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Front cover: Beja man by the well at Bir Vario, Eastern Desert (photo K. Pluskota).
The Third Season of the SARS Anglo-German Expedition to the Fourth Cataract of the Nile

Pawel Wolf and Ulrike Nowotnick

Introduction

The main focus of the season was on excavations while the local workforce is still available in our concession area. We completed the investigation of the Kerma Moyen cemetery site 3-Q-94 and the Meroitic/post-Meroitic cemetery site 3-Q-33, and we dug several single graves. At the banks of the Wadi Thannori, c. 8km upstream of Dar el-Arab, we conducted surface clearings at several post-Meroitic settlement sites. Sites 3-R-103 and 3-R-112, two multi-phase settlements, are clear examples of the coexistence of different construction techniques: circular structures with post-holes and rectangular buildings with wall trenches. Furthermore, site 3-R-112 is a complex settlement dated between Meroitic and Medieval times with structures larger than the ones found in other occupation sites hitherto tested. In addition, features like post-holes and fire places are very well preserved. In site 3-R-69, round huts were marked by stone settings instead of post-holes; additionally the excavation showed a close spatial relationship between funerary and occupation features. Finally, we tested single occupation features - stone concentrations, stone rings, small walls etc. – according to the pottery, probably of post-Meroitic and Medieval date. An occupation site, where large amounts of Napatari potsherds were found, unfortunately produced no structural features.

We continued the archaeological reconnaissance in the region of Amri East along the left bank of the Nile opposite Amri Island and made a more detailed survey along one of the major wadis, named the Wadi Thannori. The high density of ‘pottery deposits’ of post-Meroitic to Early Medieval date along its rocky banks raises many questions. These pottery caches are found inside and around man-made structures which use the natural rock recesses or graves of earlier periods. In most cases the hidden chamber is too small for funerary purposes.

During its short two week run, the rock art survey focussed on completing the documentation of the Dar el-Arab rock art corpus, which was investigated in detail during the 2004/05 season (Kleinitz and Olsson 2005).

The Kerma cemetery, site 3-Q-94

We fully excavated the Kerma Moyen cemetery which was partially investigated during the first season in 2003/04. Luckily, these had remained untouched by robbers – even though the local workmen had learned how to spot and unearth intact tombs beneath the partially destroyed tumuli.

The nine cairn tumuli of this small burial ground were erected in a row on top of a mountain ridge, 1.5km from the river Nile. Their circular burial pits, 2-3m in diameter, are cut into the eroded bedrock. After a ring of large stones was arranged at the base of the superstructure around the pit, the burial was covered with soil, gravel, and large stones which compressed the fill to a solid layer. The remaining superstructures give the impression of having originally been corbelled domes. Finally, large vessels, mostly huge storage jars, were placed either inside the hollow superstructures or around them as funeral offerings, as suggested by large amounts of potsherds on the surface around the graves.

All burials reflect the typical Kerma Moyen funerary traditions. The deceased were placed directly on the bottom of the grave pits. Only tomb no. 4 contained faint traces of wood implying that the dead rested on an angareh. The complete, but very fragile, skeletons lay in a contracted position without fixed orientation: the westernmost burials placed their right side with head to the north or northeast, while the ones in the east rested on their left or right side with variable orientations. Offerings were usually arranged near the head. Five tombs were furnished with pottery: Kerma Moyen bowls and jars, imports, and imitations of Egyptian pots. They suggest closer connections to the outside world than previously assumed for the ‘isolated’ Fourth Cataract region. Four graves had animal offerings, a sheep or goat, next to the human body. Tomb no. 2 also contained a big piece of a mammal leg - probably as an additional meat supply. Two individuals wore necklaces of tiny blue-glazed beads. The anthropological evidence shows a quite balanced

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1 The team consisted of Mohammad el-Tosn (NCAM inspector; Sudan), Alena Efremova (pottery assistant; Russia), Baldur Gabriel (prehistorian and geographer; Germany), Nicole Klein (archaeologist; Germany), Cornelia Kleinritz (rock art specialist; Germany), Roswitha Koenitz (rock art assistant; Germany), Marianna Kozlova (archaeologist; Russia), Marina Kuznetskaya (assistant architect; Russia), Kathryn Ann McLaughlan (physical anthropologist; Great Britain), Ulrike Nowotnick (archaeologist; Germany), Krzysztof Plaskota (pottery specialist; Poland), Nadzeda Reshetnikova (architect; Russia), Michael Schmitz (archaeologist; Germany), Aleksey Sichev (archaeologist; Russia), Alexandros Tsakos (archaeologist; Greece), Pawel Wolf (field director; Germany). The cook of the mission was Atif (NCAM; Sudan).


3 Locals pronounced it like Thannori although on maps the name Wadi Thannerowi can also be found.

4 Wolf 2004, 20f; Wolf and Nowotnick 2005b, 187-188 (with plan on Figure 6).

5 Although the surrounding silt naturally has a red colour, we had the impression that the fill of the burial pit was mixed with red ochre.

6 See Wolf 2004, 21, fig. 2. However, it is conceivable that the superstructures were originally ring tumuli of types V or Va (according to Welsby 2005, 4) and have been ruined by robbers, or they were erected as cairn tumuli of type VIII.
distribution of genders in this cemetery.

A rather interesting feature was tomb no. 1 (Colour plate XIV). Situated at the westernmost end of the ridge and at the highest point of the entire burial ground, this grave had the largest superstructure, contained a double burial, and was the most richly furnished burial in the cemetery. Moving eastwards in the cemetery, the grave goods became less abundant. For that reason, tomb no. 1 might contain the burials of the most prominent persons and might have been the first grave in this cemetery.

The two individuals, a male and a female adult, were placed quite close to each other in the centre of the pit in similar positions with their heads to the east, facing north. The male was laid first, his legs lying beneath those of the female. She wore a necklace of blue-glazed beads with a central gold disk at the neck and two ivory bracelets on her right upper arm (Colour plate XV). A sheep/goat was positioned on either side of the deceased. Finally, the left arm of the male adult must have been laid carefully over the animal’s back.

In total, eight pottery vessels were arranged along the walls of the burial pit (Colour plate XVI). Five stood near the heads; two more bowls were set next to the legs. The vessels are four black-topped bowls, a large Kerma storage jar, a local imitation of an Egyptian vessel, as well as two pots of foreign provenance: one of them Egyptian, the other without parallels even in Egypt. One of these vessels bore a set of pot marks. Unfortunately, the imports do not provide exact dating criteria.

The Meroitic cemetery

Due to the bad state of preservation, the types of Meroitic superstructures were less obvious. With the help of an aerial photograph we identified about 15 circular stone clusters among them flat tumuli with stone kerbs, low stone rings, and elongated stone settings. After a complete surface clearing we excavated 32 graves; i.e. half of the graves did not have any superstructures at all. The cemetery has a tight arrangement. The elongated vertical grave shafts lie quite close to each other, almost lining up in rows. Northeast–southwest aligned pits dominate the northern part; the shafts in the south are more or less east-west oriented.

The deceased were placed in different types of substructures: in narrow burial pits, lateral niches with different dimensions and orientations (Figure 2); and, in one case, in a transverse chamber which was accessible by a sloping ramp. The skeleton usually lay in an extended position on the back, with the hands on the pelvis. Very few were slightly turned to the side and/or in a slightly flexed position. The dominant direction of the head was to the west or southwest, although we noticed other orientations as well. Occasionally the body was wrapped in a woven shroud and often leather remains were found beneath the bones.

Large granite slabs resting on a ledge usually sealed the grave pit. Frequently the ‘head’ or ‘foot’ stones were removed, the burial underneath being heavily disturbed. Even when in situ capstone blockings were covering untouched burials, these intact tombs were devoid of any grave goods, having been intentionally left unfurnished. That robbers of Meroitic graves ignored unfurnished tombs, but plundered most of the equipped ones is attested by statistical analysis for the Abu Simbel North cemetery (Näser 1999, 24). As

The Meroitic to Post-Meroitic Cemetery near Timmeriya

Site 3-Q-33 is situated on a bank of a small palaeo-channel. It has been fully excavated and comprises 40 graves from the Meroitic and post-Meroitic periods. The graves of the two periods occupy separate areas of the cemetery, marked by irregularly scattered remains of superstructures in the Meroitic part in the east, and by clearly defined post-Meroitic tumuli in the western part (Plate 1, Figure 1). Fields, tracks, and irrigation channels have affected the superstructures. Many graves have been heavily looted or reused.

Plate 1. Meroitic and post-Meroitic cemetery site 3-Q-33 before excavation (Nov. 2004, from the north).
noted elsewhere, many potsherds were recovered from the surface and the grave shafts (el-Tayeb and Kołosowska 2005, 66). Some vessels might have been placed as offerings outside the burial chamber. Other potsherds were clearly used as digging tools during plundering.

Assessing the frequency of grave goods in this part of the cemetery remains problematic due to the disturbance of most burials. From the data we have collected, only half of the graves were furnished with a limited range of artefacts. There was no ‘real’ burial equipment in these Meroitic tombs, except beads and pottery. The few complete vessels were of a different character: handmade and wheel-made, coarse and painted fine ware, and a single copper-alloy bowl (Colour plate XVII). Most of the objects are of Meroitic date. No uniform rule could be established as to where in the grave these goods were positioned. Some were recovered in the head area, some in the centre of the pit and others on the ankles of the individual.

The Meroitic part of the cemetery shows a well-balanced demography. It was probably the burial ground of a single community with a hard daily lifestyle, indicated by degenerative bone abnormalities. On the other hand, traces of violence or conflicts were not observed. The anthropological data shows a quite even relation between male and female burials. A high proportion of infant and child burials was noted, although the proposed concept of a mother-child cemetery could not be confirmed (cf. Wolf and Nowotnick 2005a, 30). Many of the 36 individuals died quite young. According to the estimated age at death, almost a third did not reach the age of 20 and only five
persons were over 40 years old.

Four Meroitic tombs contained multiple burials, some of which seem to have been interred at the same time (Figure 3). Family relations for some cases (adult-child) appear likely, but cannot be confirmed. The re-opening of graves for secondary burials was evident in at least one tomb. The placement of the dead requires more thorough study, since the relations between superstructure, substructure, burial, and individual are not yet established. Due to the robbing activities, it would be inadvisable to make any statements at this moment.

The burials at site 3-Q-33 seem to follow a Meroitic tradition peculiar to the region of the Fourth Cataract, concerning the superstructures, the layout of the graves, the treatment of the dead, as well as the paucity of grave goods (cf. el-Tayeb and Kołosowska 2005, 62ff; Paner and Borowski 2005a, 213f.). In the wider cultural context of non-elite cemeteries, the burial ground shows closer parallels with Lower Nubia than with the Meroitic heartland.11

The post-Meroitic cemetery

Eight post-Meroitic tumuli were noted in the western part of the necropolis. This is not an unusual number for cemeteries of this period.12 The distinctive superstructures are flat gravel mounds, with circular, oval, or egg-shaped stone kerbs. A grave at the far east of the Meroitic cemetery bears all the characteristics of a post-Meroitic substructure with a circular shaft and an oval side chamber and might thus represent a transition between the two parts of the cemetery. All tumuli show traces of plundering. Only two graves in this part of the cemetery display the typical post-Meroitic furnishings.

Below the centre of the mounds deep circular shafts had been dug into the subsoil. The oval side chambers with a sloping roof were cut to the south or southwest. They had originally been blocked by large stone slabs, resting on a ledge.13 The individuals were placed in a contracted position on their left side, with their head to the east or southeast, turning their back to the shaft. The number of individuals buried in this part of the cemetery is too small to allow a meaningful discussion on the relationship between age and gender. In total, four females, two males, and three infants were found.

A variety of grave goods was originally placed around the individuals, but these were the target of extensive looting. Nevertheless, two well equipped burials were left almost intact and thus demonstrate local funerary practices. Except for pottery and jewellery, post-Meroitic grave furnishings were related to the sex of the interred person. The male archer in tomb no. 22 was adorned with a number of beads around his ankle or lower leg. On his right thumb he wore a stone archers’ loose. We found a leather quiver and at least four iron arrow-heads in front of him. A young woman in a grave already excavated last season probably died in childbirth and was obviously buried with a variety of grave goods. The shaft or ramp graves with east-west oriented extended inhumations of the ‘classic’ Lower Nubian burials contrast with the contracted north-south aligned burials in transverse chambers in ‘rural’ cemeteries of the south. The lack of elaborate grave furnishings is a major difference from the burial customs of other parts of the country (cf. Adams 1977, 374; Williams 1991, 23; Edwards 1998, 198; Geus 1999, 30). As can be seen in the Napatan period, for example in the cemetery of Sanam, the Kushites of the cataract region followed both Nubian and Egyptian traditions. Already at Sanam the deceased were buried in different kinds of grave substructures, oriented east-west, in extended and also in contracted positions.

11 The shaft or ramp graves with east-west oriented extended inhumations of the ‘classic’ Lower Nubian burials contrast with the contracted north-south aligned burials in transverse chambers in ‘rural’


13 Compared to other cemeteries there is less variety of substructures. The only variation is an elongated burial pit at the end of the circular shaft, noted also at the nearby post-Meroitic cemetery, site 3-Q-20.
with her newborn baby (Plate 2, cf. Wolf and Nowotnick 2005a, 30, col. pl. XIX). She was wearing several bracelets, necklaces, and copper-alloy rings. Two beer jars, a small decorated pot, and a bag made from an organic fabric with a necklace inside, were positioned around her body.

The evidence from this part of the cemetery is too little to allow discussions of the burial rites. Yet, in comparison, they correspond to other post-Meroitic cemeteries in the vicinity and throughout the country. Similar graves excavated on the right bank of the Fourth Cataract14 show many structural parallels but yielded typical Meroitic finds and were dated by C14 analysis to late Meroitic times (el-Tayeb and Kolosowska in press). On the basis of this evidence, and the general diversity of Meroitic graves in this region, the dating to the post-Meroitic period is not certain. A precise description and investigation of burial customs during the first centuries AD are needed to comprehend the local cultural development from Meroitic to post-Meroitic times.

Site 3-Q-33, summary of the results

The different burial rites in the eastern and the western part of the necropolis may reflect different time periods. Some transitional features in both parts of the cemetery15 suggest gradual changes between these customs. The occupation of the burial ground might have started in the centre spreading south- or northwards, and in the latest phase certainly westwards. After that, the community might have utilised one of the nearby cemeteries. There are several large post-Meroitic burial grounds and some occupation sites in the area. For a settled Meroitic community, so far we have found only a few traces.

The burial practices correspond to those observed in other cemeteries of the same periods on both banks at the Fourth Cataract. During Meroitic times a local tradition was prevailing, in contrast to wide-spread post-Meroitic practices which seem to be more or less standardized throughout the country. Although significant changes occur between these two traditions, the coexistence of both burial customs in one cemetery points to a social and ethnic continuity during the first five centuries AD.

The Meroitic to Medieval occupation sites in the Wadi Thannori

After the discovery of several post-Meroitic settlements in the area of Dar el-Arab during the last season (Wolf and Nowotnick 2005a, 25-30), we decided to examine other parts of our concession area for similar relics of pre-Medieval occupation. The Wadi Thannori, one of the largest wadis in the concession area, cuts about 8km upstream of Dar el-Arab through rough gneiss formations between the desert and the Nile and joins the river opposite Kandi Island. Especially to the west of the wadi, the area is very craggy, with steep and deeply carved valleys. Nevertheless, a number of occupation features has been recorded here. At the lower part of the wadi, especially to the northeast, the terrain is flatter marked by only few outcrops, a perfect place to settle (Plate 3).

Surveying a stretch of 1km along the lower part of the wadi (Plate 4), we were lucky enough to find many areas with similar surface features to those of the post-Meroitic occupation sites found last season: heavily worn potsherds and loose concentrations of stones, both scattered on flat and gravelly terraces near stream beds. It was of course impossible to test all occupation features; three of the most promising sites were chosen for trial excavations.

One interesting aspect discovered after surface clearing at sites 3-R-103 and 3-R-112 was the combination of circular and rectangular building structures within a single settlement. Both basic layouts are known in Nubian settlements.

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14 E.g. Meroitic cemeteries in the concession areas of GAME and Poznan Museum (el-Fanah, el-Gabarna, Hagar el-Beida, Hagar Sail, Khor el-Busharya, es-Sadla, Shemkiya).
15 We found, for example, a contracted post-Meroitic burial placed within a rectangular side niche typical for Meroitic times, and there was one grave with a circular shaft and southern side chamber situated in the eastern part of the cemetery.
since Kerma times and also in Fourth Cataract villages of the Medieval as well as recent periods. However, most of the houses of these settlements are rectangular in shape - only a few dwellings and buildings with a particular function are round. Within our settlements that proportion is different: the majority are round huts and other curvilinear structures. The reason for that might be a different lifestyle of the people who settled within the hamlets beyond the riverine settlements.16 These people were familiar with building techniques utilising wooden posts and wickerwork, light construction materials available and easily transportable in the grazing lands of the Bayuda. In contrast to the predominant building techniques with solid building materials in the riverine villages,17 these light buildings need a basically stable layout to withstand heavy winds and storms. The most stable structures in this respect have curved and circular rather than straight and rectangular layouts. These basic construction techniques and the corresponding building plans were used in their habitations near the river as well, since after many generations such customs often become traditional. There, even solid buildings made out of jalous or brick were erected with curved and circular plans, as is the case with many tribes in the Western or Central Sudan (Plate 5). Another observation in this respect is that whenever we found settlement features constructed from solid building materials, like stone rings etc., we never found post-holes associated with them. The use of solid building materials seems to exclude wooden posts, at least to a great extent.

At sites 3-R-69 and 3-R-103 we noted a close spatial connection between settlements and graves, since tumuli have been found within the confines of habitations. At least two examples of such proximity have been noted elsewhere at the Fourth Cataract.18 In our case, however, it is not clear whether the graves predate or are contemporary with the occupation phase, or date to after the abandonment of the settlements. The evidence indicates the latter scenario (see below).19 On the other hand, recent Nilotic tribes in Southern Sudan, for example the Bari in the area of Juba, bury their deceased within their settlements. Site 3-R-103 which was built at the foot of an outcrop in which was a cemetery with Napatan crevice graves (site 3-R-105), demonstrates that proximity to

16 According to K. Beck (pers. comm.), the Monasir of the Fourth Cataract region are split into two groups. The larger group of 35,000 people, settled near the river, is engaged in subsistence farming. The smaller group of c. 2,000 people cares for camels and small livestock. These people live a pastoral lifestyle in the ‘highlands’ up to 50km into the Bayuda. During dry winter periods, members of this group move to the Nile Valley, where they occupy settlements 1-2km away from the river (cf. Wolf and Nowotnick 2005a, 286). It is conceivable that such a population split existed already in former times, including during the post-Meroitic period.

17 Near the river it is economical to build rectangular houses out of heavy and thus free-standing building materials like stone, mud-brick or jalous.

18 See Paner 2003, 176 [site HP 394] and Näser 2005, 82 [site SR 24].

19 Similar examples of tumuli within an earlier settlement have been found at el-Meragh.
cemeteries was not considered a problem in choosing a suitable occupation site.

**Occupation site 3-R-103**

Site 3-R-103 is about half a kilometre away from the river at the east bank of the Wadi Thannori. There we identified occupation remains at the northwestern foot of a larger outcrop with a number of crevice graves. The site possessed the expected features of a habitation site. A flat gravel terrace of c. 50 x 50m was scattered with heavily worn post-Meroitic potsherds and a few hammer stones. Loosely strewn stone slabs and a silted shallow depression completed the elements of an occupation site. An almost circular stone structure reminiscent of a looted tumulus was situated in its centre, only a few metres away from the foot of the outcrop. A number of Kerma and Napatan potsherds came from the looted graves of the outcrop’s cemetery site 3-R-105. Our surface clearing of c. 30 x 15m revealed the remains of several occupation structures which we divided into three distinct complexes (Colour plate XVIII).

**The Central Complex**

The most interesting structure was the central complex of the hamlet. Despite the difficulties in establishing a chronological sequence due to the very scarce stratigraphic evidence, several construction phases were identified (Plate 6):

The earliest feature was a rectangular dwelling of 2.5 x 3.5m. It was marked by a trench 15cm wide and 15cm deep, filled with gravel and pebbles. Post-holes of 25cm diameter had been dug at its corners. We found the remains of a small fireplace near the northern corner. A doorway opened at its south-eastern side into a kind of semi-circular courtyard of 4m diameter. At its southern side, the fence of the courtyard was fixed by a trench in the ground. In the northern part, however, the yard is limited by a row of post-holes. Several single post-holes as well as a shallow pit of 50cm diameter indicate that at this place a shelter (mazira) was erected for a zir. Several other pits and depressions of various sizes might have been used as pot stands or storage pits.

A similar trench, but for a circular dwelling of 3.5m diameter, was dug during the same or in a somewhat later occupation phase abutting the south-western corner of the rectangular dwelling. A post-hole of 30cm diameter in the centre of the circle probably supported the central post of the roof. Although we could not find any remains of ash or potsherds, the arrangement of the large slab to the left of the entrance in the southeast strongly resembles a cooking place.

After the abandonment of these dwellings, two large pits 50cm deep had been dug in the centre of this area and have been surrounded by large stones. It is probable that these tumuli-like structures were post-Meroitic graves erected after the abandonment of the settlement site. However, in contrast to site 3-R-69 on the opposite bank of the wadi we did not find any clear evidence of funerary use - no bones or grave goods.

**The Eastern Complex**

Several circular dwellings with fences were situated on the downward sloping foot of the outcrop to the east of the central complex (Plate 7). They must have been set up and used before the central complex was constructed, for the trench of the latter’s courtyard cuts through one of their post-holes.

A round hut of 3m diameter was probably made out of wooden posts bound by wickerwork, perhaps coated with a layer of mud. The lack of a central post-hole indicates a light roof of similar building material. A somewhat larger round structure, perhaps an open courtyard, abuts the eastern side of the dwelling. Finally, we found a setting of post-holes in the northern spandrel between the round hut and courtyard, which again might have been a mazira.

A few metres to the south of these two buildings, a curving line of post-holes formed a kind of fence with several abutting compartments. The western edge of that complex was again occupied by a round hut of 3m diameter marked by a regular circle of post-holes, accessible from the southeast. It probably accommodated a cooking place, for it contained large amounts of ash and some larger stones. An accumulation of ash and stones at the southern side of the settlement might have been the dump area.

**The Western Complex**

The huts in the western part of the site are two circular structures of 2-3m diameter linked by a fence (Plate 8). The
larger hut to the west encloses a stone setting with a fire-place identified from ash and reddish burned soil. A shallow depression of c. 60cm diameter within the smaller structure in the east marks an activity area. The post-holes linking the two structures formed a small yard. The chronological relation between these three components is not clear.

Occupation site and burial ground 3-R-69

At site 3-R-69 we excavated parts of a post-Meroitic occupation site on the south-western bank of the Wadi Thannori. It extends over a rocky upper area among several outcrops and a flat lower area adjoining a khor. Its main features are stone circles and semi-circular stone settings, a single tumulus and pottery concentrations. Five to ten round huts might have occupied the lower area, estimated from the number of stone concentrations.

Two circular huts, F 11 and 15, were of particular interest, for their posts had been fixed in the ground not by post-holes but by small quartzite stones set in a circular pattern of c. 2m diameter, with regular gaps of 30cm between them (Plate 9). This was probably due to the harder subsoil in the area.

Close to one of the huts we identified a larger stone circle as being the superstructure of a single grave. The tumulus had a stone kerb c. 3m diameter and 40cm in height, its south-eastern part slightly pointed. It was filled with sand and gravel. Carefully laid stone slabs delimit a circular burial pit in its centre. Inside the pit, the skeleton of an adult was found in a crouched position on its left side, head to southeast, the hands clutched in front of the face (Plate 10). Unfortunately, the grave was looted and thus we discovered no artefacts except for a single potsherd. It is, therefore, impossible to decide whether the grave was associated with the habitation site. While a dating into the Kerma Moyen period cannot be ruled out, the orientation of the skeleton and the preservation of the bones suggest a post-Meroitic date. Therefore, it is probable that the tumulus was erected after the abandonment of the occupation place, as was the case with the tumulus-like structure at site 3-R-103.

Settlement site 3-R-112

Site 3-R-112 was the most complex settlement we excavated this season (Colour plate XIX). Situated on a flat gneiss terrace on the northeastern bank of the Wadi Thannori, the site, roughly 50 x 50m in size, rises only half a metre above the wadi bed. The area was scattered with loose concentrations of larger stones and slabs. The surface pottery consisted of heavily worn Meroitic to Medieval potsherds. In addition, we found several hammer stones, grinder fragments, beads, and a fragment of a Kerma copper-alloy axe, probably from a looted grave. Our surface clearing of c. 700m² revealed a complex variety of settlement structures and remains of occupation activities such as circles of post-holes, rectangular trenches, fireplaces, and storage pits. Because of the site's complexity, only a general overview can be given in the present state of analysis.
The site is packed with an enormous number of post-holes of different size and character concentrated in four or five zones. The post-holes belong to round huts, to other circular or semi-circular structures like courts (hosh) and to animal shelters (zeriba). Many overlapping remains support the assumption of a multi-period settlement as already suggested by the surface pottery. Thin layers of occupation debris and building remains were recognizable in several places.

Some of the circular structures had diameters up to 8m, which is much larger than other occupation structures hitherto tested. Correspondingly, their post-holes were up to 30cm in diameter. Several places with ash and charcoal, resembling fireplaces at first glance, might have been in fact remains of burned posts as conjectured by their circular arrangements. Finally, there are also straight and rectangular trenches of larger house structures, especially in the north-eastern part of the excavated area.

In addition to these building vestiges, we found habitation remains such as storage pits, fire and cooking places of different types, and a complete vessel set in the ground. Most of the fireplaces are flat accumulations of ash and charcoal on top of the subsoil which turned reddish-brown from the heat of the fire. Some are dug a few centimetres into the subsoil; larger ones are lined with stone settings, broken pots and big potsherds (Plate 11). Pits of up to 40cm in diameter clustered in the south-western part of the excavation. As nothing has been found inside the few tested ones, their purpose remained unclear. Elsewhere circular storage (?) pits of up to 50cm in diameter had been dug into the eroded bedrock. The largest example of such a feature was a sub-rectangular pit of 1.4 x 0.7m, cut down for 60cm into the bedrock. It was infilled with silt and contained a few worn potsherds.

In general, the site might have been structured in a very simple way during each occupation phase - like the recent hamlet site 3-R-113 nearby (Plate 12). According to information collected from its inhabitants, that site was occupied for approximately 70 years by one family. Most of its members live at Amri East near the river bank. The occupation over three generations is evident in its three main buildings. The oldest one, a circular dwelling with a kitchen made of stone slabs, was built around 1930 by the grandfather of our informant. The other two houses are rectangular, erected by his father and himself respectively. Finally, there are two open shelters for goats and sheep, one of them for the young animals, and a watering place. Interestingly, seeds are stored in the open air in large old vessels protected only by interlaced acacia branches (Colour plate XX). Thick layers of organic animal waste cover the entire area, especially inside and near the zeribaat. The middens are located to the south of the hamlet.

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20 The traces of a burned wooden post in the southern part of the area suggest that at least parts of the settlement might have been destroyed by fire.
Trial Excavations and small-scale surface clearings

Many surface features, stone rings, stone walls, scatters of stone slabs, etc. are difficult to interpret without trial excavations, especially if they are associated with settlement contexts. Therefore, we decided to test a number of such features.

Stone circle F 43 near site 3-R-106, post-Meroitic circular dwelling

F 43 was a single stone circle with a diameter of c. 3m situated within a side valley near settlement site 3-R-106. Up to two layers of larger stones were in situ. It resembled the destroyed remains of a circular dwelling, rather than the kerb of a tumulus. Directly to the south of it, we noted two silted-in depressions in the ground (cf. Wolf and Nowotnick 2005a, 27).

The surface clearing of the feature and its surroundings revealed neither a grave pit nor any post-holes (Plate 13). During clearance we noted an opening 70cm wide in the south-eastern part of the circle. To the left of that doorway we found a fireplace lined with upright stone slabs. It contained ash, some silt reddish-brown from the heat, and potsherds of at least two different cooking vessels. The location of the cooking place near the doorway is still common in recent dwellings of that area as well as elsewhere in Northern Sudan. Near the centre of the dwelling we found potsherds from a large open bowl, probably of post-Meroitic date, others from a cooking pot with finger imprints, as well as a polished stone which might have been used as a grinder, and finally fragments of ostrich eggshell for the manufacturing of beads.

In summary, the stone ring was clearly the foundation of a circular dwelling. It probably supported a construction of stone slabs and jalousi walls having a light organic roof, similar to modern houses in the area. The shallow depressions next to the stone ring proved to be 10cm deep, coated with a 3cm thick silt layer. They might have been used for the preparation of jalousi or mud mortar during construction work, or they were simply areas of animal feeding or other activities.

Khor walls at site 3-R-106

Low walls, only one or two layers of stones high, have been identified by several missions in different environments (Welsby 2005, 6; Paner and Borcowski 2005b, 104 and fig. 28). Mostly they are situated on the ground of smaller valleys, often perpendicular to their course, but sometimes also crossing over flat-topped hills. Usually they are only a couple of metres long. At settlement site 3-R-106, which extends for about 150m along a narrow valley, we found a number of such walls placed alongside the settlement limits in places where small side valleys join the settlement's valley.

In order to test whether any other structures are associated with these walls, we investigated one of them by surface clearings. However, except for the stones themselves, we found no other archaeological remains (Plate 14). Concerning their function we can only speculate: they might have been erected as border lines to limit the settlement area; to re-direct rain water run-off; to enable sedimentation or to stop soil erosion; or simply to mark specific areas. At any rate, these walls seem to be simple structures without any other features except those visible on the surface.

Site 3-R-103, Area D

Area D at site 3-R-103 is a gravely plain sloping downwards to a path connecting settlement site 3-R-103 with the Wadi Thannori. It was covered with a scatter of large stones, resembling the remains of small stone dwellings or animal shelters (Plate 15). After surface clearing we discovered a number of pits up to 60cm in diameter, which had been dug to a depth of 40cm into the soft and decayed bedrock (Plate 16). They did not have any spatial relation to the scattered stones on the surface. Instead, some of the pits seemed to form a semi-circle. Since none of the tested pits contained any artefacts, their purpose remains unknown. A couple of post-holes set in a semi-circle and a small fire-place nearby suggest that the site was a working area, with which the pits might have been associated. The surface pottery was of post-Meroitic to Medieval date.

Pavements at sites 3-R-110 and 3-R-111

Circular pavements c. 1m in diameter are a common surface feature associated with cemeteries and occupation sites...

Plate 13. Stone circle F 43 near site 3-R-106.

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21 For the type of structure see Paner and Borcowski 2005b, fig. 26 no. 5.
22 See for example Eigner 2005, 121; similar, for example, to the Hassaniya and Shaiqiya at Musawwarat es-Sufra or Naqa.
We tested two such features at sites 3-R-110 and 3-R-111. No archaeological features like post-holes or pits have been found. The subsoil and bedrock beneath the stone slabs were reddish-brown and very soft—perhaps as a result of heating. A possible explanation as cooking places is, therefore, very likely.

**Pottery deposits**

In a wider area between Dar el-Arab and Amri we identified 'pottery deposits', yielding smashed post-Meroitic to early Medieval pottery in or around stone structures.\(^{23}\) The pottery caches are situated in a very rocky terrain where there are hardly any other signs of human presence. Especially in the area west of the Wadi Thannori, the concentration of these deposits is very dense and we noted a close spatial relation to quartz veins.

The scattered pottery fragments were found mostly close to rock shelters. Either naturally protected spots were used, earlier graves reused, or special shelters built by using the natural terrain, such as rock niches, stone boxes, or spaces beneath vertical slabs. The shape and construction of these stone features are quite diverse due to their dependence on natural rock formations. Sometimes Kerma, Pharaonic, or Napatan grave superstructures were reused for storing these pots, since these graves were situated in a similar environment having the same construction characteristics. It is not certain whether the people who deposited the pottery were always conscious of them being funerary monuments.\(^ {24}\)

The pottery found in and around these rock recesses and shelters is not heavily fragmented. Among the sherds of entire vessels are post-Meroitic jars with decorated rims, Early to Classic Christian pots with flared mouths and *doka*. The function of these deposits remains obscure. Obviously these vessels were placed beneath the rocks to conceal them or to store them in the shadow. The close proximity of the deposits to quartz veins and hammer stones might point to exploitation activities. Quartz, gold, or minerals inside the veins might have been stored in these vessels, or they were vessels for the water and food of the workmen who stayed far up in the hills without a nearby water source. A ritual function as post-mortem ceremonies cannot be ruled out, especially during the Christian period when grave furnishings were disappearing. A need for offering might still have been prevalent among the people. Modern pottery offerings associated with the wish of fertility on top of ancient graves have already been noted at the Fourth Cataract (cf. Budka 2005, 13).

Fortunately, we discovered a spot with an undisturbed

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\(^{23}\) A paper with description, definition, and typology is in preparation for the Proceedings of the Cologne Conference 2006.

\(^{24}\) Similar occurrences of late pottery in close proximity to earlier graves, as well as the re-use of graves in the Meroitic period have been noted for example by Paner and Borcowski elsewhere at the Fourth Cataract (2005a, 214, 217 and 208).
deposit (site 3-R-96). It contained three complete pottery vessels in situ, two jars and a bowl (Plate 17). The vessels were well hidden in a stone box on top of a small outcrop. The hiding place was made of several stone slabs built against a vertical boulder. However, none of these vessels was used for storage, for they were turned upside down or had a hole in the bottom. They might have been deposited there as a ritual offering, perhaps as a substitute for the content.

Plate 17. Preserved pottery deposit, site 3-R-96.

The tradition of pottery deposition was already described by Wotzka (1993, 251) among archaeologically identified cultures in the Central African rainforest. It concerns the intentional burial of complete as well as broken pots in pits - a phenomenon which ranged from the last centuries BC to the beginning of the 2nd millennium AD. These quite uniform ceramic complexes were no waste dumps, but systematically positioned ensembles outside of funerary contexts. Wotzka cites a number of analogies from ethnographic reports all over the African continent which demonstrate several formal similarities, but which are mostly connected to mortuary practices or ancestor rites. Here too, the vessels were destroyed, turned upside down, or had small perforations. In a funerary context, the pottery was broken for different reasons: as an expression of anger over the loss of a person, as part of destroying the deceased's personal belongings, or for the transition of the pots from profane to sacral spheres. The so-called 'soul holes' are small perforations in the body or the bottom of the vessel. They are used for libations, for ventilating the chamber where the corpse was decomposing, or they are thought to provide an exit for the soul of the deceased.25

Despite these enlightening analogies, a satisfying general explanation could not be provided and might never be available, especially for the ceramic deposits not associated with burials.

The Rock Art Survey

While some new rock art panels were discovered and recorded, we concentrated documentation on traces of sound making and their relation to other petroglyphs, and to landscape features. At major sites, such as the jebel at site 3-Q-123, numerous rock-gong complexes were identified, the largest of them involving up to twenty boulders and containing dozens of often well-worn percussion zones. With its 21 rock-gong complexes and three single rock gongs, site 3-Q-123 seems to form the main focus of sound making in the Dar el-Arab region. The study of the complex relationship between the visual and acoustic aspects of such sites and their environment is part of a larger study of rock art in the SARS concession (see Kleinitz 2004; Kleinitz and Koenitz, this volume).

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Gabriel, B. and P. Wolf (in press). ‘Geoglyphs at the 4th Nile Cataract (Sudan): children’s playground, art, or else?’, Proceedings of the

25 A much earlier example of a pottery deposit in a similar context to those at the Fourth Cataract has been noted near Arduan below the Third Cataract. The vessels in this case dated to the Pre-Kerma or Kerma Ancient period (Edwards and Ali Osman 2000, 60-61).
Comments on the two Egyptian jars found at Tomb no. 1 of site 3-Q-94

Robert Schiestl

Whether an Egyptian-looking jar was made in Egypt or was a local imitation can only be decided by seeing the pot and checking the manufacture and fabric. Therefore, all statements on the pots are of a preliminary nature, as I have not seen the pots. The question is of basic importance as locally imitated pots may follow different developmental lines from Egyptian pots. The frequency of such imitations and the skill displayed by the potters in Nubia have recently been pointed out again by Bourriau (2004, 3) and have founded many archaeologists working in the region in the past. I am writing this with the assumption that the two vessels discussed below are Egyptian imports.

The first vessel (AKSW-05-347, Figure 4, a) has a globular body and a short neck sloping outwards with a rounded triangular lip. It is 21.3 cm tall. Its surface has a whitish colour. The pot can be linked with an Egyptian Middle Kingdom group of globular or ellipsoid medium and small-sized jars, with short necks and generally burnished surfaces. The short necks can be straight, or, most commonly, slope outwards. As the case in this example, or slope slightly inwards. These pots are generally made of Upper Egyptian marls, most frequently Marl A 2 (Nordström and Bourriau 1993, 168-182). Occasionally they are also imitated in Nile clay (Beni Hasan, Elephantine). Three main types of lips are documented:

Type 1 - most common, a triangular lip, either rounded as here, or of a more angular shape;
Type 2 - a thin, flat horizontal lip
Type 3 - a tall oval or triangular lip with a marked indentation on the inside (cf. Czerny 1998, fig. 18).

These pots are most frequently found on Upper Egyptian sites such as Elkab (pieces seen by the author at the Petrie Museum, UCL, London and the Berlin Museum), Edfu (Michalowski et al. 1950, fig. 145, Nr. 737), Thebes (Dra‘ Abu el-Naga, Anne Seller, pers. comm. and Karnak North, Helen Jacquet-Gordon, pers. comm.) and el-Kubanieh (e.g. KHM ÄS 7041, jar kept at the Kunsthistorisches Museum Vienna). They are mainly found in tombs, but are also documented at settlements sites, such as at Elephantine (von Pilgrim 1996, Abb. 161 a). Examples are also known from Middle Egypt (Beni Hasan) and some imports reach the north as well, as in Tell el-Dab‘a (Czerny 1998) and Kom el-Hisn (e.g. JdE 87380).

Remarkably the largest group of these Egyptian vessels is known from Nubia. The jars, more likely their contents, were of great interest both for the people at Kerma (see


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Bourriaux 2004) and at various C-Group sites (cf. Toshka, Junker 1926, pl. 22-23; Emery and Kirwan 1935, pl. 35). Most likely the jars imitate stone vessels and contained some sort of ointment.

The Egyptian contexts indicate an occurrence primarily in the first half of the 12th Dynasty; however, J. Bourriaux’s recent study of these jars from Kerma tombs (Bourriaux 2004) established a long sequence for this type, possibly extending into the early 13th Dynasty. A 13th Dynasty date is also indicated for a piece from Thebes (A. Seiler, pers. comm.). In Egypt no certain morphological dating criteria for this shape have yet been established. Lacking well published late Middle Kingdom Upper Egyptian cemeteries, we have no data which might allow us to follow the development of this type on Egyptian soil.

However, in the Second Intermediate Period a group of pots which could have developed from these is frequent in Upper Egyptian cemeteries (e.g. at Mostagedda, Brunton 1937, pl. LXXII, 54 c, g, 55 b, 57 b), indicating a continuity for which we are possibly still missing the link.

The second vessel (AKSW-05-849, Figure 5, b) is baffling. It is a bottle consisting of a globular body and a long narrow neck ending in a flaring rim. A small rounded lip is indicated. It is 29.4cm tall. I know of no parallels for this type of vessel from Egypt. The only parallel is from a Kerma tomb (CE 7, tomb 79) and considered by Bourriaux to be Egyptian, although she was not herself able to check the fabric (Bourriaux 2004, 5). The tomb is dated to Kerma Ancien III. The upper part of a similar vessel, albeit with a shorter neck and without the flaring rim, is from a Kerma Moyen I tomb context (Bourriaux 2004, fig. 5, no. 1). The latter is confirmed Marl A 3, the former unconfirmed.

In summary, the first vessel has strong typological links to Middle Kingdom shapes, while the second vessel provides no chronological information. However, we do not know how long such types as the first jar were produced. Thus, a date as late as the mid or late 13th Dynasty cannot be excluded.

Bibliography


Colour plate XIV. AKSW project. Double burial of grave no. 1 at the Kerma Moyen cemetery site 3-Q-94.

Colour plate XV. AKSW project. Necklace of blue glazed beads with gold disk from grave no. 1 at cemetery site 3-Q-94.

Colour plate XVI. AKSW project. Pottery from grave no. 1 at cemetery site 3-Q-94.

Colour plate XVII. AKSW project. Pottery and copper-alloy bowl from various graves at cemetery site 3-Q-33.
Colour plate XVIII. AKSW project. Kite photograph of occupation site 3-R-103 (Photo Bernard-Noël Chagny).

Colour plate XIX. AKSW project. North-eastern sector of settlement site 3-R-112.

Colour plate XX. AKSW project. Storage of seeds at settlement site 3-R-113.