Vincent Francigny & Romain David

Dating Funerary Material in the Meroitic Kingdom

Providing absolute dating for Meroitic funerary deposits remains a difficult task in spite of groundbreaking progress made in Nubian archaeology over the last decades. Without many understandable indigenous sources that discuss the history and the organisation of the kingdom of Meroe, chronological markers mainly rely on external texts from neighbouring countries, or on modern technologies applied to archaeology such as radiocarbon analyses or thermoluminescence. However, in Nubia, dating Late Antiquity with radiocarbon can only distinguish different cultural phases in a broad chronological frame. It was successfully employed, for example, at Amir Abdallah in Middle Nubia,[1] where radiocarbon dating from intact wooden coffins could establish the early nature of some funerary deposits. Without well-preserved organic material though, the problem remains and alternatives have to be found.

Based on the excavation of the royal Nubian cemeteries, and the study of the inscriptions accompanying the graves, G.A. Reisner was the first to publish an adequate chronology of the Kushite rulers.[2] Combined with the evolution of the architecture of funerary monuments and the presence of imported goods in the burial chambers, his study also made available the first series of dated Meroitic artefacts. Building on this early achievement, many new studies improved our understanding of the Kushite material culture and its chronology. Ceramic typologies were regularly published,[3] as well as studies on architecture,[4] trade,[5] and iconography.[6] However, writing the history of Meroe is still a work in progress,[7] as reminded to us by the recent adjustments on the royal chronology made by C. Rilly,[8] through the lens of palaeographical evidence.

1 Fernández 1984a.
2 Reisner 1923.
3 Adams 1973, 1986a, 1986b; Millet 1994; Edwards 1999a.
4 Török 1984.
5 Desanges 1972.
6 Hintze 1959; Wenig 1979; Hofmann 1979; Červiček 1984; Török 1987, Rondot 2011.
7 Haycock 1965; Hintze 1973; Desanges 1973; Bersina 1984; Bradley 1984; Adams 1984; Williams 1985; Török 1997.
8 Rilly 2001, 2007.

Fig. 1: Map showing the location of Sedeinga and major Meroitic sites in the region.

While it is possible to find parallels in the Mediterranean World for bronze objects, glasses, and a few categories of ceramics such as amphorae, most of the funerary deposit from ordinary graves still lacks accurate typo-chronologies. Therefore, and to avoid the traditional sequence "Early, Classic or Late" Meroitic period, more efforts should be put in (re-) examining undisturbed contexts produced by funerary archaeology.

The case study of I T 87 at Sedeinga

Among the well-preserved graves that can be used for chronological study, many are found in Middle Nubia, where major cemeteries similar to those discovered in Lower Nubia are still accessible. At Sedeinga (Fig. 1), the regional capital during the Kushite period, a large Napatan-Meroitic necropolis that developed on a surface almost 700 m long, has pro-

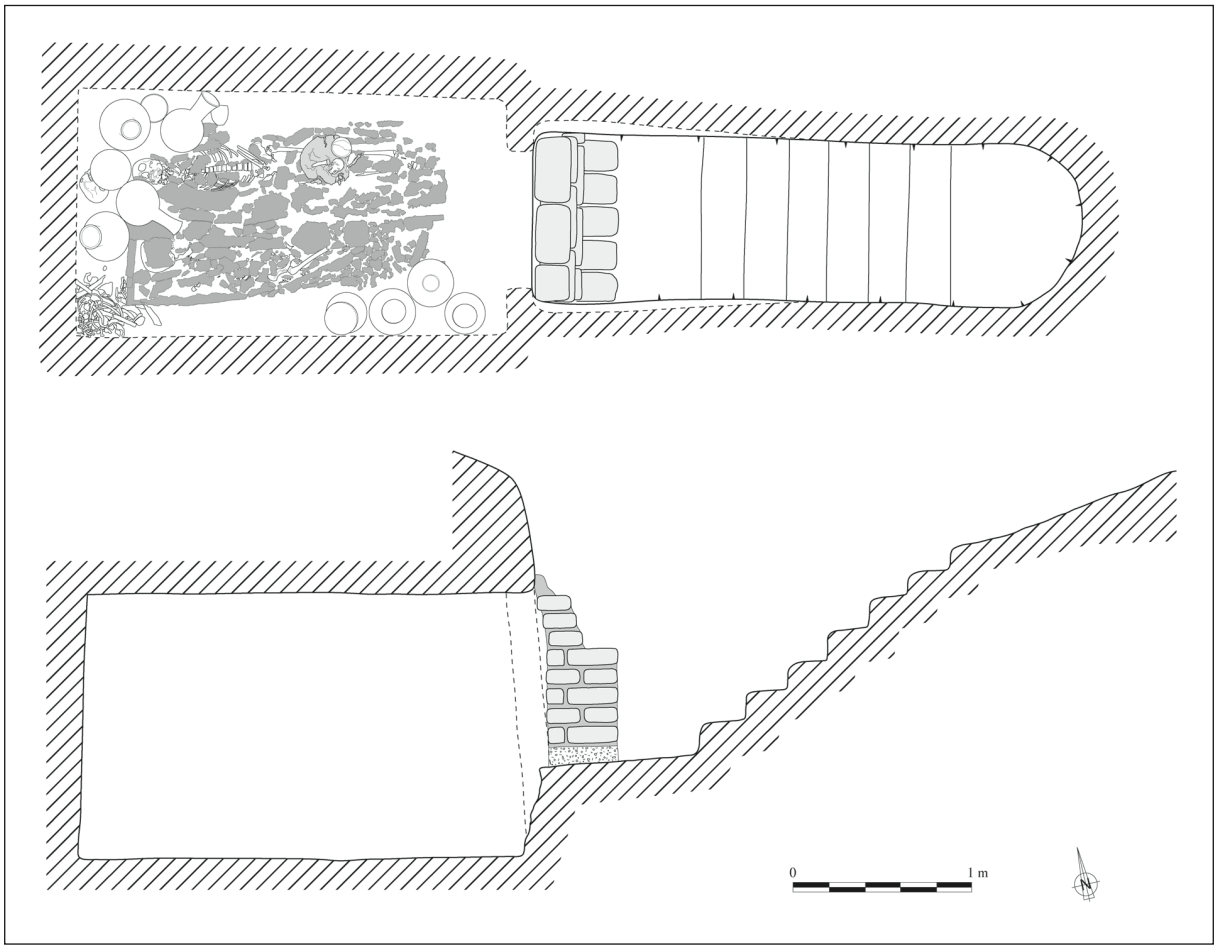

Fig. 2: Plan and section view of the grave I T 87.

vided several unlooted tombs. At the North of the site, one case in particular, the grave I T 87, remained unpublished though it had an important collection of funerary goods.[9] The resumption of archaeological activities on the site recently made its material accessible.[10] Stored in the dig house and at the National Museum in Khartoum, it was examined during the 2011 campaign, though some of the archives related to the dig were, alas, never given to our team.

I T 87 was uncovered in 2000 on the eastern part of the Sector I, where many late Napatan graves were reused during the Meroitic Period. Located between two massive tombs covered with the remains of what once was a pyramid, its surface showed no traces of mud bricks or funerary monument. A few months after the last burial took place, in an area particularly exposed to the wind and sand erosion, the tomb must have rapidly disappeared from the surface of the cemetery, which might have saved it from being seen by plunders, and therefore looted during antiquity and modern times.

Excavation took place in 2001, and began with the descendary, about 3 m long, 1 m large and 1.70 m deep. From surface to bottom, its filing was very homogenous, with only a few human bones discovered near the door but without any material associated. As a distinct feature for early Kushite graves, instead of the usual slope, there was a seven steps stair cut into the ground, leading to a narrow and flat platform where the door was installed (Fig. 2). Completely intact, the blocking system consisted of a fine wall made of mud bricks, reaching a height of 1 m, and built over a thick layer of mix soil and gravels. Typically, the bricks were sealed using mud cement, also applied at the top of the entrance to close an empty space. The cavity had a quadrangular plan measuring 2.40 m long, 1.40 m large and 1.50 m high. It was cut below the level of the bottom of the descendary, so that the entrance could form a kind of final step to access to the funerary chamber. Walls were a bit tilted, and the ceiling almost flat. Whitish horizontal traces could be seen on the bottom of the walls up to 50 cm high. They indicate the likely

9 The discovery of the grave was briefly mentioned in N. Grimal and E. Adly (2004: 131), C. Berger (2008: 188) and V. Francigny (2010: 257).

10 Rilly and Francigny 2010.

salination of the soil by capillary or evaporation after water entered the grave. The high degradation of the ground also affected the bottom of the walls, completely destroyed and reduced to powder up to 10 cm high.

Four individuals were found in the grave. Ind. 1 and Ind. 2 were only represented by a few bones and a skull pushed away in the southwest corner of the chamber. They were the primary occupants of the grave during the Meroitic period, but had their skeletons and funerary material partly removed to facilitate the deposit of new corpses. Though it could not be verified, it is likely that the bones found at the bottom of the descendary belong to this group, as they might have fallen down when the chamber was cleaned. The third deceased, Ind. 3, was placed in the northern part of the chamber. He was buried in a wooden coffin, his funerary material set behind his head and his left shoulder, as well as in a basket put on top of the coffin lid, above the knees. The fourth and last individual, Ind. 4, was also buried in a wooden coffin, placed in the southern part of the chamber. His funerary material was set along the lower part of his right leg, between the coffin and the wall. Both, Ind. 3 and Ind. 4, were resting in a supine position, head to the west. Gender or age could not be determined for Ind. 1 and Ind. 2, but the anthropological study revealed that they were adults. Ind. 3 was a female in her late forties, while Ind. 4 was a female about forty years old. In general, their postcranial skeletons did not present severe pathological conditions, though Ind. 3 showed traces of osteoarthritis. Therefore, the group buried in I T 87 corresponds to what appears to be the healthy and wealthy part of the population, an assumption supported by the overall quality of the grave, and the material associated with each individual.

The finds

As soil salinity suggests, the walls of the funerary chamber must have been damaged by water and humidity. This affected not only the substructure, but also the material placed in the grave. Consequently, most of the ceramics directly put on the ground have a fragile and eroded lower surface. In the case of perishable material, the destruction is twofold, as termites colonized the grave and ruined everything that could fit their appetite, leaving nothing but three-dimensional traces of the objects that have been eaten.

Twenty-four items were recovered from I T 87, the majority of them being ceramics. Artefacts can be divided into three groups (Fig. 3), corresponding to the funerary material of Ind. 3, the material associated with Ind. 4, and some remains that predate the burials of Ind. 3 and 4.

Number	Description	Group
I T 87 Cc 1	Ceramic	Ind. 4
I T 87 Cc 2	Ceramic	Ind. 4
I T 87 Cc 3	Ceramic	Ind. 4
I T 87 Cc 4	Ceramic	Ind. 4
I T 87 Cc 5	Ceramic	Ind. 4
I T 87 c 6	Metallic vessel	Ind. 4
I T 87 Cc 7	Ceramic	Ind. 4
I T 87 Cc 8	Ceramic	Ind. 3
I T 87 Cc 9	Ceramic	Ind. 3
I T 87 Cc 10	Ceramic	Ind. 3
I T 87 Cc 11	Ceramic	Ind. 3
I T 87 Cc 12	Ceramic	Ind. 3
I T 87 Cc 13	Ceramic	Ind. 3
I T 87 c 14	Wooden box	Ind. 3
I T 87 c 15	Beads	Ind. 3
I T 87 c 16	Glass vessel	Ind. 3
I T 87 c 17	Basketry	Ind. 3
I T 87 c 18	Metallic vessel	Ind. 3
I T 87 Cc 19	Ceramic	Ind. 3
I T 87 c 20	Galena	Ind. 3
I T 87 c 21	Painted stucco	Older Burial
I T 87 c 22	Beads	Older Burial
I T 87 c 23	Inlays	Ind. 3 (?)
I T 87 c 24	Metallic fragments	Older Burial

Ceramic vessel

In I T 87, ceramics are represented by wheel-made productions such as long necked bottles, jars, goblets and bowls. Though they were found unbroken, meaning without a chance to look at their fabrics, it was still possible to see that they used different clays for alluvial and kaolinitic productions.

The first group of ceramic belongs to the Ind. 3, set in the Northwest corner of the chamber (Fig. 4) and in a basket placed on top of the coffin. Most of them were overturned, as the coffin seems to have been moved, pushing them, perhaps during the burial of Ind. 4. Four long necked globular bottles (I T 87 Cc 9-12) were first set along the west wall.

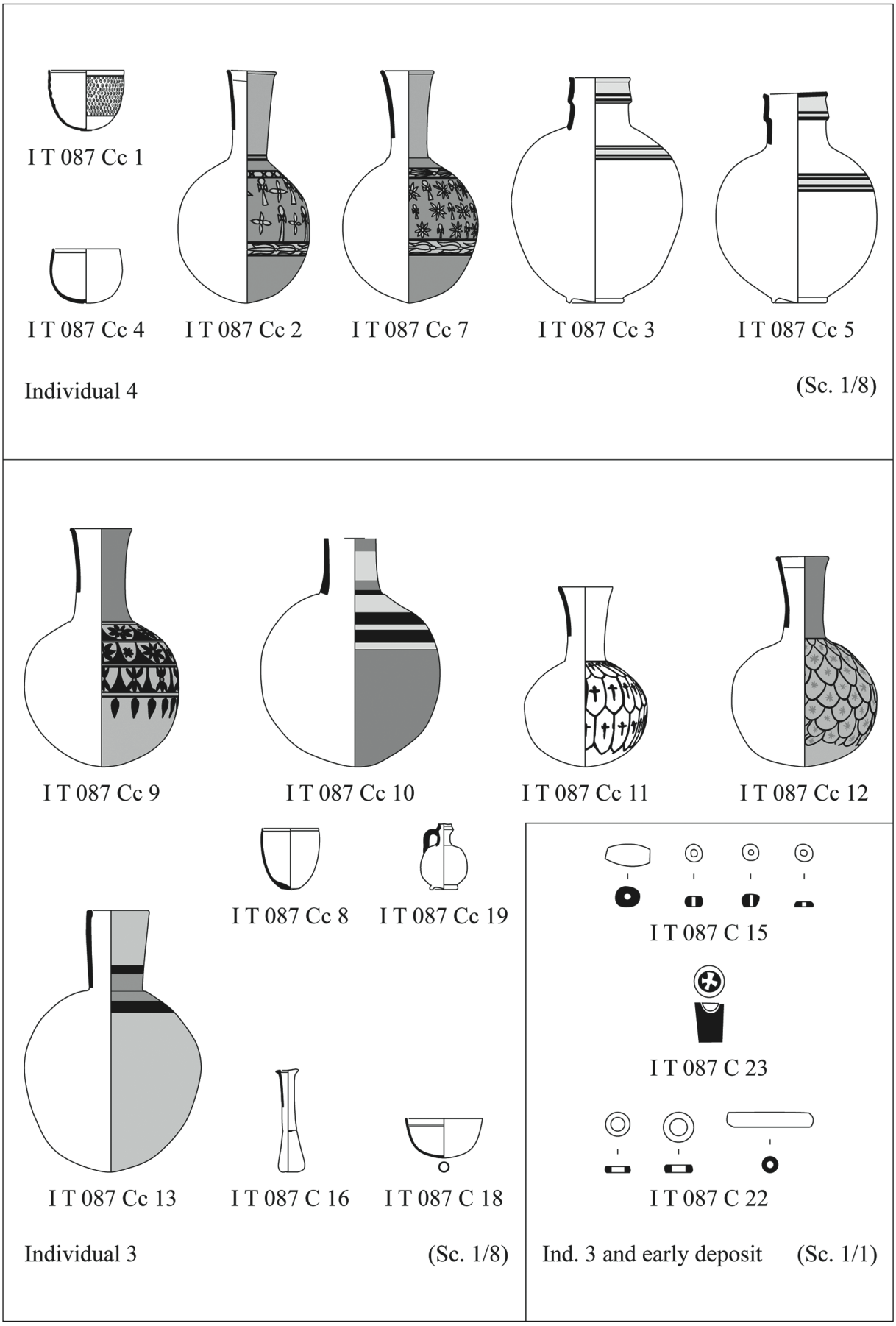

Fig. 3: Funerary material found in I T 87.

Fig. 4: Ceramics accompanying Individual 3.

This type of vessel, quite common at Sedeinga, is considered as a typical production from Middle Nubia.[11] Specimens of this first group have the same shape, with some variation for the height. Apart from I T 87 Cc 10, with its chipped rim, all the bottles have rounded rim, everted neck with a wide base, and a rounded body. The inflexion point between the neck and the body is occasionally marked by a small outcrop that corresponds to an addition made around the neck to strengthen the pottery. While each pot has a different decoration, some motives are recurrent. I T 87 Cc 9 and Cc 12 have a red slip on the neck and cream slip on the body, while I T 87 Cc 10 is totally covered by a red slip and I T 87 Cc 11 by a cream one. The body of I T 87 Cc 9 is painted with three horizontal rows of vegetal friezes that alternate various floral motives, separated by a wavy ornamental structure. Drop-shaped motives hang at the lower part of the vessel. I T 87 Cc 10 is decorated with red, cream and black bands of various size that cover the neck and the body. I T 87 Cc 11 is decorated with falcon feathers,[12] with a ankh cross in the middle of each pattern, while I T 87 Cc 10 has the same motif, but with small "stars" instead of crosses.[13] The jar I T 87 Cc 13 is medium necked with an ovoid body. A red wide band surrounded by black smaller bands is covering the base of its neck. The rest of the surface is covered with a cream slip. The fineware goblet I T 87 Cc 8 is of an unusual shape with an ovoid profile. Its surface is smoothed and unslipped, while its light orange colour has been obtained during the firing. The small lekythos I T 87 Cc 19 is a typical red slipped import from Aswan, with a cylindrical body and a ring base. Examples are found throughout the Meroitic kingdom, from Lower Nubia in the North,[14] to the Keraba,[15] and the Gezira in the South.[16]

The second group of ceramics was located in the southeast corner, along the right leg and foot of Ind. 4 (Fig. 5 & Titelbild). Somehow, its typology differs from the first group. Long necked bottles are still present (I T 87 Cc 2 and 7), but their shapes are more elongated, with a narrower neck and an ovoid body. They are red slipped and painted with motives first sketched in black, then filled with a cream colour. On the body of the first bottle is a band of beads painted above a frieze where a flower with four petals alternates with ankh crosses. Beneath is a band filled with horizontal flowers having three petals. The second bottle has a very similar decora-

Fig. 5: Ceramic and bronze vessels associated with Individual 4.

11 Leclant 1985.

12 We understand the motif as falcon feathers, the same associated with Meroitic gods and royal family (Hintze 1993: 159), though it has been described on ceramic as scales or nets (Evina 2010: 108, Cat. 126; Török 2011: 296).

13 The "stars" are similar to those found on jars from Gabati (Edwards 1998: Fig. 6.3, n° 2901-20902).

14 Williams 1991: Fig. 87a, 92d, 93b and 131c.

15 Edwards 1998: Fig. 6.25, n° T11/106c.

16 Dixon 1963: Pl. 50.

tion, with upper and lower bands having horizontal flowers, while in the central frieze the ankh crosses alternates with flowers showing eight petals. The same artist likely painted these two bottles. Floral motives and ankh symbol are widespread in Meroitic art. They are often painted together on ceramic, but only on a few types of vessels.[17] The flower might refer to different species of lotus.[18] Two jars (I T 87 Cc 3 and 5) with a collar rim, an ovoid body and a ringed base, were put side by side between the long necked bottles. They belong to a type quite rare in Nubia,[19] but well-known in the capital area.[20] Its outer surface is red-slipped, while rim and shoulder wear typical black and cream bands. Two fineware bowls cover these jars. The first one (I T 87 Cc 1) is stamped with hexagon motives,[21] while the second (I T 87 Cc 4) is only red-slipped. They both have a small line sketched under the rim in the inner face, imitating metallic vessels. The hollowed base of I T 87 Cc 4 particularly resembles to bronze specimens.[22]

Metallic vessel

A bronze bowl I T 87 c 18 (Fig. 3) was found between the bottle I T 87 Cc 9 and the jar I T 87 Cc 10. As it seems that the goblet I T 87 Cc 8 was associated with I T 87 Cc 9, we can assume that I T 87 c 18 was originally placed on the mouth of I T 87 Cc 10, before it fell down when the coffin of Ind. 3 was pushed in the corner. The bowl, probably thinned on a wheel, has a classic shape with no decoration except a line incised horizontally inside below the rim, and a small ring incised at the bottom on the exterior surface. Its preservation was excellent at the time of discovery, with only a thin layer of oxidation in some areas, while the rest of the surface was shiny and showing that the bowl had been tinned.

A second bronze bowl, I T 87 c 6 (Fig. 6), was found in the grave, belonging this time to Ind. 4. It was placed upside down on top of the bottle I T 87 Cc 7, and was discovered in situ. It is a shallow convex bowl, also tinned, and decorated in a gouge technique. With the help of an awl, the metal was hammered from the interior, to create a decoration on the exterior that, in this case, consisted of a frieze of lozenges with a circle in the middle, set between two horizontal bands. Close parallels are found at Ballana,[23] Karanog,[24] and Faras.[25]

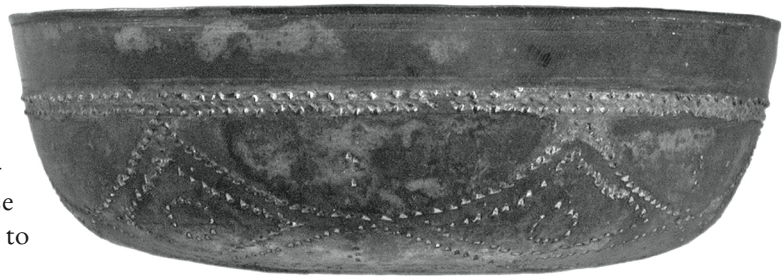

Fig. 6: Decorated bronze bowl.

Basketry

A basket (I T 87 c 17) was originally placed on top of the coffin of Ind. 3, in the area of the knees (Fig. 7). Though it was very badly preserved, it was still possible to discern its circular shape thanks to a few bigger pieces. Inside were the remains of a small lekythos (I T 87 Cc 19), a glass unguentarium (I T 87 c 16), a wooden box (I T 87 c 14) containing various beads (I T 87 c 15), and a rod-shape fragment of galena (I T 87 c 20). The use of basketry in Meroitic graves is poorly documented, as it is the case for many objects made of perishable materials. A few examples are known, showing that it wasn't unusual to use baskets for the deposit of personal ornaments and cosmetic tools. A well-preserved specimen was found, for example, in a grave at Gemai West,[26] containing also a glass unguentarium and a small pottery lekythos, together with a small faience bowl and a second inverted basket used as a lid. Another example from Qustul was found with two small ceramics, four balls of hairs, an iron rod and some galena.[27]

17 See for example Garcia Guinea and Texidor 1965: Fig. 7.1; Woolley and Randall MacIver 1910: Pl. 44, 8249, Pl. 46, n ° 8176; Griffith 1924: Pl. 45/13; Williams 1991: Fig. 115a and 166d.

18 Nymphea lotus with rounded petals can be distinguished from Nymphea Coerulea with pointed petals (Täckholm 1974:144, pl. 39). The flower motif might be compared to the "stars" of some funerary crowns and shrouds of Ptolemaic and Roman Egypt. It also appears at the bottom of some fineware goblets (Garcia Guinea and Texidor 1965: Fig. 15.2; Almagro 1965: Fig. 27.4; Reisner 1923: Fig. 12.1).

19 Vila 1967: Fig. 96c; Dunham 1957: Fig. 106, n° 16-1-504, Bakowska 2008, Fig. 46-47.

20 Dunham 1957: Fig. 94, n° 21-3-380; Dunham 1963: 347, Fig. K2-4; Edwards1999b: Pl. IV, n° 771; Grzymski 2003: Fig. 29, P.64.

21 Also called "diamond" (Zach 1988: 122).

22 Fernández 1984b: Fig. 9, n° 215-1.

23 Williams 1991: Fig. 277b, Pl. 94a-b, Phase II B.

24 Woolley and Randall MacIver 1910: 62, Pl. 31.

25 Griffith 1924: 164, Pl. 53/9.

26 Adams 2005: 87, Pl. 7e-f.

27 Williams 1991: 161-162.

Fig. 7: Remains of a basket containing personal ornaments and cosmetic tools.

Fig. 9: Necklace.

Glass vessel

A single glass unguentarium (I T 87 c 16) was found in the basket associated with Ind. 3 (Fig. 3 and 7). Generally made for perfumed oils, it was here used as a kohl container, which explains the presence of rod-shape galena pieces (Fig. 8) that seem to have slide out after the glass fell down. The shape is very common and corresponds to a production that has been spread throughout the Meroitic Kingdom.

Fig. 8: Fragments of galena.

Objects of wood

Apart from the remains of rectangular coffins for Ind. 3 and Ind. 4, the only wooden object found in the grave was a small cylindrical box placed in the basket associated with the burial of Ind. 3 (Fig. 7). Part of its circular lid was still visible, but the wood was too damaged to remove it safely. As many beads were found in and out of the box, it seems that at least one necklace was placed there. Cylindrical wooden boxes are known in Meroitic funerary deposits, but rarely occurred. Close parallels can be seen at Ballana,[28] Sai Island,[29] and Karanog.[30]

28 Williams 1991: 155, Fig. 59a, Pl. 88c.
29 Francigny 2009: 95, Pl. 4.
30 Woolley and Randall MacIver 1910: 71, Pl. 23.

Jewellery

Two groups of beads were found in the cavity. The first one (I T 87 c 15) was associated with Ind. 3, in the basket and the wooden box placed in it. From a few beads that were found in a sequence, it seems that only one necklace was placed in the box, made with 34 barrel shape gold coated colourless glass beads, separated by tiny beads, among which are 13 red carnelian beads with irregular ball shape, 6 green glass beads with irregular barrel shape, and 12 gold coated colourless glass beads with annular shape (Fig. 9 & Colour-Fig. 3).

The second group of beads (I T 87 c 22) was found after sieving the soil of the cavity floor.[31] It contains the remains of 17 faience beads with tubular shape, and 59 faience beads with disc shape (Fig. 3). Both are known during the Kushite period, tubular beads being often associated with bead nets during the Napatan phase, though the study of the Sanam collection suggests that it is not always necessarily the case.[32] Yet, in the case of I T 87 probability is high, as identical specimens were found in some other Napatan graves at Sedeinga,[33] and in the nearby Napatan cemetery at Missiminia, in both cases associated with bead nets.[34] Other discoveries in non-royal cemeteries from the same period also include Kerma.[35]

31 Among the material recovered were also 2 fragments of painted stucco (I T 87 c 21), some metallic unidentified fragments (I T 87 c 24), and 2 glass inlays (I T 87 c 23) bearing a motive of a cross (Fig. 3).
32 Lohwasser 2010: 69.
33 Janot et al. 1997: 131, Pl. 9b.
34 With tubular beads used to draw lozenges, and disc beads placed at angles (Vila 1980: 29, Fig. 12/2).
35 Bonnet 1995: 51, Fig. 22.

From relative chronology to absolute dating?

Clarifying the relative order of events that took place in I T 87 is not much difficult, as the grave was exceptionally left untouched since antiquity. Burials of Ind. 1 and Ind. 2 predate the arrival of Ind. 3, soon followed by Ind. 4, the last and only deceased that had all his material undisturbed. The study of the material recovered from the grave also supports the taphonomic descriptions of the burials. The oldest remains, notably the beads kept in the floor of the funerary chamber (I T 87 c 22), probably date the construction of the grave to the Napatan period. The location of the grave, at the eastern edge of the necropolis, within a row of massive tombs founded during the Napatan period, points at the same conclusion. Another confirmation comes from the stucco fragments painted in red and yellow (I T 87 c 21) that belonged to an early coffin,[36] part of which was found in the northwest corner of the cavity, under the jars accompanying Ind. 3.

The burial of Ind. 1 and Ind. 2 took place at a later date, as their remaining bones were found at the same surface level of the cavity than Ind. 3 and Ind. 4. No bones were found while sieving the soil, showing that the grave had been cleaned at least during the Meroitic period, to allow its reuse. It is unclear whether Ind. 1 and Ind. 2 can be seen as direct ancestors of Ind. 3 and Ind. 4, but the fact that some of their bones were kept in the southwest corner of the funerary chamber indicates a possible family relationship. The time lapse between the burial of Ind. 3 and Ind. 4 must not have been too long, as the coffin of Ind. 3, not yet ruined by termites, has been slightly pushed to the northwest corner during the installation of Ind. 4.

While both are almost contemporaneous, deposits accompanying Ind. 3 and Ind. 4 are nonetheless different:

- For Ind. 3, a Terminus Post Quem is set around the mid-1st century AD by the glass unguentarium.[37]
- Long necked globular bottles are known quite early in Middle Nubia, but specimens having a wide neck base painted with horizontal bands disappear from the Ballana-Qustul typology after the end of the 1st c. AD.[38] Long necked bottles from I T 87 are somehow different in shape, but painted with figurative motives and in a style well attested at the beginning of the 1st c. AD.[39] Vessels I T 87 Cc 9, Cc 11 and Cc 12 might point at a transition in the production, with a finer profile and a shift from horizontal bands to figurative motives. However, I T 87 Cc 10 and Cc 13 are still decorated with bands.
- The small lekythos (I T 87 Cc 19) is a well-known production, spread throughout the Meroitic kingdom between the Ist c. BC and the beginning of the Ist c. AD.[40]
- For Ind. 4, the last burial that took place in I T 87, the two jars with a collar rim (I T 87 Cc 3 and Cc 5) give some important clues for the dating of the deposit. They are well represented in the graves of the capital,[41] in a region where their production probably took place. They correspond to the type K1-K4 of Dunham's typology and, according to Edwards,[42] appear for the first time in the deposit of the grave W306 from Meroe West Cemetery, dating to the first decades of the 1st c. AD. In the Royal North Cemetery, the tomb of Amanitenmomide (Beg. N17, beginning of the 2nd c. AD) seems, on the other hand, to contain the latest examples of these jars.[43] Edwards, whose study at a large scale presents a seriation of ceramics for the Meroe West Cemetery, makes no distinction between the four sub-divisions that are found in the K1-K4 type. These morphological variations would be as follow: K1 has a round base, while K2 has a flat base, and K3-K4 a ring base. From the chronology of Meroe West Cemetery, we understood that K1 and K2 had disappeared before K4. Parallels for the jars from I T 87 (Type K4) have been found in W308, W323 and Beg. N17, dating from the mid-1st c. AD to the beginning of the 2nd C. AD. The child grave W308 is of particular

36 Similar discoveries have been made in Napatan graves of the Sector II (Janot et al. 1997: 131).

37 Isings 1957: 98-99, Type 82 B1; Rütti 1991: 119, Type AR 135; Brun 2011: 223, Fig. 272, n° 140-145.

38 Griffith 1924: Pl. 17, Type IVb; Fernández 1984b: Fig. 7, 128-1; Williams 1991: 36, Fig. 83b, Phase IIA.

39 Falcon feathers (Dunham 1957: 343, Fig. G19, tomb W 308, dated from Phase IA in Edwards 1999a: Fig. 4-5.), and stars (Edwards 1998: p. 198, 247, tomb 29, around mid-1st c. AD). See also the discussion about a decorated jar found at Gammai (Bates and Dunham 1927: Pl. LXII, Fig. 27; Török 1987: 80; Hofmann 1978: 220; Rilly 2007: 205).

40 Williams 1991: Fig. 87a, 92d, 93b, 131c, Phase IIA-IIIA; Griffith 1924: Pl. 22, Type 34d, Period B. It is worth noting its absence in the early roman layers at Elephantine (Rodziewicz 2005), which might indicate that the production ended before the mid 1st c. AD.

41 Cf. Dunham 1963: 142-143 (W306), 143-151 (W308), 240 (W185), 253 (W299), 258 (W323) and 262 (W340).

42 Edwards 1999a.

43 Dunham 1957: 143-144, Fig. 94, n° 21-3-380.

interest,[44] as it was found totally untouched and with a lot a ceramic material, among which an askos and the first specimens of ledge-rimmed bowls (Type F12-F13) that start to be produced around the mid-1st c. AD.[45] From the jewellery, a beautiful necklace containing 20 silver lunulae was found in situ around the neck. In Roman Egypt, the lunula,[46] often depicted around the neck of children and women in the so-called Fayoum portraits, is mostly dated to the second half of the 1st c. AD.[47]

- The long necked bottles accompanying Ind. 4 (I T 87 Cc 2 and Cc 7) have a thinner neck and a slightly more ovoid body than those associated with Ind. 3, while their decoration is organized in a different manner. A bottle discovered in the Tomb 5 at Nelluah,[48] that combines pictorial style of I T 87 Cc 9 and morphology of I T 87 Cc 2 and Cc 7, might come from the same workshop. It was found with another long necked bottle with a similar shape, but decorated with horizontal bands. A small cup with barbotine decoration was also part of the deposit, likely produced in Aswan at the beginning of the 2nd c. AD, and common in the archaeological levels dated to the reign of Trajan, between 98 and 117 AD.[49]

Evidently, the material coming from the grave I T 87 at Sedeinga offers a wide range of comparisons throughout the kingdom of Meroe and beyond. Cross-references allow us to confirm a general chronological frame, while relative chronology between Ind. 3 and Ind. 4 points at a short period of time between the two latest burials. With a secure chronological sequence and some precious information about local ceramic productions and imports, we understand that the grave was founded during the Napatan period, and later reused toward the end of the Meroitic classical period, around the mid-1st c. AD, by Ind. 1 and Ind. 2. A few years later, toward the end of the 1st c. AD, Ind. 3 was placed in the same cavity, while at the very beginning of the 2nd c. AD the final burial took place with the arrival of Ind. 4.

As an example illustrating how funerary deposits can be used and dated with a decent accuracy, even years after being unearthed, the grave I T 87 is an invitation to revisit other ancient discoveries that could offer valuable inputs to improve our chronological understanding of Meroitic material culture.

44 Dunham 1963: 143-151.

45 Bashir and David 2012: 122.

46 A crescent moon shaped pendant that was usually wore by roman girls as an apotropaic amulet against the evil forces, while the bulla amulet was given to boys.

47 For example, around 60 AD for a portrait of a woman (Doxiadis 1995: 63), toward the end of the 1st c. AD for a woman portrait from el-Rubayat (Walker 1997: Pl.1/1), and between 69 and 96 AD for a portrait of a child found at Hawara (Doxiadis 1995: 56).

48 Garcia Guinea and Teixidor 1965: 25, Fig. 7.1.

49 Hayes 1976: 48-49, n° 245& 247; Maxfield and Peacock 2006: 31, Type 16.

Bibliography

Adams, W.Y. (1973): Pottery, Society and History in Meroitic Nubia, Meroitica 1, 177-219.

Adams, W.Y. (1984): Meroitic Chronology and the History of Meroe, Meroitica 7, 212-214.

Adams, W.Y. (1986a): From Pottery to History: the Dating of Archaeological Deposits by Ceramic Statistics, Wissenschaftliche Zeitschrift der Humboldt-Universität zu Berlin35/1, 27-45.

Adams, W.Y. (1986b): Ceramic Industries of Medieval Nubia, Lexington.

Adams, W.Y. (2005): The West Bank Survey from Faras to Gemai. 2. Sites of Meroitic and Ballana Age, British Archaeological Report International Series 1335, Oxford.

Almagro, M. (1965): La necrópolis Meroítica de Nag Gamus (Masmas-Nubia Egipcia), Comite español de la UNESCO para Nubia. Memorias de la misión arqueológica 8, Madrid.

Bakowska, G. (2008): Meroitic pottery from Gebel Barkal. Preliminary remarks on the results of seasons 2004 and 2005, in W. Godlewski and A. Łajtar (eds), Between the Cataracts, Polish Archaeology in the Mediterranean Supplement Series 2.2/2, Gda sk, 187-204.

Bashir, M.S., David, R. (2011): Meroitic Pottery from Excavations of the Cemetery at Berber, Antike Sudan 22, 121-128.

Bates, O., Dunham, D. (1927): Excavation at Gammai, Harvard African Studies 8, 1-121.

Berger el-Naggar, C. (2008): Contribution de Sedeinga à l'histoire de la Nubie, in W. Godlewski and A. Łajtar (eds), Between the Cataracts, Polish Archaeology in the Mediterranean Supplement Series 2.2/1, 179-193.

Bersina, S.Y. (1984): Problems on Meroitic Chronology: Beginning and End of Meroe, Meroitica 7, 215-219.

Bonnet, C. (1995): Les fouilles archéologiques de Kerma, Genava 43, 31-52.

Bradley, R. (1984): Meroitic Chronology, Meroitica 7, 195-211.

Brun, J.-P. (2011): Les objets en verre, in H. Cuvigny (ed.), Didymoi. Une garnison romaine dans le désert Oriental d'Égypte, I, Fouilles de l'Institut Français d'Archéologie Orientale 64, 215-241.

Červiček, P. (1984): Zur Chronologie von Felsbildern der napatanisch-meroitischen Epoche, Meroitica 7, 424-426.

Desanges, J. (1972): L'amphore de Tubusuctu et la datation de Teqerideamani, Meroitic Newsletter 11, 17-21.

Desanges, J. (1973): Diskussionsbeitrag zum Thema meroitische Chronologie, Meroitica 1, 145.

Dixon, D.M. (1963): A Meroitic Cemetery at Sennar (Makwar), Kush 11, 227-234.

Doxiadis, E. (1995): Portraits du Fayoum, London.

Dunham, D. (1957): The royal Tombs at Meroë and Barkal. The Royal Cemeteries of Kush IV, Boston.

Dunham, D. (1963): The West and South Cemeteries at Meroë, The Royal Cemeteries of Kush V, Boston.

Edwards, D.N. (1998): Gabati, A Meroitic, Post-Meroitic and Medieval Cemetery in Central Sudan, Vol. I, London.

Edwards, D.N. (1999a): Meroitic Ceramic Chronology: Exploring the Meroe West Cemeteries, Azania 34, 25-43.

Edwards, D.N. (1999b): Musawwarat es Sufra III, A Meroitic Pottery Workshop at Musawwarat es Sufra, Meroitica 17.2, Wiesbaden.

Evina, M. (2010): Une double tradition céramique, in M. Baud (ed.), Méroé. Un Empire sur le Nil, Paris, 105-113.

Fernández, V.M. (1984a): Radiocarbon Dating for the Early Meroitic in Northern Nubia, Nyame Akuma 24/25, 23-24.

Fernández, V.M. (1984b): Early Meroitic in Northern Sudan: the Assessment of a Nubian Archaeological Culture, Aula Orientalis 2, 43-84.

Francigny, V. (2009): The Meroitic Necropolises of Sai. First Season at the Cemetery 8-B-5.A, Sudan & Nubia 13, 92-99.

Francigny, V. (2010): Nécropoles, Tombes et Au-delà, in M. Baud (ed.), Méroé. Un Empire sur le Nil, Paris, 246-263.

Garcia Guinea, M.A., Teixidor J. (1965): La necrópolis Meroítica de Nelluah (Argin Sur, Sudan), Comite español de la UNESCO para Nubia. Memorias de la misión arqueológica 6, Madrid.

Griffith, F.L. (1924): Oxford Excavations in Nubia. The Meroitic Cemetery at Faras, Liverpool Annals of Archaeology and Anthropology 11, 141-180.

Grimal, N., Adly, E. (2004): Fouilles et travaux en Égypte et au Soudan, 2002-2003, Orientalia 73, 131.

Grzymsky, K. (2003): Meroe Reports I, SSEA Publication 17, Mississauga.

Haycock, B.G. (1965): Towards a Date for King Ergamenes, Kush 13, 164-166.

Hayes, J.W. (1976): Roman Pottery in the Royal Ontario Museum, Toronto.

Hintze, F. (1959): Studien zur Meroitischen Chronologie und zu den Opfertafeln aus den Pyramiden von Meroe, Abhandlungen der Deutschen Akademie der Wissenschaften zu Berlin, Klasse für Sprachen, Litteratur und Kunst 2, 171-196.

Hintze, F. (1973): Meroitic Chronology: Problems and Prospects, Meroitica 1, 127-144.

Hintze, F. (ed.), (1993): Musawwarat es-Sufra. Band I, 1: Der Löwentempel. Textband, Berlin.

Hofmann, I. (1978): Beiträge zur meroitischen chronologie, Studia Instituti Anthropos 31.

Hofmann, I. (1979): Meroitische Chronologie im Lichte von Kunstgegenständen, Meroitica 5, 71-84.

Isings, C. (1957): Roman Glass from Dated Finds, Groningen.

Janot, F., Berger, C., Cartier, F., Martin, J. and A. Labrousse (1997): Observations sur la phase d'activité napatéenne de la nécropole de Sedeinga, Cahier de Recherches de l'Institut de Papyrologie et d'Égyptologie de Lille 17, 129-135.

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.

Lohwasser, A. (2010): The Kushite Cemetery of Sanam. A Non-Royal Burial Ground of the Nubian Capital, c. 800-600 BC, London.

Maxfield, V.A., Peacock D.P.S. (2006): Survey and Excavation. Mons Claudianus III. Ceramic vessels and related objects, Fouilles de l'Institut Français d'Archéologie Orientale 54.

Millet, N.B. (1994): Meroitic Pottery and Absolute Chronology, in C. Berger, G. Clerc and N. Grimal (eds), Hommages à Jean Leclant, Bibliothèque d'Étude 106/2, 305-308.

Reisner, G.A. (1923): Excavations at Kerma, Part 1-3, Harvard African Studies 5, Cambridge, 41-57.

Rilly C., Francigny V. (2010): Excavations at Sedeinga. A New Start, Sudan & Nubia 14, 62-68.

Rilly, C. (2001): Approche comparative de la paléographie et de la chronologie royale de Méroé, Meroitic Newsletter 28, 71-89.

Rilly, C. (2007): La langue du royaume de Méroé, Paris.

Rodziewicz, M.D. (2005): Elephantine XXVII, Early Roman Industries on Elephantine, Mainz am Rhein.

Rondot, V. (2011): L'empereur et le petit prince. Les deux colosses d'Argo. Iconographie, symbolique et datation, in V. Rondot, F. Alpi and F. Villeneuve (eds), La pioche et la plume, Hommages archéologiques à Patrice Lenoble, Paris, 413-440.

Rütti, B. (1991): Die römischen Gläser aus Augst und Kaiseraugst, Augst.

Täckholm, V. (1974): Students' Flora of Egypt, 2nd Edition, Cairo.

Török, L. (1984): Meroitic Architecture: Contributions to Problems of Chronology and Style, Meroitica 7, 351-366.
Török, L. (1987): Meroitic Painted Pottery: Problems of Chronology and Style, Beiträge zur Sudanforschung 2, 75-106.
Török, L. (1997): The Kingdom of Kush: Handbok of the Napatan-Meroitic Civilization, Leiden-New York-Köln.
Török, L. (2011): Hellenizing Art in Ancient Nubia 300 BC – AD 250 and its Egyptian Models, Leiden-Boston.
Vila, A. (1967): Aksha II. Le cimetière méroïtique d'Aksha, Paris.
Vila, A. (1980): La Nécropole de Missiminia, I. Les sépultures napatéennes, La prospection archéologique de la vallée du Nil (Nubie Soudanaise), Fascicule 12, Paris.
Walker, S.E.C. (1997): Mummy Portraits in their Roman Context, in M.L. Bierbrier (ed.), Portraits and Masks. Burial Customs in Roman Egypt, Londres, 1-6.
Wenig, S. (1979): Meroitic Painted Ceramics, Meroitica 5, 129-134.
Williams, B.B. (1985): A Chronology of Meroitic Occupation below the Fourth Cataract, Journal of the American Research Center in Egypt 22, 149-195.
Williams, B.B. (1991): Meroitic Remains from Qustul Cemetery Q, Ballana Cemetery B, and Ballana Settlement, Oriental Institute Nubian Expedition 8, Chicago.
Woolley C.L., Randall-MacIver D. (1910): Karanog, the Romano-Nubian Cemetery III-IV, Oxford.
Zach, M. (1988): Die Gestempelte Meroitische Keramik, Beiträge zur Sudanforschung 3, 121-150.

Zusammenfassung

Trotz reicher archäologischer Hinterlassenschaften steckt die absolute Datierung von Grabkonvoluten aus dem antiken Sudan immer noch in den Kinderschuhen. Es ist jedoch möglich, anhand ungestörter Befunde aus Gräbern zu sehr genauen zeitlichen Einschätzungen zu kommen. Anhand des Grabes I T 87 von Sedeinga wird gezeigt, wie eine solche Annäherung möglich ist. Nach der Vorstellung des Grabes mit vier Bestattungen und der erhaltenen Funde werde einzelne Objekte anhand von Parallelen genauer datiert und dadurch – im Zusammenspiel mit den Befunden währen der Grabung – eine auch absolut zeitlich eingeordnete Abfolge der Belegung vorgestellt.