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Front cover: Examining the pharaonic inscriptions at Khashm el-Bab on the Korosko Road, November 2013  
(photo: D. A. Welsby).

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Reports

Animal deposits at H29, a Kerma Ancien cemetery in the Northern Dongola Reach

Pernille Bangsgaard

The Cemetery of H29

The site is located close to the Hawawiya Nile a few kilometres downstream of its diffuence from the Alfreda Nile. H29 was the best preserved cemetery from the Kerma Ancien period (2400-2050 BC) found by the Sudan Archaeological Research Society during its survey of the Northern Dongola Reach in 1993-1997 (Welsby 2001). The decision to excavate the cemetery came in 2011, when a deep and newly dug pit was discovered only 50m from the mound, thus putting the site in imminent danger from future agricultural development once a water pump had been installed. During a single field season in 2011-2012, the site was, therefore, completely excavated and a total of 97 graves recorded (Welsby 2012).

Some of the graves at H29 were found with the characteristic Kerma circles of small upright black stones infilled with white quartzite pebbles. Others were found with upright stone slabs with infill still intact echoing contemporary and later C-Group graves and similar to the earliest graves in the Eastern Cemetery of Kerma (Honegger 2011, 9-13). Some of the graves had clearly been robbed and such activities probably took place both in antiquity as well as in more recent years. The funerary practices appear to mirror those identified elsewhere for the period, with various grave goods such as beads, ear studs and ceramics, the latter including both Kerma and C-Group wares (Welsby 2012). The location of ceramic sherds dispersed across several graves, but belonging to a single vessel, suggests that the location of the faunal material could also have been influenced by later activities at the site, whether it be the digging of later graves or robbing activities (pers. comm. Isabella Welsby Sjöström).

In many of the less disturbed graves large cattle hides covered in red ochre were found at the bottom of the grave. Inside, the human bodies were found tightly contracted laying on their right side most frequently with the head to the east (Welsby 2012).

Faunal deposits at H29

Twenty five of the graves excavated by SARS contained some form of faunal deposit. The remains were mainly found in the fill of the grave itself or in the tumuli. Only in two cases were deposits located next to the human skeleton at the bottom of the shaft (graves (A)131 and (A)661). An additional six deposits were recorded at various locations on the surface of the cemetery. The preservation of the bones is generally poor and as such most are fragmented with varying degrees of surface damage. Despite these problems it was possible to identify many fragments to species or genus level (91 from a total of 244 fragments). The distribution of these identified fragments (NISP) can be seen in Figure 1.

Sheep were clearly the animal most frequently deposited, apart from the group of medium ungulates, which potentially includes gazelle and goat as well as sheep. Neither of the two former species has been securely identified at the cemetery. Furthermore, most of the medium ungulate fragments were found together with fragments, which were positively identified as sheep. Therefore, it is very likely that this entire group of medium ungulates all originate from sheep, thus accounting for around 75% of the total amount of identified bones.

The remaining 25% of the identified assemblage includes larger ungulates, such as cattle and equids. Both these species have been positively identified at H29, but for the latter it is unclear whether the fragment originates from horse or donkey. The occlusal enamel pattern of a single tooth does, however, suggest that donkey or onager is the most likely species (Johnstone 2004, 163-166). Finally, two fragments were identified as coming from bird.

Deposits of Birds

Of the two bird bones one was found on the surface, the other inside grave 373. The fragments probably belong to the Phasianidae family and are likely from either a francolin or a partridge. At present both genus are represented by multiple species in the general area.
Birds are not a common form of deposit at Middle Nubian cemeteries, but it cannot be ruled out that the birds were deposited intentionally at the cemetery. This would also appear to be the most likely conclusion, as one of the two bird bones was completely burnt black, suggesting that some form of human activity was involved in its deposition at H29. The other bird fragment was found inside grave (A)373, which had not been robbed or otherwise disturbed prior to excavation (pers. comm. Derek Welsby).

Deposits of large ungulates: Equids and Cattle

Both species of large ungulates are exclusively represented by fragments from the skull, but there are also internal variations in the distribution. In Figure 2 each ungulate species has been divided according to which bones or part of the body is represented.

The bones identified as equids include fragments of teeth, maxilla and mandible; in essence the upper and lower jaw, together with some likely equid fragments from the large ungulate group, all of which belong to various parts of the neurocranium. Thus the evidence would suggest that complete or near complete equid skulls were deposited at the cemetery.

The cattle fragments represent a more restricted group of elements, as only the horn core, the frontale and the zygomaticus have been identified. The best preserved example of these skulls was discovered at the side of grave (A)534, placed in the fill near the surface (see Plate 1). Based on the distribution of elements it is likely that the cattle skulls deposited at the cemetery were an early type of the well-known cut bucrania, described by Louis Chaix from especially the Eastern Cemetery at Kerma in both late Kerma Ancien and Kerma Classique graves (Chaix 2001, 364).

At H29 remains of cattle were found in five graves and on the surface disassociated with any one grave. Inside they were located in various fill layers and also on the surface of the grave. The equids are connected with three graves and were found both in the fill layer and on the surface (see Figure 3 for the location). Based on the above mentioned evidence it is impossible to pinpoint a consistent or exact location of these large ungulate remains in relation to the graves. The distribution of remains may also, at least in part, relate to the aforementioned robbing and following disturbance and movement of the bones.

Deposits of Medium Ungulates: Sheep

As the most common species at the cemetery, sheep is also represented by a more varied assemblage of bones than any of the other species (see Figure 2). This varied assemblage of bones includes a few skull elements found on their own, several finds where multiple parts of the body are represented, some finds of a single or two adjoining long bones from the upper leg, and finally some finds of metapodia representing the lowest part of the leg. The first and the latter type would not include any substantial meat-bearing bones, whereas the two remaining types do. At H29 grave (A)58 contained the largest assemblages of sheep bones and although several parts of the body are present, it is a far from a complete skeleton (see Figure 4).

The diverse collection of bones also means that some information of ontogenetic age is available for sheep, although it is purely based on the fusion of long bones (Rietz and Wing 1999, 76) and not the more reliable teeth eruption and wear (Greenfield and Arnold 2008). The data clearly establish that the typical animal was either a juvenile or young adult (see Figure 5). It was probably also healthy, as no form of pathology or abnormalities have been found on any of the bones. Additionally, a single pelvis suggests that the preferred animal for a cemetery deposit was male. If the faunal assemblage was to represent a typical small scale household population of sheep, a wider set of age categories would be expected, as older breeding females and male were put down when their fertility declined. The limited age categories identified at H29 may reflect a conscious choice on the part of the community,
to exclusively use young, healthy and fertile animals. But it might also be suggested that the young and probable male animals would constitute a natural surplus in a population, not needed for breeding purposes and killed around or shortly before reaching full adulthood.

The location of the sheep deposits is as diverse as the larger ungulates, as they are found throughout the cemetery (see Figure 6). Inside the graves the bones were located in various fills, lower and higher up. They were found on the surface of the grave, inside the tumuli or in the fill of a robber pit. So once again it is not possible to establish a clear pattern of location for the deposits at H29.

**The meaning of a deposit**

What did the sheep represent to the people who buried their dead at H29 and were the animals deposited there as a skull, as the remains of a meal or as a complete animal? Certainly the two deposits containing only skull fragments suggest that we do have deposits of this first kind at the cemetery. The type is similar to the previously described cattle horn cores or
bucrania and is a well-known type of deposit at other Kerma cemeteries (see for example Dubosson 2011; Chaix 2001). The two additional interpretations of the sheep remains, as either a meal or a near complete animal, can perhaps be answered by another line of evidence: at H29 around 20% of the deposits of sheep display some form of human induced changes. These changes include signs of burning as well as cut marks. The burning is limited to 18 fragments, of which seven were completely burnt black. The fragments were either from the ends of long bone or unidentified fragments of long bones. The remaining 11 fragments were only partially burnt black; they include fragments of ribs, vertebrae, long bones and a skull. Included in the latter group is a skull fragment from grave (A)528, which was where the most complete skeleton of a sheep was found, as mentioned above. In total four graves and two separate groups of surface finds contained burnt fragments (graves (A)343, (A)498, (A)507 and (A)528).

The cut-marks were identified on two elements from two separate graves ((A)293 and (A)675). The cut-marks are of a sort typically related to the dismembering process and were found on an ulna and a tibia respectively.

Taken together the evidence clearly suggests that the majority of the sheep remains found at H29 were not deposited as complete and intact animals. Instead the remains found their way there as bones that had been altered by human hands. It is highly probable that such bones could have been the remains of a meal or a feast or, as in the case of a single metapodium, a symbol of such a feast.

**Comparative deposits**

Due to its location the cemetery of H29 was likely associated with one or more small rural communities in the hinterland of Kerma and as such it promises to provide a different set of funerary data compared to the extensive Eastern Cemetery with its numerous and elaborate graves, prolonged use and the association with the urban centre of Kerma (Honegger 2011). In the earliest graves at the Eastern Cemetery, the early Kerma Ancien deposits of sheep appear to consist exclusively of horn cores, which were placed directly on top of, or next to, the deceased (Dubosson 2011). Later sheep are present as two kinds of deposits in the Kerma Moyen graves from the Eastern Cemetery as well as at a number of other cemeteries. Firstly, complete sheep are located inside the grave proper. They are typically deposited along the lower leg of the deceased. At Kerma this type of deposit could become very large with multiple animals and include sheep as well as goats and dogs. In some instances the animals could be elaborately decorated, with beads or ostrich feathers attached to the horns. Secondly, sheep deposits are also present inside the grave as cuts of meat. These are typically found alongside other grave goods such as ceramic vessels and located next to the upper body or head of the deceased (Chaix 1993; 2001).

A series of Kerma Moyen graves has also been excavated at cemetery P37 by SARS in 1997. The site is located just 17km north north east of H29, and although the cemetery is substantially larger its setting in a similar rural landscape suggests that the finds are more directly comparable to that of H29 than the Eastern Cemetery (Welsby 2001, 206-229). The excavation of the southern end of the cemetery revealed three types of faunal deposits associated with 12 of the 13 excavated graves and mirroring the findings from Kerma. Firstly, cuts of meat from sheep and goat were placed in front of the deceased. This assemblage consisted of long bones, ribs and vertebrae, excluding any bones from the feet or skull. Secondly, complete animals were placed at the feet or lower leg of the deceased. The species include sheep, goat and a dog. Examination of the skeletons suggests that the typical animal was juvenile and male. Finally, outside the grave proper immediately to the south the remains of cattle bucrania were found (horn cores and frontale). Based on the size and robustness of the horn core the deposit type included both males and females (Grant 2001).
Further afield among the C-Group cemeteries we often find deposits of mainly complete sheep. The majority of these are from a slightly later period than H29 as the earliest finds so far belong to the I/b and early II/a phases. This is the case at several cemeteries excavated by the Scandinavian Joint Expedition, where complete sheep were the most common deposit type. There is, however, no evidence for deposits of sheep skulls; instead cattle skulls may occasionally be deposited outside the tumuli along with one or more ceramic bowls (Bangsgaard 2010; 2014).

The appearance and general distribution of the large ungulate skulls and in particular the cattle skull elements at H29 are comparable with the later Kerma Moyen skulls found in such abundance at Kerma. But these later skulls were typically placed just south of the tumuli in herd formation and the largest deposits contain as many as 4,300 skulls (Chaix and Hansen 2003). The only cattle deposit found in connection with the Kerma Ancien graves at the same Eastern Cemetery consist exclusively of cattle horn cores. These are sometimes found with the horn-sheath still preserved and were typically placed over or next to the midsection of the deceased (Dubosson 2011).

Figure 6. Cemetery H29; graves marked by black circles contain sheep and/or medium ungulate remains (plan: SARS NDRS Archive).
Conclusion
The small assemblage of faunal deposits identified at H29 includes evidence of large ungulate skulls and birds as well as more extensive and numerous remains from sheep. The latter appear to also include the aforementioned skulls, but evidence also clearly suggests that the majority of the elements were the likely remains of meals or feasts. The overall pattern fits into the tradition of mainly sheep and cattle deposits, which is so well known from other Kerma cemeteries, and ties into the tradition of faunal deposits at C-Group cemeteries. But it also seems clear that the pattern of deposits at H29 is less settled in placement, in species and certainly in what specific parts of the body were present. This later variation particularly opens up different interpretations of the human actions that led to the bones becoming part of the archaeological record. Conceptually a jumble of bones may represent something very different from a complete and untouched animal. The possibility of some form of communal meal or feast, the remains of which ended up inside the fill of the grave, is an interesting one. Faunal evidence of such activities has never been testified clearly at any Kerma cemeteries, as the articulated cut-off meats from Kerma Ancien graves appear more as intact provisions or offerings for the dead than the remains of a meal. Also it should be mentioned that the pots deposited upside down next to some of the Kerma Ancien graves could have been used in such a funerary feast. Perhaps what we are seeing in the H29 cemetery is a less formal graves could have been used in such a funerary feast. Perhaps what we are seeing in the H29 cemetery is a less formal and separated form of funerary activities compared to that observed at the other and mainly later sites. Is it possible to imagine that these feasting activities were later removed from the cemetery proper and what remained were symbolic herds of cattle above the grave, complete sheep and cuts of sheep meat inside the grave, as a meal for the dead.

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Horus, Lord of the Desert. A natural rock outcrop along the route from Buhen towards Wadi Murrat (photo D. A. Welsby).

View upstream along the Wadi Murrat from the late 19th century Anglo-Egyptian fort. The pharaonic inscriptions are amongst the trees at the wadi edge in the far centre (photo D. A. Welsby).