# SUDAN \& NUBIA 

 The Sudan Archaeological Research Society

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Front cover: Berber Meroitic Cemetery. Tomb, BMC 8, showing grave goods, the extended position of the skeleton and the remains of a coffin (photo: Mahmoud Suleiman Bashir).

Sudan er Nubia is a peer-reviewed journal

## Kawa Excavations 2009-2010

Derek A. Welsby

Excavations were continued in a number of areas within the New Kingdom and Kushite town and in its associated cemetery lying several hundred metres to the east. ${ }^{1}$

## Area A

Excavations were begun here over a decade ago with the investigation of the shrine, Building A1, containing a bark stand bearing the painted cartouches of Taharqo (Welsby 2001, col. pl. XLV). Immediately across the street to the north was a building (A2) of similar mud-brick construction $15.1 \times 9.5 \mathrm{~m}$ in size. This structure, although similar in plan to domestic buildings elsewhere on the site, appears to have had a more specialised function on account of the very limited repertoire of pottery vessels used within it and the specific faunal assemblage. Also, the nature of the deposits within the rooms, large quantities of big pieces of pottery and bone resting on the surfaces then covered by a layer of sand before the sequence was repeated, suggests that the building may have been used only on brief occasions before periodic abandoning (Welsby 2000, 6-8; 2001, 64-67; 2002, 32-35; 2008, 34-36; 2009, 72). The whole of the area of Building A2 was excavated, along with the street between it and Building A1 and an area to the east.

## Period 1

The earliest features noted were two cylindrical ceramic ovens (Plate 1) set into what was assumed to be the undisturbed, natural, silty sand, a little of which was excavated without any finds being recovered. No other features were found at this level across the whole of the excavation area. Subsequently the area was intensively occupied, with many occupation deposits and abundant evidence for burning being noted (Plate 2).

## Period 2

This was marked by the construction of a building (A3) with walls of mud brick, generally one header in width (c. 370 mm ) strengthened at intervals by small internal buttresses one header wide (Plate 1). Courses of headers and stretchers alternate. The full plan of this building was not recovered. It extended out of the excavation area to the west and north (Figure 1) and some of its walls appear to have been totally

[^0]removed at a later date. ${ }^{2}$ The pieces of walling discovered consisted of both straight and curved sections (Plate 1), surviving to a maximum height of over 1.5 m . This building was modified particularly on its eastern and south-eastern side, with walls realigned and one strengthened with a massive buttress. An additional room, of the same style of construction as the original walls, was also added in this area.


Plate 1. Period 1 cylindrical ceramic oven with walls of Buildings A3 and $A 4$ overlain by the north wall of the shrine, Building A1.

## Period 3

The newly constructed parts of this building (A4) is of rectilinear plan with walls built of courses of one header and one stretcher, or one header and two stretchers attaining a thickness of between 544 and 574 mm . As with A3 it extends out of the excavation area, so little can be deduced of its original form. When it was built, some walls of A3 were incorporated into the new structure while others which were


Plate 2. Section against the south wall of Building A2 in Room I showing deposits associated with Buildings A3 and A4 as well as earlier occupation material.
${ }^{2}$ During the excavation of the shrine, owing to the necessity of refilling the rooms as soon as possible to preserve the fragile wall paintings, it did not prove possible to excavate below its primary floor surfaces.



Building A4
not to be reused were demolished to the level of its primary floor surface (Plate 3). One doorway, 1.96 m wide, was noted. Internal features included stone door pivots and post pads. The builders of A2, which was on a completely different

Figure 1. Buildings A3 and A4 (scale 1:200).
alignment to its predecessors, demolished the walls of A4 down to their primary floor levels within the new building.

This season's work brought to a close the excavations in this area begun in 1998. Although towards the southern margins of the Kushite town where the occupation mound appears to be low, approximately 4 m of stratigraphy was preserved (Plate 4), the whole sequence dating to the early


Plate 3. Thin walls of Building A3 abutted by the thicker walls of Building A4.


Plate 4. The central part of Building A2 with walls of Buildings A3 and $A 4$ at the close of excavation.
Kushite period. Just how early is, at present, unclear but the sequence must extend well back before the reign of Taharqo, who presumably built the shrine, into the $8^{\text {th }}$ if not the $9^{\text {th }}$ century BC. All the phases of use of Area A were associated with early Kushite pottery and although the nature of the assemblage changed, reflecting the differing uses of the area over time, similar forms were found at all levels. No pottery of New Kingdom type was noted.

## Area F

The excavation of a rectangular kiln, Building F3, in this area in the 2007-8 season failed to indicate its specific function (Welsby 2008, 36-37). Therefore this year another similar structure, Building F7, was excavated a little over 20 m to the south. This kiln was slightly smaller than the other, at $5.35 \times 3.67 \mathrm{~m}$, but otherwise was very similar (Plate 5, Colour plate XVII) and set in a pit, dug 1.9 m through early Kushite deposits and buildings into the sterile sand. Some of its cross walls, supported on arches, survived to their full height and it is on the top of these that the specially shaped floor bricks will have been laid. Very few fragments of these were found, suggesting the possibility that they had been removed for reuse in the other kiln where many were discovered. Kiln F7 only exhibited one period of use. Its poor quality of construc-
tion may have led to its abandonment and the building of the kiln to the north to replace it. A sherd from an imported Roman amphora suggests that the kiln does not predate the $1^{\text {st }}$ century BC.

Both of these kilns show a striking similarity to those generally used to fire tiles in the North-Western provinces of the Roman Empire and are also very different from the ubiquitous cylindrical kilns to be found at many periods in the Nile Valley. ${ }^{3}$ The possibility of a link between these two widely spaced regions is of considerable interest.

Earlier buildings in this area were only preserved to a height of a few courses (Plate 6). No complete building plan was noted. The remains had been disturbed by the construction of the kiln and to the west they may have been totally eroded away. We are thus uncertain which areas are internal or external spaces. In what appears to be an external space were 11 ceramic containers, set into the primary floor surface (Plate 7). Of these, 10 were the lower parts of pottery vessels ranging in maximum diameter at their girth from $c$. $190-390 \mathrm{~mm}$, while the other was an oval basin $1 \times 0.5 \mathrm{~m}$ in size. The upper parts and rims of these vessels did not survive and may have been removed when a new floor surface was laid in the area. Within the basin were a few complete small pots and in the fill of the basin and of some of the other vessels were fragments of mud bearing seal impressions. A hard floor surface sealed these vessels and contained much pottery. In the uppermost deposits were vast quantities of pottery sherds, all small and eroded. These appear to be a dump of material but from where they came and why they were placed here is unclear. Cutting into these deposits were many pits filled with wind-blown sand. The latest phase of robbing of the site occurred only a few months ago when a large pit was dug into the fill of the kiln's western stoke-hole down to the sterile sand at a depth of about 2 m .


Plate 5. Building F7, the southern kiln.

[^1]

Plate 6. Early Kushite mud-brick buildings cut through by the construction pit for the kiln.

Excavation also commenced of the large building (F1) 20 m to the east of the kiln. Only the uppermost levels in two rooms were partly excavated. In the north-western room, Room VIII and in Room IX, immediately to the south (Plate 8), there was a large amount of woven matting with many circular mats across the room with some leaning against the side walls. There were also thick deposits of matting particularly alongside the walls as well as the remains of palm beams. In amongst the deposits were many large pottery sherds, a bucranium and a broad copper-alloy strip pierced by nail holes. Similar deposits were found in the room to the south


Plate 7. Pots and an oval ceramic basin set into the floor surfaces associated with the early Kusbite buildings F8 and F9.


Plate 8. Circular mat in Room VIII of Building F1.
which is linked to it by a doorway. A doorway from Room IX into the corridor to the east retains its timber door frame. Within the mud-brick rubble in Room VIII were many pieces of mud, incorporating small pebbles and small fragments of stone and red brick. On their flat and smoothed surface they bear many impressions from a very large oval seal (Plate 9). It is possible that these were impressed onto a mud-blocking wall sealing the entrance to the room. Excavation in this area will be continued in the coming season.

## Area T

When Griffith excavated the temples at Kawa in 1929-31, work followed by that of Macadam and Kirwan in the winter of 1935-6, the temenos wall, 4 m thick at the base, was briefly investigated and assumed to be of early Kushite date (Kirwan 1955, 208). Only the north-east angle and a small part of the east wall were found. Several years ago, a gateway through this eastern wall was discovered and excavation of


Plate 9. Multiple seal impressions on the door blocking between Rooms VIII and IX in Building F1.


Figure 2. The gateway into the temenos through its east wall (scale 1:100).
this was commenced part way through this season. Kawa was a contemporary foundation with Sesebi, the plan of the Pharaonic town there being well known from the Egypt Exploration Society's excavations in the 1930s. The current hypothesis is that the temenos wall may actually be on the line of the Pharaonic defences and the plan of a settlement of the same form as at Sesebi fits well into the topography of the site at Kawa with the newly discovered gate being in the same position as one of the Sesebi gates. Excavations of the gate are at an early stage so it is premature to elaborate these ideas. What is clear is that the gate had a complex history with four periods/phases already documented (Figure 2).
Period 1
The earliest structural remains located, to date, consist of the temenos wall of mud brick and the walls flanking the gate passage. These walls by the gate are faced in stone. Massive
robber pits dug down into the mud-brick walls, but not penetrating through them, show that the walls of this period survive to a height of at least 2 m .

## Period 2

This substantial gateway must have been in poor condition when it was rebuilt in timber. Massive timbers formed the two sides of the gate passage (Plate 10) while a central triple post-hole presumably supported the timbers against which the two leaf gate closed. Most of the timbers were set in substantial, but shallow post-holes apart from the three on the south side of the gate, which were partly recessed into the uppermost surviving course of the period 1 stone facing. The alignment of the gate is a little different from that of its predecessor with a curious gap of about a metre between its north side and the earlier north side of the gate passage.


Plate 10. The east gate into the temenos with the post-holes of period 2 and walls of periods $3 a$ and $b$ looking north east.

## Period 3

Built over the denuded remains of the period 1 walls and partly on rubble a new gateway was constructed with walls built of reused large stone blocks (Plate 11) including part of a cornice. These, surviving to a height of about 400 mm , were laid in a careless fashion in some cases with the bedding planes of the stones set vertically. Mud-brick walling filled gaps within the stonework even on the faces. In this period the gate passage was 4.48 m wide at its east end increasing in width to 5.32 m to the west and was approximately 4.4 m long.


Plate 11. Detail of the south wall of the gate passage with the top of the period 1 wall cut by circular depressions. The poor quality period 3 a wall, built of reused blocks, overlies it.

## Period 4

The walls of the gate passage were extended approximately 1.75 m to the west in the same crudely laid stonework and bricks.

## The cemetery

In the 2008-9 season two dressed stone pyramids were discovered at the north-eastern extremity of the Kushite cemetery lying to the east of the town.

## Pyramid P1

This small pyramid had a very short descendary, 2.7 m in length, dug to a maximum depth of 1.2 m below the contemporary surface. It provided access into a small tomb chamber which only extended a little below the pyramid. No trace of the primary burial was found, but the lower part of the associated stone blocking wall remained. Subsequently, resting on a thin layer of re-deposited alluvium, were three infants, each aligned west-east in a slightly flexed position, the central one on its left side, the others on their right sides. The central one was accompanied by over 100 very small faience beads. The tomb was then sealed with a rough wall of stones and this in turn was sealed by a mudbrick blocking wall. These blockings remained in situ until the time of excavation and appeared to completely seal the chamber although, on their removal, the tomb was found to be full of silt and sand. Overlying the fill of the descendary on its long axis was found a large fragment of a stone offering table, a smaller part of which had been found close by in the previous season (Plate 12). Pyramid P1 was certainly later than the construction of Pyramid P2 as its descendary cut through the mortar mixing pits associated with the latter and its enclosure wall overlay those pits (Colour Plate XVIII).


Plate 12. The offering table associated with Pyramid P1.

## Pyramid P2

This pyramid, approximately 10.6 m square, had been very badly destroyed (Plate 13). All the facing stones from the west wall and almost all those from the north wall had been taken, while the core had been almost totally removed when


Plate 13. Pyramid P2 before the total excavation of the robber pit looking west. Pyramid P1 can be seen on the extreme left of the picture.
ing chapel was constructed against the east face of the pyramid. The south wall of this was constructed on the ground surface, the north wall presumably on the descendary fill. As with the pyramid, no foundations were provided for the chapel and its south wall and pylon had subsided, leading to the collapse of the front of the pylon. Thirteen courses were found lying where they had fallen, indicating that the pylon attained a height of at least 2.5 m . The collapse of the pylon may have occurred before the reuse of the tomb. A little above the primary stairway new steps had been constructed, using stones taken from
the tomb was robbed. The tomb had been entered down a broad descendary 2.36 m wide at the surface, with a flight of at least 18 very shallow steps cut into the alluvium (Plate 14). The robbing had been so severe that virtually no trace of the tomb chamber remained, although it appears to have attained a depth of about 3.5 m . Following the primary burial, an offer-


Plate 14. Two phases of steps giving access into the tomb.
the offering chapel to form a steeper flight (Plate 14). All remains of the secondary burial have been totally destroyed. The mud-brick rubble found in the robber pit may come from a blocking wall while some dressed stone blocks, including two much larger than any of the others used in the structure of the pyramid apart from the door jambs of the offering chapel, may be from the structure of the tomb (see below). Very little human bone was recovered and of the many pottery vessels which must have been placed with the primary and/or secondary burials only fragments were found in the fill and among the rubble. The scale of the robbing suggests that the grave was originally richly furnished. The fine painted stela found in the previous season indicates the high status of the tomb owner and this was confirmed by the discovery of a superb copper-alloy offering table, depicting a censing scene with an enthroned Osiris with a goddess behind receiving a libation and incense (Colour Plate XIX). This scene is comparable to those on a number of Kushite grave stelae and is very similar to that on the stela of Tedeqen from the west cemetery at Meroe (Beg.W.19) (Dunham 1950, fig. 29f; 1955, figs 161, 209-212; 1963, fig. 60). Similar scenes, but with the enthroned ruler rather than Osiris, can be seen on the walls of the royal funerary chapels at Meroe. The discovery of this 'royal' object at Kawa is unexpected. The pottery, which has yet to be studied in detail, is of later Kushite date.

The excavation of the robber pit and descendary posed a number of logistical problems, as they were cut into the friable alluvium, itself in places surmounted by the unstable rubble core of the pyramid. The use of shoring was essential both for the well being of the monument and of the excavators (Plate 15). The work was completed and the descendary backfilled without incident.


Plate 15. Excavating the robber pit cut into Pyramid P2 looking east.

## Pyramid P3

Immediately to the south of Pyramid P1 is the rubble core (Plate 16) probably of another pyramid of similar, small size. All its facing stones have been removed and this may be the source of those used to construct Pyramid P1. Although Pyramid P3 appears to have been a very small monument to its east is a massive descendary (Plate 16) of the same order of magnitude as that associated with Pyramid P2. Although not excavated, on the surface it is 2.4 m wide and 13 m in length. At its west end mud bricks are visible and there is the possibility that there is a mud-brick tomb chamber here. The alluvium at Kawa is very friable and although many small tomb chambers, hollowed out of the alluvium are known, the dangers of collapse may have been considered too great


Plate 16. Pyramid P3 with its massive descendary looking west.
for the construction of larger tombs. As at Sedeinga, for example, the larger tombs may have been built structures placed within a pit dug down from the surface and this would perhaps explain why the robbers were able to totally expunge all traces of the tomb under Pyramid P2.

## Grave (JH4)

Fifty metres to the north of Pyramid P2 a single grave, which had been robbed very recently, was investigated. It was typical of graves in the cemetery with its descendary leading down into an oval tomb chamber. Within the tomb the adult had been placed in a cartonnage coffin of which only traces remained. The body was aligned west-east but only the tibias were in situ. The lower courses of the mud-brick blocking wall survived. Owing to the severe erosion in this part of the cemetery the upper parts of the grave had been removed including the roof of the chamber. Close by other graves have fared much worse; the bones of the skeletons lie exposed on the present ground surface.

## Mud seal impressions

The seal impressions excavated from Building A1, from the rubbish deposits adjacent to it and from Building Z1, were examined by Irene Vincentelli with the assistance of Silvia Bonamore. Among the names on the seals those of the Kushite kings Senkamanisken, Anlamani and Aspelta were noted. Study of this material is continuing.

## Acknowledgements

The project was supported by generous grants from the Institute for Bioarchaeology and the British Museum and donations from several SARS members. Thanks are expressed to the staff of the National Corporation for Antiquities and Museums in Khartoum for all their assistance both in Khartoum and in the field.

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Colour plate XVII. Kawa.
Building F7: the arched supports for the firing chamber with a section through the ashy deposit.

Colour plate XV III. Kawa.
Pyramid P1 with its enclosure wall and descendary cutting through one of the
lime-mortar mixing pits associated with the construction of Pyramid P2 to the north.


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Colour plate XIX. Kawa.
The copper-alloy offering table
found close to Pyramid P2.


[^0]:    ${ }^{1}$ The SARS/British Museum team arrived at Kawa on $5^{\text {th }}$ December 2009 and returned to Khartoum on $8^{\text {th }}$ February 2010. Team members - Tanya Bowie (archaeologist), Emilie Gustafsson (physical anthropologist), Matt Harrison (archaeologist), Mohammed Ibrahim (cook), Mortada Bushara (NCAM inspector), Stephen Porter (archaeologist), Ross Thomas (archaeologist, pottery assistant), Alison Tigg (archaeologist), Isabella Welsby Sjöström (assistant director, pottery specialist), Derek Welsby (director). We were joined by two volunteers, for the first month by Sue Coffey and for several days by Young Soo. Irene Vincentelli assisted by Silvia Bonamore studied the seal impressions.

[^1]:    ${ }^{3}$ Another kiln of identical type has very recently been discovered in the Kushite town of el-Muweis (pers. comm. Dr M. Baud).

