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Excavations at Baawa, Samburu
District, Kenya: Preliminary Report on
the 2006 Season

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Introduction

This interim report summarises the results of the first season of archaeological survey, excavations and anthropological research on changing burial practices among pastoralist communities in northern Kenya, and the landscape value and significance of these and associated archaeological sites to the contemporary Samburu inhabitants of the study area. The study reported here forms part of a broader investigation of the range of material signatures of East African pastoralist economies and cultural practices. By focussing on the evolution of pastoralist landscapes, holistically conceived as encompassing both actual physical entities and differing perceptions and representations of these entities, the broader project aims to contribute to current theoretical debates within anthropology and archaeology on the links between space and place, environment and identity, and material culture and memory. Additionally, in attempting to document the views of contemporary Samburu herders regarding their links with the stone cairns, rock art and archaeological sites found across the landscape, the project is endeavouring to address recent calls to engage in anthropological research that is both theoretically and ethically rigorous (Meskell 2002); that more fully integrates archaeology and cultural anthropology (Herzfeld 1996); and has the potential to generate

truly 'indigenous archaeologies' (Lane 1996; cf. Nicholas and Andrews 1997; Watkins 2000).

The Study Area

The main study area is the Samburu political subdivision of Baringon, on the Leroghi Plateau c. 30km south of Maralal, northern Kenya (Figure 1). This was selected partly because it was already the focus of longitudinal investigation by different cultural and economic anthropologists on a range of topics including gender and interethnic violence, land tenure issues, material culture, globalisation mortuary practices, and histories of migration (e.g. Holtzman 2003, 2004; Lesorogol 2003, 2005; Straight 1997, 2002, 2005, 2007). During the course of this work, various archaeological remains, including stone cairns and open habitation sites, had been noted and oral traditions concerning some of these had been collected. Additionally, the area was the focus of a preliminary survey and documentation of rock art sites during 2005 (Chamberlain 2006), conducted under the auspices of a larger British Institute in Eastern Africa project aimed at investigating the longterm environmental and settlement history of the Laikipia Plateau (Causey and Lane 2005; Lane 2005, in press; Taylor et al. 2005). During the 2006 season, research focused on a single complex, named by the project as the Nakeidi cairnfield (GIJI-1; Kenya 1:50,000 map sheet 78/4). This comprises an extensive area of stone cairns of different types, situated close to the edge of the Loroki Forest Reserve on the eastern side of the Karisia Hills, some 3.2 km to the northwest of Baawa village. Additionally, some limited archaeological survey was also conducted in the immediate vicinity of Baawa Cairnfield, leading to the discovery of several archaeological scatters representing traces of earlier pastoralist and possibly forager activity. One of these was subsequently mapped and test-excavated.

Circumstances of Discovery

The Nakeidi cairnfield site first came to scholarly attention in early 2005 when reports began to emerge both locally and subsequently in the national press (*Sunday Nation* 06/2/05) of the discovery of '80 skeletons' in shallow graves, alleged to be victims of a 'colonial era massacre'. The discovery had been made, apparently, by local villagers said to be

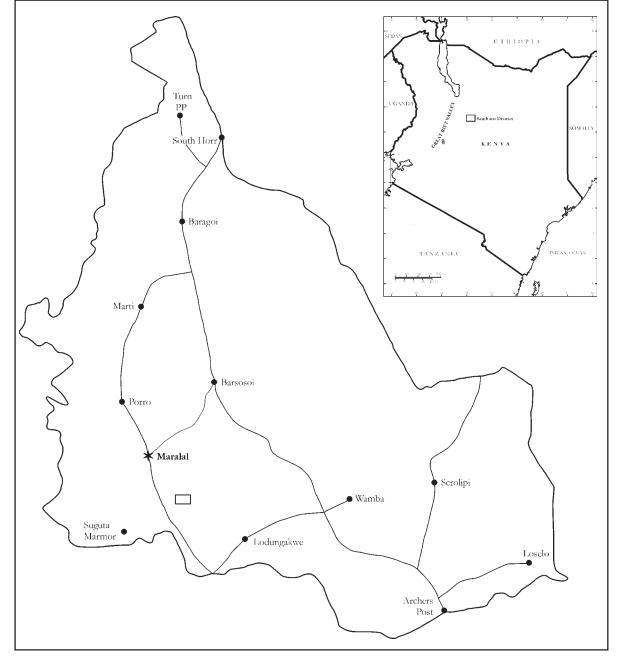


Figure 1. Location of Nakeidi cairnfield, Maralal, Samburu District, Kenya.

searching for stone for constructing a new building at Baawa Primary School. In the process of collecting stones from a number of cairns, several human crania, long bones and other skeletal material were exposed. It was these finds that were initially attributed to a colonial era (and even a 'colonial', i.e. by British forces) massacre. Soon after the first reports appeared, the area was visited by Mr Leriten Lesorogol, at the time

Deputy Chairman of Samburu District Council (now Chairman of the Council), who on seeing the site and the exposed bones immediately requested that the cairns be left alone so as to allow a proper scientific assessment of the remains, and possible dating. The cairns and their contents were brought to the attention of three cultural anthropologists engaged in longitudinal studies of different aspects of Samburu

culture and history in the area – Bilinda Straight and Jon Holzman (Western Michigan University) and Carolyn Lesorogol (Washington University). All three visited the site on different occasions in mid-2005, and in meetings with local community leaders further reiterated the need to protect the site and its cairns from further damage. Straight also alerted Paul Lane, then Director of the British Institute in Eastern Africa, partly in his capacity as an archaeologist but more specifically because he had been mapping the distribution of cairns and excavating selected examples in areas of the Laikipia Plateau immediately to the south. Lane visited the site with Straight and also Leriten Lesorgol in early August 2005. Further discussions involving Straight, Leriten Lesorogol and prominent members of the Baringon Group Ranch on which the Baawa cairns are situated, led to the community extending an invitation to Straight and colleagues to undertake a scientific investigation of the site.

Research Objectives

A three-week pilot season of survey and excavation was conducted at the Nakeidi cairnfield and in its immediate vicinity during July and August 2006. The Principal Investigators for this project were Bilinda Straight, who was responsible for conducting interviews with local informants about the cairns, the excavations and Samburu history and changing burial practices; Paul Lane, who was responsible for directing the archaeological surveys and excavations; and Charles Hilton, a physical anthropologist also based at Western Michigan University, who was responsible for directing the recovery and recording of all human skeletal remains and the subsequent identification and analyses of these. The PIs were assisted by a team of graduate and undergraduate students from the BIEA and Oxford University; the BIEA's archaeological surveyor Mr Stephen Manoa; Straight's research assistant Mr Musa Letua, and three local Samburu men employed as research assistants and excavators.

The specific objectives of the 2006 pilot season were i) to map the extent and nature of the cairns at Nakeidi; ii) to recover in a controlled manner all visible human remains exposed during recent disturbance of the cairns and collect as much associated contextual information about these as possible; iii) to excavate at least one undisturbed cairn so as to

recover material for scientific dating, to assess burial practices, and establish the manner in which cairns were constructed and used; iv) to conduct surveys around Nakeidi cairnfield for other archaeological remains so as to place the main site within a broader archaeological framework; and v) to collect information about Samburu burial practices, oral traditions concerning the site and contemporary perspectives on the past and attitudes to the archaeological investigation of the cairns.

Excavation Methodologies

Prior to the selection of cairns for excavation and/or recovery of disturbed human skeletal remains, the site was subjected to a detailed walkover by team members. During this phase, each cairn or other stone monument was assigned a unique identifier number, with any evidence for recent damage and/or exposure of human remains being noted. The diameter, type and possible mode of construction of each cairn were also recorded. In all a total of 41 stone monuments were recorded in this way. During the walkover, isolated scatters of human remains were also observed. The positions of these were logged using a high-resolution, hand-held GPS, and the bones were then collected and bagged according to their location of discovery.

With completion of the walkover survey, work began on topographic mapping of the entire site and all the cairns, using a Leica TC600 Total Station. This was supervised by Stephen Manoa from the BIEA, who was also responsible for generating the final site plan reproduced here as Figure 2. Concurrent with the topographic survey, work began on recording and recovering all the exposed scatters of human remains still associated with a specific cairn, under the overall direction of Charles Hilton, and on the excavation of a kerbed cairn (Kerbed Cairn 1) that appeared not to have suffered any disturbance in recent years. The cairn excavation was directed by Paul Lane.

The strategy used for the recovery of human remains from the obviously disturbed cairns aimed to strike a balance between the need to record relevant contextual information and the value of the human remains as bioarchaeological specimens. Accordingly, priority was given to recovering all the exposed specimens in the time available to the project while trying not to compromise the archaeological

Caim

Cairn number

Exposed burials

Caim Excavation (kerbed caim 1)

2000.000

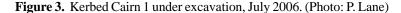
2005.000

922760.00mE 922800.00mE
1985.000
1995.000
1955.000

Figure 2. Plan of Nakeidi cairnfield, July-August 2006. Survey by Stephen Manoa.

integrity of the cairns with which they were associated. Additionally, this was deemed necessary because some Samburu informants explicitly stated that in some cases bones 'had been put back' after cairns had been disturbed, and so there was no guarantee that the human remains associated with a particular cairn at the time of the survey had actually come from the same cairn (although this was considered to be probably the case). It was also rapidly noted that all of the disturbed cairns contained the bones of more than one individual. The recovery strategy used, while not ideal from a purely archaeological perspective, was therefore as follows. First, digital photographs showing the surface disposition of human remains were taken of each of the cairns where bones had been exposed. Second, since in all cases the recent disturbance had involved the removal of stones from near the centre of the cairn and the creation of a shallow hollow, this was cleaned of all accumulated leaf litter and any loose stones that had obviously been displaced. Any small bones that were found within this loose material were collected and bagged. All other bones were left as found and the soil around them removed using wooden tools, brushes and fingers. This loose earth was screened through 2.5 mm mesh sieves, resulting in the occasional recovery of isolated teeth and additional bone fragments. The cleaned and exposed bones were then photographed and planned at either a 1:5 or 1:2 scale, and identified to body part (if possible at this stage) by the project physical anthropologist. Where bones appeared to be articulated or associated in such a way that they appeared to have derived from the same individual, this was duly noted on the plans.

On completion of this recording, the bones were lifted under the supervision of the project physical anthropologist, and bagged according to their spatial grouping. The underlying surface was then inspected. In a few instances, the lifting of the first layer of exposed, but seemingly *in situ*, bones resulted in the exposure of further human bones. At this point a decision had to be made, involving the excavator, and the project physical anthropologist and archaeologist as whether to continue excavation, or to rebury the exposed bones for investiga-





tion at a later date in a manner that would involve full excavation of the cairn in which the bones lay. Only where it appeared that a) the newly exposed bones were part of one of the individuals that had already been lifted, and b) that they were isolated pieces rather than part of a fully articulated limb or torso, was the decision taken to lift additional bones. The same procedure of cleaning, photographing, planning and identifying as followed previously was carried out before these bones lying lower within the cairn fill were lifted. After excavations ceased, the base of the hollow was covered with thick black plastic and then backfilled first with earth and then a covering of stones. Preliminary analysis and identification of the recovered skeletal remains was then undertaken by the project physical anthropologist back in camp.

Although some of the human remains associated with different disturbed cairns were still in situ, and in some cases the orientation of the inhumation burial could reconstructed from the surviving remains, it was thought prudent to investigate at least one undisturbed cairn so as to gain a clearer understanding of burial practices and monument construction, and see if there was any evidence for the inclusion of grave goods. It was also hoped that samples suitable for dating would be recovered. Accordingly, one of the kerbed cairns (Kerbed Cairn 1) toward the southern upslope end of the site was selected for excavation (Figure 3). Prior to excavation, a stone-by-stone scale plan of the cairn surface was carried out using a Leica TC600 Total Station. An excavation trench measuring 4 x 3 m was then laid out over three-quarters of the visible portion of the cairn, leaving the upslope section unexcavated. This part of the cairn appeared to either butt or possibly underlie part of an adjacent cairn (Cairn 5). Since it was not possible to tell from the surface the precise nature of this stratigraphic relationship, it had been intended to extend the original excavation trench to incorporate all of Cairn 5 as the work progressed. However, midway through the project it was decided to postpone this work as it was apparent that the excavation of Cairn 5 could not be completed in the remaining time available. It was also decided not to attempt to section the kerbed cairn across its centre line, but instead to excavate the cairn and its fill/s in horizontal spits removing natural contexts and construction phases in the reverse order in which they were formed. This decision was made on the basis of previous experience of excavating stone cairns on Laikipia and the limited returns (in terms of stratigraphic information) obtained from attempts to half-section some of these. Instead, so as to maintain stratigraphic controls, after every second layer of the stone fill covering the cairn had been removed a new stone-by-stone plan of the exposed stone fill and surrounding stone uprights was made. In all, five such stone-by-stone plans were produced.

Excavation was by hand and entailed the systematic removal of successive layers of stone fill accompanied by the removal of any accumulated soil by trowelling. This soil was screened through 2.5 mm mesh dry-sieves. As indicated above, after each second layer of stones had been removed, a detailed stone-by-stone plan with a series of spot heights on individual stones was produced. The external, upright slabs forming the outer ring were left in situ, but re-planned as more of their surfaces were exposed. The accumulated humus and A-horizon soil outside this ring was treated as a separate context (although it was identical in nature to the soil infill around the stones within the cairn), and was also removed by trowelling and sieved. After the removal of the last layer of stone infill, the residual soil deposits were removed by trowel until the basal sub-soil, consisting of weathered sandy gravel was reached. At this level, the outline of a roughly oval pit cut into the natural subsoil was exposed. This was photographed, planned and half-sectioned. After the section was drawn the remaining fill was removed, and the excavated feature was re-planned and photographed. The entire excavated area was then photographed and planned and the sections along the northern and western sides of the trench were drawn. The excavated surface was then covered with heavy duty black plastic, the cairn 'reconstructed', the rest of the trench backfilled, and the surface stabilised with stones and brushwood.

Preliminary Results from Excavation of Kerbed Cairn 1

Kerbed Cairn 1 was roughly circular, approximately 3.60 m in diameter and constructed of locally available blocks and slabs of local stone. It consisted of an outer ring of stone slabs (0.35-0.70 m in length) set on end into the gravely loam subsoil, inside which and slightly off-centre to the south was a roughly oval pit with steeply sloping sides that was c. 0.90 m in diameter and had a maximum depth of c. 0.40 m.

This feature appeared to have been deliberately filled with large- and medium-sized stones, some of which were angled downwards into the pit while others were more or less horizontal. These stones were in a matrix of coarse loamy sand. At the base of the fill, resting at an angle on the northern side of the pit and flush with the natural subsoil were fragments of two adult long bone diaphyses, a femur and a tibia. The positioning of these bones suggested that the body had been buried in a crouched position, with the head to the north. Other than a few charcoal fragments, no other finds were recovered from this feature. The natural subsoil in the interior of the stone ring was sealed by a thin layer of dark grey clayey loam, containing a number of medium-sized charcoal fragments and smaller charcoal flecks. A sample of one of the larger fragments, recovered from close to the base of this layer submitted for AMS radiocarbon dated yielded a date of 2700 ± 40 BP (Beta-224653), or Cal 920-800 BC at 95% probability using INTCAL04. A few isolated pieces of black, friable, thin-walled pottery were also recovered from this horizon. Similar pieces of pottery, including a few conjoinable sherds, were also recovered from the soil and stone matrix sealing the natural subsoil on the outside of the stone ring. Based on a single rim form and a few pieces decorated with fine incised lines, this pottery bears some resemblance to the Pastoral Neolithic Akira tradition. However, since other dated examples of Akira ware fall between c. 1200-1900 b.p., this attribution is not consonant with the radiocarbon obtained from charcoal recovered from within the cairn.

After the filling of the central grave pit, and probably as part of the initial sequence of events associated with the building of the cairn, the area within the stone ring was covered by a layer, several stones thick, of large- and medium-sized stone slabs and blocks. These were arranged randomly and no internal divisions or compartments could be discerned. When excavated, the stones were found embedded within a matrix of dark brown loamy soil with some charcoal flecking. The only finds from this horizon, which attained a maximum thickness of 0.41 m, comprised a group of eight or nine fragmentary human permanent and deciduous tooth crowns, all of which lack roots due to post-mortem damage. These tooth fragments lay close to one another in a patch of loamy soil some 5-8 cm above the natural subsoil and toward the southern end of the excavation trench close to the position of the underlying grave pit. They are believed to derive from a secondary burial, although, apart from the long bone fragments recovered from the grave pit, no other human remains were found anywhere else within the cairn. All of the permanent tooth crowns have either faint traces of attrition or no evidence of wear. For example, the incisors still possess their incisal edge mammelons. The deciduous dentition present includes three teeth, the left and right dm₂ and the right dm². The permanent M2s exhibit slight wear indicating some eruption. The mandibular PM2s exhibit full crown development and some root formation but postmortem damage prevents an accurate assessment of root development. These morphological features suggest that the teeth were derived from a child between $8.5-10.5 (\pm 1 \text{ year})$ years of age (Buikstra and Ubelaker 1994).

The uppermost horizon covering most of the stone fill, and in a few places even the tops of some of the upright slabs forming the ring, consisted of a humus-rich, blackish brown loam. This context extends across the entire hillside and probably represents the soil horizon formed after the construction of the cairns. This is supported by the fact that the entire area in which the cairns lie is currently covered by dense acacia thicket, and several of the cairns have small trees growing out of their centre. The amount of leaf litter and other humic material generated on an annual basis by this vegetation cover would certainly encourage quite rapid soil formation.

Human Remains Recovered from Nakeidi Cairnfield

As outlined above, human remains were recovered during the course of the project from three different categories of location. These were, in descending order in terms of the value of their contextual associations, the small sample of bone and teeth excavated from Kerbed Cairn 1 described above; a large sample of teeth and bones, some clearly still articulated and indicating the mode and orientation of burial, from cairns that had been disturbed probably sometime in the 12-18 months prior to the fieldwork; and a sample of bones, including two almost complete crania, recovered from within the area of Nakeidi cairnfield but not directly associated with a particular cairn. These latter finds are presumed to have been exhumed from one or other of the cairns within the 18 months prior to July 2006. Many of the individual bones from the disturbed cairns were in



Figure 4. Detail of inhumation burials in Cairn 1 exposed after clearing recent debris. (Photo: P. Lane).

remarkably good condition, although in other cases the bones were fragmentary and less-well preserved (Figure 4). Although complete contextual information about these burials is lacking, it has been possible to glean a considerable amount of information about both the structure of the population buried in the cairns and also about variations in burial practices.

During the 2006 field season human remains representing at least 18 individuals were retrieved. This number includes two children, three adult males, 11 adult females, and two adults of undetermined sex. These human skeletal remains were either excavated or collected from the surface of seven cairns: Cairn 1; Cairn 4; Kerbed Cairn 1; Cairn 11; Cairn 14; Cairn 21; Cairn 22. Additionally, human remains were collected from the surface of an area designated Location 1. In a number of instances, human remains collected from the surfaces of several cairns could be associated and matched with remains subsequently excavated from the layers immediately below. The ages for the individuals ranged from c. 6.5 years to an

individual in her late 50s. However, the ages for the majority of individuals fell between 30-39 years. While several individuals exhibit the typical signs of periodontal disease and degenerative joint disease normally associated with subsistence producers, the overall health of this skeletal sample appears to have been good. This preliminary conclusion regarding health will require verification with subsequent osteological analyses.

The highly disturbed context of many of the remains has presented several difficulties with regard to osteological analysis. In particular, unclear associations between postcrania and cranial elements prevents a full understanding of the relationship between the expression of the sexually diagnostic morphological traits seen in the pelvis and the skull of this specific population. The Nakeidi cairnfield burials with cranial elements often lacked pelvic material or possessed damaged pelvic elements. For example, those skeletons with pelvic elements lacked crania or were associated with highly damaged crania. The lack of comparative East African pastoralist human re-

mains complicates the analysis as there is little in the way of human skeletal remains that can serve as a baseline reference sample for key sexual characteristics². Thus, osteological assessments may be subject to change with subsequent examination of the range of variability in the morphological expression of sexually diagnostic traits for recent East African pastoralist populations.

Preliminary Results of Oral Interviews

While the archaeological aspects of the project were ongoing, Bilinda Straight, assisted by Musa Letuaa, conducted interviews of local Samburu men and women about a range of matters including clan histories, their knowledge of the Nakeidi cairnfield, changes and continuities in Samburu burial practices, and also their attitudes to the archaeological investigation and recovery of human burials.

Interviews on clan history and collective memory associated with the landscape were suggestive of extensive oral traditions relating groups the Samburu see as ancestral to specific clans and lineages, including the earlier Laikipiak peoples, with a range of economic strategies that Samburu identify with recognizable landscape features. These included: stone cairns used for hunting; stone cairns used for path marking; stone cairns for burial; subtle soil colourations viewed by Samburu as diagnostic of specific aspects of pastoral land use; and water wells made with differing technologies. Moreover, contrary to prevailing anthropological claims concerning the extinction of the Laikipiak during and immediately following the Purko wars of the 1840s, Straight interviewed Samburu who assert a living Lakipiak identity. In most cases, lineage traditions describe families founded through the rescue of Laikipak children and teenagers whose families were destroyed during the wars that devastated the Laikipiak. However, in one case, an entire lineage claims to be a living Laikipiak lineage, preserved through negotiation during warfare. Subsequent interviews will trace these histories in more detail, and specify with more precision the differences preliminary interviews suggest between descendant-Laikipiak landscape and ritual practices, and practices associated with other Samburu lineages and clans.

Interviews with local Samburu working with the pilot project reveal local enthusiasm for the project for at least three reasons. First, those assisting with the archaeological fieldwork took an active interest in the process of discovery as the excavation proceeded. These Samburu shared a number of ideas, some of which were consistent with preliminary archaeological conclusions, and some which were a bit more challenging. At the same time, the differences in respondents' answers to interview questions preand post-excavation demonstrate a dynamic, open attitude on the part of local Samburu as they willingly tested their own hypotheses about what the cairns contained. The enigma the kerbed cairn posed is a case in point. Several workers shared the opinion that the kerbed cairns pointed to a practice of re-use of specific cairns over time. They described their idea that people continually returned to add more human remains to the cairns, creating a series of layers. Mound cairns represented completed burials, whereas the stone markers protruding to form kerbed cairns indicated that more layers of burials had been planned but for some reason abandoned. As excavation progressed, this hypothesis was shaken somewhat, although not entirely, as Samburu workers began to consider the possibility that kerbed cairns were houses of some kind, possibly temporary shelters erected during war-time or else stone houses belonging to forest dwelling foragers related to Samburu.

In addition to the excitement of participating in the discovery process, Samburu respondents were quick to point to heritage claims in association with the cairns, and this aspect of their participation in, and response to, the project revealed a dynamic process of memorialisation and meaning-making associated with the landscape. Several features of the cairns pointed to continuity as well as differences between contemporary Samburu mortuary practices and those associated with ancestral clans. Names of ancestral clans such as Laikipiak and Olgalala featured prominently in these discussions, and the predominant feeling was one of strong ancestral identification with the cairns. While respondents conceded that they were not certain of precisely which ancestral groups constructed the cairns, they expressed more certainty that the cairn builders were related to living Samburu.

Finally, Samburu associated with the pilot excavation expressed a strong appreciation for the practical, material benefits that the project was providing, and a desire for those benefits to continue. They appreciated their inclusion in the process, and expected community members to be active agents as the project continued. This aspect of the project is particularly exciting, as similar excavations elsewhere normally have not included community members in this way (although cf. work by Bertram Mapunda, reported in Mapunda and Lane 2004).

Discussion

Stone cairns are found throughout the Laikipia and Leroghi Plateaus, and at least five types have been recognised. The simplest of these consists of a roughly circular pile of stones between 1.5 - 3.0 mhigh and ranging from c. 4.0 - 10.0 m in diameter, with no apparent external structural features. These are the commonest type and frequently occur singly or in pairs, although clusters of half-a-dozen or so are also encountered. In a few cases, as noted on Mugie Ranch, an upright monolith c. 50-60 cm in height may be placed at the centre of the cairn. Circular kerbed cairns represent the next commonest type. These comprise a ring of small, upright stones forming an external kerb enclosing a simple cairn. Other rarer types include 'ring' cairns (i.e. shaped rather like a ring donut), linear cairns, and stone rings of short upright slabs forming a 'kerb' without any internal stones (although some have a central monolith). The spatial distributions of these different types overlap but are not exactly the same. Examples of simple cairns and circular kerbed cairns are found in many other adjacent regions (see e.g. Brown 1966; Curle 1933; Leakey 1966; Lewis 1961; Lynch 1979; Posnansky 1968; Sassoon 1968; Stiles and Munro-Hay 1981; Sutton 1973), while the 'stone circles' closely resemble the Ng'amoritung'a complexes found to the south-west of Lake Turkana (Soper and Lynch 1977).

As part of a programme of recent archaeological fieldwork on Laikipia and Leroghi conducted by the British Institute in Eastern Africa (BIEA), the location of numerous isolated cairns as well as several cairn clusters and larger cairnfields (defined here as clusters of ten or more cairns) have been plotted using high-resolution hand-held GPS recorders. Two other cairnfields, in addition to that at Baawa have been mapped using digital theodolites and the variation in cairn type and construction recorded in more detail. Both are situated on Mugie Ranch, at the north-

western end of the Laikipia Plateau, about 38km to the south-west of Baawa as the crow flies. Limited excavations at these sites (Ol Keju Lesera cairnfield and Simba Hills cairnfield) of a total of three cairns failed to produce any human remains. All three of the excavated cairns were of similar construction to Kerbed Cairn 1 at Baawa, in that they had an external kerb of small upright stones enclosing randomly piled stone. Moreover, the excavated example on Simba Hill, like Baawa Kerbed Cairn 1, also had a distinct steep-sided, U-shaped pit positioned slightly off-centre of the cairn, cut into the natural subsoil and sealed beneath several layers of overlapping stone rubble. Fragments of black, undecorated pottery with a fairly coarse fabric were recovered from the soil matrix in which this covering stone horizon was contained but in the absence of diagnostic pieces it has not been possible to assign this to any of the known pottery traditions from the region.

One other cairn has been excavated as part of this recent BIEA research. This is situated in a group of roughly circular and fairly large simple stone cairns. These are situated immediately adjacent to an extensive pastoralist settlement with structural remains, rubbish dumps and iron smelting furnaces, known as Mili Sita and dated to the mid-17th century, in the Lolldaiga Hills on the south-eastern edge of Laikipia. Half-sectioning of the cairn exposed a highly fragmented human mandible and part of the maxilla with dental elements, plus a limited number of extremely fragmented post-cranial skeletal elements in a shallow pit beneath the cairn. Post-mortem damage to the human remains precludes the evaluation of key diagnostic features. However, the small and gracile morphology of the clavicular and femoral shaft fragments suggest those of a female while the minimal degree of dental attrition suggests a young adult (Hilton 2007). The burial itself has not been dated, so it is possible that it may not be contemporary with the adjacent settlement and iron-smelting remains.

There are reports of other cairns on Laikipia having been excavated by various individuals over the last c. 80 years. However, only one of these, of cairn KFR-C4 on Kisima ranch, was conducted under controlled archaeological conditions (Siiriäinen 1984). This, like the example excavated on Lolldaiga, consisted of a simple circular stone mound, c. 3.5 m in diameter, which sealed a shallow burial pit in which a crouched inhumation on its left hand side was placed. A sample of collagen from one of the bones yielded a

radiocarbon date of 760 ± 90 BP (Hel-853), or c. AD 1190. Traces of a secondary burial, of indeterminate age and sex were also found (Siiriäinen 1984:42-7). The primary burial appears to have been a juvenile, aged between 12-15 years. The sex of this individual could not be determined from the surviving remains (Rightmire 1984:98). A similar burial form (i.e. a crouched (or flexed) inhumation burial beneath a simple circular cairn, possibly in a burial pit), has been observed by Lane on Enasoit Ranch, immediately to the south-west of Lolldaiga, where erosion has halfsectioned one of a cluster of stone cairns. Based on the currently available evidence it would appear, therefore, that the simple circular type of cairn was being used on Laikipia for inhumation burials during the Pastoral Iron Age by at least the 12th century AD and continued perhaps until at least c. 1750-1800 AD. The tradition of constructing stone cairns with an external kerb and central pit, sometimes for inhumation burials but possibly not always, on the other hand would seem to be rather older, and if the single date from Baawa is substantiated by further research, may be more diagnostic of Pastoral Neolithic traditions. Until more examples of cairns of different types on Laikipia and Leroghi have been excavated and securely dated, these comments must be treated as tentative. Moreover, despite the obvious similarity between some of the cairn types found on Laikipia and Leroghi and those recorded for other parts of eastern Africa, many uncertainties remain as to how these different traditions are related, if at all. Additional research is also need to clarify the range of functions to which different cairn types were put and the cultural meanings attributed to them. It is hoped that several of these issues will be addressed during the next phase of this research.

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Footnotes

- 1. See Lane 2005; also http://www.biea.ac.uk/research_pages/exec_summary.pdf.
- 2. The available reference collection in the Osteology Department of the National Museums of Kenya, for example, numbers around 480 individuals of varying completeness. Accompanying documentation indicates that the majority of those individuals were of Kikuyu or Embu ethnic affiliation, who had resided in area around Nairobi and the Central Highlands.

References

Brown, J.

1966 The excavation of a group of burial mounds at Ilkek, near Gilgil, Kenya. *Azania* 1: 59-77.

Buikstra, J.E. and D. H. Ubelaker

19xx Standards for Data Collection from Human Skeletal Remains. Fayetteville: Arkansas Archaeological Survey.

Causey, M. and P. Lane

2005 GIS and landscape archaeology: delineating the possible long-term environmental effects of pastoralism on the Laikipia Plateau, Kenya. *Nyame Akuma* 64: 24-32.

Chamberlain, N.

2006 Report on the rock art of South West Samburu District, Kenya. *Azania* 41: 139-57.

Curle, A.T.

1933 Prehistoric graves in the Northern Frontier Province of Kenya Colony. *Man* 33: 99-101.

Herzfeld, M.

1996 Monumental indifference? *Archaeological Dialogues* 3: 120-123.

Hilton, C.

2007 Report on the Baawa 2006 fieldwork skeletal sample. Unpublished manuscript, on file at the BIEA, Nairobi.

Holtzman, J.D.

2003 In a cup of tea: Commodities and History among Samburu Pastoralists in Northern Kenya. American Ethnologist 30: 136-59.

2004 The local in the local: Models of time and space in Samburu District, Northern Kenya. *Current Anthropology* 45: 61-84.

Lane, P.J.

1996 Rethinking ethnoarchaeology. In R. Soper and G. Pwiti, editors, *Proceedings of the 10th Congress of the Pan African Association for Prehistory and Related Studies*. Harare, University of Zimbabwe Press, pp. 727-732.

Lane, P.J., editor

2005 Landscape and Environmental Change in Semi-Arid Regions of East and Southern Africa: Developing Interdisciplinary Approaches – Summary of Results on Lakipia. Unpublished Report, on file in the BIEA Library, Nairobi.

Lane, P.J.

in press The later Holocene archaeology of Laikipia Plateau, Kenya and evidence for environmental change. In P.A. Tsheboeng et al. (eds.), Proceedings of the 12th Congress of the Pan African for Prehistory and Related Studies. Gaborone.

Leakey, M. D.

1966 Excavation of burial mounds in Ngorongoro Crater. *Tanzania Notes and Records* 66: 123-35.

Lesorogol, C. K.

2003 Transforming institutions among pastoralists: inequality and land privatization. *American Anthropologist* 105: 531-541.

2005 Privatizing pastoral lands: economic and normative outcomes in Kenya. *World Development* 33: 1959-1978.

Lewis, I. M.

1961 The so-called 'Galla Graves' of northern Somaliland. *Man* 61: 103-6.

Lynch, B. M.

1979 Four Turkana graves at Ng'amoritung'a in N.W. Kenya. *Azania* 14: 161-162.

Meskell, L.

2002 The intersections of identity and politics in archaeology. *Annual Review of Anthropology* 31: 279-301.

Mapunda, B. B.B. and P. J. Lane

2004 Archaeology for whose interests – archaeologists or the locals? In N. Merriman, editor, *Public Archaeology*. London: Routledge, pp. 211-223.

Nicholas, G.P. and T.D. Andrews

1997 Indigenous archaeology in the postmodern world. In G. P. Nicholas and T. D. Andrews editors, At a Crossroads: Archaeology and First Peoples in Canada. Burnaby, B.C.: Archaeology Press, pp. 1-18.

Posnansky, M.

1968 Cairns in the southern part of the Kenya Rift Valley. *Azania* 3: 181-7.

Rightmire, G.P.

1984 Report on human skeletal remains from the Laikipia District, Kenya. In A. Siiriäinen, Excavations in Laikipia: An Archaeological Study of the recent prehistory in the Eastern Highlands of Kenya. Helsinki: Suomen Muinaismuistoyhdistksen Aikakauskirja Finska Fornminnesförenengens Tidskrift, p. 98.

Sassoon, H.

1968 Excavation of burial mounds in Ngorongoro Crater. *Tanzania Notes and Records* 69: 15-32.

Siiriäinen, A.

1984 Excavations in Laikipia: An Archaeological Study of the Recent prehistory in the Eastern Highlands of Kenya. Helsinki: Suomen Muinaismuistoyhdistksen Aikakauskirja Finska Fornminnesförenengens Tidskrift.

Soper, R. and B. M. Lynch

1977 The stone-circle graves at Ng'amoritung'a, Southern Turkana District, Kenya. *Azania* 12: 193-208.

Straight, B.

1997 Altered Landscapes, Shifting Strategies: The Politics of Location in the Constitution of Gender, Belief, and Identity Among Samburu Pastoralists in Northern Kenya. PhD dissertation, University of Michigan.

2002 From Samburu heirloom to New Age artifact: The cross-cultural consumption of Mporo marriage beads. *American Anthropologist* 104: 1-15.

2005 Cutting time: Beads, sex, and songs in the making of Samburu memory. In W. James and D. Mills, editors, *The Qualities of Time: Temporal Dimensions of Social Form and Human Experience*. ASA Monograph Series. Oxford, UK: Berg, pp. 267-283.

2007 Miracles and Extraordinary Experience in Northern Kenya. Philadelphia, PA: University of Pennsylvania Press.

Stiles, D. and S. C. Munro-Hay

1981 Stone cairn burials at Kokurmatakore, northern Kenya. *Azania* 16: 151-66.

Sutton, J. E. G.

1973 The Archaeology of the Western Highlands of Kenya. Nairobi: British Institute in Eastern Africa (Memoir 3).

Taylor, D., P. J. Lane, V. Muiruri, A. Ruttledge, R. Gai McKeever, T. Noland, P. Kenny and R. Goodhue

2005 Holocene vegetation dynamics on the Laikipia Plateau, Kenya. *The Holocene* 15: 837-46.

Watkins, J. E.

2000 Indigenous Archaeology: American Indian Values and Scientific Practice. Walnut Creek: AltaMira Press.