Contents

Reports

Tululat Architecture at Jebel Barkal: 2
Timothy Kendall

The New Kingdom Town on Sai Island 17
(Northern Sudan)
Florence Doyen

The British Museum epigraphic survey at Tombos: 21
the stela of Usersatet and Hekaemsamen
Vivian Davies

A name with three (?) orthographies: The case of 30
the ‘king’s son, overseer of southern foreign
lands, Penre’
Tomas A. Bacs

Fieldwork at Sesebi, 2009 38
Kate Spence, Pamela Rose, Judith Bunbury, Alan Clapham,
Pieter Collet, Graham Smith and Nicholas Soderberg

Cemeteries and a late Ramesside suburb 47
at Amara West
Neil Spencer

Petroglyphs under the sand – A preliminary report 62
on the field season 2008/09 at the fortress Gala
Abu Ahmed
Friderike Jesse and Robin Peters

Houses and Pyramids at Kawa, excavations 2008-9 72
Derek A. Welsby

What are these doing here above the Fifth Cataract?! 78
Napatan royal statues at Dangiel
Julie R. Anderson and Salah eldin Mohamed Ahmed

Petrography of Pottery from Meroe, Sudan 87
Robert B. J. Mason and Krzysztof Gregowski

The Meroitic Necropolises of Sai Island. 92
First Season at the Meroitic Cemetery 8-B-5.A
Vincent Francigny

Front cover: The head of a Kushite king, excavated in 2008, 97
from the Amun temple at Dangiel. It has been tentatively
identified as Aspetla (593-568 BC) based upon comparisons
with statues of this king discovered at Jebel Barkal and
Dokki Gel-Kerma. (Photo © J. R. Anderson, Berber-Abidiya
Archaeological Project).
Houses and pyramids at Kawa, excavations 2008-9

Derek A. Welsby

The Sudan Archaeological Research Society’s team was in the field from 16th December 2008 until 10th February 2009.¹

Excavations in the town

Excavations were continued within the domestic structure, Building A2, at the southern edge of the settlement located immediately across the street from the painted shrine Building A1. The earlier Building A3 to the east was also re-excavated (Welsby 2001a, 64-66). Last season Building A2 had been almost completely excavated down to, and in some cases below, its primary floor level (Welsby 2008, 34-36). Excavations were continued over the whole area of the building as well as in the street and beneath Building A3.

Building A2 sealed several walls from at least two earlier buildings (Plate 1). Remains of earlier walls, of Buildings A4 and A5, were found in all rooms of A2, except for room I, the excavation of which has not, as yet, been carried to the same depth. Early walls were also found in the street between Buildings A1 and A2. Although it is clear that Building A3 was demolished to construct A2 it appears that the builders of A2 removed all traces of A3 within the footprint of the new building. All the earlier walls found under A2 do not appear to relate to A3, although there are problems of interpretation as the early walls extend under the east wall of A2 but do not appear under A3.

The walls of Buildings A4 and A5 are well-constructed with mud-plaster rendered faces. Several doorways were noted, one with a mud-brick pivot block, another with a pivot stone. Beneath the northern range of A2, these earlier buildings were fully excavated and survived to a maximum height of several courses. They were built on the natural sand on the gentle slope down, from the north east to south west (Plate 2), some of the walls acting as terrace walls. Excavation of the walls further to the south was not completed. The wall revealed in the street describes an arc and may be a part of A3.

¹ The core team consisted of Pernille Bangsgaard Jensen (archaeozoologist), Alice Forward (archaeologist), Enas Awadulla Mohammed (NCAM inspector), Mohammed Ibrahim Mahmoud Mohammed (cook), Julian Newman (archaeologist), Ross Thomas (archaeologist, pottery specialist) and Derek Welsby (director, photographer, surveyor). We were joined for two weeks by the Polish remote sensing experts Tomasz Herbich and Dawid Swiech and for a week by the geomorphologists, Professors Mark Macklin and Jamie Woodward.

A much wider range of pottery types was associated with Buildings A3-A5 than with A2 and these included many handmade wares. However, several of the distinctive early Kushite wares are common to all contexts in the area, suggesting that all the buildings found date to the earlier Kushite period.

Cemetery R18, area (JE3)

Survey of the Kushite cemetery in 1993 had noted the presence of substantial remains of structures made from dressed white and yellow sandstone blocks, on a ridge of alluvium at the north-eastern extremity of the cemetery (Welsby 2001b, 149 and fig. 3.97). These had a very lucky escape a few years...
ago when a bulldozer excavated a hole immediately adjacent to the monuments (Plate 3) in a quest for gravel to be used in the construction of the Kareima to Kerma highway. Another similar hole a little to the north unearthed human bone and later Kushite pottery, presumably the result of having cut through a grave. Fortunately gravel was not found close to the surface here otherwise the whole area would have been totally destroyed.

An area of 25 x 15m was initially examined, later extended to the north (Figure 1). On the surface there was a prominent flat-topped mound, roughly square in shape, formed of large stone blocks and rubble, all eroded to give the impression of a stone pavement (Plates 4 and 5). As so often in the cemetery at Kawa, what you see on the surface bears no relation to what was originally there. This roughly square pavement turned out to be rubble from the destruction of a monument immediately to the north while a further monument, a little to the south west was totally masked by further rubble. Excavation of this area has not yet been completed.

In the northern and central part of the excavation trench is a large pyramid, built of dressed blocks of white sandstone, much of it in a very friable condition. It is a stepped pyramid, four steps remaining in the centre of its south side (Colour Plate XXX). The steps vary in height between 260 and 290mm and are constructed from up to three courses of often small, but well-dressed blocks, set in a purple lime mortar. The core is of both large and small stones set in an earth matrix. The exact size of the pyramid has yet to be ascertained but it is a minimum of 9.1m square and probably was approximately 10.4m square. On its east side it has a well-constructed offering chapel, built of regular courses of ashlars in yellow sandstone (Plate 6), fronted by a pylon in white sandstone. The front face of the pylon has fallen and several courses of the articulated blocks survive, as well as the lower part of a door jam, a large block of yellow sandstone. The centre of the pyramid is occupied by a massive robber pit (Colour plate XXXI, Plate 7), the robbers having excavated the full width of the descendary and perhaps having cut through the roof of the burial chamber. Excavation of the robber pit, the descendary and the burial chamber(s) has yet to be completed. The north side of the offering chapel
had been constructed on the descendency fill and was totally destroyed by the robbers.
Predating the robbing, wind-blown sand had built up against the south side of the pyramid, sealing some rubble from the collapse of the monument. Even before the destruction of the monument, during the final phase of robbing, the structure was in a perilous state. The eastern end of the south wall and the adjacent section of the east face have subsided markedly into a subsurface feature, perhaps an earlier grave, or possibly into a secondary grave-chamber excavated under the pyramid, an occurrence common at Kawa and frequently noted at Sedeinga.

Immediately to the south west of the pyramid, low down in the rubble, the capstone was found, a shallow truncated pyramid with a central square depression, the bottom pierced by two holes (Plate 8). The top of a stone finial – of the ‘mushroom’ type as known, for example, from Sedeinga (cf. Berger 1994), Sai (Geus 2002, pl. XIVa) and Soleb (Giorgini 1971, 354, fig. 692) – was recovered. Also amongst the rubble was a fine sandstone stela
depi
c
ting a Kushite man, presumably the owner of the pyramid, before the goddess Isis beneath a winged sun disc (Colour Plate XXXII). Substantial areas of paint survive, red, yellow, blue and white among them, on the relief. From amongst the rubble came the stepped base of a square pilaster, a fragment of an offering table and a number of blocks with graffiti (Plate 9).

A little to the south west of the pyramid was another much smaller pyramid (Plate 10). Again, a stepped pyramid, it was constructed of large blocks of yellow sandstone, one course (height 305mm, 320mm) forming each step. Many blocks bore setting-out lines for the placing of the course above. As the pyramid measures only 2.8m north-south, by 2.6m east-west, the blocks appear rather large and well-dressed for such a small monument. Also, many are very badly wind-eroded, even on the south side of the monument, suggesting that they may have been reused from an earlier structure. Found on the south and west sides was an enclosure wall, a single row of large stone blocks, set on edge. Excavation was not carried far enough to ascertain whether the enclosure wall extended around the whole monument. No evidence for a chapel was noted. The north-east angle had subsided into a pit, the nature of which is not, as yet, clear.

Although pyramids are a common feature of Kushite cemeteries, examples constructed of dressed stone have hitherto only been noted in the royal cemeteries at el-Kurru, Nuri, Jebel Barkal and Meroc and in the elite Western Cemetery at the latter site. Other stone pyramids are known. During the Merowe Dam Archaeological Salvage Project a pyramid constructed of rough blocks of granite was discovered near et-Tereif at site 4-F-71 (Welsby 2004), another at Sedeinga, designated WT.1, was built of undressed slabs (Giorgini 1965, 116ff, pl. XXXIa). At Karanog some pyramids had several course of dressed stone, the upper part being of mud brick (Woolley and Randall-MacIver 1910, pl. 112). At Kawa, however, the vast amount of rubble associated with the monuments suggests that they were constructed, throughout, of stone.

The pyramids at Kawa are hence unusual in a non-royal context, on account of their style of construction. Pyramid 2 is also a very substantial monument, being larger than many similar monuments of ruling Kushite kings. It is directly comparable in size with the pyramids in the northern cemetery at Jebel Barkal and is considerably larger than many royal pyramids in the Northern
Cemetery at Meroe dating from the 1st century BC onwards, some of which are as small as 5m square. It ranks in terms of size with the largest in the Western Cemetery at Meroe, where only four are over 10m in size, the largest being 11.3m square (Dunham 1963). The substantial nature of a pyramid at Kawa, and there are probably many more, is further evidence for the rise to prominence of the provincial elites in the later Kushite period, when they may have come to rival the rulers themselves (Welsby 1996, 199ff). Comparing the Kawa pyramid with those at other elite centres, Pyramid 2 is larger than any of those known in the elite cemeteries at Qasr Ibrim (Mills 1982, 44-45), Karanog and Sedeinga; what may be a larger mud-brick monument, 12m square, at Faras, is not described in detail (Griffith 1925, 64).

The importance of Kawa in the early Kushite period is clear, its Amun temple being one of several visited by the king on a regular basis. However, in the later Kushite period the excavations by Griffith, Kirwan and SARS within the town have not provided evidence that this importance was sustained. Now the discovery of the stone pyramids at Kawa highlights the high status of the cemetery and presumably of its associated settlement at this time. Kawa appears to have flourished for most of the Kushite period and retained its position as one of the major centres in the kingdom.

Very large amounts of pottery had been recovered in the previous season from within Building A2 and south of the kiln. Much of this backlog was processed this year by Isabella Welshy Sjöström, assisted by Ross Thomas, and some of this material is reported upon in this volume. The vast amount of animal bone also recovered from Building A2 was studied by Pernille Bangsgaard Jensen. Almost all this material came from cattle. The substantial quantities of soil samples collected during the 2007-8 and this season were dry and then wet sieved by Julian Newman and await study.

Survey in the town
The magnetometer survey was continued over a further 5 hectares in the southern and northern parts of the settlement using a fluxgate gradiometer. This revealed a large number of mud-brick buildings, many of which were not visible on the surface. Some areas of the town are densely settled, while others appear, from surface and geophysical surveys, to be devoid of structures (Plate 11). It is not clear whether this accurately reflects the situation, or whether in some area the building remains are deeply buried, or indeed have been totally removed by wind erosion.

Site protection
During the season the whole of the ancient town was enclosed on its north, east and south sides, the boundary being brought up to the Nile bank (Plate 12). The fence was constructed from angle-iron posts set in concrete and linked by a single strand of barbed wire. An additional strand will be added when sufficient funds are available. Steps were also taken to mark out the boundary of an archaeological zone.
which will include within it the Pharaonic and Kushite town, the Kushite cemetery, three Kerma period settlements, the Kerma Classique cemetery and post-Medieval occupation deposits. Much of the environs of the site are threatened by agricultural development and protection of the site within its largely unspoilt riverine and desert environment is a matter of some urgency.

**Geomorphology**

The study of the Nile palaeochannels by Prof. Mark Macklin from the University of Aberystwyth and Prof. Jamie Woodward from the University of Manchester was continued. Sediments were logged in a number of sections both within the palaeochannel belt and through the alluvial fans. Samples were collected from these sections for OSL dating. In an attempt to date the final abandonment of the well fields the upper fills of two brick-lined wells at site H10 (see Welsby 2001b, 46 - Type 4, 605ff) were excavated and further OSL samples taken.

**Acknowledgements**

The team would like to thank our ghaffir, Selim Abdel Magid and his family, for all their help and hospitality and the 25 workmen from Kasura, without whom we could have achieved very little. Thanks are also extended to the National Corporation for Antiquities and Museums, to the British Council (especially Mustafa Mohammed), to the Pagoulatos family of the Acropole Hotel in Khartoum and to Dr Vincent Francigny. The project was financed by SARS from grants made by the Institute for Bioarchaeology, the British Museum and patrons of the Society. The magnetometer survey was again funded by a grant from a very generous private individual.

**Bibliography**


Colour plate XXX.
Kawa. The south face of Pyramid 2. The collapse of the facing is clearly visible.

Colour plate XXXI. Kawa. The massive robber pit cutting through the core of Pyramid 2.

Colour plate XXXII. Kawa. Incised and painted stela from within the rubble of Pyramid 2.