

SUDAN & NUBIA

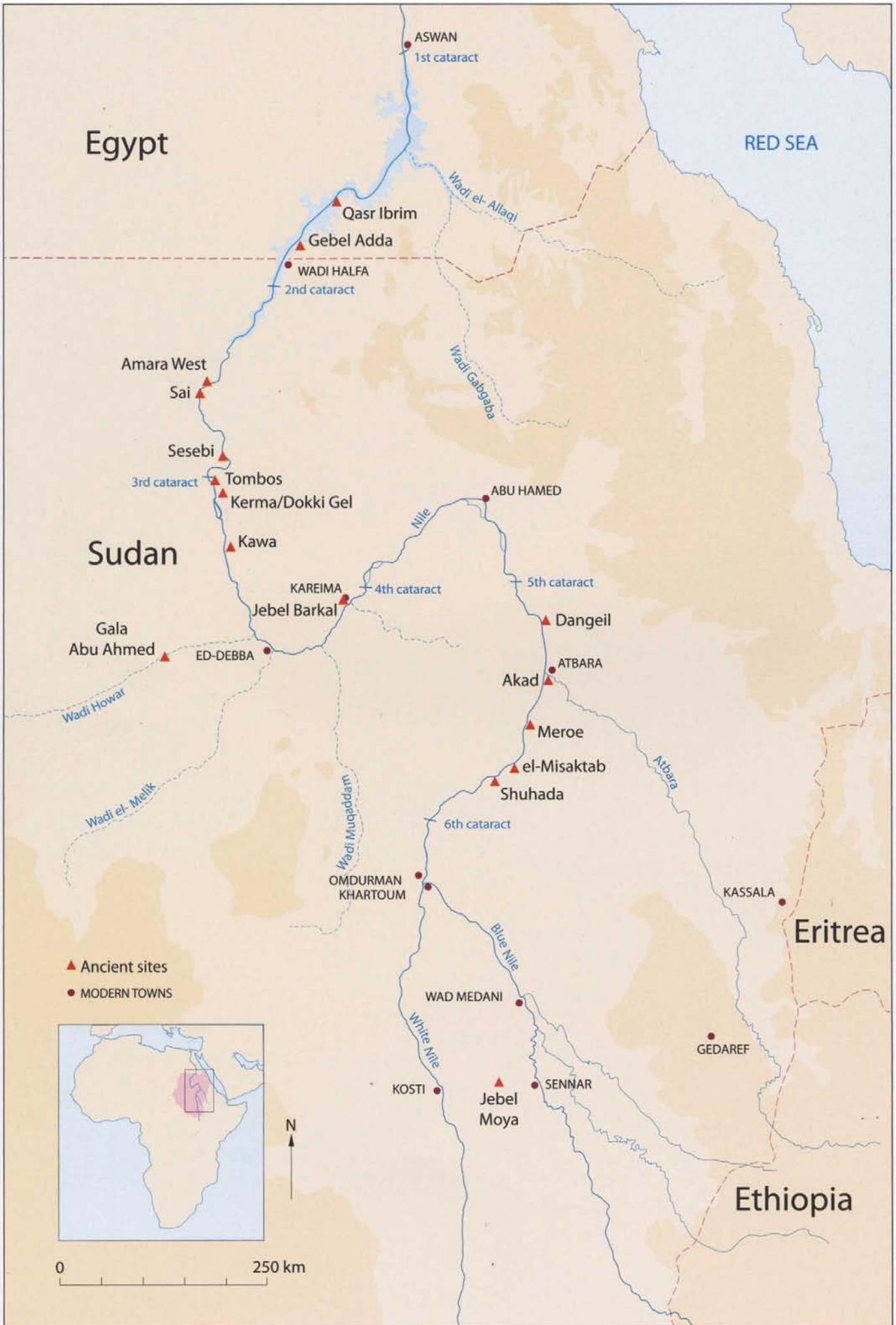
The Sudan Archaeological Research Society



Bulletin No. 13

2009





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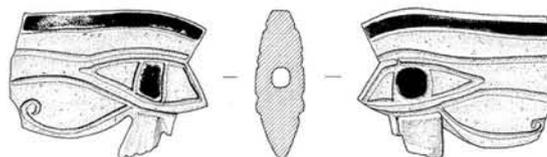
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Front cover: The head of a Kushite king, excavated in 2008, from the Amun temple at Dangeil. It has been tentatively identified as Aspelta (593-568 BC) based upon comparisons with statues of this king discovered at Jebel Barkal and Dokki Gel-Kerma.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



The Meroitic Necropolises of Sai Island

First Season at the Meroitic Cemetery 8-B-5.A

Vincent Francigny

Background of the Project

The archaeological heritage of Sai Island, long recognised by archaeologists as reflecting all periods of Nubian history, has become a focus of specialised investigations, in recent years. Under the auspices of the University of Lille 3, a multi-national team undertook fieldwork covering periods from the prehistoric to the Christian era. On the basis of my field experience for several years under the direction of the late director Francis Geus, and as a continuation of my PhD thesis on Meroitic private funerary customs, I suggested to Professor Didier Devauchelle, scientific director of the mission, that Meroitic research on the island be resumed. The threat of inundation of the middle Nile valley as a result of a possible dam project in the region added a sense of urgency and led me to join the team at the beginning of 2009.

The Meroitic period on Sai Island is mainly represented by elements related to funeral activities, from which many objects have been selected for international exhibitions on Nubia. Nevertheless, these remains are still largely unknown, as publications on the subject are few and far between. Bearing these circumstances in mind, I decided to begin the first season in the field at cemetery 8-B-5.A. This necropolis, partially excavated in the past (between 1997 and 2004), apparently offered a perfect framework for the establishment of a regional profile,¹ which could fit into the general cartography of funerary practices at that time. In reality, however, the task turned out to be rather a challenge, as I had to dedicate a substantial amount of time to collecting all the Meroitic objects, distributed throughout different stores of the dig house, with almost no documentation to identify them.

This article presents the results of the first phase of this work, as a short overview of the project, based on excavations and material studies.

The site 8-B-5.A

Sai Island has a vast funerary area at its northern part, notably four Meroitic necropolises, 8-B-5.SN/SAS2, 8-B-5.A, 8-B-5.B and 8-B-52.B, while it has only one in its southern half, 8-G-49.² Test excavations, carried out under the direction of

Francis Geus, revealed that at least two areas (8-B-5.A and 8-B-52.B) were devoted to the burial of a local elite. However, neither of these had been followed by a comprehensive programme of excavation and publication.

The cemetery 8-B-5.A, the closest to the ancient settlement, was judged as containing the graves of the most influential people on the island. Established around the 1st century AD and located only a few metres west of the ditch which protected the fortified Egyptian town dating from the New Kingdom period, this necropolis contained monumental pyramids, some of which have a stone socle made of schist, that were directly visible from the Meroitic settlement. To be buried in 8-B-5.A, thus, one must have had to attain a privileged social status; this may also explain the small size of the site (Colour plate XLVI). Serving as an emblem of the power of the community leaders at Sai, it is probable that the cemetery's creation was associated with the emergence of a religious elite. The presence of such a group was recently attested by the identification of decorated architectural blocks from a temple, dating from the reign of Natakamani and Amanitore (Francigny 2009a; 2009b). Another observation on 8-B-5.A is its proximity to site 8-B-5.SN (formerly called SAS 2 = *Sai Adou Sondage 2*). Located only a few hundred metres south of site 8-B-5.A, it is the location where in 1975³ Jean Vercoutter discovered some Meroitic graves, richly endowed with goods, including a bracelet with silver plaques depicting the head of the god Amun (*criocephalus*). This unique ornament may prove that at least some of the elite buried at this site were priests. From this perspective, site 8-B-5.SN can be considered the southern edge of cemetery 8-B-5.A, as the recent Muslim necropolis, occupying the space between both, is probably covering Meroitic graves. This hypothesis is supported by the presence of highly-eroded Meroitic sherds, scattered over the surface of this Muslim cemetery.

The whole funerary area forms a hillock (Colour plate XLVI), composed of aeolian sand mixed with small pebbles. The surface is covered with sherds from different periods, stone slabs from the doorways into the graves and fragments of offering tables and *Ba*-statues. Based on these indications, the work begun in 1997 and continued until 2004 fully excavated 11 adult graves and 55 of juveniles. The best plan amongst those published, so far, shows that by that time research had taken place in only one sector, being expanded during the course of the following seasons (Lefebvre 2007, 255, fig. 1b). Three rows (oriented north-south) of graves clearly appear on the plan. Some of them have larger sloping descendaries and chambers to the east of the excavated area, which corresponds to the centre of the Meroitic necropolis. The whole area is flanked, to the south and the east, by later graves from the post-Meroitic, Christian and Islamic periods. The Meroitic graves have a sloping descenary which leads

¹ Between the Second and the Third Cataract, where data are scarce and chronologically diverse.

² All the archaeological sites of the island were numbered based on Hinkel's *Archaeological Map of Sudan* system.

³ More recently, two new test excavations were carried out in order to extend the research around the area, discovered by Jean Vercoutter (Geus 1995, 111-122; 1998, 98-99), but they led to the discovery of only six new Meroitic graves.

to an axial chamber in the west and very few of them still retain remains of funerary monuments.

The excavations

In the first season, excavations took place from January 17th to February 19th, 2009. Throughout the mission, Romain David assisted me and we relied upon the help of 10 local workers in the field. The Meroitic cemetery 8-B-5.A had no geo-referenced system installed and no grid remained when the work began. However, the irregular borders of the previous excavation areas suggested that a 10 x 10m grid had been utilised. Therefore, our main priority was to establish a permanent datum point outside the site (coordinates 100/200), in order to install a new grid encompassing all the ancient remains, and to act as a bench mark for the altitude inside the necropolis ($\Delta = 206\text{m}$).

The main purpose of the mission was to define how far the Meroitic cemetery extended and to understand its relationship with later burials. To this end, we decided to begin by excavating a trench (oriented east-west), measuring 60m in length and 10m in width located at the southern edge of the previous dig. It showed that the Meroitic graves were mostly concentrated in the centre and on the highest part of the hill, with a Christian cemetery to the west (narrow pit graves oriented east-west) while scattered Muslim burials covered the entire area (large pits oriented north-south, reusing Meroitic stones and statuary to seal the chamber over the body).

We were fortunate to discover a well-preserved natural surface,⁴ on which the Meroites constructed their funerary monuments. It sealed a lower, black silt layer and an upper layer sub-divided into two strata of different colours (one light grey and one red-brown due to the presence of ferrous minerals). The latter are sandy, containing small river pebbles, which hardened upon the disappearance of the river creating a surface with enough strength to support construction activities. We then began to document the very well-preserved stratigraphic sequence, starting from the ancient ground level up to the elevation of the monuments. Due to a natural slope in the ground, descending southwards and westwards, the Meroites added a layer of sand, mixed with gravel and pebbles, in order to create a level surface, for the foundations of the pyramids (if the gap was over 120mm, mud-brick was used to fill it, instead of the mixed layer). In between this artificial layer and the lowest brick course of the pyramids, a thin layer of grey mortar was used, as a base for the monument (Plate 1). A good example of this arrangement is represented by the example of pyramid T 012, in which the south-east corner is founded upon a thick, mixed layer, covering the ground surface; as opposed to the north-east corner, which had very little mortar under the first course of brick (Colour plate XLVII).

The nearly square pyramid T 012 (measuring 7.6 x 7.5m), the north-east corner of which had been cut by an Otto-



Plate 1. Stratigraphic sequence of pyramid construction (from bottom to top): natural ground surface, layer of sand mixed with pebbles (70 to 120mm), grey mortar (30 to 50mm) and mud bricks.

man period grave, is well enough preserved to provide more information about the building process. We can distinguish two types of mortar used in the masonry: the first is very compact and grey in colour, whereas the second is of a pinkish tint, with a much sandier texture. The process of clearing the ground, far beyond the burial area, gave us the chance to discover a location outside the cemetery dedicated to preparing the mortar used to construct the funerary monuments

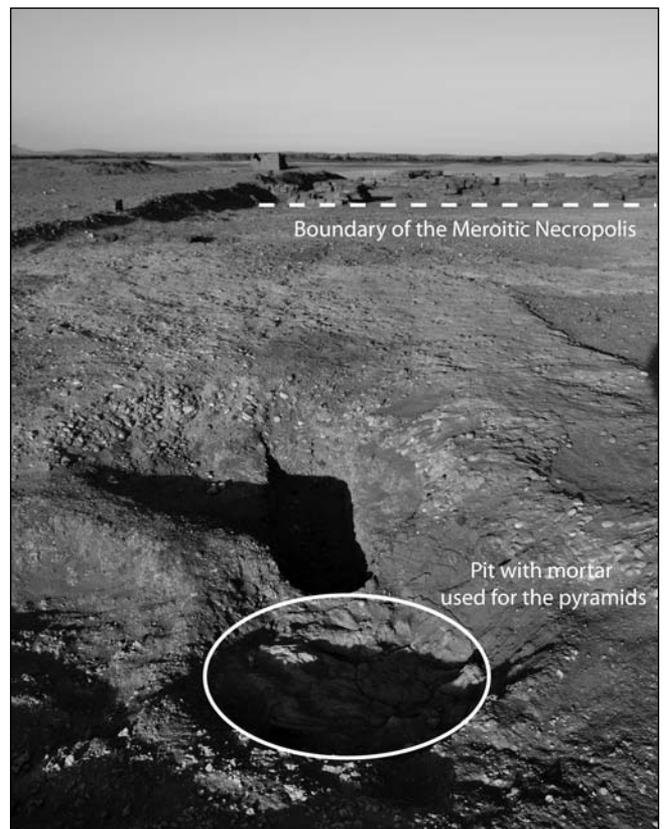


Plate 2. View of the Meroitic cemetery looking west. In the foreground, the pit with the mortar used during the construction of the pyramid T 012, visible behind.

⁴ Unfortunately destroyed elsewhere during the previous excavations.

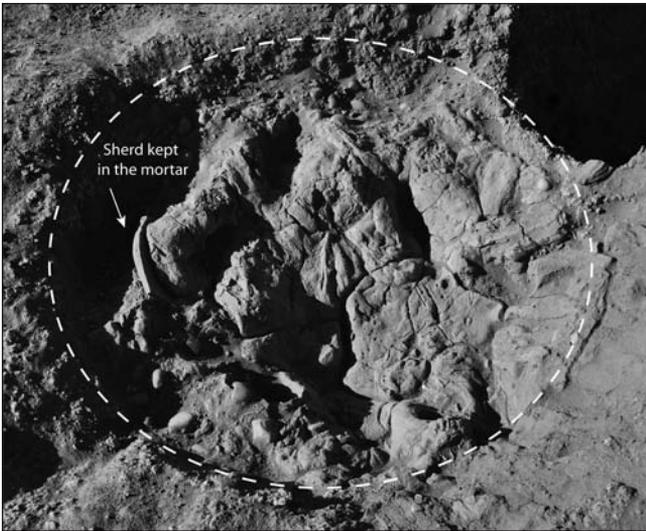


Plate 3. Detailed view of the pit with the sherd sealed in the mortar and used as a tool by the builders.

(Plate 2). In particular, a small, shallow, circular pit was found still containing the mortar used by the masons (Plate 3). A mixing tool, in this case a sherd chosen for its hardness, was embedded within the hardened mortar.⁵ Two samples of mortar, taken both from the pit and from pyramid T 012, are of similar composition, confirming the relationship between the two. Another element, rarely documented in non-royal buildings, is the presence of paint on the monuments. Generally, when we mention traces of colour on Meroitic pyramids, it is mainly referring to paint still visible on plaster, *in situ*, or which has been spilt onto the ground. Here, the case is different because it relates to drops of paint on the surface of the first mud-brick course (Colour plate XLVIII), from the time when the workers painted the monument.⁶ It indicates that the entire pyramid may not have been rendered and painted, but only the upper or top part.

Remains of six pyramids were discovered during the season (Colour plate XLIX). Some of them were set along the central row, which seemed to be reserved for the main structure (T 012, T 013 and T 014), whereas others, smaller and later in date, were relegated to another row in the east (T 016, T 017 and T 018). From the original superstructures, at best only five courses of bricks survived. As the majority of our time was devoted to studying material from the excavations of 1997-2004, which had been stored in bags and boxes for years, we could only excavate two graves (T 012 and T 015) in this area during this campaign; both rather unusually

⁵ This sherd, probably belonging to an imported Egyptian amphora, is characterised by a high density fabric and a surface covered by a creamy wash. It could correspond to the Roman Ballas Ware U 16 (Adams 1986, 575) and can be associated with other discoveries in Nubia, dating from the 2nd – 3rd centuries AD.

⁶ This evidence for red painting is the only one ever found on non-royal pyramids; cf. Millet 1964, 8; Schiff-Giorgini 1965, 116. It was used on plaster made of mud, calcite or gypsum, and appears on the royal monuments only from the 2nd century AD; cf. Hinkel 1989, 827.

being associated with the same funerary monument. They had been heavily plundered, leaving almost no anthropological remains, or artefacts inside. Although T 012 is directly beneath the main structure and T 015 seems to be outside, it is possible that both are contemporary. T 015's location under the chapel, of which only a small part of the north wall that was attached to the east face of the pyramid remained (Colour plate XLVII), indicates that T 015 must predate the construction of the chapel. A second element, based on the shape of the burial chamber, supports this hypothesis: while T 012 may have had a typical design with a sloping descendary and axial chamber to the west, T 015 has a shaft opening in the south onto a lateral niche (Figure 1). This deliberate choice appears to prove that T 012 was already in existence and that an axial grave if dug would have cut its descendary, thus the workers, at the time of digging T 015, knew the subterranean configuration of T 012. This indicates a short time-span between both constructions.

Having found the east and west boundaries of the Meroitic cemetery, our efforts during the second half of the season were focused towards the northern edge of the site, where its limit was still unknown. At first, through a test square (measuring 10 x 10m) in the western part, in the direction of the huge post-Meroitic necropolis with its large tumuli, we discovered what might correspond to one of the very first graves (T 019), established in cemetery 8-B-5.A. Although preserving no traces of a superstructure, its plan is typical with the sloping descendary and axial chamber to the west. As disturbed as the previous ones, it nevertheless contained a long-necked, globular bottle whose style of painted decoration can be dated to the 1st century AD.

Of the three graves excavated this season, the two with axial chambers (T 012 and T 019) still had remains of their mud-brick blocking walls. The lateral-niche grave T 015 retained remains of a thick band of mortar at the bottom of the shaft, following the northern edge of the chamber. It must have supported small schist slabs (seven were found scattered around the pit during excavation) no doubt originally leaning at an angle against the south wall of the shaft.

Although intact human remains were very scarce, it was still possible to determine that in every grave a minimum of two persons were buried in the chamber, most probably successively. This could be confirmed by traces of reconstructions in the mud-brick blocking walls. All of the burials were in the extended position, bodies lying on their backs. In T 012, some phalanges of the left hand that were found undisturbed showed that originally the hands rested on the pubis.

Due to several phases of plundering, grave goods were rarely found; of note, however, was a well-preserved wooden set, comprising a *kohl* pot and a small circular box⁷ (Plate 4), which was discovered under a collapsed ceiling in grave T

⁷ This type of circular box, with a central knob on its lid, is already known in a funerary context, in particular through the discoveries at Karanog (cf. Woolley and Randall-MacIver 1910, pl. 23).

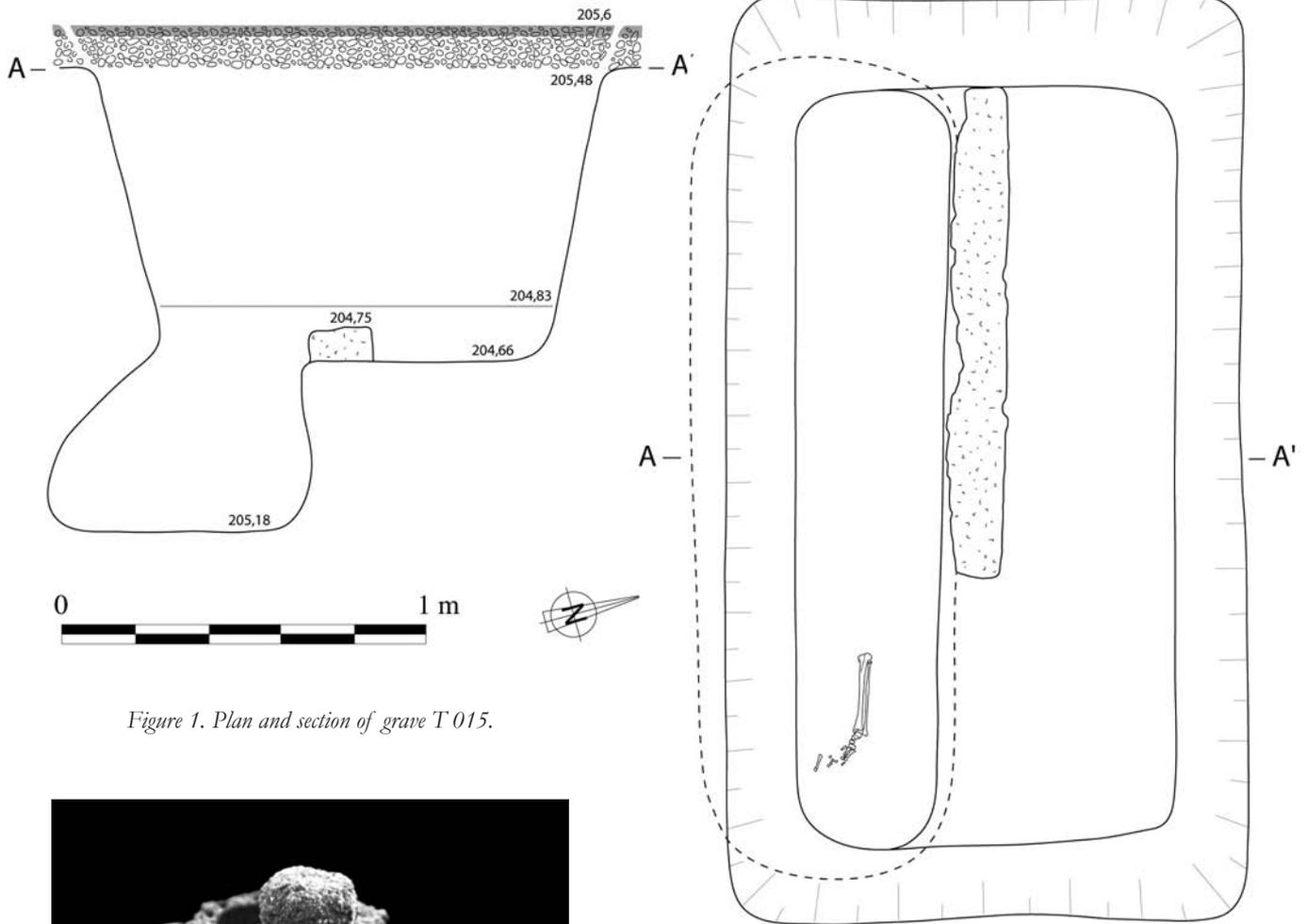


Figure 1. Plan and section of grave T 015.

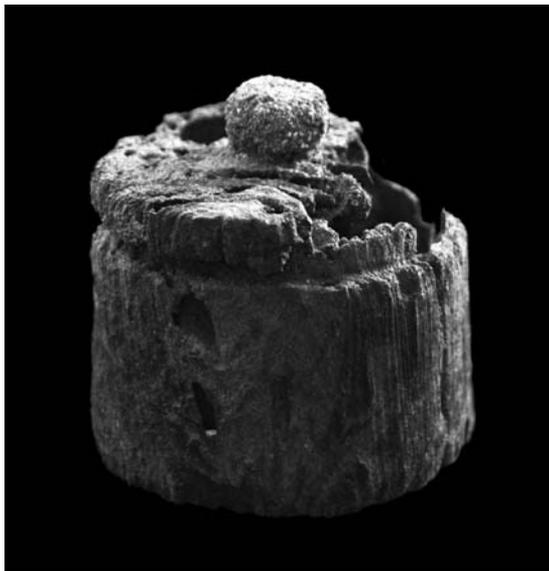


Plate 4. Small circular toilet-box in wood discovered in situ in grave T 015.

015 placed in the eastern part of the chamber, behind the feet of the deceased. In addition, we frequently found objects left by the robbers in the pit or on the surface nearby, such as fragments of glass, ceramics,⁸ faiences, metal, and pieces of *Ba*-statue. One of these *Ba*-statue fragments (Plate 5) was



Plate 5. Sandstone fragment of a *Ba*-statue representing the middle part of the wings.

⁸ Most were not Meroitic because of the proximity of this area to the town which had many phases of occupation over thousands of years during Egyptian, Meroitic, Post-Meroitic, Christian and Ottoman periods.

found in the east of the necropolis, reinforcing the hypothesis that the rows of graves progressed from the west to the east, as it represents the wings of the deceased, without any details of the feathers. This generally corresponds to the late phase



of development of this statue type, when it became almost totally anthropomorphic.

Toward the end of the season, we proceeded to a last test square (10 x 10m) in the north-eastern part of the site, still in an attempt to determine the limits of the Meroitic cemetery. When we discovered graves dating from this period, we did

boundaries of the Meroitic necropolis were ascertained, allowing us to plan next year's excavation strategy. We studied a significant part of the ceramic material, from previous works, as well as analyses of the rest of the grave goods. Moreover, we are drawing all structures unearthed this year, but will await next season to put them on a general plan of the site,



Plate 6. Meroitic grave with Christian burials in ceramics on its surface, looking south.

not touch them due to the intriguing presence of late burials at the surface. It is most likely that at the beginning of the Christian era, the Meroitic grave shafts could be easily recognised, due to their sandy fills. Thus, people from that period would have taken advantage of these spots, which were relatively easy to dig, in order to deposit foetal and stillborn burials (Plate 6). While a few bones, associated with a shroud, were discovered in a shallow pit, the greater part of the burials were made in pottery vessels. Foetal and stillborn babies were placed in amphora⁹ or cooking pots.¹⁰ Each pot was sealed with a curved sherd and mud. Most of these seals bear an incised pentagram (Plate 7). This protective symbol is one well-known to be associated with the first Christians who lived in Nubia. We find it incised, or painted, on pottery (cf. Presedo Velo 1965, pl. XXX; Shinnie and Shinnie 1978, 65, fig. 50d), or as a selvedge pattern on shrouds (cf. Adams *et al.* 1999, fig. 9d, pl. 14b). No adult graves of this period have been discovered nearby, indicating that this area was specifically dedicated to newborns; adults seem to have been buried in the southern part of the site.

By the end of the first season, the north, west and east

along with several graves excavated in the past. Three more fieldwork seasons will be necessary to publish the whole project, as we must complete the excavation and compare the nature of the funerary practices of the elite cemetery 8-B-5.A to others observed on the island and in the nearest places around Sai, such as Sedeinga (where excavations will recommence at the end of 2009).



Plate 7. Mud seal on a sherd, bearing an incised pentagram, and used to close a cooking pot.

⁹ Imported Egyptian amphora, corresponding to Adams' Ware U2 (Aswan Byzantine Pink utility Ware), dated between AD 550-850 (cf. Adams 1986, 545).

¹⁰ Dated between AD 550-1000 (Adams 1986, 423-424, fig. 249).

First report on ceramic material from Meroitic Cemetery 8-B-5.A

Romain David

The Meroitic ceramics of Sai Island have never been the subject of an in-depth study. Nevertheless, the five necropolises on the island¹¹ have produced rich material that is still largely unknown. Very few published articles have touched upon the subject (Vercoutter 1979; Geus 1994a; 1994b; 1995; 1998; 2002; 2006). No large-scale ceramic studies have taken place to provide a typology of fabrics and forms. In these circumstances, the reopening of excavations in cemetery 8-B-5.A under the aegis of the University of Lille 3, gives us the opportunity to begin this work. The last season at cemetery 8-B-5.A aimed to resume excavations after the previous eight seasons led by our predecessors, in addition to studying the excavated material. A selection of sherds collected from the surface (around 15,000 items) were used to create the provisional typology of fabrics and served as a basis for the study of the excavated material. We present here the preliminary results from this season during which four different fabric types were identified.

Fabrics

Fabrics were distinguished via a macroscopic study, with a magnifying glass (x 10). The nature of the inclusions, their frequency, the quality of firing and the colour of the break are the factors utilised to elaborate this first typology. This study takes into account only wheel-made products, representing approximately 90% of the total assemblage, amongst which more than 50% (Al 1 and Al 2) seem to be of local origin. Fabric Al 1 (Colour plate L) is recognisable by its homogeneous red-brown colour (2.5YR 5/4) and by the abundance of vegetable temper. The sherds of this fabric are generally fine, sometimes imitating fine ware forms and decoration. The surface is smoothed, or burnished, covered with a red slip on the exterior and a white or red slip inside. It is readily recognisable as Meroitic Ordinary Red Ware (Adams 1986, 455, Ware R 32) as is Fabric Al 2 (Colour plate L), a coarser fabric with more vegetable matter, the surface of which is smoothed or burnished, covered with a red or a cream slip and often bearing painted decoration. Another type of fabric, imitating those of Aswan, Fabric Al 7 (Colour plate L), is made from alluvial clay and is rather coarse, hard and dense. The break shows a fine, light-red border (2.5 YR 6/8), with a wide layer of red-purple (10R 5/4) and a brown core (very slight difference: 2.5YR 5/2). The presence of voids and some calcareous inclusions are the main characteristics of this fabric. It can be categorised as Meroitic Imitation Roman Ware (Adams 1986, 456-457, Ware R34 (?)). The last fabric found during this season is the famous Meroitic Fine White

Ware (Adams 1986, 439, Ware W26) designated Ca 1 (Colour plate L) according to our typology. Its frequent occurrence suggests the wealth of those buried in this elite necropolis.

Forms

We present here a range of the most unusual forms in terms of either their frequency or striking character. Tumblers (Figure 3.1) with bevelled rims, covered in red slip on the exterior, which seemingly overflowed onto the white slipped interior,

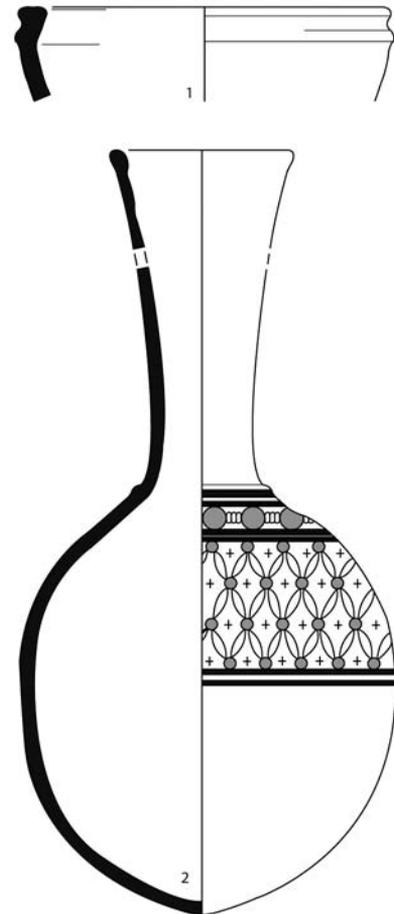


Figure 2. Bowl and globular bottle from T 012 and T 019 (scale 1:4)

are regularly found in the graves of cemetery 8-B-5.A,¹² associated with bottles in Fabric Al 2 (Figure 3.4). These types of tumbler are of the same fabric - Al 1 - and are also known in the other necropolises on the island.¹³ Concerning Fine Ware tumblers, some have a relatively common form (Figures 3.3 and 3.5),¹⁴ while others seem to be hitherto

¹² T 002 (CS 001), T 004 (CC001, CS 002), T 012 (CD 001), T 015 (CD 004).

¹³ Vercoutter 1979, 219, fig. 6. The jar and tumbler were interpreted as being a product of the X-Group but the other examples on sites 8-G-49 and 8-B-52. B indicate that this type is certainly Meroitic. See Geus 2006, fig. 18; Adams 1986, 455.

¹⁴ As regards decoration, the motif of the lotus bud (?) is also represented in Karanog (cf. Woolley and Randall McIver 1910, fig. 52, no. 8495) and the checkerboard motif recurs in Meroitic painted decoration

¹¹ Sites 8-B-5.A, 8-B-5.B, 8-B-5 SN/SAS 2, 8-B-52.B and 8-G-49.

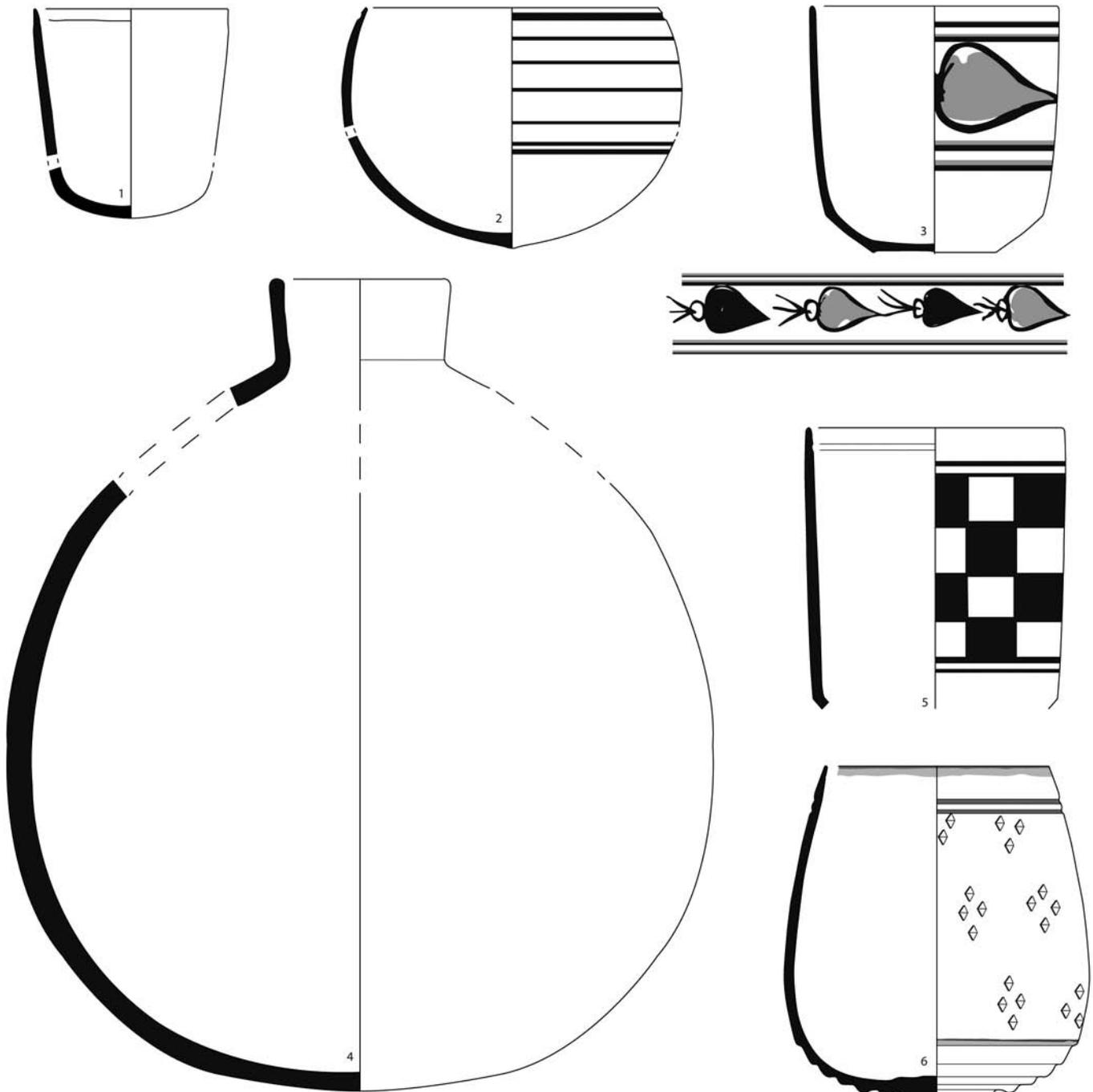


Figure 3. Different forms of Al 1, Al 2, Ca 1 (scale 1:2)

unknown (Figures 3.2 and 6).¹⁵ It is necessary to define the origins of these forms. It is worth noting that the range of pottery forms from cemetery 8-B-5.A corresponds to that of the funerary assemblage common in Nubia, with a large number of bottles and tumblers.

Chronology

Two elements provided the first clue for dating cemetery

(cf. Griffith 1924, pl. LI.4; Edwards 1998, fig. 6.16 (515)).

¹⁵ The goblet (Figure 3.6) has been published in Geus 1998, 102, fig. 12a.

8-B-5.A. First, a long necked globular bottle¹⁶ (Figure 2.2), discovered in the north-western part of the site, suggests a date around the 1st century AD, possibly when the necropolis was first established. Secondly, a bowl¹⁷ (Figure 2.1), dated to the 1st-2nd century AD (Rodziewicz 2005, 188, pl. 70 nos 1157-1161), copying an Aswan product, was found on the opposite side of the site. These two dates give us a chronologi-

¹⁶ T 019 CD 001. See Leclant 1985, 185-204 and for a date, Török 1987, 83-84.

¹⁷ T 012 CC001. Al 7 Fabric.

cal sequence for the development of the cemetery, but await further verification in the next season's excavation.

Bibliography

- Adams, W. Y. 1986. *Ceramic Industries of Medieval Nubia*. Lexington.
- Adams, W. Y., N. K. Adams, D. P. Van Gerven and D. L. Greene 1999. *Kulubnarti III. The cemeteries*. Sudan Archaeological Research Society Publication no. 4. London.
- Edwards, D. N. 1998. *Gabati, a Meroitic, Post-Meroitic and Medieval Cemetery in Central Sudan* Vol. I. Sudan Archaeological Research Society Publication no. 3. London.
- Francigny, V. 2009a. 'Le prince Arakakhataror', *Hommages Lenoble*. Khartoum, (forth.).
- Francigny, V. 2009b. 'The Meroitic Temple at Sai Island', *11th International Conference for Meroitic Studies*. Vienna, (forth.).
- Geus, F. 1994a. 'L'île de Saï à travers l'histoire du Soudan', *La Nubie. L'archéologie au Soudan, Les Dossiers d'Archéologie* 196, 22-27.
- Geus, F. 1994b. 'Saï méroïtique', in C. Berger, G. Clerc and N. Grimal (eds), *Hommages à Jean Leclant*, vol. 2. Le Caire, 141-150.
- Geus, F. 1995. 'Saï 1993-1995', *Archéologie du Nil Moyen* 7, 79-98.
- Geus, F. 1998. 'Saï 1996-1997', *Archéologie du Nil Moyen* 8, 85-126.
- Geus, F. 2002. 'Saï 1998-1999', *Archéologie du Nil Moyen* 9, 95-134.
- Geus, F. 2006. 'Saï 2000-2002', *Archéologie du Nil Moyen* 10, 87-134.
- Geus, F., Y. Lecoïnte and B. Maureille. 1995. 'Tombes napatéennes, méroïtiques et médiévales de la nécropole nord de l'île de Saï. Rapport préliminaire de la campagne 1994-1995 (Archéologie et anthropologie)', *Archéologie du Nil Moyen* 7, 99-142.
- Griffith, F. Ll. 1924. 'Oxford Excavations in Nubia', *Liverpool Annals of Archaeology and Anthropology* 11, 141-180.
- Hinkel, F. W. 1989. 'Examination of Meroitic Mortar and Plaster', *Meroitica* 10. Berlin, 827-833.
- Leclant, J. 1985. 'Bouteilles globulaires à long col en Moyenne Nubie', in F. Geus and F. Thill (eds), *Mélanges offerts à Jean Vercoutter*. Paris, 185-204.
- Lefebvre, A. 2007. 'Le fonctionnement d'une sépulture méroïtique : l'exemple de la tombe 315 du site 8-B-5.A de l'île de Saï', in B. Gratiën (ed.), *Mélanges offerts à Francis Geus, Cahiers de Recherches de l'Institut de Papyrologie et Égyptologie de Lille* 26, 253-262.
- Millet, N. B. 1964. 'Gebel Adda Expedition Preliminary Report', *Journal of the American Research Center in Egypt* 3, 7-14.
- Presedo Velo, F. J. 1965. *El poblado cristiano de la isla de Abkanarti en la segunda catarata del Nilo (Sudan)*, *Comite Espanol de la UNESCO para Nubia*. Memorias de la mission arqueologica 7. Madrid.
- Rodziewicz, M. 2005. *Elephantine, vol. XXVII, Early Roman Industries on Elephantine*. Mainz am Rhein.
- Schiff-Giorgini, M. 1965. 'Première campagne de fouilles à Sedcinga (1963-1964)', *Kush* 13, 112-130.
- Shinnie, P. L. and M. Shinnie 1978. *Debeira West. A medieval Nubian town*. Warminster.
- Török, L. 1987. 'Meroitic Painted Pottery: Problems of Chronology and Style', *Beitrag zur Sudanforschung* 2, 75-106.
- Vercoutter, J. 1958. 'Excavations at Sai (1955-1957). A Preliminary Report', *Kush* 6, 144-169.
- Vercoutter, J. 1979. 'La tombe méroïtique S.A.S.2.T.1. de Saï', *Cahiers de Recherches de l'Institut de Papyrologie et Égyptologie de Lille* 5, 210-236.
- Woolley, C. L. and D. Randall MacIver 1910. *Karanog, the Romano-Nubian Cemetery*. Eckley B. Coxe Junior Expedition to Nubia, vols 3 and 4, Philadelphia.



Colour plate XLVI. Sai. General view of the site looking north west. The estimated extent of the Meroitic cemetery (about 90m north-south \times 60m east-west) is marked in red.

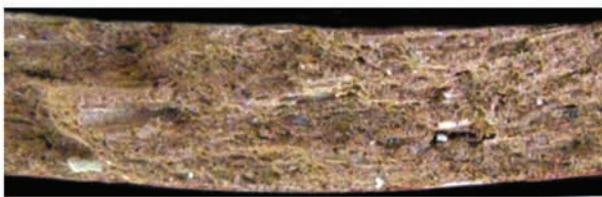
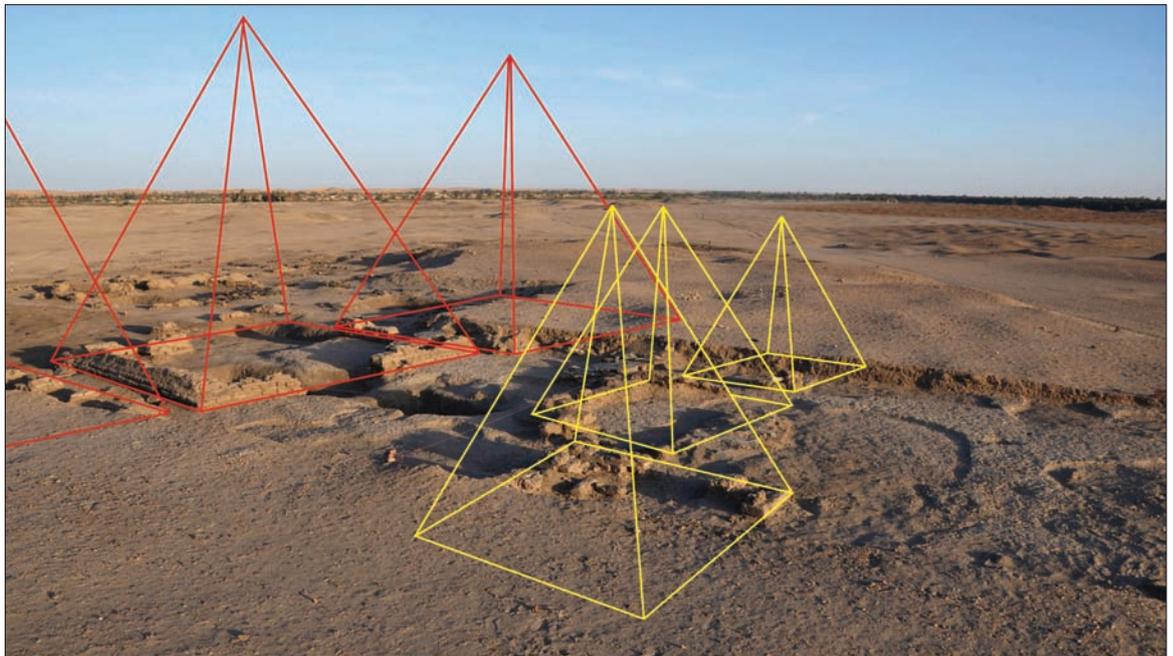


Colour plate XLVII. Sai. View of the pyramid T 012 looking west, with graves T 012 beneath the structure and T 015 in front.

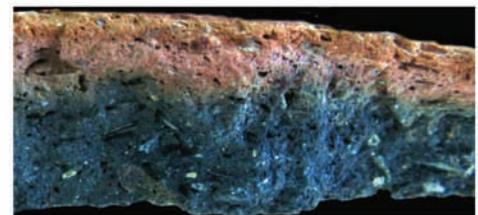


*Colour plate XLVIII.
Sai. Drops of red paint
on the upper surface of
the first mud brick course
of pyramid T 012.*

*Colour plate XLIX.
Sai. Isometric
reconstruction
of the Meroitic
pyramids unearthed
this season. In red:
T 012, T013 and
T 014. In yellow:
T 016, T 017 and
T 018.*



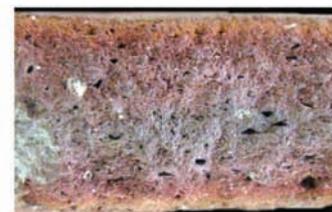
A1 1



A1 2



Ca 1



A1 7

Colour plate L. Sai. Four fabrics from Meroitic Cemetery 8-B-5.A.