Contents

The Kirwan Memorial Lecture
Quarrying for the King - the Sources of Stone for Kushite Royal Monuments
Abdelrahman Ali Mohamed

Reports
Qalaat Shanana: a large Neolithic site in Shendi town
Ahmed Hamid Nassir Hamd

Social Complexity Set in Stone? The A-Group Site of Afyeh
Alice Stevenson

The Kerma Ancien cemetery at site H29 in the Northern Dongola Reach
Derek A. Welsby

Merymose and others at Tombos
Vivian Davies

Re-assessing the abandonment of Amara West: the impact of a changing Nile?
Neal Spencer, Mark Macklin and Jamie Woodward

Excavations of the French Archaeological Mission in Sedeinga, 2011 season
Claude Rilly and Vincent Francigny

Excavations of the French Archaeological Mission in Sedeinga, 2011 season
Claude Rilly and Vincent Francigny

Meroitic Building Techniques: a few observations from Dangeil
Julie Anderson, Salah Mohamed Ahmed and Tracey Sweek

Gebel Adda Cemeteries 3 and 4 (1963-1964)
Reinhard Huber and David N. Edwards

The forts of Hisn al-Bab and the First Cataract Frontier from the 5th to 12th centuries AD
Alison L. Gascoigne and Pamela J. Rose

Fortresses of Sudan Project. Abu Sideir case study
Mariusz Drzewiecki and Tomasz Stępnik.

The Archaeological, Ethnographical and Ecological Project of El-Ga’ab Basin in Western Dongola Reach: A Report on the First Season 2009
Yahia Fadl Tahir

A Survey in the Western Bayuda: The Wadi Abu Dom Itinerary Project (W.A.D.I.)
Angelika Lohwasser

Preliminary report on the exploration of Jebel Sabaloka (West Bank), 2009-2012
Lenka Suková and Ladislav Varadzin

Rosières Dam Heightening Archaeological Salvage Project. The Excavations at Azaza Site ROSE 5,
Preliminary Report
Mahmoud Suliman Bashir, Murtada Bushara Mohamed and Mohammed Saad Abdalah

Aeolian sand landforms in parts of the Sudan and Nubia. Origins and impacts on past and present land use
R. Neil Munro, Mohammed Abdel Mahmoud Ibrahim, Hussien Abuqied and Babiker el-Hassan

Miscellaneous

Obituaries
Svetlana Bersina (1932-2012)
Eleonora Kormysheva

Michel Baud (1963-2012)
Vincent Rondot

Tomas Hägg (1938-2011)
Adam Łajtar

Khidir Abdelkarim Ahmed (1947-2012)
Intisar Soghayroun Elzein

Jean Leclant (1920-2011)
Catherine Berger el Naggar

Andre Vila (1923-2011)
William Y. Adams

Front cover: Excavations in progress in the Kerma Ancien cemetery at site H29 in the Northern Dongola Reach (photo D. A. Welsby).

Sudan & Nubia is a peer-reviewed journal
Preparing for the afterlife in the provinces of Meroe

Vincent Francigny

In 2008, at Lille University, I defended a thesis on Meroitic non-royal funerary practices. Hitherto unpublished, I presented an overview of this study at the British Museum during the SARS colloquium in 2012, with particular focus on funerary architecture and the latest material coming from new Meroitic excavations started at Sai Island (Francigny 2009; 2010a; 2010b) and Sedeinga in 2009 (Rilly and Francigny 2010; 2011).

Meroitic Funerary Archaeology

Ancient literature on Meroitic funerals is extremely scarce and litigious. One of the earliest accounts, during the 5th century BC, is found in Herodotus’ interview of the two ‘ichtyophagi’ spies sent by Cambyses to Meroe, while ‘the father of history’ met them in Elephantine, the farthest southerly locality in the Nile Valley he reached.

“Also, last of all, they were allowed to behold the coffins of the Ethiopians, which are made of crystal, after the following fashion: when the dead body has been dried, either in the Egyptian, or in some other manner, they cover the whole with gypsum, and adorn it with painting until it is as like the living man as possible. Then they place the body in a crystal pillar, which has been hollowed out to receive it, crystal being dug up in great abundance in their country, and of a kind very easy to work. You may see the corpse through the pillar within which it lies; and it neither gives out any unpleasant odour, nor is it in any respect unseemly; yet there is no part that is not as plainly visible as if the body were bare. The next of kin keep the crystal pillar in their houses for a full year from the time of the death, and give it the first fruits continually, and honour it with sacrifice. After the year is out they bear the pillar forth, and set it up near the town.”

(Herodotus, Histories, III)

This description is partly reused around the 2nd century BC by Agatharchides of Cnidus, as later cited by Diodorus.

“Different also from those of other peoples are the customs they observe with respect to their dead; for some dispose of them by casting them into the river, thinking this to be the best burial; others, after pouring glass about the bodies, keep them in their houses, since they feel that the countenances of the dead should not be unknown to their kinsmen and that those who are united by ties of blood should not forget their near relations; and some put them in coffins made of baked clay and bury them in the ground in a ring about their temples, and they consider that the oath taken by them is the strongest possible.”

(Diodorus Siculus, Bibliotheca Historica, III)

At the beginning of our era, the same myths remained in Strabo’s description of the Nile Valley.

“Some tribes throw the dead into the river; others keep them in the house, enclosed in glass. Some bury them around the temples in coffins of baked clay. They swear an oath by them, which is revered as more sacred than all others”.

(Strabo, Geography, XVII, 2, 3)

To re-discover the truth about Meroitic funerals, we had to await the first descriptions made by 19th century travellers on Meroitic architecture, later followed by excavations of the first cemeteries in Lower Nubia (Randall-MacIver and Woolley 1909; Woolley and Randall-MacIver 1910; Griffith 1923; Firth 1927; Emery and Kirwan 1935). Since then, hundreds of sites have been investigated and led to the development of an understanding of Meroitic funerary practices relying essentially on archaeology. But archaeological records are somewhat limited. First, because they are not always consistent as they cover more than a century of research, with constant evolutions of methodology and technical approach. Second, because Nubian archaeology relies on what have been spared by time in a range of very different environments, and does not cover equally the whole territory of the Kushitic kingdom.

While the practice of funerary archaeology has been very active during and after the UNESCO campaign in the northern part of the valley and in the region upstream of the Fourth Cataract surveyed before the construction of a dam, both areas contrast with the few cemeteries identified or excavated around the capital Meroe, where natural environment and history of settlement appears to differ from the regions further north. To the south of Khartoum, a few discoveries that are contemporaneous with the Meroitic period should also be mentioned, even if they seem to be culturally different.

However, geographical disparities in archaeological investigations are not the only reasons why there are certain limits on the documentation at our disposal. The origin of the population living in the kingdom, its genetic or cultural admixture, and the significance of regional traditions in a large territory are among the most relevant questions that have been long ignored or misunderstood that will always interfere with archaeological hypotheses. As a result, the Meroitic religious world remains on a large scale a Terra Incognita for researchers, with the need for more excavations and discoveries, especially outside of the Nile Valley.

Tomb architecture

Graves and funerary monuments, both usually completely disturbed by robbers and ruined by time, constitute the working base for archaeologists. The vast majority of Meroitic
tombs were not covered with a superstructure, but as most of Lower Nubia’s cemeteries demonstrate, a small part of the population had the privilege to build a monument in the form of a small pyramid.

To understand why, in that particular region, the local elite chose this type of architecture, we need to go back in time to see how the pyramid was first introduced to Nubia. From the later 8th century BC, with the grave of king Kashta in the el-Kurru cemetery, to the end of the 4th century AD, funerary pyramids were erected throughout Nubia. Initially built for some members of the royal family, the pyramid began to be associated with a few non-royal graves during the Napatan period, before being spread to a greater extend in the Meroitic kingdom. The adoption of the pyramid by the Kushite rulers was linked to the conquest of the Egyptian territory and thus the history of the 25th Dynasty. Though the Egyptian pharaohs had abandoned it over 800 years earlier, the funerary architectural heritage of Egypt must have influenced the Kushite kings living in the capital Memphis who considered some of the ancient kingdom’s rulers as role models. But the decision to return to the pyramidal tradition had to be adjusted to a different environment, Kush, where the kings wanted to be buried. This partly explains why the royal Kushite monuments differ from Egyptian ones. In addition, the resources of the Napatan state and ancient Egypt had to be adjusted to a different environment, Kush, where the kings wanted to be buried. This partly explains why the royal Kushite monuments differ from Egyptian ones. In addition, the resources of the Napatan state and ancient Egypt were hardly comparable, both in terms of raw material and manpower. Kushite kings were not of the first to introduce the pyramid into Nubia, as some New Kingdom dignitaries, Egyptians and egyptianized local elite had already adopted it to mark their graves at Debeira (Säve-Söderbergh 1963), Aniba (Weigall 1907; Steindorff 1937), Soleb (Schiff Giorgini 1971), Amara West (Binder 2011) and Tombos (Smith 2007).

It is that particular non-royal architecture, present in the Nubian landscape, that inspired the royal Kushite monument and its descendant, the Meroitic pyramid.

Contrary to the royal edifices made exclusively of stone or red brick, most of the pyramids found in the provinces of Meroe are built with mud bricks. When a material such as sandstone or black schist was accessible in the neighbourhood, it could be used as a base, with the upper part of the monument being completed again with mud bricks. The construction of the monument usually started directly on the ground. Only in a few cases were trenches made to build foundations at a deeper level. Made with local silt, the bricks had an average size of 330 x 170 x 100mm, very close to the Egyptian ideal standard of 325 x 162.5 x 81.25mm (Roik 2000). During the process of cleaning the ground around the burial area, it is quite common to discover areas dedicated to preparing the mortar used as bonding material between the mud bricks (Francigny 2009).

The method of construction was fairly simple, as the interior of the monument was filled with rubble every time a new course of bricks was added. A similar method was used in most of the royal pyramids at Meroe, but eventually led to a number of disastrous consequences including the partial collapse of the monuments. The unstable filling that created empty spaces within the structure was one of the main weaknesses of these pyramids; in addition to the lack of bonding between the core and the facing, degradation due to penetration of water, and probably some maintenance issues. To avoid the problem of slumping of the fill, non-royal monuments accommodating a number of other options to consolidate the structure from the inside. Therefore, it is common to find supporting walls built in the largest pyramids that divide the structure into smaller units, so that the filling was kept stable. An alternative to supporting walls has recently been discovered at Sedeinga, where a well-preserved pyramid has a thick layer of mortar in the core that suggests the horizontal division of the monument at regular intervals. The system was probably as good as using internal walls, and could even offer stable platforms for the workers at different levels of the structure during the building process.

To slow erosion, and hide imperfections and weaknesses in the construction, it was common to use painted plaster on the external faces of the pyramid. After centuries, the same plaster is usually found on the ground around the monument, mixed with dissolved mortar. Pyramids were probably not completely covered, as drops of paint can be found on the lower courses of bricks, indicating that painters were already giving the final touch to the monument while bricks in its lower part were still exposed (Francigny 2010a).

The ground plan of a Meroitic pyramid was not necessarily square. A monument that needed to be large enough to cover two chambers with two separate entrances, but without enough space to be developed into a square, could adopt a rectangular plan. At the time of the first discoveries of Meroitic pyramids, such unusual plans were often mistakenly associated with the concept of the mastaba superstructure, though it never appeared in the Nubian tradition. Huge variations in the size of the monuments could occur ranging from over 10 x 10m as in Kawa (Welsby 2011) to less than 1 x 1m as in Sedeinga (Rilly and Francigny 2011). The smallest monuments were not always related to infant burials, but to adults, and occasionally had a space organized on the east side for the deposit of offerings, instead of a proper chapel.

Two stone elements could be added to a pyramid: a monolithic niche (also called a window cornice) and a capstone. Both could also be found on royal monuments, even if the shape was completely different. The Meroitic cornice was placed in the upper part of the eastern face of the pyramid. Its shape, however, illustrates the legacy of an ancient Pharaonic tradition that remained until the late Roman period, when niches were set into sacred monuments or graves to host a statue of the god or the deceased. They could be adorned with a cavetto cornice and horizontal torus, while a unique fragment found at Abu Simbel (Smith 1962, pl. 6-3), with an engraved figure of Anubis pouring a libation, shows that they could even bear some iconography. The second architectural element, the capstone, was put on top of the pyramid. Whereas the royal one consisted of a
block with a base following the slope of the monument and an upper part shaped into a cylinder with two holes made to hold what was probably a copper-alloy statue or a solar disk, the capstone found on provincial monuments was radically different. There, the block was turned into a kind of pole, vaguely squared at its base and with a regular slanted surface in the middle, ending with a sphere surmounted by a cone. As indicated on the finest pieces discovered (Plate 1), it represents a lotus flower tied with a rope and attached to the solar orb, a symbol emphasizing the daily rebirth of the sun.

Although we can trace the building process of a Meroitic pyramid, we know very little about the religious aspect of the construction. While the pedj-shes ceremony (‘stretching the cord’), accompanying the erection of sacred buildings is known as the most important foundation ritual in Egypt, we have almost no information concerning such ceremonies in the Kingdom of Kush. But since Kushite pyramids are often oriented in accordance with astronomical alignments and can be associated with foundation deposits (Plate 2), there’s no doubt that the construction was part of a ritual procedure.

Normally, when a Meroitic family could afford its own pyramid, a chapel dedicated to the funerary cult accompanied it. This addition to the funerary monument also belongs to a tradition much older than the Meroitic Kingdom, as we already found it associated with a few tumuli at el-Kurru, and before that with some of the Egyptian pyramids built in Nubia during the New Kingdom or C-Group tumuli. To support the role of the chapel, a sacred space could also be created with a light wall or temenos on the east side of the monument, as most of the non-royal constructions were too small to be used as real chapels. While mostly symbolic, the chapel was still essential to complete the funerary monument, and was used to shelter funerary offerings or ritual material. So far, there was no explanation for the lack of mud-brick chapels on the east side of major monuments. A recent and careful inspection of the floor surrounding the pyramids at Sai Island elite cemetery 8-B-5.A revealed a series of post-holes indicating the presence of wooden chapel reproducing the typical chapel plan with a single room preceded by a pylon (Plate 3).

![Plate 1. Fragment of a capstone from Sedeinga.](image1.jpg)

A few architectural elements made of stone could be added to the mud-brick chapels of a certain rank. One of them, the doorjamb, was often decorated. Typically, two divinities would face each other while looking towards the entrance, both pouring a libation for the deceased, Anubis facing Nephys or Isis-Hathor, being the most frequent association. An alternative, at Sedeinga, shows Anubis with his arms raised, a gesture referring to the adoration of the rising sun (Plate 4). Two other architectural elements were the threshold and the lintel, the latter being decorated with the typical Egyptian winged solar disc flanked by two uraei. For a reason that is still difficult for us to interpret, all of these stone pieces may bear traces of graffiti that were incised later, representing crocodiles, birds and dogs (Plate 5).

While in the northern part of the valley, between the First and the Third Cataract, most Meroites were buried without a monument; upstream to the region of central Sudan, another alternative was offered to them: the tumulus (Plate 6). One of the difficulties with the tumulus is its diachronic nature.
It is extremely difficult to date from the surface prior to any excavation. As experienced in the Fourth Cataract area, when archaeologists first visited the region, many tumuli fields thought to be associated with the post-Meroitic horizon were later reassigned to the Meroitic period. An example near Meroe, at Jebel Makbor (Lenoble 1987), had already established that in the same burial area, tumuli from the protohistorical period could be found next to Meroitic, post-Meroitic and early Christian structures. The geographical distribution of pyramids and tumuli even suggest a kind of cultural division within Meroitic society. In fact, if we place the Meroitic period in the long history of the region, it is clear that the tumulus has always been the traditional superstructure covering the grave, the pyramid only a temporary and geographically limited alternative used in the valley.

Below ground, all kinds of options were available for the substructure of a Meroitic tomb, most of them based on models well known and already used for hundreds years in Nubia. The simplest grave usually consisted of a vertical shaft, sometimes covered with horizontal slabs. Another solution was to dig a shaft or a sloping access to a transversal or an axial burial chamber. According to the few typo-chronologies available (Griffith 1924; Vila 1967; Fernandez 1989), another form, the lateral niche chamber, was also used before these two features became popular. Relatively rare, a more elaborate system was to dig a rectangular shaft and build a mud-brick vault inside of it. A recent discovery at Kawa (Welsby 2011) provides a unique example of a stone barrel-vaulted chamber associated with late Kushite burials. In a few cases, when a cemetery was installed in a rocky area, a natural cavity in the ground or a cliff could be used to house the body which was later covered with stones. Finally, it was frequent that the Meroites reused older graves, particularly those from the Napatan period. The great diversity of the substructures also reflects the regional evolution of some funerary practices, and the size or the quality of a construction is not always a relevant criterion to describe the social status of its owner. One should also remember that the shape of a grave could depend on its capacity to be used as a single or multiple burial chamber.

A great variety of blocking systems were used to seal the grave, most of them designed in a way they could be easily removed or opened, and thus guarantee clear access to the burial chamber for later use (Plate 7). The most common door blocking was made with mud bricks bonded with mortar. Another option was the use of black schist slabs, often resting on one or two courses of mud bricks, and also sealed with mortar. The reuse of architectural blocks from ancient...
Egyptian buildings was not excluded, but it is hard to tell whether the choice of inscribed material was significant, or only the quality of the stone block mattered.

**Ritual material and funerary deposit**

Associated with the cult of the dead, a few objects were placed outside of the grave, in association with the chapel, to commemorate the deceased or directly interact with him or her. Among them, the stela provides the most complete set of information about the deceased’s career and family. During the Napatan period, when non-royal Kushite pyramids started to appear, the funerary stela still remained a royal prerogative. It was only during the Meroitic period that non-royal stelae emerged, with motifs and texts being incised, carved or painted. Representing one of the major corpora of Meroitic texts at our disposal, stelae are also a valuable source of information for the dating of funerary remains via palaeographical analyses combined with archaeological data (Rilly 2007; 2010).

Another ritual object is the offering table. If a few examples made of pottery are known for the Napatan period, at Sedeinga and Sanam, sandstone was mainly used in the provinces of Meroe. Two categories dominate its iconography: offerings and scenes of oblation. The former presents various associations of offerings such as bread (always four or eight) libation vases, amphorae, meat and plants. These images work as magical substitutes activated by the liquid of the libation that conveys them to the netherworld in order to regenerate the deceased. The second category shows deities, mostly Anubis facing Isis or Nephtys, pouring a libation on offerings placed on the floor or on small altars. In addition to these, many alternatives exist, with representations of a sacred pool with stairs, cartouches, a variety of religious symbols, animals, etc. Meroitic offering tables have been constantly influenced by the evolution of the decoration on Roman-Egyptian prototypes, but seemed to have been more popular in Kush than elsewhere in the valley.

Statuary is also part of the material found at the surface of elite graves, whatever the surface monument looked like. The so-called Meroitic *Ba*-statue encompasses a collection of funerary figures with a morphological evolution that seems to have developed from an aviform statue to an almost complete anthropomorphic sculpture. An interesting detail is that bird-like figures often have a long base that was used to set the statue into a monument (Plate 8). According to its size, this base was made to offer a strong resistance to wind and it is not impossible that before capstones appeared, bird-like statues were put at the top of pyramids. Later anthropomor-

---

Plate 8. Ba-statue from Sedeinga.

Plate 9. Head of a Ba-statue from Sedeinga.

Plate 10. Funerary deposit at Sedeinga.

---

Plate 11. Personal ornaments from a grave.

---

Plate 12. Necklace from a grave.
and we are often unable to state, for example, whether some were more associated with male or female burials. Among personal items, objects related to toiletry could also enter the grave with their owner. Tweezers, but also oil and perfume containers (Plate 13), jewellery, small boxes and kohl tubes, thus provided a familiar environment to assist the deceased during his or her journey.

One of the main reasons to open a grave in antiquity was the possibility of finding valuable metallic objects that could be reused or recycled. Copper-alloy and iron industries at Meroe were the source of a large spread of weaponry within the kingdom, which was later put in the graves. It is then quite common to discover remains of arrowheads or spearheads accompanying the deceased. But weapons in a funerary deposit do not necessarily carry a military connotation (Plate 14). Large amount of weapons could be buried to honour the deceased according to his rank or title, more than to indicate his outstanding abilities in war. Therefore, they should be considered as part of the ritual deposit, more than personal items. Also associated with the funeral ceremonies, and in particular with the libation, metallic vessels were placed in the grave as consecrated and magically charged items.

Pottery was probably the central piece of funerary deposit, particularly the water bottle with its cup (Plate 15) and the oil containers. More than a simple reserve placed in the grave to feed the dead, it should probably be understood that the water carried the essential and magical principle that could help to reproduce the Osirian resurrection, symbolically represented by the flood and the water of the Nile.

The deceased

During the Napatan period, it seems that a form of Egyptian mummification was still performed among the elite. But the term is also used, incorrectly, for the Meroitic period where archaeologists are often confused by the presence of anthropomorphic coffins and well preserved desiccated bodies with hair and skin. Though they were not mummified, Meroitic corpses were usually protected, when put inside the grave. One of the common features used was the wooden coffin, assembled or tied with ropes. It could be made of different...
wood species, among which was the sycamore fig, extensively used in Egypt to build sarcophagi. Another possibility, quite common in the northern part of the kingdom, was to carve the coffin from a trunk of a dom palm tree. A lid was not always added on adult’s coffins, as it seemed to have been important to see the deceased until the funeral ended. A few occurrences of painted cartonnage coffins at Sedeinga (Berger el-Naggar 2008) and Kawa (Welsby 2002) also raise the question of egyptianized funerals outside the royal sphere.

Traces of garments (Plate 16) such as loincloths, or large pieces of fabric used as shrouds are frequently found with the skeletal remains inside the burial chamber. The majority of fabrics were not decorated and seem to have been utilized before they accompanied the dead on their final journey. In a few cases, however, the quality of the workmanship was high, indicating the wealth of the owner and their possible connection with royal circles or Egyptian networks of imported goods. Polychrome and painted fabrics were rare and mainly found in funerary deposits associated with elite burials.

The body of the deceased, alone, put into a coffin or wrapped in a shroud, could be placed either on the floor of the cavity or on a funerary bed (Plate 17). As wood seldom survives the strong appetite of termites, a number of holes or small trenches on the floor of the cavity are often the only signs indicating the former presence of a bed. When there was not enough space, the legs of the bed could simply be removed and placed to one side.

On the floor or on a bed, two main positions were adopted by Meroites to deposit their bodies in a grave: the extended supine position and the crouched position. The former was often, but not always, associated with the head to the west, while the latter was frequently seen with the head to the south. As previously mentioned with the monuments, there is a clear division in the funerary practices between the northern part of the kingdom (supine), and the central Sudan (crouched), with the exception of the capital Meroe and its surroundings, traditionally more exposed to Egyptian influence.

Conclusion

Despite the loss of Lower Nubia and its original border with Egypt beneath the waters of the Aswan lake, the complexity of regional powers, where privileges are granted for local administrators, can still be studied in middle Nubia through excavations on major sites such as Sedeinga and Sai Island. More than simply adding new graves and monuments to the long list already published of Meroitic funerary remains, they represent our last chance to fully document the funerary tradition of powerful northern regional centres.

While many museum stores are filled with Meroitic grave artefacts, our understanding of their role in the funeral ceremonies remains paradoxically often uncertain. The different
functions and possible locations for the Ba statuary and the necessary study of the deceased’s attributes represented on it illustrates this situation. The lack of accurate typo-chronology for funerary ceramic and the over-representation of late remains is also problematic.

The Egyptian origin of most of the beliefs and rituals contrasts with their original and Kushite development, and requires research on both sides of the Nubian border. The solar significance of the pyramidal construction for example, combined with the supine position and some material focusing on the rebirth of the deceased, is indicative of the influence of the myth of Osiris on Meroitic funerary religion which was followed by a substantial part of the population. However, little is known about other contemporaneous funerary traditions and their origins, especially outside of the valley, though it is now more than a century since the first non-royal graves were found and excavated.

Bibliography