## **Humboldt University** Nubian Expedition (H.U.N.E.) in Dar al-Manāsīr: The First Reconnaissance Survey on the Left Bank

Julia Budka

The first season of the Humboldt University Nubian Expedition (H.U.N.E) in the area of the Fourth Cataract was conducted in March 2004 (cf. Näser, this volume). The southern end of H.U.N.E.'s concession area is marked by Jebel Musa (*Ğabal Mūsa*), the site of the Battle of Kirbekan (al-Kirbikān) (9 February 1885). At the bend of the Nile immediately north of the village of Salamat (Sug al-Salamāt) lies the upstream end. Consequently, H.U.N.E.'s working area is situated next to the concession of the Sudan Archaeological Research Society (SARS) in the south, and in the north, the Polish concession (Centre of Mediterranean Archaeology, Warsaw University and Poznań Archaeological Museum).

### Left river bank between Jebel Musa and Salamat

In the following the results from the reconnaissance at the mainland will be presented. The expedition team working there comprised Frank Kammerzell (project director), Julia Budka (archaeologist) and Fawzi Hassan Wahid (archaeologist, inspector of NCAM). Since fieldwork was limited to ten days of work the report is of a preliminary character.

## Topographic description of the area under investigation

What was pointed out in papers already published about the landscape of the Fourth Cataract region (cf. Donadoni 1990, 1997; Welsby & Davies 2002, 36) also holds true for H.U.N.E.'s concession area. It is

predominantly a mass of jebels, rocky hilltops and large stone boulders. There are also sandy plains along the bank of the river and dunes in the hinterland. The region around the camp in Mushra (Mušr<sup>c</sup> al-Hammīr) is marked by a broad strip of arable land and sandy beaches. In contrast, the area between Kereiti (Karaiti) and Umm Jaghor ('umm Jagur) is almost totally devoid of a riverine area. Rocky outcrops and boulders closely approaching to the river characterize the landscape (Fig. 1).

Another significant topographical feature of H.U.N.E.'s concession area is a large sandy plain in the hinterland of Kerarir (al-Kararīr). This area is called Walad Sabir and covers a zone of several squarekilometres. The modern dirt road runs along Walad Sabir for quite a long distance due to the advantage of a flat area which is free of stones and easily accessible. Some isolated tombs were found by following this track (cf. Fig. 4).

The peninsula Umm Domi ('umm Dumī), situated south of Mushra opposite the small island of Tibet, is a typical example of seasonal islands which are very common in the cataract area. Wadi Eltanub (Wādi al-catānūb) which separates Umm Domi from the mainland is used as arable land during the period when it is not flooded. Important landmarks in the southern part of our concession area are Jebel Musa and Wadi Kirbekan. Both are very significant within the landscape. Wadi Kirbekan with its steep ridges provided some difficulties in passing through by car. Altogether, the landscape of H.U.N.E.'s concession area consists predominantly of granite and other rocks.

#### Earlier archaeological work conducted in the area

Although no intense archaeological fieldwork was carried out between Jebel Musa and Salamat so far, the region has been subject to some surface studies in the last century. In March 1926 a superficial reconnaissance was conducted by H. C. Jackson. He states at the very beginning of his paper that "the whole of this district was almost one continuous cemetery of buried civilisations" (Jackson 1926, 1). This statement, which was confirmed by MDASP in general (Hakem 1993; Paner 1998; Ahmed 2003) and by recent research of different missions, also holds true for the area under investigation by H.U.N.E.

I am indebted to Brittany Lehman for correcting my English.

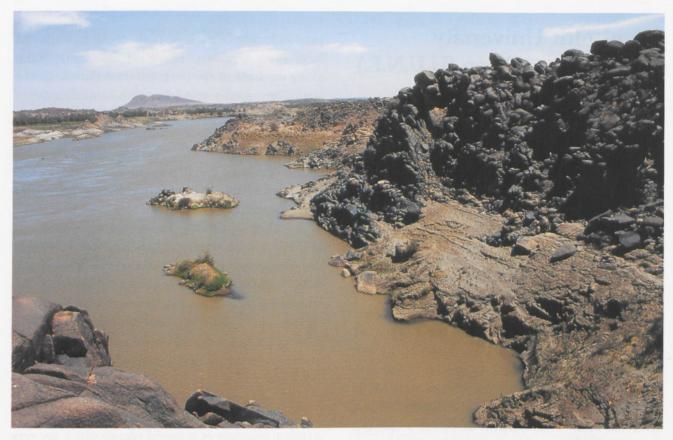


Fig. 1. General view of the topography of the left river bank opposite the northern end of Boni Island looking north-east.

On the mainland the following sites were visited by Jackson: El-Shukuk (= Eltanub near Mushra)², Shellal (al-Šēllāl) and Salamat. At El-Shukuk he mentions rock drawings (Jackson 1926, 23) — possibly some or all of those we documented as sites MS 005, 006, 010, 013, 014, 015, 016, 019, 020, 023 and 024. These different groups of rock art are all located on outcrops and boulders in the vicinity of the village of Eltanub. Jackson (1926, 25) examined several tombs at Shellal. It would be of interest if he refers to the cemetery located right in the area of the modern village. This site (ShS 01) was very recently destroyed and only traces of a single tumulus survived.³

Jackson observed a large density of structures and sites of Post-Meroitic date, so called "Anag"-remains in the general area. His description fits well with our own observations — tombs and cemeteries, "stone villages and indistinct traces of paths and walls" (Jackson 1926, 24f.).

Of particular interest are massive stone constructions found at the Shukuk Pass (Fig. 2). This so far unique site (MS 027) in H.U.N.E.'s concession area attracted already the attention of Jackson. According to him it was "put up by the robber gangs of Rubat when the Arabs first came to this part of the world". His description runs as follows: "These [walls] are well made of unhewn stone and were merely places in which the robbers could hide before pouncing on the unsuspecting victims that used the narrow path below" (Jackson 1926, 31). He does not mention how he came to this peculiar conclusion. The walls of site MS 027 are very solidly built with a maximum thickness of 2.50 m. The largest part of the construction measures 12 m in length and is preserved up to 3.20 m in height. A kind of water dam-construction connected with the wadi seems more probable than Jackson's idea about the function of these walls.

<sup>&</sup>lt;sup>2</sup> Jackson explicitly mentions the names El-Shukuk and Eltanub — nowadays both the large *wadi* and the village are known under the single name Eltanub; only a small *khor* is still called Shukuk.

Local people told us about a larger number of tombs that they all removed to gain arable land. During the clearance a number of objects came to light (pottery and small finds). For the ongoing plundering of tombs in the area compare also the early remarks of Gray (1949, 121): "many graves will be found to have been robbed in antiquity; many cemeteries have been seriously damaged by marog-diggers".

But this preliminary interpretation still needs more investigation and requires an intense search for parallels.<sup>4</sup>

In 1989, following a UNESCO appeal, Jean Leclant conducted a reconnaissance in the area between Abu Hamed and Jebel Barkal, a region of approximately 250 km in length. Some results of this work were published a few years later by J. Montluçon (1994). The French expedition came across a cemetery situated in the Wadi Kereiti. As yet it is the largest one in H.U.N.E.'s concession area and was recorded as site KN 003. Montluçon (1994, 310 and fig. 4) called the site "Abd el-Haïm (El Kirreit)". Christian box graves, of which about 50 are still preserved, whereas the original number was much higher, and in addition more than 20 tumulus

No sediments have been recognized at these walls that could definitely support an explanation in connection with water.

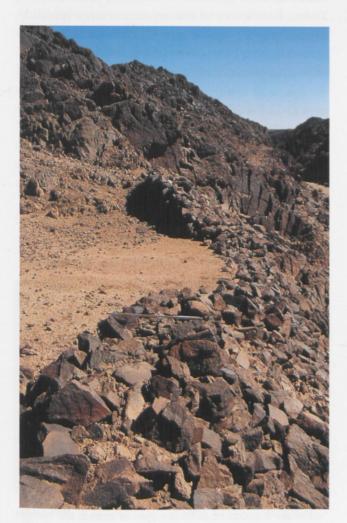


Fig. 2. The western wall of site MS 027 looking north-east.

graves of probable Meroitic or Post-Meroitic date, were noticed in 2004.

Besides Jackson's and Leclant's observations on sites in H.U.N.E.'s concession, some remarks on place names and archaeological remains marked on the map of the Geographical Survey are possible. Thanks to oral information provided by local people one topographical term on the map can be corrected. The name of the village just south of the island of Tibet is not Umm Ghafur, as spelt on the map, but Umm Jaghor. Several villages and *wadis* are not noted on the map at all and therefore one goal of H.U.N.E. is to create an actualized and more detailed version of it. In this respect it would also be of interest to collect colloquial names of toponyms, their local tradition and lifespan and if possible their meaning and origin.

Christian remains are marked on the map north of the village of Salamat. Jackson (1926, 26) found medieval/Christian pottery at the site. A short visit to the site confirmed the existence of traces of probably Christian occupation. When the map was composed, the remains were obviously easy to identify. Today, all that is left are some red bricks and pottery sherds in the now cultivated area near the river. Even these sparse traces indicate the former existence of a quite large building-complex.

## Results of the 2004 season on the mainland

The first season of H.U.N.E. was primarily dedicated to logistic reasons. Furthermore it was possible to conduct a preliminary reconnaissance of selected areas.

The areas covered more or less in detail on the left bank include:

- a narrow strip between Shellal and the small village of el-Signi (al-Signi) (selected areas: 6 sites)
- a strip extending 2 km outside the riverine area, following major *wadis* and *khors* into the hinterland, in the region between Kararir and el-Debab (*al-Dibāb*), with particular emphasis on the vicinity of Mushra (69 sites)
- a strip extending 1.5 km from the river, following major wadis into the hinterland, between Umm Jaghor and Kereiti (43 sites).

A total of 118 sites were registered on the left riverbank by GPS, preliminarily described and recorded with photographs. All in all, the types of sites located so far comprise 39 concentrations of rock art, 24 cemeteries (8 box grave cemeteries, 16 tumulus cemeteries), 3 isolated tumulus graves, 13 shelters or huts built in stone, 5 settlement sites, 20 scatters of occupation, 3 stone rubble walls and 19 miscellaneous stone structures. Some of the places fit in more than one category - consequently the total number of site types is higher (126).5 This is illustrated by KN 011, where stone-built dwellings, possibly one tumulus grave, a group of box graves and rock art (two camels with riders) were found. Surface finds and the architecture imply a medieval date for the site, which can be categorized as settlement, cemetery and concentration of rock art.

The span of time covered by the sites found extends from the Prehistoric period (Paleolithic–Neolithic) to medieval and very recent times. Some of the shelters and stone structures with unknown functions may be of modern date but they could also be "of some antiquity" as Welsby (2003, 123) has already indicated. The bulk of material seems to belong to the Neolithic and the Christian/medieval periods. But the presence of certain artefacts does not automatically corroborate the date of the structures where they were discovered lying on the surface (Welsby 2003, 121). Consequently, the first surface survey gave some hints, but only future excavations will provide precise dating evidence.

### **Funerary remains**

In the following an overview on the context and structure of the monuments discovered so far will be given by means of presenting a few selected sites. The majority of sites belong to the scope of funerary archaeology. Although the number of sites documented so far is still incomplete and selective, it seems that the predominance of funerary monuments may be regarded as a characteristic feature of the region. Within the cemeteries two main groups of graves can be recognized: in the first place different types of tumuli<sup>6</sup>,



Fig. 3. The plundered tumulus cemetery MN 006 looking north-east.

which very likely cover a time span from Kerma to Meroitic and Post-Meroitic and maybe medieval times, and secondly Christian box graves.

The modern soccer field of the village of Mushra was once a large tumulus cemetery (MN 001). It was totally cleared in order to obtain a level surface. Today, only traces of the superstructures (possibly round, gravel covered mounds, a minimum of 12 pieces) survive. No sherds or other finds lie on the surface to give some hints in respect of dating.<sup>7</sup>

Traces of another tumulus cemetery, MN 005, were found set in the alluvial deposits in a *wadi* just south of Kararir village. Because of its location on these sandy sediments, the tombs (gravel covered mounds) were exposed to erosion and are only partly preserved. In general, the position of cemeteries in the area depends on the local topography, but most often they were set in *wadi* beds or other sandy plains.<sup>8</sup>

A cemetery closer to the Nile and the modern village of Kararir, MN 006, consists of a minimum of five tumuli. All five belong to the gravel covered mound type and are of different sizes (Fig. 3). The empty pits in the centres of the superstructures provide evidence of recent plundering. One tumulus was completely stripped of its stones and these blocks were heaped together beside the tomb. Blocks from ancient tumuli have frequently been used as modern building material, since they are available in large

<sup>&</sup>lt;sup>5</sup> See Welsby 2003, 121 for a similar situation in SARS's concession.

<sup>&</sup>lt;sup>6</sup> For a preliminary typology of tumuli in the area of the Fourth Cataract see Welsby 2003, 122.

Local villagers reported that during the clearance large amounts of bones and ceramics were found.

For the location of different types of tumuli see Welsby 2003, 122.

numbers and have a convenient shape and size. They are found reused in dam constructions and in different kinds of walls and terraces.

A large cemetery (MN 009-010) is situated north of the public school building of Kararir, on a sandy plain. Both tumuli and box graves were found close together, which is a common combination in the area (cf. Montlucon 1994, 310 and Welsby 2003, 17, site 3-N-302, figs. 2.14 and 2.15). In the southern part of the site at least eight or nine gravel covered mounds were counted, partially robbed of their stones. Approximately 40 box graves are well preserved in the northern part. Between the Christian tombs, two heavily destroyed tumuli were noted. As a rule, it is only tumulus graves that are the targets of plunderers in the concession area. It is obviously well known among those who pillage ancient sites that there is little chance to find grave goods within a Christian burial. Consequently, the box graves are usually left intact (Welsby 2002, 63). At site MN 010, the box graves are orientated east-west in the usual pattern. An Islamic cemetery is located next to the Christian tombs and copies their orientation. In contrast to Islamic guidelines, the Muslim graves are not facing Mecca, but the river. Similar examples of burial traditions being adopted by people of different religions are quite common in the area of the Fourth Cataract. In future times, H.U.N.E. will focus on the question of whether or not this is due only to limited space available for tombs or if it is significant of religious concepts and cultural symbiosis of the region.

Several other cemeteries and isolated tumuli were found in the sandy plain of Walad Sabir (MN 012-14), quite far away from the river and cultivated land and



Fig. 4. The isolated tumulus in Walad Sabir MN 015 looking north-east.

close to the modern track. All of them are destroyed and were robbed very recently, but traces still survive. Only very few, insignificant sherds were collected from the surface. A remarkable group of tumuli (at least three structures), that may be described as clearly egg-shaped mounds, was recorded as site MN 014. These graves are of Welsby's tumulus type IV, which is a characteristic feature of the region (Welsby 2002, 55, fig. 22 and Welsby 2003, 122).

Only 900 m north of MN 014, another small group of tumuli was documented as site MN 015. Three tombs are still very well visible, although they have suffered some destruction. Two of these oval ring-tumuli measure 10 m in diameter. The third one is much smaller, having a diameter of only 4.5 m, and differs considerably in shape, since it is roughly circular. The stone ring of one of the large tumuli was slightly destroyed on the western side. Some of the stones were piled up to in two small heaps at the centre of the tomb (Fig. 4).

A similar kind of modern re-arrangement of original stones was recognized at site MN 013. This is an isolated ring-tumulus in a roughly round form. On its east and west side stones had been vertically erected — probably this took place in the recent past. Close to the eastern stela-like stone, the surface is littered with potsherds. In addition, intact handmade pottery vessels were deposited, many with traces of smoke and all of them belonging to the common coarse household wares. Fortunately, a local man explained this assemblage: women who wish to become pregnant come to the monument, pray and offer food and drinks. Later, these offerings are at the disposal of all passers-by in need and are believed to bring good luck to their donors. The span of usage of this Post-Meroitic or perhaps even Kerma Period tomb is consequently quite remarkable. Long after its systematic use as a burial place, the structure began to achieve another meaning and now serves a totally different function — that of a modern fertility cult site. Future research will focus on the character and purpose of contemporary re-use of burial places as attested by MN 013 and MN 015.

The second important types of tombs in the area are box graves. They were found in different locations: near the riverine area and the cultivated land<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> E.g. sites SA 01 and MS 001, where several rows of box graves are preserved and, in addition, a single, robbed tumulus was found.



Fig. 5. General view of the medieval cemetery MS 036 looking north-east.

as well as in wadi beds10 and on plateaux further into the stone desert and hinterland. A well preserved Christian cemetery near the village El-Debab was documented as MS 036. The site measures 32 m from east to west and 15 m from north to south. It is oriented east-west as usual and was largely covered with sand (Fig. 5). A minimum of 56 box graves, arranged in eight rows with at least seven tombs each, was counted. The tombs are stone boxes with fine gravel filling and pebbles, in some cases equipped with head- and footstones. The common dimensions measured approximately 2 x 1 m and 2.30-2.50 x 1.50 m. In some cases stone layers measuring more than 1 m in height are preserved. There were neither finds visible on the surface nor could we find any traces of modern disturbance. Because of its state of preservation and location the cemetery could be related to the Christian settlement MS 040 close by (see below).

## Remains of occupation and settlements

A considerable number of occupation scatters and working places were discovered in 2004. Based on the information provided by the surface finds, they predominantly date to the Neolithic period.

 $^{10}$  E.g. sites KN 003 and MS 031, both large cemeteries set in the alluvium of ancient water channels.

A terrace, measuring 20 m from north to south and 10 m from east to west, with evidence of human activity and stone tool production is located on top of the largest hilltop of the Umm Domi peninsula just opposite the island of Tibet (site UD 04). Some low orthogonal stone settings were visible on the surface. Several concentrations of lithic material (flakes and tools) as well as ceramics were found on the surface and samples of them were collected.

More examples of small shelters and concentrations of lithic material and pottery (artefact scatters) were found around this hilltop and on rocky outcrops in the area of Kereiti (e.g. KN 041, KN 019, KN 010). Circular or rectangular features of still unknown function were recorded (cf. Paner 2003, 178, fig. 16 and 17). A typical example of this type of site is a large plateau on top of a jebel in the hinterland of El-Debab. It revealed several small places on the rocky surface which were littered with flakes, very few sherds and some stone settings (site MS 039). The natural rock was used as a shelter and in addition some large boulders were connected with rubble-like walls. The main feature seems to be a small stonering (2 m in diameter) in the south-eastern corner of the plateau where the surface was covered with some flint flakes. Large granite boulders protect the place against the wind, which in this area usually blows from the north.

As of yet, in H.U.N.E.'s concession area settlements are composed of stone-built structures (cf. Jackson's "Anag-remains", see above). Traces of mud brick walls were preserved only at one single location. <sup>12</sup> This contrasts considerably with the situation in the neighbouring concession area of SARS, where several settlements with mud brick structures have been discovered (Welsby 2003, 123). Future work will provide evidence of whether or not this first impression is accidental or if there really is a difference in the dwelling building-technique in the neighbouring areas.

Like occupation scatters of Neolithic times, later settlements may also be found on prominent hilltops or on elevated terrain, like site MS 022 (Fig. 6). This dwelling place contains a minimum of nine drystone-walled units. These comprise round and rectangular features with either a single room or with several

<sup>&</sup>lt;sup>11</sup> E.g. site ShS 02: a group of approximately 15 box graves with the common dimensions of 2.50 x 0.90 m x 1.00 m. This cemetery is oriented north-south, which is remarkable and probably due to the course of the river in this area south of Shellal.

The remains of this heavily eroded rectangular structure made of (burnt) red mud bricks were documented as site ShS 04.

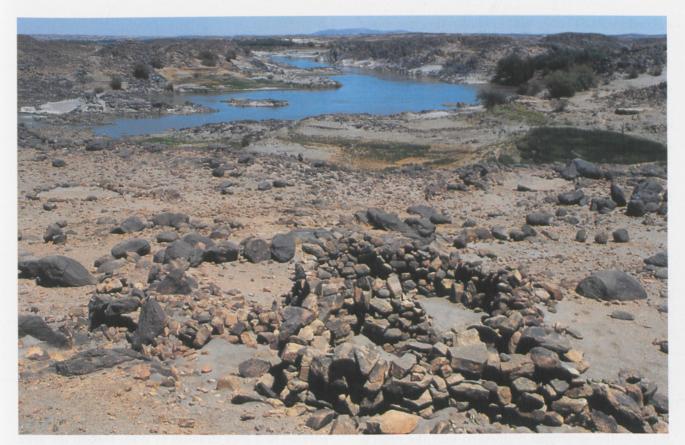


Fig. 6. General view of the medieval stone-built dwelling place MS 022 looking north-east.

rooms as well as simple stone rings. A large amount of domestic material was found on the surface — pottery with traces of smoke (cooking ware), animal bones, tools, lithic material, baking plates and grinding plates. At the moment a medieval date for the site seems most likely.

Another settlement of this type is one of the highlights of the riverbank survey. Village MS 040 lies quite far in the desert at the foot of that jebel on top of which site MS 039 was found. Different kinds of features, all together seven units, were noted - circular, freestanding huts and rectangular structures built of rubble walls abutting the natural rock as well as single lines of stones and simple stone rings. The site seems to be totally undisturbed because everything is deeply covered in sand. A variety of objects, clearly domestic material, was found nearby and on the surface. Some of the most interesting finds are pieces of pottery, especially MS 040.5, a decorated rim sherd of a collared vase or cup (Fig. 7), stone tools, flakes and the small clay figurine of a camel. The painted rim sherd finds parallels in the Dongola reach, at Hambukol and Old Dongola (see Welsby Sjöström in Welsby 2001, 241: form group J50 = Adams 1986, 102,

class F12, dating from the early Classic period). Even closer parallels were discovered within the Christian fortress of Nagʻ esh-Sheima in Lower Nubia, made of Aswan-clay and dated to the 10th century (Bietak & Schwarz 1987, 157, fig. 45, no. 76736).

The small clay-figurine that depicts a camel is made of a rather fine Nile silt ware. All four legs, the neck and the head as well as the tail are broken off and do not survive. The upper part of the hump is missing as well, thus only the rump of the animal is preserved (3.9 x 1.9 x 2.3 cm). A second, very similar piece was found at the peninsula of Umm Domi (UD 005.1) in a comparable context, lying on the surface near a settlement built in drystone-wall

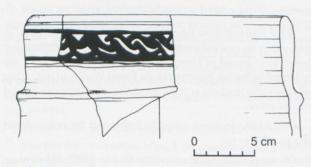


Fig. 7. Rim-sherd of decorated vessel (MS 040.5).

technique (UD 003). Again, all four legs, the tip of the hump and the head of the figurine are broken off. The remaining features (4.1 x 3.9 x 2.3 cm) nevertheless clearly depict a camel (Budka 2004, 41, fig. 3). The material of this artefact is different from that of MS 040.1, but similar to the common coarse ware of pottery sherds usually found in these dwellings. This could point to the figurine also being of medieval date.

Animal clay figurines are regularly found in small numbers at Christian sites in Nubia. 13 Similar pieces were discovered at Abu Geili and Jebel Moya; these do not represent camels but animals like horses and cattle with prominent humps on their backs (Crawford & Addison 1951, pl. LV, A). 14 In general, these simple, handmade clay figurines are supposed to be children's toys (Addison 1949, 147f.). It is obvious, that they do not resemble votive objects nor served any cult purpose (Budka 2004, 42). Like the hundreds of rock drawings depicting camels, the figurines discovered by H.U.N.E. in 2004 illustrate the close relationship between the people that were living in the structures connected with the objects and the depicted animals (cf. Evans-Pritchard 1937, 238 and Klute 2002, 110).

#### Rock art

In close proximity to the dwelling place MS 040, along the modern (and also ancient?) trail, some rock drawings of camels were discovered. They consist of different types, forms and sizes and are sometimes arranged in groups. In total, 39 sites of concentrations of rock art with over 200 drawings were recorded on the mainland in 2004. Five main groups of motifs can be defined<sup>15</sup>: symbols (crosses and various other forms), animals (bovines, camels, equids, caprids, canids etc.), animals with riders



Fig. 8. Rock drawings of longhorn cattle (KN 028)

(mostly camels and equids), animals with drovers (mostly camels), and humans (hunting and fighting scene). <sup>16</sup> All of these motif types, except the symbols, are attested both in outline and in solid drawing. One of the more complex and rare scenes documented as site KN027a depicts a man riding on a camel who is hunting an ostrich. This hunting scene finds a close parallel in a rock drawing at Wadi Diib in the area of the Red Sea Hills recently surveyed by Pluskota (Pluskota 2003, 188, fig. 7). <sup>17</sup>

Rock art provides considerable difficulties in dating and in many cases can rarely be attributed to a specific period with certainty — with the exception of certain signs, such as Christian crosses which should belong to the epoch between the 7th and 15th centuries (Welsby 2003, 113). We found a single dated inscription — a subrecent Arabic graffito which reads Ahmed Mohamed, 21/4/98 (site MS 002). Despite all difficulties in dating, some depictions of certain animals probably represent the oldest art - like the long-horned cattle (Fig. 8; cf. Mohammed-Ali 1982, 211f., figs. 32 and 33) and the giraffe (Welsby 2003, 113). The predominant motif types of the rock art in H.U.N.E.'s concession on the left bank of the river are clearly camels with and without riders or drovers. According to Welsby (2003, 113) these depictions "may date to the medieval period or equally well to the post-medieval up until the recent past."

<sup>&</sup>lt;sup>13</sup> Since none of these figurines is published yet, I depend in this matter on oral information kindly provided by colleagues. Some were found at Dongola — for this information I am indebted to Stefan Jakobielski. As Pawel Wolf told me, other missions also working at the Fourth Cataract have discovered similar pieces.

<sup>&</sup>lt;sup>14</sup> I would like to thank Angelika Lohwasser for pointing out this parallel to me.

<sup>&</sup>lt;sup>15</sup> Cf. the motif types classified by Welsby 2003, 111: vegetation, symbols, animals, humans, animals with riders.

<sup>&</sup>lt;sup>16</sup> In addition, on the islands boats and a sketch of a church were found by the team of Cl. Näser.

<sup>&</sup>lt;sup>17</sup> In the case of the figure recorded by Pluskota the ridden animal resembles an equid rather than a camel — note especially the neck, head and the long tail.

#### Various stone structures

Stone structures (e.g. shelters) were frequently found next to and associated with rock art (e.g. KN 014, KN 029).18 In this context one has to mention another type of site, peculiar stone rubble walls or lines, made of rough dry-stone (e.g. MS 04, MS 035). These structures are sometimes connected with the shelters discussed above, or at least situated in their neighbourhood. The rubble walls in most cases either follow the ridges of mountains or block the ways to ancient dried out water-channels. Often the man-made structures are situated between large stone boulders and form a sort of connection between them. The purpose of these wall features is not evident and it may very well be that they represent several distinctive types of installations that serve more than one purpose. In some cases they could be installations connected with water-harvesting systems. Edwards and Osman (2000, 61, fig. 4) used a similar explanation for analysing rubble walls along the edge of the Wadi Farjar at the Third Cataract. 19 As for the Fourth Cataract, the current working hypothesis is based on information provided by local villagers. The walls were apparently constructed in antiquity<sup>20</sup> to keep camels off the cultivated land and away from the wadis that are used for agriculture. As a rule, camels are held free-ranging in a semi-wild state and are not constrained. Although they cover long distances, they prefer familiar tracks and always return to their 'home-wells' (Brewer & Redford & Redford 1994, 102). In view of this behaviour these possible herding walls at the Fourth Cataract would make sense. In this respect the following observation by Robinson (1936, 55) is of interest: "In Roman towns or at Roman posts the animals [= camels] were not quartered within the walls. Many of these animal lines can be seen in the Eastern desert now". Unfortunately he doesn't describe these "animal lines" in detail. Whereas this analysis seems reasonable for those structures built on a more or less flat surface and blocking the way to the cultivated areas, it is probably not the best explanation for those rubble lines or walls along the ridges of hills.<sup>21</sup>

#### Conclusions

The main types of site and feature discovered thus far are cemeteries (primarily tumuli and box graves, some isolated tombs), settlements and also occupation areas without apparent structural remains, huts and shelters, enclosures and walls, dams and possibly herding constructions as well as hundreds of rock drawings. Some preliminary remarks on the distribution of rock art in H.U.N.E.'s area are possible after the first reconnaissance. It is interesting to note that concentrations of rock drawings depicting camels, which are the dominating motifs, are most common along modern trails and paths.<sup>22</sup> Boulders overlooking the river are almost totally lacking rock art and scarcely ever exhibit camels.23 This very likely implies a connection between the role of the camel as a transport animal and the locations of frequently used traffic routes. These routes seem to have a long tradition in the region due to the natural landscape.

One of the most interesting results so far is evidence for long term cultural continuity including repeated re-use of many sites, especially of cemeteries. This includes a transformation of the original meaning of ancient structures and a diverse modern use as well as cult activities. Ethno-archaeological research might be very rewarding in this aspect and is therefore planned for the future.

In summation, the ancient civilizations in the area between Jebel Musa and Salamat left plenty of funerary architecture and, consequently, the region resembles "one continuous cemetery" (Jackson 1926, 1). Since, however, tombs are necessarily connected with

 $<sup>^{18}\,</sup>$  This was already observed by other missions in the area; cf. Welsby 2003, 20 (site 3-O-2).

<sup>&</sup>lt;sup>19</sup> One group of these walls was associated with Kerma pottery.

The term 'antiquity' in this context could mean various time periods up to the last century.

I want to thank Mahmoud el-Tayeb, who kindly told me after a presentation of an earlier version of this paper in Warsaw, May 2004, that in the Polish concession area these rubble walls are believed to prevent wild rabbits to come to the *wadis*. In some cases this explanation seems to make more sense than the idea with the camels — especially on the ridges of mountains in the hinterland, where no camels are likely to run around.

This fits with the observations by Welsby 2003, 111.

The few concentrations of rock art discovered on boulders near the river (e.g. site KN 012) comprise motif types of probably early date like giraffes and canids.

people and dwelling places, it is reasonable to contemplate whether similar particularities existed in the concept of living and architecture as those which are now evident from the cemeteries of the region. Because there are still many questions in this respect, future research will focus on the occupation pattern and settlement of the area.

# Outline of works planned for the next season

For the first half of the coming season, an eight week period of fieldwork in February and March 2005, H.U.N.E.'s activities on the mainland will continue to be limited to surface studies, fieldwalking and mapping. In a later phase of the next campaign, trial excavations and rescue operations at the most promising spots will be conducted.

Landscape archaeology — the study of the relationships between people and their natural environment, including the material culture, the buildings, settlements, cemeteries and the routes of transport and traffic — will be carried out. One of the focal points of interest is the changing role and importance of the camel through the centuries, as it is reflected by the archaeological remains, especially in connection with rock art, caravan routes and human constructions such as rubble walls and shelters and the distribution of settlements in general.

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