represents, within the project for the Park, an important natural attraction; and, finally, the presence in the same area of several other sites excavated by the French mission (Gombore I, Gombore Iy and Gombore II) where a large part of the sequence of Melka Kunture is documented and will be illustrated by appropriate didactic panels.

The presence of the Italian restorer Stefano Ricci was essential for the preparation of more than 250 casts of paleontological specimens and lithic artefacts for the display of the Gombore II “Butchery site”. His commitment, the results of which are now visible in the area of the Archaeological Park, was considerably enhanced by the collaboration of the National Museum in Addis Ababa that allowed its best technician, Alemu Admassu, known throughout the scientific world for his ability to produce casts of the most famous hominids recovered in Ethiopia, to participate in the project (Piperno 2001b).

During the same mission, twenty didactic panels were shipped to Ethiopia and placed at Melka Kunture. These panels have text in English and Amharic derived from the cards of the Guide and display the general stratigraphy of Melka, its prehistory, the fauna and the hominid remains (Fig. 12). Another panel was placed near the reconstruction of the Gombore II “Butchery site”.

Several test trenches, limited to the excavation of a few square metres in the area of Gombore II, allowed for the identification of an area that would be suitable for the excavation that was meant to represent the main attraction within the Open Air Museum.

During the same 2001 mission, a survey was carried out in the area of Balchit, about 6 km from Melka Kunture. After many years, it was possible to revisit the original outcrops of this volcanic raw

2001

The third Italian Archaeological Mission took place between January 22nd and February 28th 2001, with the participation of Jean Chavaillon, Arlette Berthelet, Jean-Paul Raynal, Guy Kieffer, and Rosalia Gallotti. One of the main goals of the mission, besides the continuation of the geological and vulcanological studies and the thorough sampling of sediments and rocks by the French geologists, was the beginning of the development of the Open Air Museum. With this aim in mind, two main objectives were identified that could be realized during the period of the mission: the enclosure of an area of about one hectare and a half for the permanent exhibition of some archaeological sites, and the presentation, by means of casts, of the “Butchery site” of Gombore II, discovered and excavated by the French mission in 1974 and again in 1993-95 (Fig. 11).

Apart from the great archaeological and paleontological interest of Gombore II, the enclosed area within the Open Air Museum was selected on the basis of several considerations, among which is its proximity to the camp of Melka Kunture that facilitates surveillance by the guards; the proximity of

material, to study its characteristics and to evaluate its importance as a possible source for raw material during prehistoric times (see Poupeau *et al.* in this volume).

The beginning of a systematic study of Balchit, mainly based on a provenance analyses of the obsidian used on the various sites at Melka Kunture, demonstrated the great importance of the site as a geological and archaeological deposit. With the agreement of the Ethiopian authorities, it was decided to promote this locality within the framework of the activities of the Italian mission.

2002

Many of the projects scheduled from the beginning of the Italian mission and begun in the first years were concluded between February 17th and March 29th 2002. With M. Piperno the participants were Jean Chavaillon, Arlette Berthelet, Grazia Maria Bulgarelli, Rosalia Gallotti and a final-year student of the University of Naples "L'Orientale", Federica Sulas.

The French archaeologist Pierre-Jean Texier also participated in this mission with his contribution on the knapping techniques employed for the lithic industry.

The main activity of the fourth mission was the excavation over about 40 square metres of a Middle Acheulian paleosurface (Fig. 13) and the construction of a large roof in local style to cover and protect the excavated area.

This paleosurface, located the year before by means of limited test trenches, turned out to be exceptionally rich in faunal remains (mainly hippopotamus and different species of bovids) and a lithic industry characterized by pebble tools, handaxes, cleavers and tools on flake of basalt, trachyte and obsidian.

The choice of this area for display in the Open Air Museum was suggested by the fact that it is located close to the area of Gombore II that had already been prepared with casts the year before. It represents a widespread Acheulian occupation floor that yielded some *Homo erectus* skull fragments. Lastly, it is well placed chronologically with an age between about 0.8 Ma and 0.75 Ma.



Fig. 12. The actual Museum with some didactic panels in the camp of Melka Kunture.



Fig. 13. The excavation of the Open Air Museum area at Gombore II during 2002.



Fig. 14. The covering structure of the Open Air Museum.

During the excavation, preliminary consolidation and conservation was carried out on all the faunal remains and on the artefacts made of fragile materials such as obsidian.

An area 150 cm wide was left free for visitors circulation around the entire perimeter of the excavation. The didactic organization of the area includes the positioning of some panels in English and Amharic around the excavation, and the indication of some artefacts and paleontological remains of particular interest that will be illustrated *in situ* with short explanations. These same specimens will also be marked on the general map.

The shelter of the excavation covers an area of more than 100 square metres. The peripheral structure on which the large roof is based, was completed with 24 wooden posts, quadrangular in section (15x15 cm), four metres high and 150 cm apart, that were cemented into the ground for about one metre after anti-termite and anti-humidity treatment (Fig. 14).

The tops of the posts are connected to wooden beams running around the perimeter of the entire structure and transverse to it. The function of these beams is to support the weight of the roof and avoid cluttering the excavation area with further supporting posts.

Above this structure, a larger roof was built in local style covering the whole excavation area, as well as the visitors circulation zone and an external peripheral area, and serves as a protection against rain.

The roof rises at the center of the structure to a height of more than 6 m above the ground; the four inclines are supported by four vertical posts founded, as already mentioned, on the horizontal structure connecting the 15x15 cm posts. The construction material employed is entirely of vegetable origin according to the current regulations in the protected area of Melka Kunture. In addition to the above mentioned 15x15 cm wooden posts, it consists of eucalyptus posts of different diameter and length covered by bundles of straw more than 30 cm thick, and tied with a hemp rope.

The shelter was finally completed with a wooden fence, also treated, with a variable height of about 1.5 m designed to block animals from entering the exposed excavation area.

During the same mission, further restoration was carried out within the camp of Melka Kunture, in order to increase the area for the Museum.

One of the buildings constructed by the French archaeological mission that was located near the Museum and had already been restored in previous years, was completely restructured. This building was devoted to exhibition of the materials from the nearby site of Balchit and of obsidian reference materials from different sites at Melka Kunture, accompanied by a series of posters illustrating different aspects of the locality at Balchit.

In addition, a portion of paleosurface of about 4 square metres with several hundred obsidian artefacts was located in front of the entrance to this building in order to reconstruct, although at a reduced scale, one of the extensive obsidian occurrences that characterize the area.

Several people took part in the fifth Italian Archaeological Mission in Melka Kunture (14 November - 22 December 2002). Along with the usual research team, composed of Jean Chavaillon, Arlette Berthelet, Jean-Paul Raynal, Guy Kieffer, Grazia Maria Bulgarelli and Rosalia Gallotti, there were some graduate students together with students of the Specialization School of the University of Rome "La Sapienza" (Carmine Collina, Carmen Santagata, Teresa Varricchio and Carolina Maestro) who actively contributed to the further excavation and survey of Gombore II. Marianne Hirbeck-Raynal, who took upon herself the task of translating into English a considerable part of the French texts for the monograph, was also present during the mission.

During this campaign, we completed the excavation of the Gombore II area and began a 1:10 mapping of the uncovered paleosurface. The roofing of the area was completed by covering it with a thousand tight-

ly interwoven reeds, which guarantee total insulation, as well as improving its aesthetical appearance considerably.

The most significant achievement of the November-December 2002 campaign, however, was the shooting of a professional quality film on Melka Kunture. Over 13 hours of filming was done by Sante Martin and Roberto Conti of KSD Film Production in Rome. The film was completed, thanks to the collaboration of Suliman Dadafo, former Head of the Office of Information and Public Relation of Oromia by Diriba Megersa, former Head of the Oromia Television, and by Adibaru Fitawek under the active and competent direction of Solomon Bekele.

2003

The sixth Italian Archaeological Mission at Melka Kunture lasted from November 25 to December 20. Participants included Grazia Maria Bulgarelli, Rosalia Gallotti, Carmine Collina and Carmen Santagata. We completed the mapping of the over 6000 objects strewn over the paleosurface of Gombore II. The plans drawn on graph paper in the field were scanned and joined using the MapInfo Professional® data and image management software.

A preliminary identification of faunal remains, mainly attributable to bovinds, suids, equids and hippopotamus, was also carried out, together with a detailed typological and technological analysis of part of the lithic industry (2000 artefacts from one half of the area). In view of the musealisation of the paleosurface, we did not remove the materials from their original position; the analysis was hence limited to examining the visible part and measuring each artefact, after numbering it on the plan.

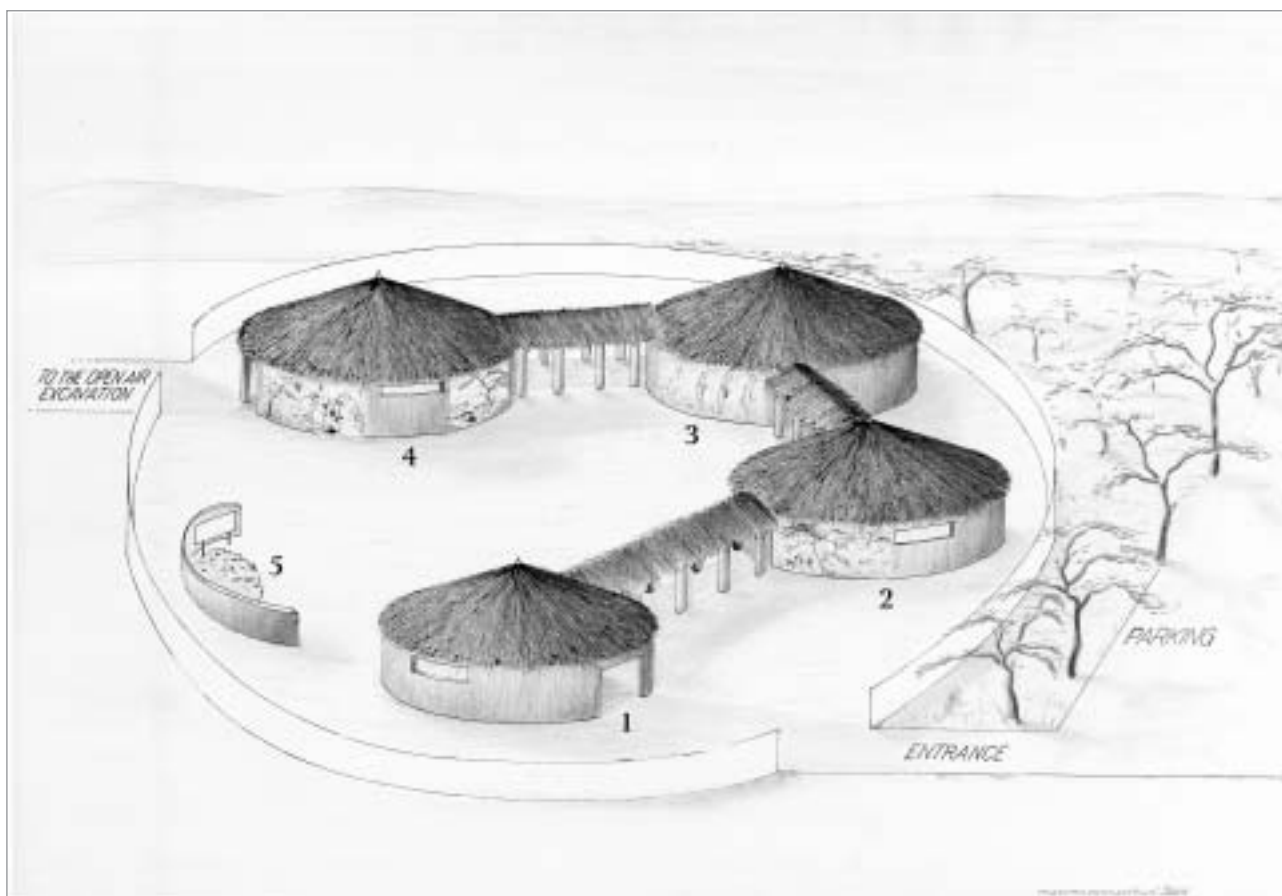


Fig. 15. View of the four pavilions (1: Reception; 2: Geology; 3: Paleoanthropology; 4: Prehistoric archaeology) and of the Balchit area (5) of the new Museum of Melka Kunture. *Drawing by M. Pennacchioni*

We also produced an especially accurate photographic documentation of the excavation and part of the excavated material. These photographs will be used in a forthcoming publication of a small guidebook of the two sites included in the Open Air Museum.

In collaboration with the Authority for Research and Conservation of Cultural Heritage, the Oromia Culture and Tourism Commission and the Italian Institute of Culture at Addis Ababa, it was decided to publish a brochure in English and Amharic, providing concise information about Balchit and the Open Air Museum of Melka Kunture, and indications about how to visit the latter.

During 2003, the protected area of Melka Kunture was much extended, thanks to the active interest of Minister Teshome Toga (Ministry of Youth, Sports and Culture) and of the President of the Oromia Regional State Juneydi Saddo, who are concerned with providing better protection for the vast archaeological areas explored since the 1970's. Equally decisive for the future of Melka Kunture was the allocation of an important grant by the Oromia Culture and Tourism Commission for the construction of the enclosure of the new protected area and, especially, of four pavilions destined to house the new site Museum (Fig. 15), together with several infrastructures such as water, electricity, road and parking lot, following a project presented by the Italian Archaeological Mission in its second year of its activity.