

# SUDAN & NUBIA

The Sudan Archaeological Research Society

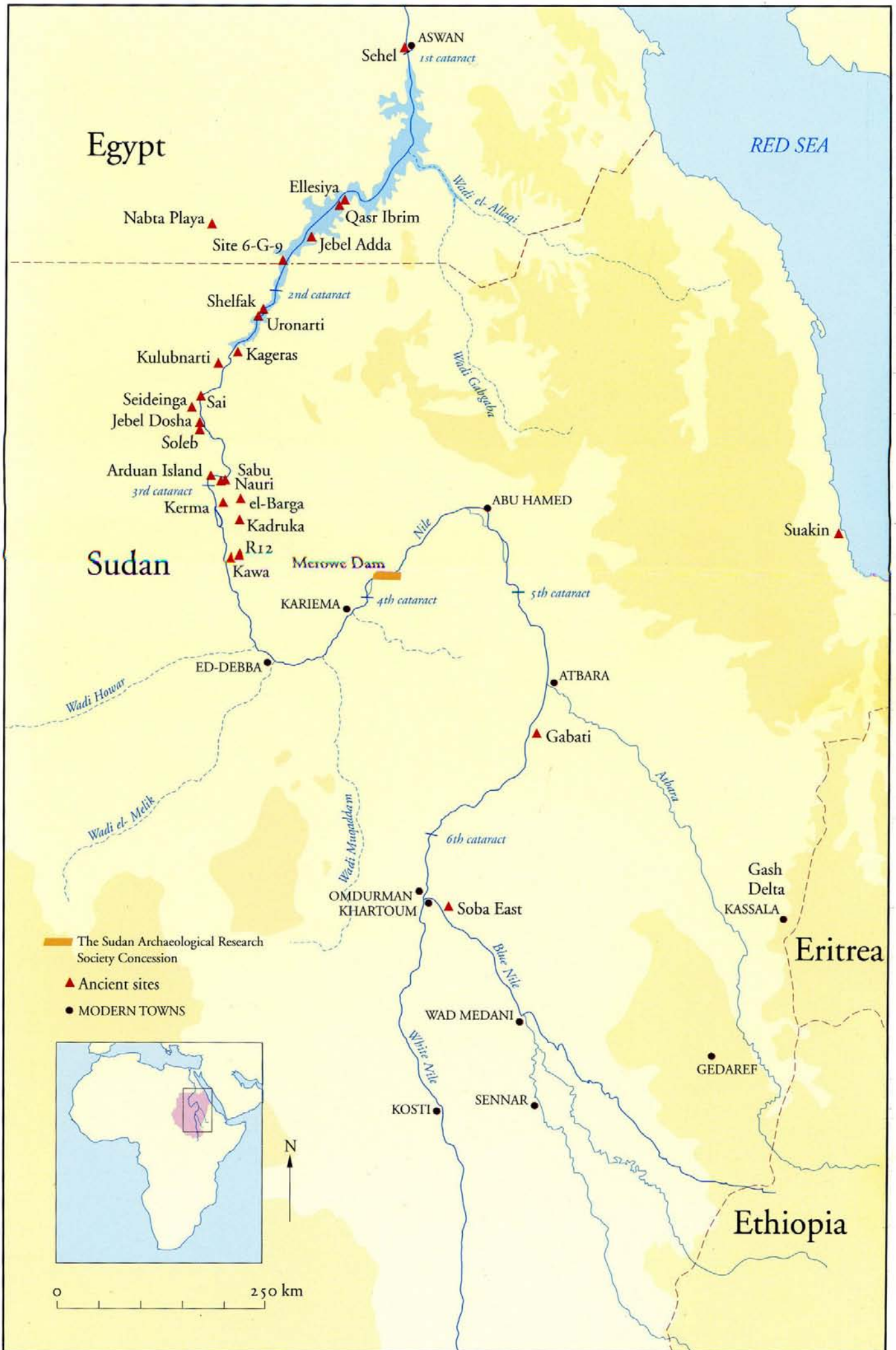


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# The SARS Anglo-German Expedition at the Fourth Cataract of the Nile: the 2003/04 season

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## Introduction

The first season of the Merowe Dam Archaeological Salvage Project SARS Anglo-German Expedition took place from November 2003 to February 2004. The mission was made possible by grants from the British Institute of Eastern Africa and the Cultural Department of the Swiss Foreign Ministry. We would like to express our gratitude to these institutions. In addition, we would like to thank the National Corporation for Antiquities and Museums in Khartoum, the University of Shendi, as well as the Greek Community of Khartoum for their invaluable help and cooperation. Last but not least, I would like to thank our international team with its 13 team members, six volunteers, and three camp assistants<sup>2</sup> for their enthusiastic commitment in the field.

The mission joined the Sudan Archaeological Research Society in the downstream part of its concession area, starting at the Medieval fortress of Dar el-Arab and extending 40km upstream. The archaeological investigation included the recognition of sites, their documentation and some test excavations. After localisation, basic recording of sites was done by surveying them with handheld GPS, sketching and written description on pre-printed forms. A total number of 2500 GPS-points were taken. Further documentation

of selected sites produced dozens of plans and sketches, 9000 digital photographs, including landscape panorama photographs, and several thousand points surveyed with a total station. The archaeological survey, during which only diagnostic surface finds were collected, and the test excavations yielded more than a dozen complete pots, hundreds of diagnostic potsherds, and about 100 small finds and samples. In addition, 13 skeletons of the *Kerma Moyen* and late Meroitic periods have been unearthed during the test excavations. In view of the expected flooding of the area and the resettlement of the population, we focused our fieldwork not only on archaeological subjects, but documented as much as possible of the recent ecologic, geographic, and ethnographic situation. These accompanying studies of place names, crops, recent land use and agriculture, as well as family and household relationships, produced additional verbal records, audio- and videotapes, as well as samples of crops, plants, and insects.

## General Results

During the survey, which covered *c.* 8 x 2km on the left bank of the Nile upstream of Dar el-Arab and the major river islands,<sup>3</sup> 244 archaeological sites have been located (Colour plate XI):

- 97 occupation sites including six large settlements
- 1 Medieval fortress
- 95 cemeteries ranging from single tumuli up to some with 120 tumuli
- 13 concentrations of lithic tools and large Palaeolithic workshop areas
- 35 stations of rock art and rock inscriptions
- 5 stone structures of uncertain date and function
- several, mostly recent, water supply and irrigation systems.

Test excavations were undertaken at four sites: a large Medieval settlement (3-Q-62), a Neolithic occupation site (3-Q-73), a *Kerma Moyen* cemetery (3-Q-94), and a late/post-Meroitic tumulus field (3-Q-20).

## Distribution of sites and palaeo-ecology of the region

The sites range in date over the Palaeolithic, Neolithic, Kerma, Napatan, late and post-Meroitic, Medieval and Islamic periods. Not all sites could be dated with certainty on the basis of surface finds, pottery or structural features. Many show multi-period use, as is implied from the surface pottery. Figure 1 illustrates the chronological distribution of occupation sites and cemeteries, derived from the preliminary analysis of the surface finds. The total number of sites demonstrates the archaeological and cultural richness of

<sup>1</sup> The present report incorporates the special reports of the several team members responsible for specific tasks, especially R. Bradley, A. Dittrich, K. Gessner, U. Nowotnick, N. Reshetnikova, M. Faroug, B. Gabriel, T. Kohler, A. Malterer, J. Robertson, and A. Tsakos. I would like to thank all of them for their exemplary collaboration.

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<sup>3</sup> Umm Deras, Susi, Heibit, Garri, Umm Ushar, Al Tamra, Umm Goz, and Umm Tahla Kawafit.



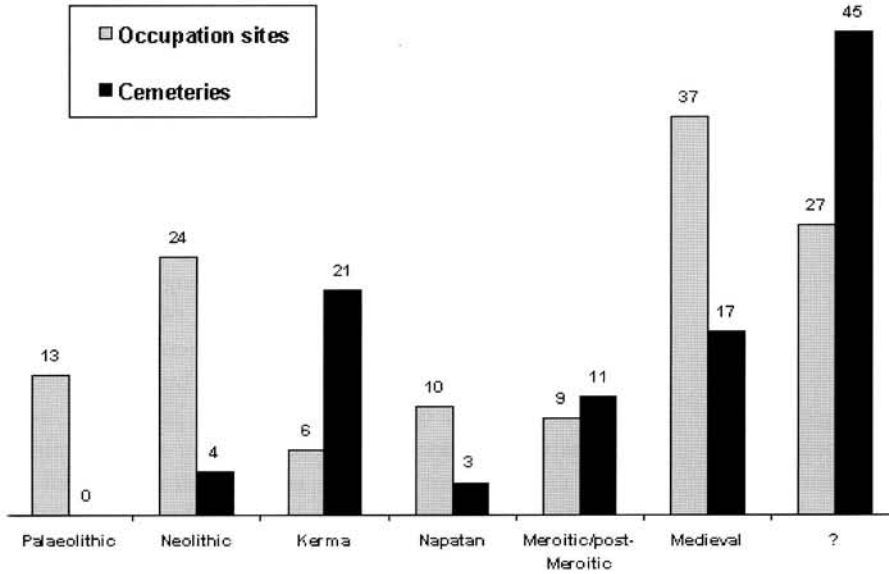


Figure 1. Diagram illustrating the chronological distribution of occupation sites and cemeteries.

the area since the Palaeolithic. Naturally, the Medieval period left the largest number of settlements and a high number of cemeteries. However, remarkable is the contrast between the relatively large number of prehistoric sites, and the poverty of 25<sup>th</sup> Dynasty, Napatan and Meroitic remains.

Occupation sites and cemeteries are quite evenly distributed over the entire area. There is no difference in their concentration between the islands and the left bank of the Nile. Whereas smaller occupation sites are often located on flat gravelly and sandy plains at the foot of *jebels* or between outcrops, larger sites and settlements are situated near the river or its channels. Cemeteries show roughly the same distribution, although it seems that in those areas with larger settlements they were placed a bit more inland. Beside the large tumuli fields in the alluvial *wadi* plains which contain several dozen graves, smaller burial grounds and single tombs are frequently to be found in areas of rocky outcrops and even on top of the mountain ridges (especially Kerma cemeteries).

Apart from the even distribution of the sites in general, their spatial distribution within specific chronological periods shows some remarkable differences (Colour plate XI). Palaeolithic sites and workshops are mainly to be found on the higher rocky plateaus and along the large *wadis* further inland. Except for one Palaeolithic site on Susi Island, all Palaeolithic sites are situated on the river bank. Neolithic sites are concentrated on the left bank, but closer to the river, with only three sites on the islands. Sites of the Kerma period show a more even distribution between islands and river bank with concentrations in the area of Dar el-Arab and on Umm Duras, the largest of the islands. The rare Kushite sites are more evenly distributed over the entire area. Medieval sites are concentrated near the river and its channels, evenly on both the left bank and islands.

Thus, the distribution of sites illustrates a gradual occupation of the islands since the Neolithic period and a move closer to the Nile.

This general development can be explained at least partially by the palaeo-ecological observations. It seems that since the Neolithic period at the latest, climatic and ecological conditions must have changed considerably. In several places at the river bank and on the islands we observed remains of several metres thick sand-silt-clay sediments containing calcified roots (rhizomes of swamp vegetation). These so-called lacustrine sediments are clearly dated to the Neolithic period by the excavations at site 3-Q-73 (see below). At this site, a several metre thick layer of lacustrine sediments is mixed with more than 50cm of stratified Neolithic

occupation-remains with hundreds of lithic artefacts, pottery, grinders, beads etc.

Comparable sediment layers and fluvial pebble terraces were noted in large *wadis*, sometimes characterized by amounts of scattered lithic artefacts and Neolithic pottery, as for example, the area of the late/post-Meroitic tumulus cemetery 3-Q-20 (see below). Likewise, Neolithic tools were often scattered among Medieval settlements near the river. Occasionally, areas far from the Nile show signs of former high energy water flow, like polished rock surfaces and erosion marks of water turbulences, and less patinated foot zones of *jebels*. These observations clearly demonstrate that until the Neolithic period the main level of the Nile must have been much higher than nowadays. Accordingly, the Neolithic surface level was several metres higher than today. Thus, the islands must have been smaller, and being cut off from the mainland throughout the year, more difficult of access. In addition, many *wadis* might have been palaeo-channels, swamps and small lakes in the more humid climate during that time. During the following periods, the Nile level dropped, changing the ecologic configuration of the landscape considerably. Human settlement moved closer to the river, and islands were populated more densely. Through the erosion of the sediments in *wadis* and fluvial terraces, Neolithic tools and pottery became mixed with later artefacts.

### Lithics

Altogether about 1500 lithic artefacts were collected at 56 sites, mostly from the surface, but at site 3-Q-73 also from a stratified context during the test excavations. The lithic material dates in general from the Middle Palaeolithic down to the Neolithic and later periods. The raw material used for the production of tools consisted of flint, agate, chert, quartz, quartzite, basalt, granite, volcanic stone, rock crystal



and sandstone. Most of the material is local. It is remarkable that different periods preferred different raw materials. Whereas during the Middle Palaeolithic mainly quartz, quartzite, and basalt were used, pebbles of flint were not utilised before the Upper Palaeolithic. During later periods, pebbles of all kinds, mainly flint, agate, quartz, chert, and very rarely quartzite were exploited. This is probably due to the size of the tools produced: in the Neolithic the producer was not bound to a specific material and preferred flint, agate, and chert<sup>4</sup> because it was of better quality and the tools were sharper.

#### *Palaeolithic sites*

All 13 sites with scattered Palaeolithic tools were work places without any structures. Usually, they are situated quite a distance from the present-day riverbed, often between outcrops and in hilly areas (cf. Paner 2003, 16), but also in the flat, gravelly plains of *wadis*.

Site 3-Q-34, situated within an undulating landscape of granite and gneiss outcrops, was quite remarkable, since it turned out to be a Palaeolithic 'factory' extending over a huge area of more than 2km<sup>2</sup> (Colour plate XII). An extraordinary number of artefacts accumulated here during the Palaeolithic periods. A prominent feature of the site are three quartz seams running almost parallel in an east-west direction. The heavy exploitation of these rock seams during Palaeolithic times is illustrated by the dense concentration of good quality quartz tools along these quartz veins. In addition, stone tools cluster in lower areas, like *wadis*, where cores illustrate that here too workshops have been located. The lithic industry is very consistent in material and typology. A large part shows significant features of the Middle Palaeolithic Levallois-technology. Other interesting features are Nubian point cores, a local variant of the Levallois-technology tools with a remarkable careful preparation of the cores for the production of high-quality tools, denticulated flakes and points (Plate 1). A number of other sites<sup>5</sup> probably utilised the same source of raw material, since they show typologically similar Levallois-tools made of quartz.

Another highly interesting site is 3-R-12, which had a lithic industry based on denticulated pieces, scrapers, and Levallois-cores. Some of these cores might constitute so-called Halfa-cores, typical for the Upper Palaeolithic, which is known to have existed in Lower Nubia north of the Second Cataract (Plate 2). Site 3-R-12 might be proof that Upper Palaeolithic industries existed further south along the Nile.

Lithics associated with Early Khartoum related pottery at site 3-R-28 might suggest that some of the smaller artefacts date into the Mesolithic period. However, pottery of

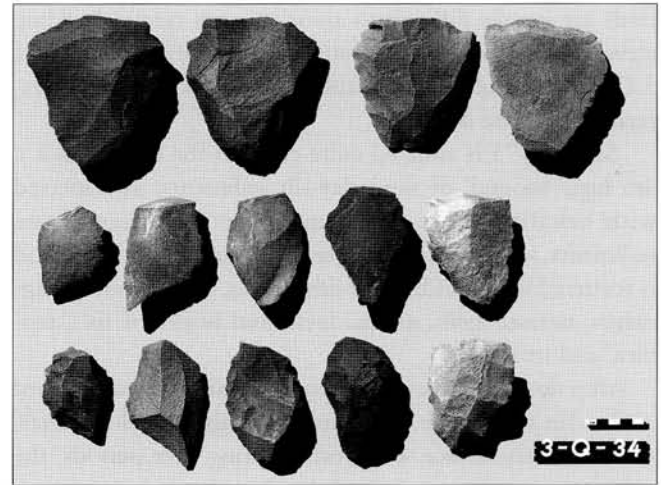


Plate 1. Examples of Levallois-artefacts from site 3-Q-34.

typical Mesolithic fabric with large pieces of organic temper<sup>6</sup> has not been found, and the lithic material is not sufficiently diagnostic to allow it to be separated clearly from that of the Neolithic period. Nevertheless, a decoration pattern similar to early-Neolithic/Mesolithic pottery was found on a fragment with dotted wavy-line decoration at site 3-Q-20.

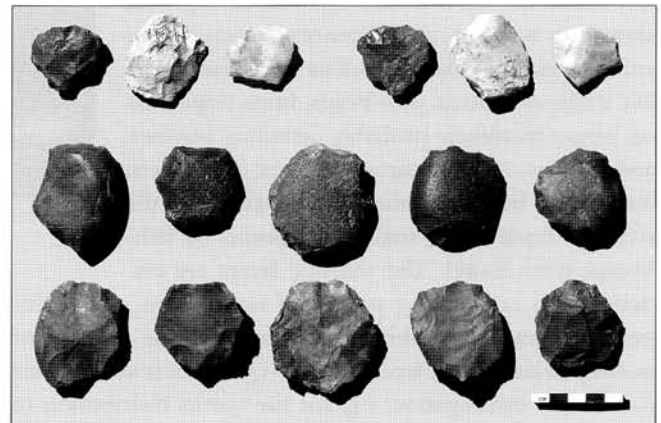


Plate 2. Artefacts from site 3-R-12.

#### *Neolithic sites*

Neolithic pottery is prominently represented in the ceramic assemblage, including both the early, full decorated patterns covering the entire body of the vessels, as well as the later zonal decorations made by rocker-stamp technique, or wares impressed with wavy-line and dotted patterns.

Twenty-eight sites were attributed to the Neolithic period. Most of them are occupation sites or workshops. Only four cemeteries were associated with Neolithic pottery, a similar situation to that observed on the right bank of the river (cf. Paner 2003, 18). Up to 120m long dry-stone walls were observed together with Neolithic artefacts at least at two sites (3-Q-20 and 3-Q-25). However, Neolithic

<sup>4</sup> Cf. however, Paner 2003, 16, for the increasing use of white quartz in late Neolithic sites on the right bank.

<sup>5</sup> 3-Q-36, 3-Q-37, 3-R-10, 3-R-14, 3-R-15

<sup>6</sup>D. Usai, pers. comm.





finds are usually difficult to associate with certain building structures. Therefore, the stratified Neolithic contexts at site 3-Q-73 constitute a remarkable situation, worthy of investigation in more detail.

Site 3-Q-73 is situated quite close to the river. It is a c. 4m high 'mound' of sand-clay-silt sediments, interspersed with calcified roots of swamp vegetation (lacustrine sediments, see above). The present-day surface of the mound is scattered with hundreds of lithic tools, cores, pottery fragments, mussel-shells, animal teeth and bones of fish, reptiles, and mammals.

After detailed surveying and surface sampling, we opened a 12 x 1m test trench. In contrast to other Neolithic sites, whose palaeo-surface was eroded during later periods, the rather massive layers of site 3-Q-73 are remarkably rich in archaeological finds. The topmost layer (1), c. 40 cm thick, contained calcified roots, lithics, Neolithic pottery, bones and mussels. Below, a hard calcified sediment layer containing archaeological material separates it from a second stratum (2) similar to layer (1) but with less concentrated find material. The deepest stratum excavated (3), situated below another hard layer, contained even less lithic artefacts and no pottery at all. The lithic inventory of layers (1) – (3) shows no typological differences. It consists of small cores and flakes as well as specialised tools like drills, associated with beads, bone fragments of bigger mammals probably including bovines, and reptiles. At the bottom of layer (1) a quern was found. In spite of the close proximity to the river no bone tools, such as harpoons or fish-hooks, were found. The massive layers are evidence of a rather long period of occupation, the multi-period character of which is indicated by the absence of pottery in the lowest layer. Thus, 3-Q-73 is a rewarding site for further investigation, e.g. for the spatial distribution of artefacts and the study of activity areas.

At several sites, Neolithic artefacts were associated with structures and material of later periods, e.g. at the *Kerma Moyen* cemetery 3-Q-94, the late/post-Meroitic cemetery 3-Q-20, and the Medieval settlement 3-Q-62.

#### *Kerma period*

Twenty-seven sites might be dated to the Kerma period. Most of them are cemeteries with a dozen cairn tumuli situated further up in the rocky areas. In contrast to the Neolithic period, settlements are very rare: only six occupation sites might be attributed on their surface finds to this period. As with the Neolithic period, however, their surface structures – mostly circular dry stone walls – are difficult to relate to a specific period, since most of these sites are multi-period ones.

The 'hilltop cemeteries' yielded a wide range of funerary pottery scattered near the tumuli and down the hill sides. This was the case particularly with cemetery 3-Q-94 which was chosen for test excavations. It is a graveyard with nine cairn-type tumuli, set along a 40m high ridge, with circular superstructures of up to 5m in diameter, partially preserved to a height of 1m (Plate 3). A wide scatter of Neolithic pottery and tools indicates that the cemetery was built on a Neolithic camping place. In addition, the destroyed superstructures were surrounded by huge amounts of potsherds, comprising a collection of almost complete vessels. Their relationship with the tombs is not certain, but the vessels provide a selection of the wide repertoire of Kerma shapes and decorations. Connections to earlier periods could not



Plate 3. Tumulus 5 of Kerma cemetery 3-Q-94.

be well defined, but frequent rocker stamps recall earlier techniques (Plate 4).

We excavated four of the nine graves. To our amazement we found the burials to be unplundered – as the destruction of the superstructures might have implied. The robbers removed the upper stones to reach vessels and possible offerings; however, there was no sign of any attempt

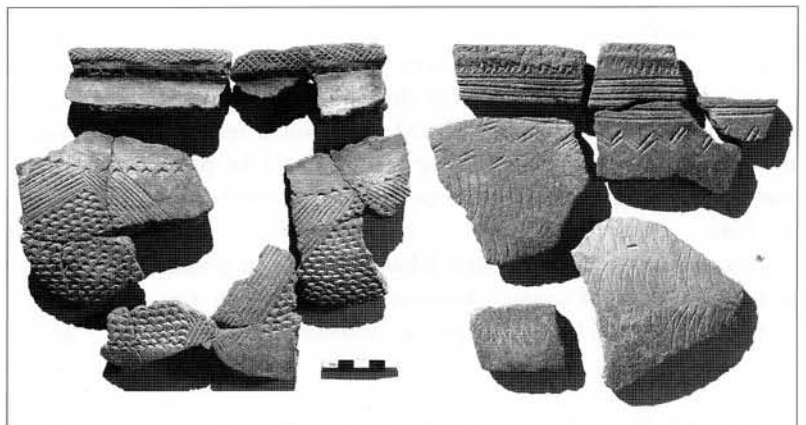


Plate 4. Pottery scattered at cemetery 3-Q-94.



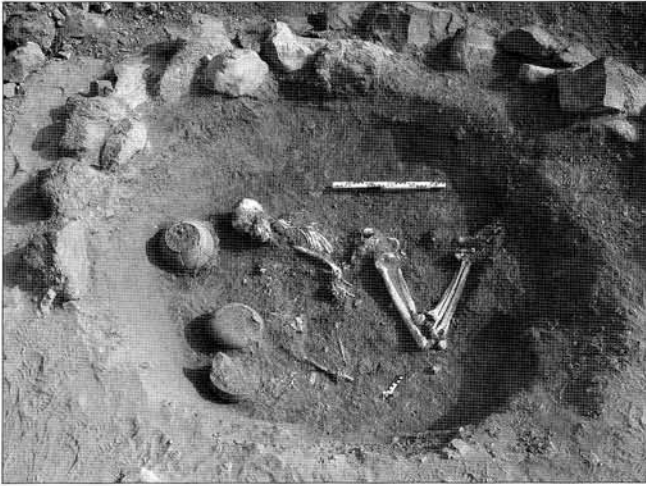


Plate 5. *Kerma* grave 3-Q-94 (4).

to dig the grave pits proper. The excavation showed that the original burials were situated *c.* 600mm below the natural surface and all four burials, which proved to be of *Kerma Moyen* date, were completely preserved (Plate 5). They demonstrate the characteristic funerary traditions of that period (cf. Paner 2003, 17; Kołosowska *et al.* 2003, 23f). The circular to oval pits were dug into the bedrock and filled after the burial with a tightly packed layer of stones and silt, which was hard to remove and even difficult to distinguish from the natural ground. The shallow pits were lined with a ring of big stones. The deceased and the offerings were placed directly on the bedrock or on a thin layer of fine sand. Traces of wood around the body might be remains of an *angareb*. No further organic material was preserved apart from the bones, which were in poor condition.

All bodies were laid on their right sides in contracted position. The two adults were orientated along the east-west axis while the two non-adults were orientated north-south. Given the age–sex profile of the skeletons excavated<sup>7</sup> the cemetery may represent a single “family” burial ground. This hypothesis is difficult to test but should be kept in mind. Apart from the child’s burial which contained no grave goods, all the others were accompanied by animal offerings, probably a goat and additional large pieces of meat (*scapula* of a big animal). The male adult was equipped with a number of orange agate and blue glass paste beads from a necklace and a bracelet, which must have made an attractive piece of jewellery. The funerary pottery, placed near the head of the individual, is a typical selection of *Kerma Moyen* jars and bowls with characteristic and finely made decoration; one grave contained an imported Egyptian jar (Colour plate XIII, cf. Paner 2003, 17 and pl. 4; Kołosowska *et al.* 2003, 22f, fig. 3, pls 6-7).

The vessel sherds scattered on the surface must have been originally deposited near or within the superstructures. During excavation we also found some fragments inside

the stone rings, implying a contemporary date to the *Kerma Moyen* grave goods.<sup>8</sup> Due to the disturbed state of the superstructures, they were first considered to be ring tumuli of type V of the typology established by Welsby (2003b, 122); however, there is some evidence that they might have been domed structures, possibly mud-plastered. Except for small amounts of wind-blown sand, no remains of any gravel or similar filling was preserved within the superstructures. In addition, some of the tombs had carefully laid stones indicating a kind of a ‘corbelled vault’, which might have protected a hollow chamber with offerings (Figure 2). Below, a grave pit contained the burial itself and the grave goods, covered by a 50-60cm thick layer of gravel and stone rubble. The inner stone rings of these grave pits, usually 2-3m in diameter, might have constituted a kind of foundation for the superstructures. This arrangement reminds one of the ‘dome graves’ described by Paner (2003, 18 with pls 6-7), which were igloo-shaped when intact, having pottery and carnelian beads reminiscent of *Kerma* examples in and around the structures.

Finally, a grave with a preserved corbelled superstructure 2m height (cf. type VII of Welsby 2003b, 122), built against the steep northern hill slope, was excavated. Unfortunately, the deceased was placed on the bedrock without a grave pit. Thus, only powdered remains of the unprotected skeleton survived. The tomb contained no grave goods, but a heavily worn vessel was found placed in a rock niche above.

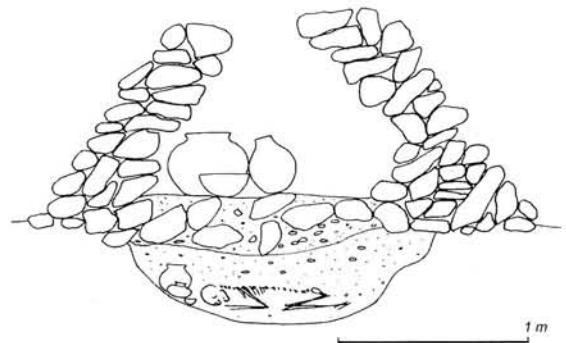


Figure 2. Section and reconstruction of grave 4 at cemetery 3-Q-94 (scale 1:40).

#### *Kushite period*

Napatan and Meroitic evidence is scarce in the concession area, as already frequently remarked by other scholars working at the Fourth Cataract (e.g. Paner 2003, 18). Napatan pottery was found in 13 places. The majority of them are probably occupation sites. In only three cases was Napatan pottery associated with grave structures.

Beside the fact that only few wheel-made wares can be dated to the Napatan period with some certainty, it seems probable that the wheel-made pottery usually associated with

<sup>7</sup> Old adult-male, adult-female, adolescent, child.

<sup>8</sup> However, they may have been moved secondarily to that place.





the term 'Napatan' was concentrated in the centres of the Napatan kingdom, and therefore rather rarely used in rural areas.<sup>9</sup> However, many potsherds of Napatan-like wares were found in association with Medieval occupation sites. This might be either due to the fact that the Napatan population occupied the same sites as the Medieval people, or it is simply due to a misdating of those wares. Fragments of Napatan amphorae were found at site 3-Q-27, a flat area surrounded by granite outcrops, covered with pottery. It might suggest a naturally fortified settlement or campsite with five narrow entrances. An initial surface clearing revealed several post-holes aligned in three rows over an area of 8 x 8m. This interesting site will be further examined next season.

#### *Meroitic to Post-Meroitic period*

Meroitic features and pottery are even less frequent. Hand-made fragments with comb decoration are very rarely found in settlements close to the Nile. Only at site 3-M-4 were these wares exclusively represented. In other sites they are only stray finds in settlements (e.g. 3-Q-14). Also Meroitic wheel-made pottery is very sporadically found. On the one hand, the area lacks kaolin, the raw material of the Meroitic fine ware. On the other hand, typical Meroitic decoration symbolism and patterns, known from the painted and stamp decorated Meroitic fine ware, are very scarce. This fact might be similarly explained by the assumption that the population of the Fourth Cataract region was rather traditionally oriented and therefore less influenced by the symbolism of the higher class Meroitic society. It might be suggested that especially the large tumulus cemeteries like 3-Q-20 (see below), although their grave goods would usually suggest a post-Meroitic dating, already existed during the late-Meroitic period, and were probably continuously in use until the early Christian period (cf. Paner 2003, 19). Their hand-made pottery and its decoration reflect an old and widespread tradition, which existed within the Meroitic period, and which became the prevailing pottery tradition after the end of the Meroitic kingdom. Some of the finds seem to support this interpretation, e.g., a late-Meroitic wheel-made bowl and a graffito representing an *Isis-knot* on a beer jar, both found in the graves of cemetery 3-Q-20. The wide distribution of Napatan to post-Meroitic sites in the concession area, as well as the existence of Kushite pyramids,<sup>10</sup> illustrates that the area of the Fourth Cataract was not that sparsely inhabited, and that it was of administrative relevance to the kingdom.

<sup>9</sup> See, however, the wheel-made wares from the early Kushite cemeteries near et-Tereif a little over 20km upstream, particularly from Site 4-F-74 (Welsby 2003a, 30).

Nine occupation sites and 11 cemeteries could be attributed by their surface finds to the Meroitic/post-Meroitic periods. Some of these cemeteries, including tumuli fields of more than 100 tombs, are among the most prominent archaeological features of the area. One of these tumulus fields, situated within a wide alluvial plain, was chosen for test excavations (Colour plate XIV).

The cemetery contained 115 tumuli of four different superstructure types. Three of these types fit the typology established by Welsby (2003b, 122):

type I - gravel mounds of round or vague shape (probably due to preservation)

type II - flat, circular to oval gravel mounds with a well placed stone ring

type IV - 'egg'-shaped mounds surrounded by a carefully built stone revetment, filled with pebbles and gravel. The pointed part is considerably higher than the rest of the mound.

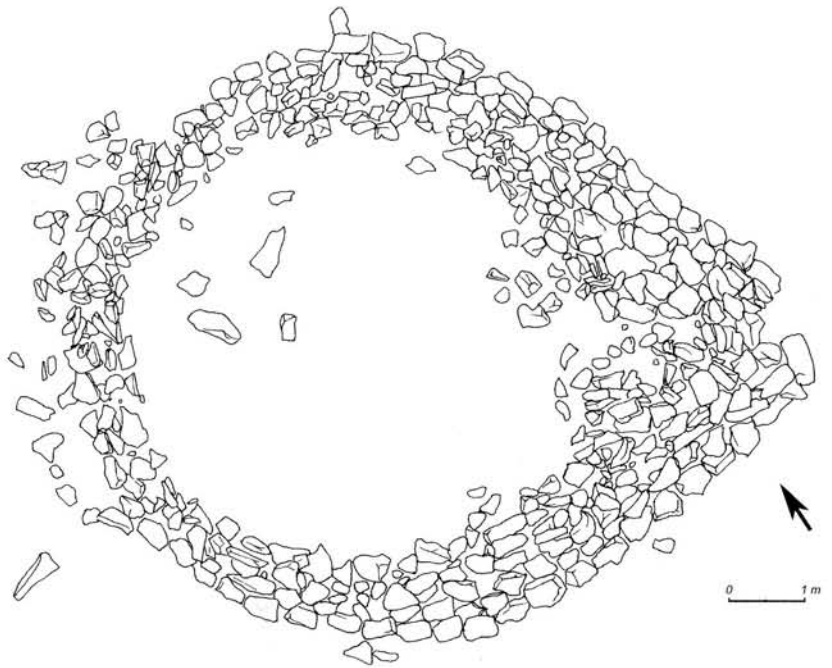


Figure 3. Tumulus 64 at cemetery 3-Q-20 after clearing (scale 1:100).

A further tumulus type, designated sub-type IVa because of its similarity to Welsby's type IV, has a well-built stone revetment and a raised part also. However, the main body of the tumulus is not 'egg'-shaped or oval, but circular, having a small 'nose'-like annex built of carefully laid stone courses (Figure 3). This semi-circular annex is frequently oriented to the south east and other directions, but never to the north or north east.

The test excavations included nine graves covering at

<sup>10</sup> Remains of an early Kushite pyramid have been found by the SARS Amri to Kirbekan Survey further upstream near et-Tereif (see Welsby 2003, 30 with n. 8, site 4-F-71; see also Welsby, this volume).



least one example of each type. As far as could be observed due to the limited number of graves excavated, the differences in superstructure bear no relation to social rank, sex, age, or time. All excavated tumuli are datable to the late/post-Meroitic periods. One of the type IVa tombs had a remarkable feature – a circular ditch in the ground beneath the tumulus, filled with humic and silty material (Colour plate XV). Comparable features have been noted at Sesebi (Edwards 1994, 163, 172, with figs 3 and 7) and at site 3-O-1 further upstream in the SARS concession (Welsby 2003a, 29). These ditches, in Sesebi *c.* 2-3m wide and up to 1m deep, have been explained as having been used as sources for the earth material of the tumuli makeup. The ditch of our tumulus at site 3-Q-20, however, is *c.* 1m wide and just 20-30cm deep. Thus, it must have served another purpose.

Beneath the south-west quarter of this tumulus, close to that trench, a pit with an intact cover of stone slabs was revealed. It contained a bowl and two beer jars, one of which is one of the most beautiful finds of the season (Plate 6). Unfortunately, the main chamber of this tomb was robbed, as was the case with all other graves excavated at this cemetery.

On top of, or in the vicinity of, some of the type I and type IVa tumuli, stone slabs 1m high and 20 x 20cm in section were observed. It is tempting to assume that they were originally raised on these tumuli as grave markers. However, none of these stones showed traces of pictograms or inscriptions. Thus, they might have also been slabs of the original cover of the grave chambers, unearthed by grave robbers.



Plate 6. Pottery from tumulus 64 at cemetery 3-Q-20.

During plundering, some of the skeletons and grave furnishings had been heavily disturbed. In those cases, however, where most of the bones of the skeleton, as well as the grave goods were left untouched in their original context, the burials corresponded to the 'post-Meroitic' burial attitudes known elsewhere (Plate 7). The individuals were interred in burial chambers underneath tumuli of between

5 and 12m diameter. The grave shaft was situated roughly at the centre beneath the later built tumulus and was cut by a robber pit. Remains of 'tabbass-grass' were found covering the shaft. At the lower end of the shaft, a step led to the burial chamber, which was dug to the south, or just straight

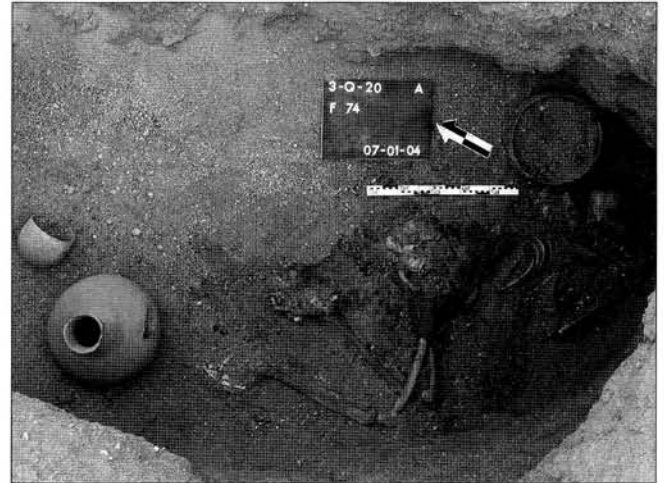


Plate 7. Burial in grave 74 at cemetery 3-Q-20.

down as an elongated burial pit. The bodies, sometimes partially naturally mummified, were placed in a contracted position on their left side, aligned east-west. Some of the individuals were laid on animal skins and covered by strawmats, and some were dressed in woven textiles or leather loincloths (cf. Paner 2003, 19). The burial equipment and the pottery beer jars and open bowls imply a widespread funerary ritual and therefore an integration into a supra-regional context. The partially preserved furnishings were placed around the deceased and consisted of basket work and other food containers of organic material, arrows and quivers, necklaces and bracelets of beads. Remnants of wood were often found around the walls of the chamber, but none of them was substantial enough to reconstruct an *angareb*. The bones of the nine skeletons (8 adults, 1 adolescent; 4 females, 5 males) were in a good state of preservation. The young age at death is an interesting aspect - no individual seems to have reached the age of 30. All have extreme dental wear and in addition, they exhibit clear signs of diseases and serious infections.

#### Medieval sites

Due to their more recent date, Medieval sites are most prominent and numerous. There is a clear preponderance of occupation sites (37), in contrast to cemeteries (17). However, due to their compact structure, medieval box-grave cemeteries hold usually more graves than cemeteries of earlier periods. In contrast to the earlier periods, the Medieval period left some larger settlements, which – like the villages of the present-day population – are situated in the outcrop areas close to the river. In that respect it might be noted that all occupation sites which were found outside





the present-day villages are 'secondary' places, since the best places for settlement are of course still occupied. Some of these settlements have adjacent cemeteries, but other graveyards were found in remote rocky areas.

Wheel-made and hand-made Medieval pottery was found in large amounts and covers a wide spectrum from coarse to decorated fine wares within the Medieval settlements. The characteristic ceramic repertoire comprises very coarse and big hand-made vessels like thick-walled bowls with rim decorations, globular pots and pot stands. The fine wheel-made ware has often painted designs, plastic wavy-lines and even some stamped motives. The vessels have often a coloured slip of black, red, white, yellow, or orange shade.

After examination of several Medieval occupation sites, the largest and most promising site of them, site 3-Q-62 at el-Turkab, was chosen for more detailed documentation and test excavations (Plate 8). The settlement, covering an area of roughly 300 x 750m, contained more than 230 house structures. Thus, it is much larger than any modern settlement in the area. Test excavations were carried out in two house compounds and within the church of the settlement. The church was built on the western part of a hill overlooking a bend in the river. It was erected on a platform of large stone slabs. Its walls were of mud brick, covered with mud plaster and whitewash. The excavations revealed a rectangular ground plan of  $\approx 8.3 \times 7.5\text{m}$  with a quadrangular nave and an apse to the east (Figure 4). Two strong cruciform pillars of mud brick supported the roof. The entry to the



Plate 8. Distribution of house compounds at settlement 3-Q-62.

nave was through a lateral door at the western end of the southern wall. A second entrance on the opposite side could not be determined due to erosion. The archway (?) to the apse was later reduced by a mastaba-like structure. The floor of the apse was one step higher than the nave and covered with a mosaic of white, brown, yellow and black river pebbles - one of the very few examples of that kind known in the Sudan. A rectangular hole filled with sand and red bricks might indicate the place of an altar of  $1.1 \times 0.8\text{m}$  in size. The eastern rooms flank the apse, as is usual in Nubian churches. Since big granite boulders limited the space, the builders erected an irregular room with an entrance on the north-eastern side. Attached to the southern side were two rectangular structures of stone slabs (graves?). Based on the plan and building material, the church might be dated into the Classic Period (9<sup>th</sup> – 12<sup>th</sup> century AD).<sup>11</sup> Although the pebble-mosaic is known from earlier periods, a small bottle and a bowl probably used as oil lamp, both found at the floor of the church, confirm a dating to the Classic to Late Periods.

On a rock outcrop facing the church, a Greek invocation was documented (3-Q-60). The inscription invokes Jesus, bears the name of the carver and concludes with the epiclesis "Have mercy on me". It is interesting to note that the form  $\Gamma\Omega$  and  $EAEH\Omega ME$  show a deviation from the normal types  $E\Gamma\Omega$  and  $EAEH\Omega ME$ .

The ruin of a Medieval fortress at site 3-Q-95, situated on a small island near Umm Klait, was documented in detail. It might have been a watchtower, built at the most narrow and difficult part of the Nile for navigation, i.e., at an excellent point for the control of this part of the river. The tower was erected without foundation, out of granite rubble, having an irregular plan of  $\approx 14 \times 22\text{m}$ . Its walls, with a thickness of 2.5m at their base, are still preserved up to 4.5m high. Steps, leading to the top of the walls, indicate that the tower had an observation post and maybe a parapet. According to the inclination of the staircase and the limits of the walls, the absolute height of the walls can be estimated to have been  $\approx 5.7\text{m}$  at maximum without parapet. No pottery was found to date the structure, but the building technique employed, the nature of the structure and its location suggest that it is of the same time as the two fortresses at Suweiqi, that at el-Kab and at Karmel on Mograt island. The watchtower is intervisible with both of the big fortresses of Suweiqi; thus, they might belong to a united system of fortifications.

#### Islamic Period

Only selected sites of more recent date were recorded, like abandoned cemeteries or graves in

<sup>11</sup> W. Godlewski, pers. comm.



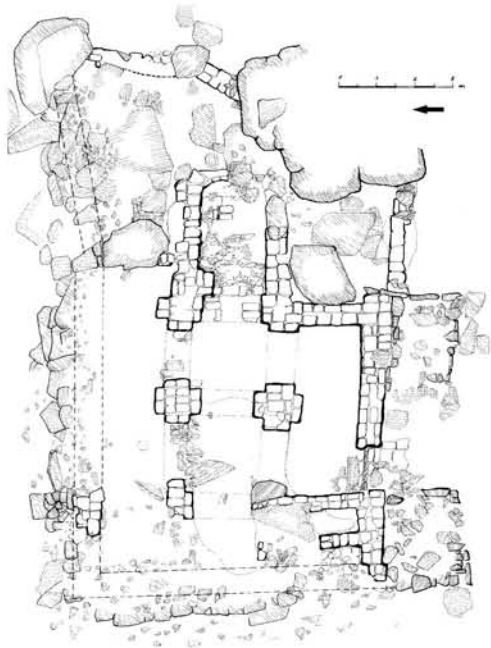


Figure 4. Plan of the church of settlement 3-Q-62 (scale 1:200).

association with older tumuli fields, and a 100 year-old *qubba* at el-Waraaq cemetery (3-R-75). Typical Islamic pottery found consisted of deep bowls with mica or other inorganic temper within the fabric. They were usually set on top of or near Islamic graves as offering vessels.

### Ethnography

The ethnographic studies focussed on lifestyle data of the Shaigiya and Monassir householders, as well as on ethno-archaeological data, and place names and their meanings. Four households and their behaviour areas were mapped. Interviews concerning use of space, time, and household equipment, plus the source and history of any pottery or notable items were recorded. Also the ownership and use of neighbouring structures like common areas, pathways, and fields were mapped. In addition, records were made concerning features that might leave archaeological footprints like refuse disposal, charcoal production, smiting, storage, trapping and fishing practices, cemetery organisation, building techniques, and irrigation. Pottery production was organised in a way that might be archaeologically interesting: it was produced and fired locally, using local raw material, but made by male potters travelling from Kareima, Merowe, or as far away as el-Suki on the Blue Nile. Local production of metal items was also undertaken by itinerant craftsmen (Colour plate XVI). An important part of the recording concerned

the folklore, history and place names specific to the landscape. Names of villages and prominent geographical features and their meanings were recorded. Narratives and local histories were collected. These included legends about the holy men who are effectively patrons of the recent cemeteries, a story about the origin of the name Dar el-Arab, going back to Funj times, and two stories about events during the Khalifate.

In addition, views about the upcoming move and expectations about the future in the resettlement areas were recorded. This material should be of value after resettlement, to aid in assessing its impact on the lives and habits of the people. The views expressed were different; however, most informants indicated that they would sorely miss their homes, their established cultivations, the scenery, and the cemeteries of their relatives and forefathers.

### Ecology

Parallel to the ethnographic records, a thorough study of the recent ecological situation was undertaken. It focused on the topography, the recent climate and water resources, geology and soils and recent flora and fauna in the rocky areas as well as near the Nile. In addition, it comprises records on the land use including pastoralism and agricultural activities.

### Rock art and 'Gravel pictures'

Rock pictures, found at 32 different sites, were localised and photographed only. The subjects are mostly cattle, camels, and animals like ostrich and dogs, but also crosses, circles, and fighting persons. In some places they have been associated with so-called rock gongs, i.e. rows of depressions pounded into the granite outcrops and used as percussion drums still in recent time (see Kleinitz, this volume).



Plate 9. 'Gravel picture' a few kilometres west of Dar el-Arab.





Another highly interesting feature of the area are about 30 'gravel pictures', situated on flat gravel plains in the neighbourhood of the present-day villages, but also far away in the rocky hinterland. These are lines and areas clear of gravel, forming sometimes pictures of real objects (e.g., cars), inscriptions in Arabic, parallel lines, or completely enigmatic clearings of different shape, size and complexity (Plate 9). Remarkable are the dimensions of most of these pictures, varying between several meters to sometimes more than 100m. The age, purpose and origin of these pictures are difficult to establish, although it can be hardly believed that they predate the 20<sup>th</sup> century. However, since features of this type have not been published from elsewhere, they are worth recording.<sup>12</sup> The gravel pictures appear to have multiple explanations, but one of them is surely to memorialise and/or entertain.

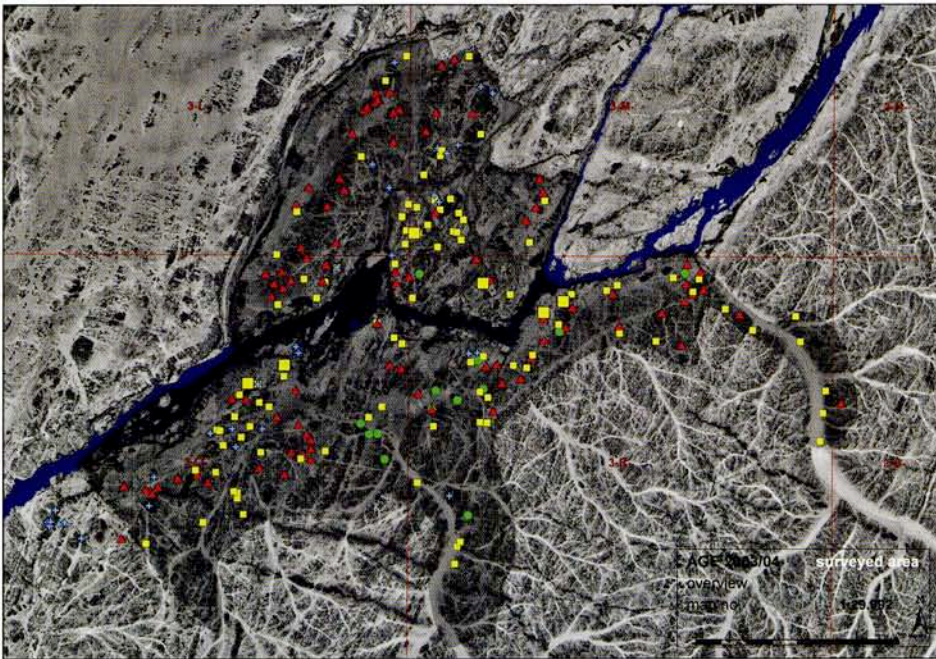
For next season it is planned to continue identifying sites at the river bank and on the islands further upstream and to finish the documentation of several sites already located. Mainly, however, the next season will focus on excavations at archaeologically interesting sites identified this season, including Neolithic, Kerma, Napatan, and Late/Post-Meroitic occupation sites.

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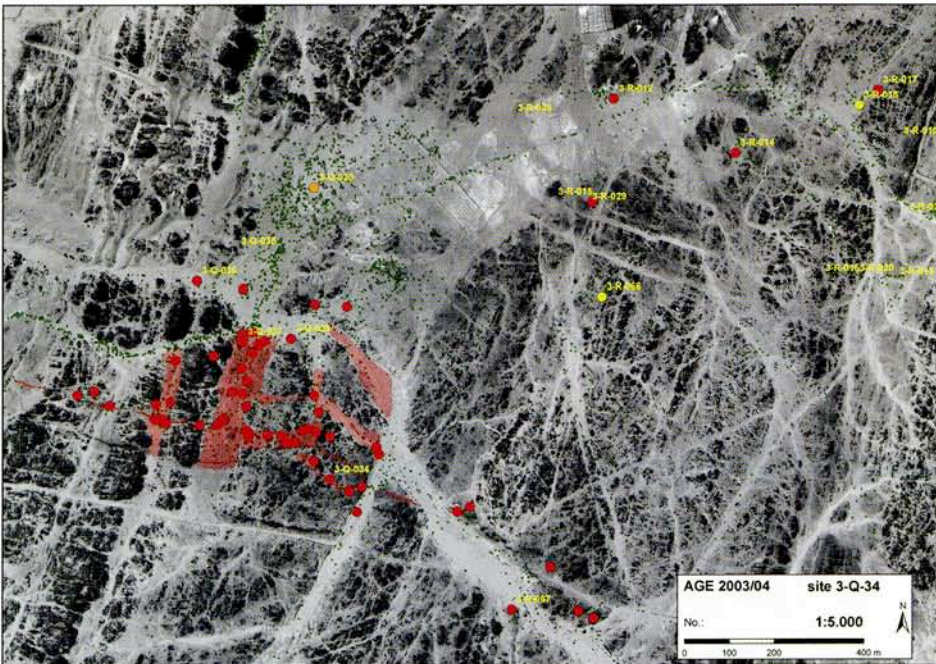
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<sup>12</sup> Similar features were observed by the University of California Santa Barbara expedition between el-Khandag and Hannek directed by Dr S. T. Smith (pers. comm. Julie Anderson).





*Colour plate XI.*  
*The SARS Anglo-German*  
*Project. Site map of the season*  
*2003/2004.*



*Colour plate XII.*  
*The SARS Anglo-German*  
*Project. Distribution of lithic*  
*concentrations between sites*  
*3-Q-34, 36, 37, and 38.*

*Colour plate XIII.*  
*The SARS Anglo-German Project.*  
*Pottery from the Kerma graves at*  
*cemetery 3-Q-94.*







*Colour plate XIV.  
The SARS Anglo-German  
Project. View of cemetery  
3-Q-20.*

*Colour plate XV.  
The SARS Anglo-German  
Project. Tumulus 64 at  
cemetery 3-Q-20 showing the  
ditch and the pit with pottery.*



*Colour plate XVI.  
The SARS Anglo-German Project.  
Itinerant blacksmiths at Dar el-Arab.*