

■ ETHIOPIA

Excavations and Surveys in Mursiland, S.W. Ethiopia, May-July 2009: A Preliminary Fieldwork Report

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Introduction

This brief article represents an interim statement on the first season of field survey and excavation carried out between May and July 2009. Although the broad geographic focus of the project is the Lower Omo Valley (Figure 1), a targeted sample is currently the object of investigation in the territory known as Mursiland, approximately 45km southwest of Jinka, the nearest urban centre. This sample area, known locally as Dirikoro (E36.6° N5.42'), was identified for survey largely owing to over forty years anthropological and ecological research of the inhabitant communities and their environs (Gil-Romera et al. in press; Turton 1973). Primary aims are centred upon the changing connections between themes of landscape, memory and identity, correlating historical, anthropological and archaeological data. This is regarded as an important means towards understandings the later human inhabitation of a landscape that has been dominated by palaeoanthropological research into the earliest of human origins (MacDougall et al. 2005). Furthermore, taking into account the rich tradition of local oral histories, our interest has also been con-

cerned with the means by which the archaeological landscape has been moulded into contemporary local worldviews, and the effects on their shape that a practical archaeological engagement entails.

Little is known of past human groups in Mursiland before oral history accounts depict an influx of population movement into the region a couple of centuries ago. This reflects knowledge of the Lower Omo Valley in general, where stone tool industries have been found dating to 2 million years BP with evidence of the earliest anatomically modern humans, whilst understanding of subsequent periods remains absent. The potential for archaeology has been inferred from a number of sources. Surface finds of bone points dated to 10,000 – 8,000 BP have been noted in the southwest of the Lower Omo Valley (Brown 1975), and environmental assessments (not with an archaeological purpose) also imply a fairly constant human occupation over several thousands of years. In a policy document for the Omo National Park, for example, the savannah east of the Omo River is thought to be indicative of an environment shaped by long-term burning practices (Stephenson and Mizuno 1978). Moreover, observations of potentially upstanding architectural features of unknown origin were brought to the authors' attention by David Turton in 2008 (see also Turton 1988: 270). Appearing in photographs from 1969 as circular platforms of large concentric stones with possible upstanding stelae, local informants attributed their construction to pre-Mursi communities, thus providing an additional signal to the area's archaeological potential. This should not seem that surprising. Indeed there are well-known monumental stone cairn and disc sites around Lake Turkana and numerous megalithic stelae and cairn constructions towards Konso in the north east.

A number of logistical challenges are taken into account whilst preparing for and carrying out fieldwork in Mursiland. Access and drought were the most prominent in 2009. However, the project as a whole strives to actively address some of these obstacles through participation with local communities. Such a participative approach has been introduced elsewhere by the authors (Clack and Brittain 2010, in press), and is designed to engage local communities from the outset of fieldwork whilst promoting archaeological forms of knowledge sensitive to cosmopolitan and local concerns (*pace* Meskell 2009). Moreover, the desire has been from the outset to counter

Figure 1: Location of the broad area of research interest in the Lower Omo Valley.



claims that the Lower Omo Valley, particularly within the limits of the National Park, was a 'pristine wilderness' or 'natural wasteland' in the past as it is often characterised to be in the present (Turton, in press). Although this report is concerned more with the technical outcomes of the fieldwork data, this participative approach is mentioned here as an important facet that guides both methodological and research agendas.

Location

Mursiland occupies a territory roughly oblong in shape, bounded to the east by the River Mago, to the north by the River Mara, and to the west and south by the River Omo. Most of this territory consists of the 'Mursi Formation' – a volcanic plain – which slopes from east to west. The lowlands are overlooked by the Dara range stretching from southwest to northeast, with Dara Mountain prominent at 1,666m asl. Dirikoro is situated on the foothills of the Arichigirong hills that run near parallel to the larger Dara range, and are flanked by the perennial Elma River.

Numbering approximately 10,000 people, the Mursi are one of eight distinct ethnic groups that inhabit the Lower Omo Valley. These groups speak six different languages derived from Afro-Asiatic and Nilo-Saharan dialects. Relations between neighbouring ethnic groups are complex, and the cultural and linguistic diversity is unique for such a relatively condensed locale.

Today the Mursi practice a mix of agro-pastoralist subsistence, with options regulated by the fluctuating environment. The annual rainfall of 300 – 800mm is episodic, falling between March and April, and October and November, meaning that the climate ranges from semi-arid to arid, with the northern areas significantly wetter than those in the south. Cattle-herding, rain-fed and flood-retreat cultivation, fishing, hunting and gathering are thus variously employed. The permanent River Omo, flanked by forest, flows through landscapes changing from moist savannah in the north to dry savannah and grassland in the south. It is a major waterway of over 1,000km feeding into Lake Turkana to the south. Over the last century, fluctuations in the level of Lake Turkana by almost 20m in height signifies the irregu-

larity of rainfall across the Lower Omo Valley (Butzer 1971), and oral narratives recount various episodes of variable saturation before and during the Mursi inhabitation of this environment. It is through such narratives that the Mursi account for the unusual architecture described in more detail below.

Methodology

Detailed survey is still underway at Dirikoro. For this first season the primary focus was a characterisation of the possible platform structures as identified in the ethnographic field archive of David Turton. The thickness of the vegetation was a challenge for survey by foot, although a broad area of approximately 500m radius could be traversed in detail. Elsewhere, additional survey on foot was initiated towards the banks of the Elma River where perennial flooding often precludes the seasonal movement of cattle. In addition to a drawn plan and photographic record, all surface finds and upstanding features were assigned coordinates with a Suunto X10M military issue GPS watch to sub-metre accuracy, and a handheld Garmin eTrek H GPS unit at 5-10m accuracy. These were then plotted into various GIS software packages. In addition, small scale trial excavation was carried out on one poorly preserved platform for an indication of future excavation potential.

Individual and group interviews were carried out with members of the Mursi communities principally those residing close to Dirikoro but also at other locations including Mako, Maganto and Nortonmei. These were directed towards Mursi understanding of the past inhabitants around Dirikoro and the origins and function of the platforms, as well as historical changes in the climate and subsequent human response to such changes. Interviews were digitally documented as an audio mp3 and video record. One of the aims of this documentation process has been the correlation and comparison of this new field data to accounts and notes transcribed in the early 1970s in the archive of David Turton whose long-term ethnographic research with the Mursi, as noted, has informed this study from the outset. This offers substantial context, and facilitates an approach whereby known dates and events can be used as fixed points through which local memories can be related.

Figure 2: Plan showing the north-westerly alignment and clustering of Dirikoro platform features.



Preliminary Results

Platform features

Fifteen platforms were identified ranging between 2.5 and 13 metres in diameter. These were sited in a broadly north-westerly alignment in three clusters (Figure 2), although further investigation may reveal additional structures in between. Eight of the platforms were cleared of vegetation. This revealed

elaborate designs of locally procured and carefully placed cylindrical and sub-circular volcanic stones in a concentric order with a single linear gully from the centre to the perimeter of the circle. These stones ranged in size from that of a clenched fist up to considerably larger examples approximating 80cm by 25cm. With the exception of one of these platforms (site 15), the gully was consistently oriented to the west (the gully of site 15 was oriented to the east) and was either filled with a line of smaller stones or was left as an open space.

In the process of clearing the surface of the platforms it was evident that varying quantities of fragmentary bone lay between the stones. The degree of deposition was tested on one half of site 3, measuring 6.5 metres in diameter (Figure 3), from which over 700 grams of burnt and unburnt bone were recovered. Some of these had clearly been exposed to high temperatures. These represent mixed bovine and caprine species (Vida Rajkovaca, personal communication) that will undergo full analysis once site 3 is completely excavated in 2010. In addition to the bone fragments, 35 fragments of volcanic stone were also recovered from between the platform stones of site 3. These comprised a mix of clearly struck and less diagnostic flakes, potentially from the dressing of stones utilised within the platform architecture (Laura Bassell, personal communication).

Platform site 2 was also subjected to a more intensive investigation between the stones, again revealing burnt and unburnt bone fragments and struck and undiagnostic flakes of volcanic stone. With a diameter of 2.5 metres, this platform was in the poorest condition of the fifteen identified platforms, possibly having been subject to recent animal and human disturbance. However, its form was intact enough to identify over 60 medium sized volcanic stones in a broadly concentric order, with a possible blocked gully oriented to the west. A single quarter section was excavated to a primary surface beneath that partially overlaying the platform (Figure 4). It was upon this primary surface that the platform had been constructed. Two features were identified at this level. The first was a hollow or pit at the centre of the platform. Partial excavation revealed a cut with a shallow break of slope, containing a single find at a depth of 15cm of a struck flake of a stone different to that utilised within the platform. Further investigation of this feature is forecast for 2010.

Figure 3: Plan of feature 3.

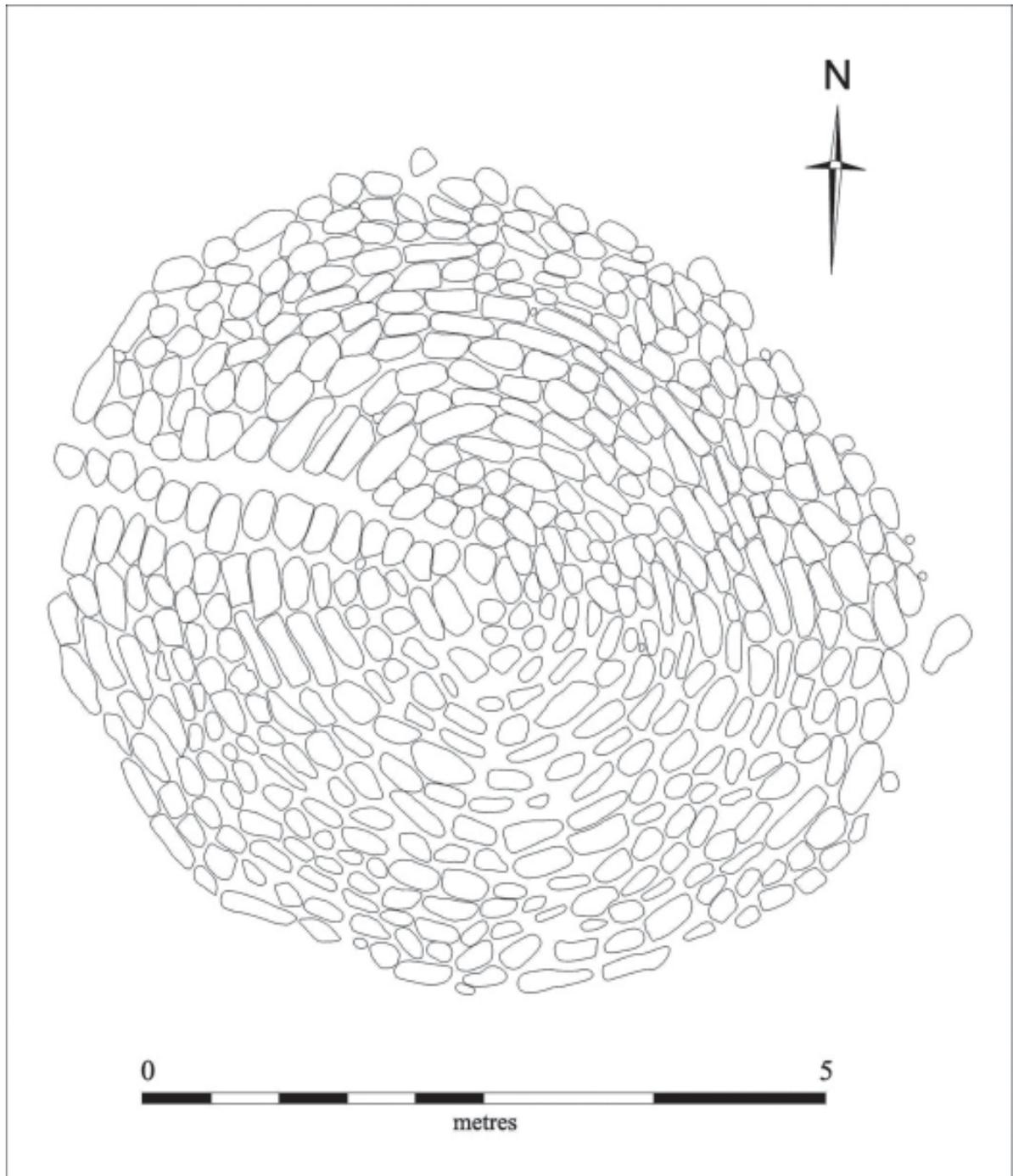
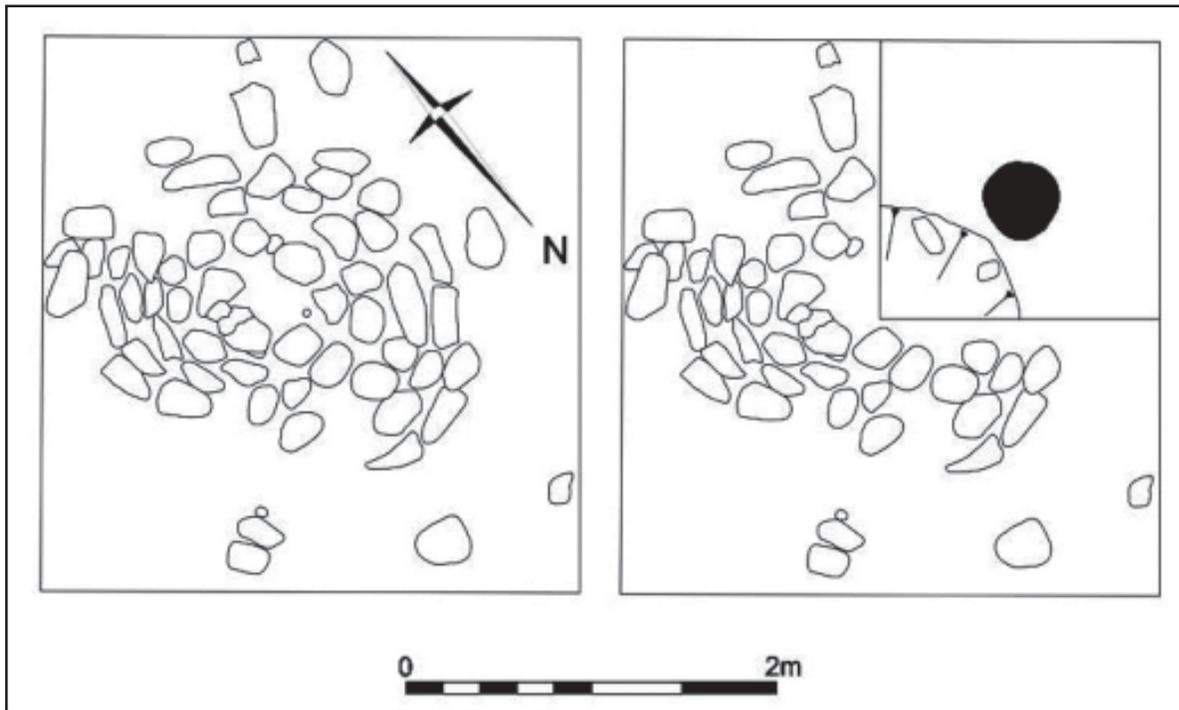


Figure 4: Plan of feature 2, showing quarter trial section (right).



The second feature identified in the quarter section of site 2 was a circular pit or post-hole situated on the outer lip of the platform perimeter. With a fill slightly looser and darker than the surrounding geology, this presented a gradual upper break of slope and vertical sides with a near flat base at a depth of 15.5cm and a width of 40cm. Within the fill were less than two grams of calcined bone, possibly residual from the upper surface of the platform. Photographs from the 1973 Turton archive clearly display upright stones or dressed stelae either within or encircling what may now be recognised as the stone platforms at Dirikoro. These could not be located in 2009, and whilst further investigation is required, it is likely that this second feature at site 2 is the socket for one of the stela, having been removed at some point in the last four decades.

Chipped stone floors

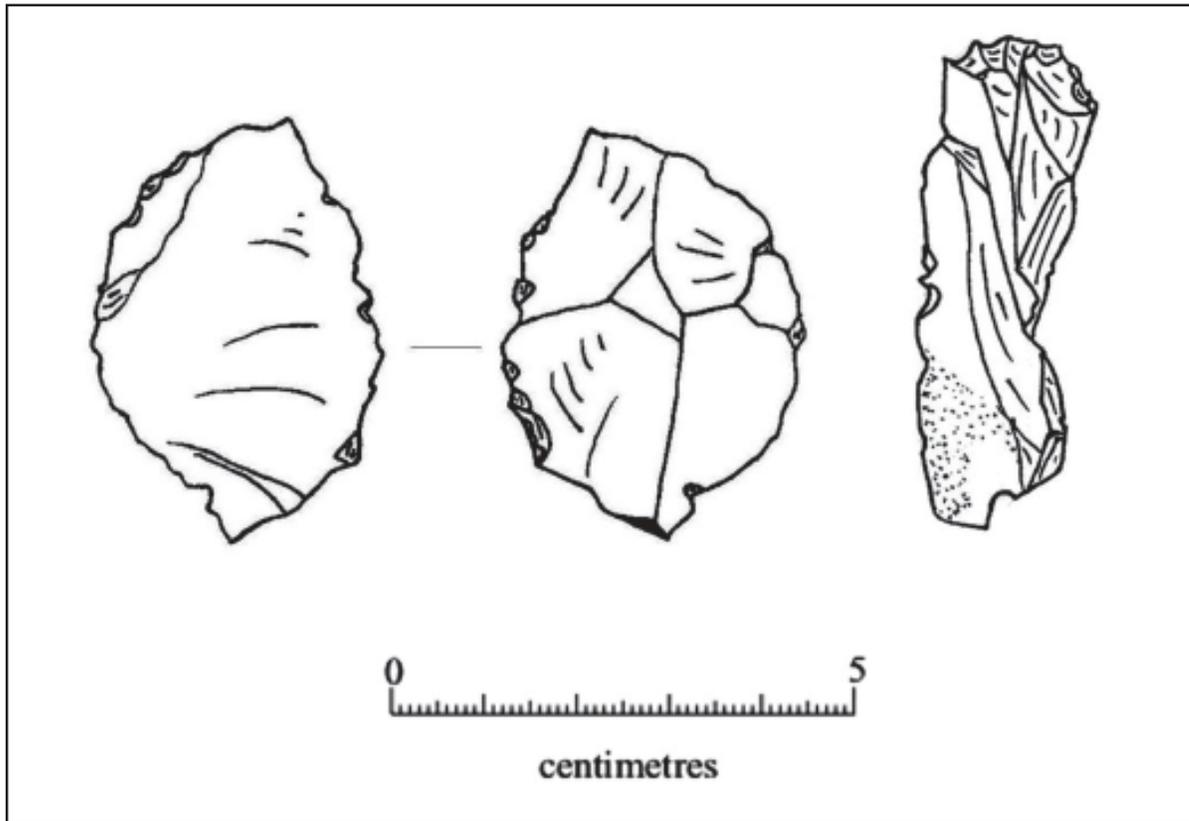
Five surface scatters of chipped stone were identified to the south and the west of Dirikoro. Only representative samples were documented with the aim of a closer inspection and record in following seasons of fieldwork. A full technical analysis will

take place when more detailed investigation has been carried out. However, there are clearly a range of technologies and material sources being used, with scrapers, cores and utilised flakes all present (Laura Bassell, personal communication)(Figure 5).

Other surface finds

Approximately 200m west of the central ‘cluster’ of platforms at Dirikoro was a surface scatter of over 100 pot sherds spread over an area of 3m diameter. These were clearly weathered along the broken edges, and were likely to be from a single thick walled (c. 1.5cm), well-fired vessel (Figure 6). Again, a full analysis is to be presented following a more detailed investigation and collection of the scatter, but initial observations point to an impressed overlapping design, possibly of flexible cord-wrapped roulette (Kevin McDonald, personal communication). No comparative assemblages have been collected from the region, making discussion fairly limited at this stage, but cross-reference with Mursi material culture in coming field seasons may help to elucidate the nature and date of this ceramic style.

Figure 5: Drawing of unretouched flake (left) and possible fragment of scraper (right).



Oral interviews

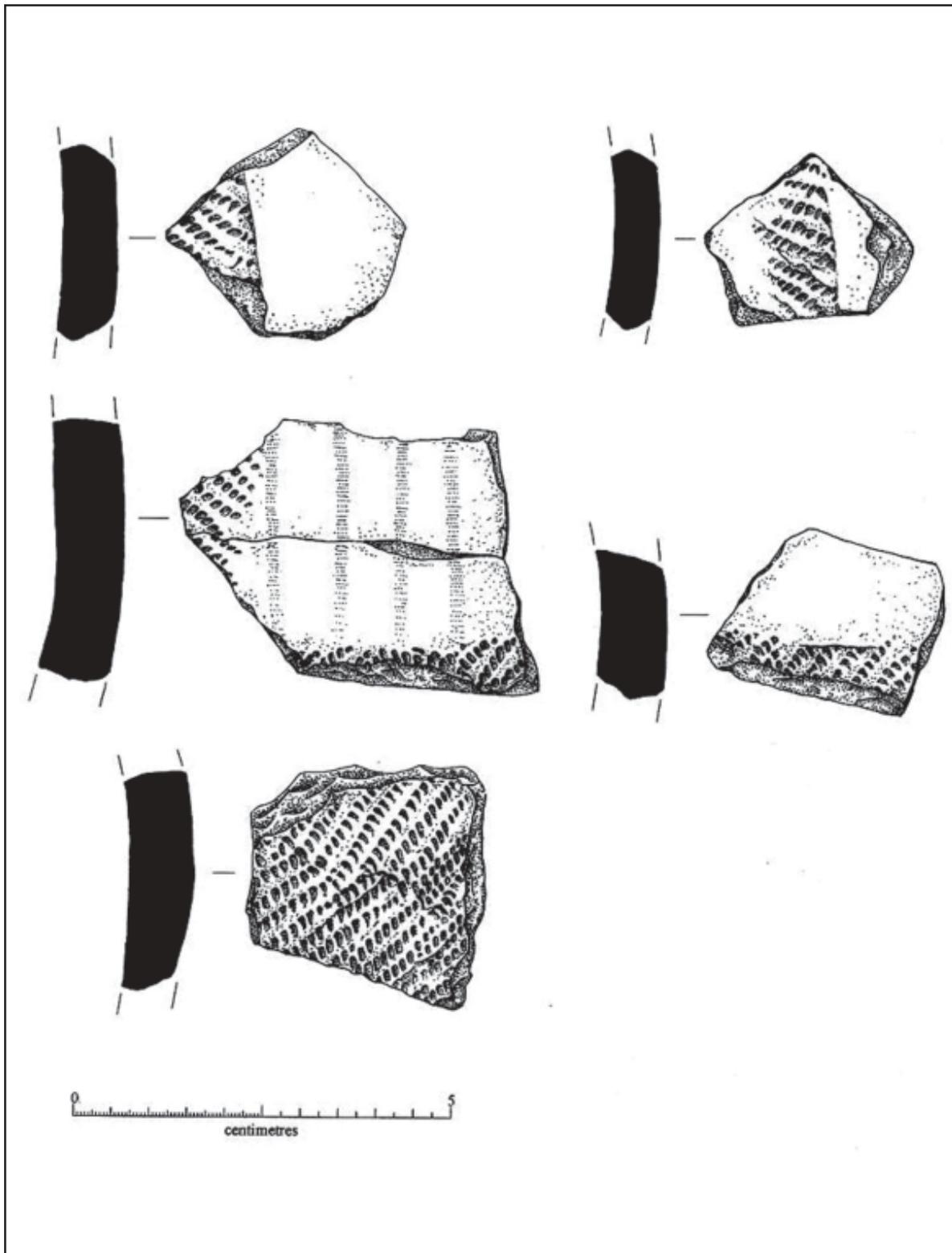
The stone platforms described above are nestled within a landscape considered sacred by the local Mursi. Interestingly, it is not the platforms themselves which are considered sacred rather the entire area, although certain natural features in the landscape are noted to have an enhanced spiritual potency. This section will offer a synopsis of oral testimony relevant to the Dirikoro locality and describe some fieldwork events impacting indigenous comprehension.

The Mursi refer collectively to all the Dirikoro stone platforms as *Benna kulugto*. This has the approximate meaning ‘stone circles’. In translation *benna* means ‘many stones’ and *kulugto* ‘making a fence’. These *Benna kulugto* are also called *benna be zou oudjio kingi* which means ‘stones put there a long time ago by people’. Indeed the Mursi contend that the platforms were constructed by groups that occupied the territory prior to their movements of

colonisation. The pre-Mursi groups include the Dime, Bodi and Kwegu. However, of the three groups only the Dime (agriculturalists) and the Bodi (pastoralists) are considered to have any relationship to the platforms. The Kwegu (hunter-gatherers) are explicitly ruled out as platform constructors. At this preliminary stage the patronising relations between the Mursi and the Kwegu must be acknowledged (see Turton 1986) for this may have as much to do with this disassociation as the subsistence and cultural practices exhibited by the latter.

According to the Mursi those previous inhabitant groups responsible for constructing the platforms in the locale used them as *dori kiango* elevated from the ground at a time when the climate was significantly wetter. The expression *dori kiango* corresponds to ‘house floor’ with *dori* meaning ‘dwelling’ and *kiango* ‘stomach’. Throughout the season’s archaeological endeavour the local population sustained an interest in activities and material findings. This presented the authors with the opportunity to

Figure 6: Drawings of pottery from Dirikoro.



document changing responses to the features. Fuller details of Mursi reaction to the *Benna kulugto* will be contextualised elsewhere but at this stage it is worth noting that nearly all of the features brought, through the archaeology, to the attention of locals were explicitly acknowledged as corroborating their oral accounts. The variation in size, regularity in platform architecture, presence of gullies, and sheer quantity and clustering of the platforms were recognised as material confirmations of long-standing historical narratives. Thus as each platform was cleared it was manoeuvred into the comfortable familiarity of the raised floor explanation. Indeed the so-called gullies, previously unobserved, became evidence of drainage. This simultaneously substantiated claims that the environment was indeed much wetter in the past and that the pre-Mursi constructors had ingeniously ensured surface water would be discharged away from the core of the dwelling.

Informants put forward details that the materials used in the non-surface architecture of the dwelling were organic and this was thought to explain their absence. Although informants recognised that these dwellings were constructed many generations ago it was confidently asserted that they were composed of wooden vertical roof supports, wattle or thread-woven walls with a roof of bundled or semi-thatched grass. This mirrored neatly the materials and design of their own contemporary seasonal constructions. Thus the dwellings were recognised as different but equivalent. Of course appropriating elements from the 'known' to elaborate the 'unknown' is a common response to uncertainty and is part of the way all cultures make things intelligible. Nonetheless some cultural differences are readily accepted, including the fact that most Mursi dwellings are simply erected over unmodified earth surface and that huts are rarely over 4 metres in diameter. However, the evidence which the Mursi found most challenging to integrate were the hundreds of fragments of charred animal bone recovered during surface clearance and trial excavation. During interviews it was explained by some informants that these were the remains of wild animals which had died and decomposed on the platforms, however, others admitted this was unlikely whilst acknowledging that the platforms were constructed so long ago that many details have been forgotten.

The final element worth underscoring in this section is the repeated reference in interviews and

conversations to the supernatural potency of the Dirikoro landscape. This potency characterised the landscape as an entirety but also congealed around specific natural features. It is perhaps not coincidental that the *Benna kulugto* are embedded components within this landscape. Surprisingly, though, the Mursi do not attribute any spiritual dimension to the platforms but they do sit in an alignment with other features which are considered places of power. This linear alignment of platforms and natural features is striking albeit a character of the landscape which is seemingly unrecognised by the indigenous populations. Nonetheless these natural features are fixed points resonating religio-magical power. These natural features include: a pit, where dark soil is extracted for numerous ritual usages; a large sacred tree, under which important meetings and ceremonial activities are performed; and an area of high relief.

The literal translation of the place-name Dirikoro is 'dark earth', and this relates to a conspicuous apron of black soil which covers the immediate landscape enveloping the *Benna kulugto*. This earth is considered a powerful media for spiritual connection, the properties of which may be transferred when daubed in the appropriate ritual manner onto the faces and bodies of persons by a *komoru* (priest). Despite the ubiquity of this earth in the landscape only a handful of specific extraction pits are utilised. The earth is most notably used to defend the bodies of warriors partaking in bouts of ceremonial duelling (sometimes also patronisingly termed 'stick-fighting'), as a medicine to heal sick and infirm individuals, and as a protective substance used to shield dwellings and animals. Perhaps of greater importance to the biographic record of Dirikoro is a sacred *Ragai* tree (*Tamarindus indica*), to which grand significance is imbued. Its prominent position within the origin tales of the Mursi colonisation of the Dirikoro area is related to an understanding of the landscape vegetation prior to the encroachment of savannah scrubland. Oral tradition regards the *Ragai* as the solitary substantial tree in the landscape during the early stages of the Mursi occupation. As it provisioned the optimal source of shade, it was utilised for public meetings and various other related ceremonies, including animal sacrifice. Although it was not witnessed by the authors, informants testified that the *Ragai* continues for this purpose today; indeed, cattle bones and horn cores could be found littered upon the ground surface. The shade of the *Ragai* also

remains taboo for women, and important decisions amongst the male elders are still decided beneath the canopy. The spatial and meaningful relationships between the *Benna kulugto*, *Ragai* tree, dark earth sources and other features remain a research priority for future seasons.

Discussion

Whilst the evidence to date would indicate that much of the findings from the first season of field survey are likely to predate the arrival of the Mursi colonialists, there are many details that remain to be explored. In particular, the platforms seem to be exceptional monumental forms. Future work is certain to be directed towards a greater understanding of platform construction sequence and sub-platform activity. It is likely that the varying sizes of the platforms represent not only differential purpose, but perhaps also separate stages within a sequence of platform construction, use and elaboration. The smallest platforms, at 2.5m in diameter, are comprised of approximately sixty stones. The next size of platform is consistently in the region of 6m in diameter, and appears to incorporate the smaller of the platforms at their centre, again comprised of nearly sixty stones. A sequence of construction and elaboration may therefore be postulated, although the character of the gullies in relation to this possible scenario remains unclear. Moreover, the origin and function of the platforms is yet to be ascertained, and whilst the geometric symmetry of their form is exceptional in many ways, certain features of the platforms share qualities found elsewhere in regional proximity. For example, stone monuments, energised by the interplay of human and bovid remains, are known from the Pastoral Neolithic in the Turkana Basin (Robbins 2006); numerous lengthy traditions of monumental stelae are reported throughout Yemen, Ethiopia, Eritrea and Somaliland with diverse associated dates (Joussaume 2007); and linear placement of monumental construction has been documented throughout the Sahara and Eastern Africa, predominantly identified with Neolithic traditions (Paris 1996). Despite certain similarities between these monuments many uncertainties remain as to how any of the associated traditions are related, if at all.

There are Mursi reports of stone platforms at four other sites from the Elma River Valley. On the basis of indigenous way-finding a series of recon-

naissance trips to these locations will take place during the next phase of this research. If further platforms are observed at these or other localities then there will be scope for the documentation of inter-site variation. Additional research is also needed to clarify the environmental setting of the platforms and to test the validity of the Mursi narratives of climate change. At the same time the significance of the platforms as components in the Mursi worldview must be described and analysed. The recent findings make it hard to validate the indigenous interpretation of the platforms, and offer a potential insight to the way that memory choreographs the Mursi experience of the landscape.

Conclusion

On the basis of the research to date it can be justifiably asserted that the Lower Omo Valley is inaccurately described in terms of a pristine wilderness or natural wasteland. Indeed, to conceptualise even the Arichigirong landscape, for example, as *terra nullius* is erroneous in both present and the past contexts. It is hoped that the next periods of fieldwork will continue to document evidence for human presence in the locale over the long-term. This may serve to counteract previous disciplinary inactivity concerning the area's prehistoric material manifestations; indeed some reports even stretch back to the beginning of the last century (e.g. Donaldson Smith 1900; von Höhnel 1938: 38-9; Wellby 1900). Within this context of inactivity it is vital to note that work at Dirikoro and the wider region assumes greater significance as a source of information on Holocene landscape inhabitation, especially perhaps pastoral adaptations to shifting environmental conditions, because of the threat posed to the site and wider region by a battery of current development initiatives, including agricultural investment areas and hydro-electric schemes. These are set to precipitate significant change to the environment and, as a consequence, endanger heritage.

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