Return to the Fourth Nile Cataract: Fieldwork on Sherari Island, 2016

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Introduction

In April 2008, the last spillway gate of the Merowe Dam was closed and the Nile began to rise behind the barrage at the downstream end of the Fourth Nile Cataract. In March 2009, the dam was officially inaugurated. Its reservoir lake flooded some 180km of the river valley up to the downstream tip of Mograt Island. In anticipation of the flooding, this area had seen intensive archaeological exploration from the mid-1990s up to the mid-2000s. Twelve international and Sudanese missions, united under the organisational umbrella of the Merowe Dam Archaeological Salvage Project (MDASP), combined their efforts to document as much of the hitherto almost unknown archaeology of the region as possible. Large-scale surveys were conducted and knowledge off the rich occupational history of the area from the Early Stone Age up to the recent past expanded rapidly.[1] However, the overall project ended prematurely due to social unrest and protests by the Manasir, the ethnic group which was most affected by the imminent resettlement. Representatives of the Manasir halted archaeological work from 2006 onwards and after spring 2007 the majority of the salvage activities were terminated (Näser and Kleinitz 2012, 278-280).[2] While many Manasir moved into the resettlement areas, others opted to stay by the newly-formed lake (Hänsch 2012).

Both the resistance of the Manasir and the results of the archaeological salvage work drew attention to the Fourth Nile Cataract in the mid-2000s, but as is often the case this attention soon died away. As no monitoring of the dam's impact on the archaeological heritage had been put in place, nothing was known about the fate of the sites after the barrage had gone into operation in 2008. In February 2016, the lead author of this contribution undertook a study trip to the region and subsequently launched a project to resume archaeological work in the heartland of the Fourth Cataract. This article outlines the results of the first four-week field season, undertaken in September and October 2016. The main objectives of this first season of the newly founded Archaeological Mission to the Fourth Nile Cataract were:

– to initiate salvage excavations at two highly endangered Kerma burial sites,

– to rebuild the communication with the local residents and start a community project,

– to launch a study which investigates the impact which the shifting activity zones at the banks of the reservoir have on the surviving archaeological sites and to monitor their condition based on data collected during the MDASP surveys in the years 2004 to 2007.

The study area

Situated some 80km upstream of the Merowe Dam, the study area had formed the heart of the Fourth Cataract before the flooding (Plate 1). It was characterised by numerous large and small islands which obstructed the course of the Nile and widened the river bed. The lead author had conducted salvage archaeological work on three of these islands – Us, Sur and Sherari – with the Humboldt University Nubian Expedition from 2004 to 2007 (Näser 2005; 2007; 2008; 2012). Before the flooding, it had been announced that the reservoir was to rise to a height of 300m asl (cf. Failer *et al.* 2006, 73). This would have left large tracts of these islands above water. Indeed, large parts of their interiors have survived (Figure 1). However, with all the lowland, i.e. the former agricultural

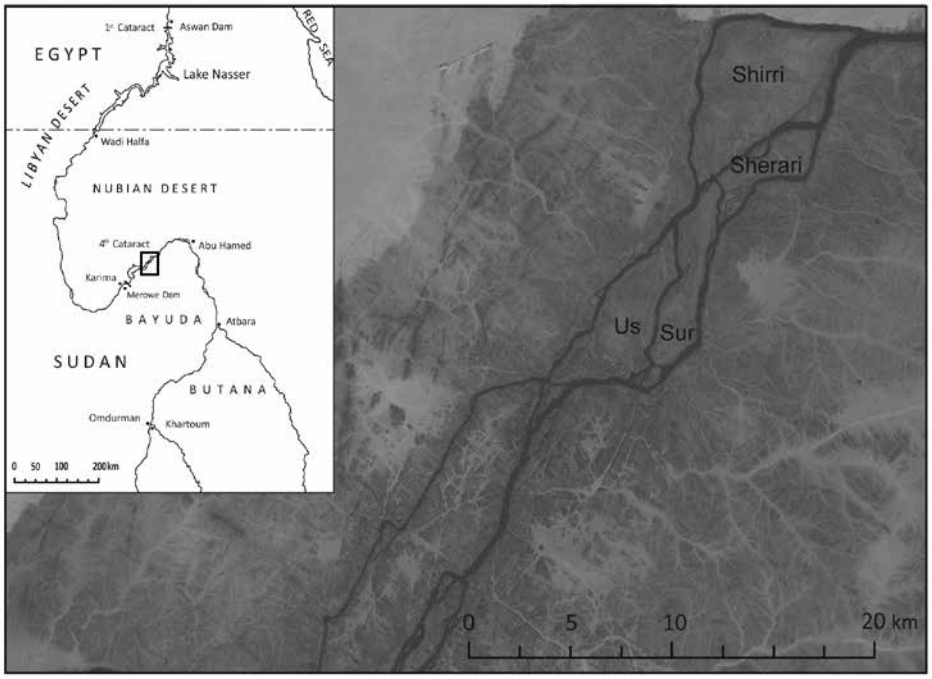

Plate 1. The islands of Shirri, Sherari, Sur and Us in the concession area of the Archaeological Mission to the Fourth Nile Cataract before the flooding (source: ESDI, graphic adaptation: J. Weschenfelder).

[1] See e.g. the edited volumes of the annual MDASP conferences: Paner and Jakobielski 2005; Näser and Lange 2007; Gratien 2008; Paner *et al.* 2010; Wotzka 2012.

[2] Only in the most downstream and upstream parts of the flood area fieldwork continued at a reduced scale until spring 2009 (Emberling *et al.* 2014; Żurawski 2010).

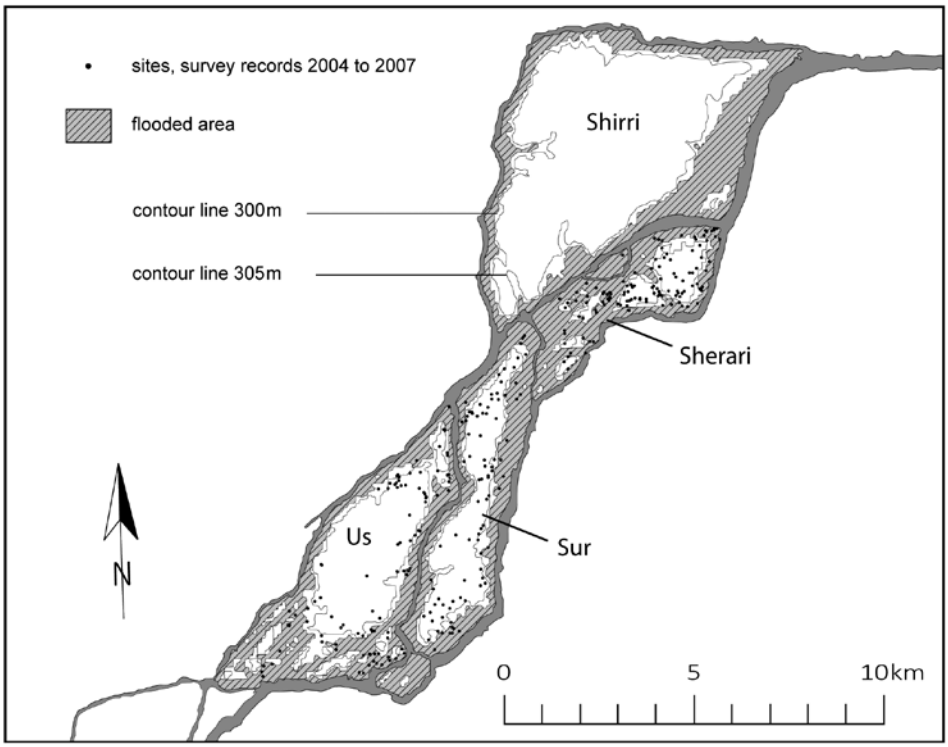

Figure 1. The islands of Shirri, Sherari, Sur and Us with the sites recorded between 2004 and 2007 and the flooded area indicated (cartography and graphic adaptation: J. Weschenfelder).

zone and the adjacent stretches of desert, being lost, the local topography was completely altered. For example Sherari is now divided into two islands for part of the year, when the Khor el-Hadima is flooded. Translated into archaeological terms, the drowning of the agricultural land and the desert lowland means that all sites which were situated in these zones have been lost.[3] Sites of the Meroitic to Islamic periods were affected most.

While this loss of sites had been anticipated, another effect had not been foreseen. Official planning had envisaged the relocation of all inhabitants into resettlement schemes far away from their former homeland. However, many residents had refused this option in the mid-2000s. After considerable protests and the failure to reach a timely agreement, they had simply stayed put and were virtually flooded out of their homes in 2008 when the gates of the dam were closed (Hänsch 2012). Since then, many people have decided to build a new life along the shores of the reservoir. They constructed new villages on higher ground and cleared the desert to create new fields. These activities are concentrated in a 200m-strip along the shores of the new lake above the highest water level – which, in archaeological terms, is the heart of the Kerma funerary landscape. Thus, while this zone has escaped the drowning, its sites are now acutely endangered by the infrastructural measures connected with the new settlement activities. Both this, and the hope to learn more about how the communities by the lake had fared, were decisive in the decision to return to the region and take up the work from where it had prematurely stopped nine years ago.

Excavation at Kerma burial sites

During the initial surveys between 2004 and 2007, more than 50 Kerma burial sites were recorded on the islands of Us, Sur and Sherari (Näser 2005; 2007; 2008; 2012). Like a string of pearls, many of them line the edges of the island plateaus where they are visible from afar. Others are situated in the island interiors. As far as surface finds permit a statement, most sites feature a *Kerma Moyen* component. Material related to earlier and later phases of the Kerma period is rare. A notable exception to this are two cemeteries on Sherari which were both first recorded in 2005. SHE084 featured pottery that was tentatively ascribed to the *Pré-Kerma* or *Kerma Ancien* periods (*c.* 3000 to 2000 BC; cf. Näser 2007, 122, pl. 4). SHE098 produced fragments of *Kerma Classique* beakers (Näser 2007, 122-124, pls 5-7). Therefore, both sites had been marked for further exploration which, however, was never undertaken due to the premature termination of salvage work in 2007.

Formerly situated outside the zone of habitation and agricultural use, both sites are now acutely endangered by the creation of new fields and agricultural installations, like threshing floors (Plate 2). In addition, SHE098 is encroached upon by the new houses of Atoya. Both sites were, therefore, of utmost interest for renewed investigations.

SHE084

In the pre-flooding topography, SHE084 was situated on an elevation overlooking Khor el-Hadima which ran across Sherari and may at least periodically have bisected the island as a water-bearing channel in ancient times. In 2005, eight stone ring structures had been recorded (Näser 2007, 122). The north-western part of the site was transformed into a threshing floor in the meantime (Figure 2, Plate 2), obscuring Feature 08 located there. Some of the features were apparently recent (01, 03, 04), while others were ancient (02, 02A, 05-07; Plate 3). Four features were chosen for investigation (Figure 2: 01, 02 with 02A, 04, 05).

[3] This and the following observations relate to the outlined study area in the centre of the Fourth Cataract. Obviously, the situation is different in the more low-lying downstream parts of the Fourth Cataract as well as upriver. All islands downriver from Boni Island have been completely drowned. Upstream of Shirri, the riverbed was much narrower and comprised fewer islands. While the relationship between the lake level, the local topography and the archaeological landscape is similar on the main riverbanks, the current report exclusively relates to the islands as they form the focus of the study presented here.

Plate 2. SHE084 on the hill top, seen from the east, overlooking Khor el-Hadima visible in the background (photo: C. Näser).

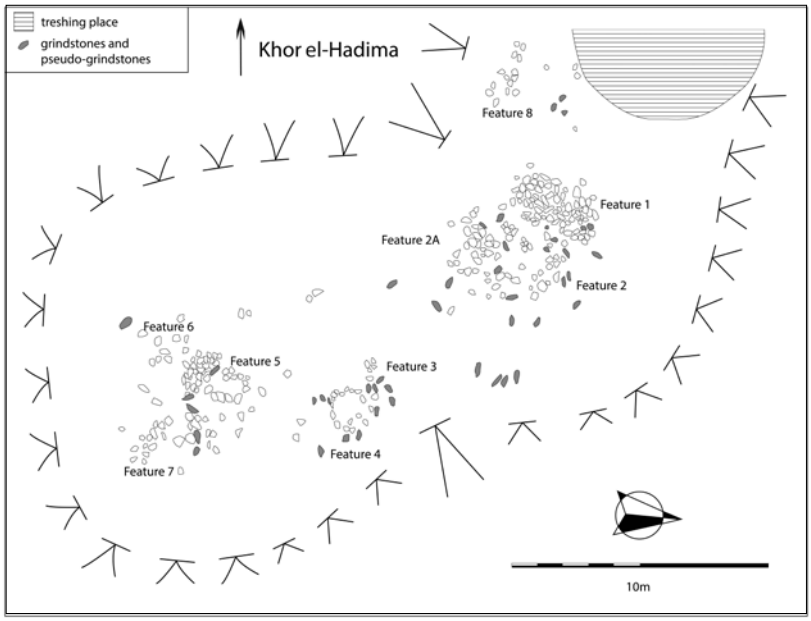

Figure 2. Plan of site SHE084 (drawing: L. Janotte; graphic adaptation: J. Weschenfelder).

Excavations revealed that the site had experienced severe disturbance in antiquity which was not recognisable from its present surface condition. Human skeletal remains of heavily fragmented and fragile condition were recovered from Feature 02 only.[4] Remains of two immature individuals (SK01, SK03) came from a pit underneath the stone ring superstructure. SK03 was only poorly preserved, thus age of death could only be estimated in a rough range from 10 to 17 years, even though the size of the bones suggest an age earlier in this range. SK01 was a slightly older individual of 11 to 17 years. In a pit north west of the superstructure, fragments of the skull of the same individual were found, alongside the partially preserved skeleton of an adult (SK02), a probable female of 45 to 60 years.[5] Two pits associated with Features 04 and 05 did not produce any burials, but contained habitational material. An assemblage of grindstones found in the pit underneath Feature 04 was especially remarkable (Plate 4). Its significance still escapes understanding. However, it is to be noted that the superstructures at SHE084 also incorporated many grindstones and small long-oval stones which were dubbed 'pseudo-grindstones' (Figure 2, Plate 3). These have roughly the same shape as grindstones and were deliberately brought to the site, but do not show any traces of use. In fact, they may represent miniature stelae associated with the original tomb superstructures. This interpretation needs further research and, if possible, the identification of comparative material in the Fourth Cataract and elsewhere.

Plate 3. Feature 02 (photo: J. Weschenfelder).

Pottery from the site surface and the excavations was in a very fragmented condition, but displayed a wide range of decorative elements spanning the 3rd millennium BC i.e. the

[4] The human remains were recorded and analysed according to US-American and British standards (Buikstra and Ubelaker 1994; Brickley and McKinley 2004). For pathological diagnosis, various standard publications were used (Ortner 2003; Mann and Hunt 2012; Walker 2012).
[5] The skeletal remains displayed the following pathologies: possible osteoporosis (SK02; cf. Ortner 2003, 562), metabolic condition (SK01), lesions that might be connected to thalassemia major (SK03; Mann and Hunt 2012, 213-224; Ortner 2003, 264-365).

Plate 4. Pit underneath Feature 04, which was stratigraphically not related to the stone ring on the surface (photo: L. Janotte).

Pré-Kerma and/or *Kerma Ancien* periods (Plate 5; see also Näser 2007, 122, pl. 4). The overall nature of the site suggests that it had been a burial ground which was reused for other activities not too long after its primary occupation. The second phase of use led to a thorough reorganisation of cultural material related to its first occupation phase.

Plate 5. Pottery from SHE084 (photo: J. Weschenfelder).

SHE098

SHE098 was the largest Kerma cemetery recorded during the initial phase of fieldwork on Us, Sur and Sherari (Näser 2007, 122-124, pls 5-7). It is located in a somewhat atypical position, stretching over the slope of the island plateau towards the lowland on the east bank of Sherari. Surface finds indicated that the site had been used in the *Kerma Moyen* and *Classique* periods. It was estimated to comprise a minimum of 150 graves. The identification of individual structures was hindered by the fact that the occupation is very dense, with many superstructures abutting or partly superimposed on each other. In addition, many of them are in a state of substantial disarrangement. A special feature, concentrated in the south-western part of the site, is rectangular stone linings which were constructed of stone slabs set vertically against the side of the grave pit. Their upper edges are visible on the surface (Plate 6). The exposure of these installations indicates that the site had suffered considerable erosion, not least due to its hillside location.

Plate 6. SHE098, Feature 01 before excavation (photo: L. Janotte).

Three of these rectangular features (F01, 02, 03) were excavated. Despite all three having been plundered – a condition which in each case was evidenced by a distinct robber cut – they still contained human remains and grave goods partly *in situ* (Plate 7). The burials had been placed in

Plate 7. Burial in Feature 02, SHE 098 (photo: J. Weschenfelder).

a contracted position with differing orientations. The most complete individual (F03.SK01) is a probable female of approximately 20 to 30 years. A further individual (F02.SK01; Plate 7) is of indetermined sex and 36 to 45 years old. The third individual (F01.SK01) is also an adult, but neither sex nor age could be identified. All three skeletons show signs of joint disease. The grave goods comprise several ceramic vessels. One of them, from Feature 02 (Plate 7, under the elbow of the individual), is a small Egyptian marl jar which can be dated to the early 18th Dynasty at the earliest (Plate 8, Figure 3). This vessel was accompanied by two red-slipped, black-topped bowls, one of which displays distinct yellow lines around the body (Plate 8, Figure 3). This characteristic has been noted before and its first appearance was assigned to the late *Kerma Classique* period (Sjöström 2012). The re-

Plate 8. Pottery from Feature 02, SHE098 (photo: J. Weschenfelder).

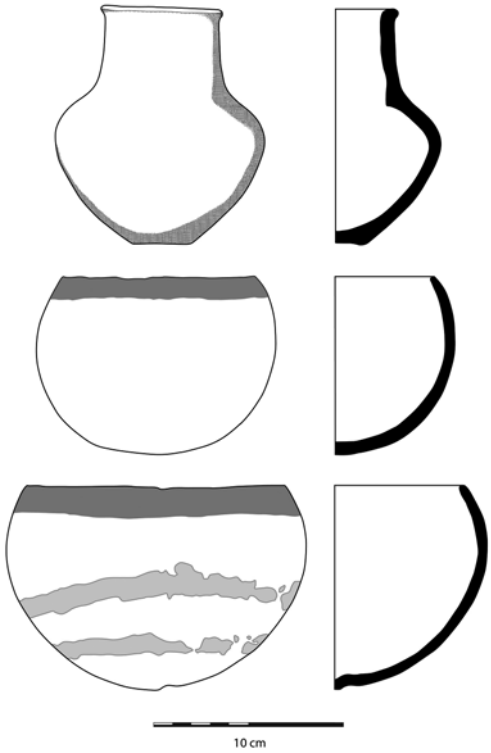

Figure 3. Pottery from Feature 02, SHE098, scale 1:4 (drawing: J. Weschenfelder).

peated association of yellow-line bowls with New Kingdom pottery (Welsby Sjöström 2012; cf. el-Tayeb and Kołosowska 2005, 61, fig. 16; Vincentelli 2006, 23, 27, fig. 2.12: 71, 72) indicates that they were most prominent at a somewhat later date. In sum, Feature 02 represents a distinct, and relatively late, stage in the development of Bronze Age burial customs in the Fourth Cataract region. *Kerma Moyen* graves in the area often feature circular grave pits with a lining of 'widely spaced rings of stones near the edge of the pit' (Emberling *et al.* 2014, 331), while *Kerma Classique* pits 'were rectangular and lined with more closely spaced stones' (Emberling *et al.* 2014, 331).[6] In SHE098, the superstructures of the graves in question have largely been lost. Only Feature 03 preserves the remains of a tumulus with a diameter of 1.9m, consisting of an outer ring of large stones and a filling of small to medium-sized stones.

The second assemblage chosen for test excavations at SHE098 comprised three features (F04, 05, 06) in a large group of graves in the north-western part of the cemetery. These features consisted of circular stone rings of medium-sized to large stones; their interiors were partly disturbed by ancient robber-cuts. The associated substructures were subcircular pits dug into the bedrock (Plate 9). The burials in

Plate 9. Burial in Feature 05, SHE 098 (photo: K. Kossatz).

Features 05 and 06 were disturbed only lightly, while Feature 04 had been robbed more thoroughly. Feature 05 contained an approximately 10-year-old juvenile, buried on the right side in a flexed position with the head to the north (Plate 9). The skeletal remains showed lesions that can be attributed to tuberculosis (cf. Walker 2012, 69). The incomplete and poorly preserved remains of Feature 04 were from an individual of similar age. The bones show indications of scurvy (cf. Walker 2012, 204-207). The burial had been placed in a flexed position on the left-hand side with the head to the north east. Few very well preserved bones of a second individual, a young adult, were found in the same pit. Feature 06 contained the very fragile bones of a 3-4-year-old individual. In each case, the bodies had been surrounded and covered by medium-sized stones, a feature common in *Kerma Moyen* burials in the Fourth Cataract (see previous paragraph).[7] Although all three graves had been robbed, numerous beads and several fragmented ceramic vessels were recovered from inside and outside the grave pits, in the robber cut and on the surface. The latter include a fragmentary bottle of marl clay, an almost complete *Kerma Classique* beaker and further black-topped bowls and pots (Figure 4).

[6] For further mentions of stone lining see Kołosowska *et al.* 2003, 23-24; Welsby 2005, 3; Wolf and Nowotnick 2005, 24-25, col. pl. 14; Kołosowska and el-Tayeb 2006-2007, passim; Petrick 2012, 119.

[7] It should be noted, however, that this element continued into the later New Kingdom period on Mograt Island further upstream; Weschenfelder and Rees 2014, 149-150; Weschenfelder 2015, 153-156. Thus, its relevance for dating has to be separately assessed for each region.

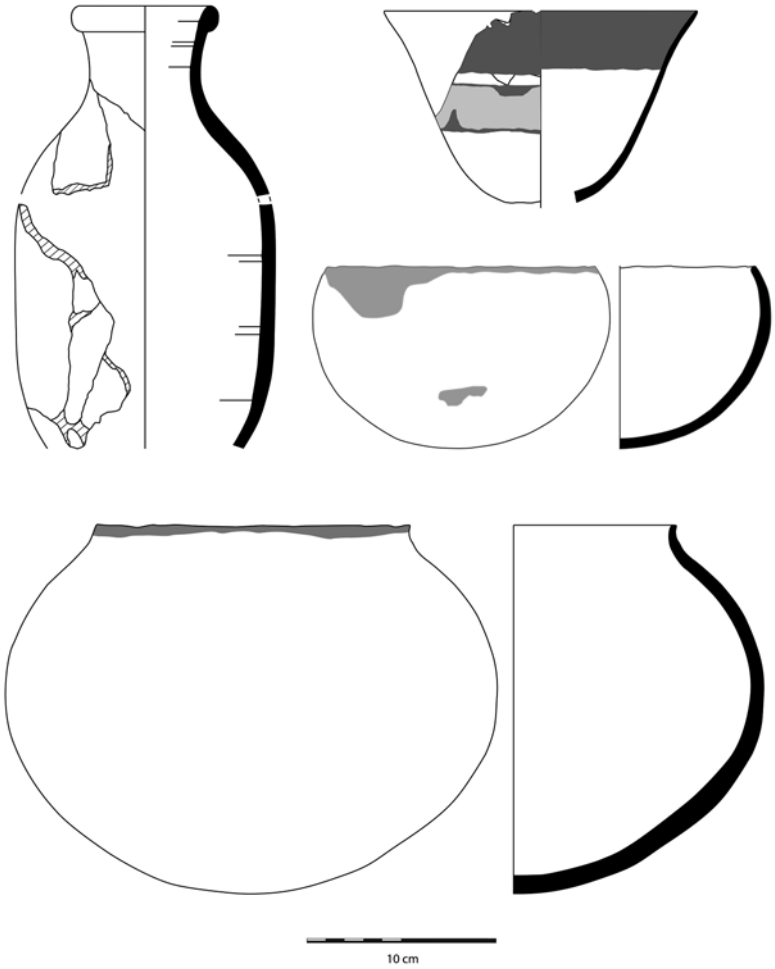

Figure 4. Pottery from Features 04 to 06, SHE098, scale 1:4 (drawing: J. Weschenfelder, K. Kossatz).

In sum, the two assemblages investigated at SHE098 represent two succeeding phases in the use of the site which extend from *Kerma Classique* well into the New Kingdom.[8] The finds indicate that even the relatively remote heart of the Fourth Cataract at that time was part of a superregional exchange network with imports from Egypt reaching the area and finding their way into local burial practices. The interesting results certainly qualify SHE098 for further investigation.

Community project

The community project started in the villages of Atoya and Shamuma, next to sites SHE098 and SHE084 (Figure 5). Interviews with residents were conducted to explore how people organise their lives by the lake and cope with the changed conditions after the partial flooding of their homeland. Atoya had already been the focus of a social-geographical survey in 2005 when a detailed study of its settlement structure was conducted (Haberlah and von dem Bussche 2005). At that time, the village had been divided into a deserted part, i.e. Old Atoya, and a then inhabited part, i.e. New Atoya. Those residents who decided to stay on after the flooding built new houses barely 200m upslope of New Atoya. Our return to the village allowed us to follow up developments in a long-term perspective and create significant narrative links with the pre-flood period.

Interviews centred on the time immediately after the flooding, strategies of coping, the development of new economic bases and routines of life today. All our interview partners described the months after the flooding as traumatic. People moved upwards up to four times before the lake had reached its maximum level. All families lost part of their possessions and some if not most of their livestock, but the interviewees were also very keen to talk about how they had started to build a new existence, raising new villages and cultivating fields by the lake. A new infrastructure, including schools, mosques and tracks connecting the new hamlets, was established. A fishing industry which mainly caters for the markets in Khartoum developed. Farmers experiment with numerous crops, including roselle, chilli peppers and cotton. The first new date palms – formerly the most important cash crop in Dar el-Manasir, the Land of the Manasir (Haberlah 2007, 160-164) – were planted. Due to the exodus of part of the population, land scarcity which was a strong socioeconomic factor prior to the flooding was significantly reduced. Alternatives to the life by the lake, i.e. moving to the resettlement area, to a large city or even abroad, were discussed as well. The interview partners related that about 50% of the former inhabitants of Sherari had chosen to leave. Villages and families were divided in their decisions. In the beginning, relations with those who had moved to the resettlement area of Mukabrab

Figure 5. Map of Sherari by Abdelqudus Hamuri who worked for the project as boatman. A topographic feature highlighted in the drawing is Khor el-Hadima, the seasonally flooded valley which splits the island into two for part of the year. Site SHE084 is indicated next to the rectangular football field.

[8] For a similarly extended period of use see site MOG034 on Mograt Island; Weschenfelder and Rees 2014; Weschenfelder 2015.

were strained, but contacts normalised over the last years. All our interview partners assessed their decision to stay on Sherari positively. They were proud of how far they had progressed with no or very little outside assistance. As their most important need they identified the construction of a bridge to cross Khor el-Hadima (Figure 5) which is flooded when the lake is high, making it difficult for the children living in the villages upriver to reach the school on the downstream part of the island.

A visit to the primary school on Sherari was undertaken to involve teachers and children in the activities of the project. Team members taught a class, introducing themselves and their work on Sherari and vice versa learning about how the children perceived their island, past and present (Plate 10). Needs and interests of pupils and teachers with regard to teaching materials about the region's history were discussed and it was arranged that, if future funding is available, a book in Arabic will be produced in cooperation with the residents of Sherari and the archaeological team to close the identified gaps.

One particular aspect of the community project was to start investigations into how the construction of the dam

Plate 10. Drawing of Sherari by Ihsan el-Nasir, a year five girl at the island's primary school. Note the comment "We die standing up!" at the left margin of the picture which seems to be a late reflection of the tensions surrounding the (partly refused) resettlement of the local residents nine years ago.

and the ensuing events had impacted on the life-worlds of women. In contrast to many other regions in riverine Sudan, women at the Fourth Cataract had been working in the fields – cultivating the *jarf* land, to which they could also own property rights – and tending small stock prior to the flooding (Weschenfelder 2012). It was expected that changing socioeconomic conditions after the flooding would also change the working routines of women, their access to an independent income and their role in the community (Näser and Kleinitz 2012, 292). Indeed, the cultivation of the *jarf* land seems to have largely passed into the hands of men. It was the first arable land available after the flooding and is now primarily used to grow sorghum for family consumption. Thus, the attention to this land category and its proportional value have risen considerably. When the *jarf* land is flooded and/or labour resources are available, farmers busy themselves with developing new, often terraced, fields in the higher zones (Plate 11). This land is watered by diesel pumps, *babur*, but it is still called *saqiya* on analogy to pre-flood conditions (cf.

Plate 11. People of Shamuma creating new fields at the edge of the desert plateau (photo: J. Weschenfelder).

Haberlah 2007, 160). Women take part in working the *saqiya* fields, sowing (Plate 11) and processing the produce, mainly different kinds of beans at the time when we were there. The systematisation of these observations and the monitoring of longer-term strategies for reorganising agricultural production will form topics of future research. One concrete result of our engagement was that our discussions encouraged the local community to agree that a young woman could come to work with us as a labourer in the excavation. This allowed her to generate an additional income for her all-female family which lives in reduced circumstances due to the absence of a male provider.

Impact study

The third aim of resuming work at the Fourth Cataract was to initiate a systematic assessment and monitoring of the impacts which the Merowe Dam has on the cultural and natural resources of the region. Alongside collecting basic data on the lake level and its fluctuations, we started to investigate how the re-organisation of life by the lake affects the archaeological sites. Data collected in the community project indicate that after an initial period of uncertainty, living conditions have

stabilised and new daily routines have developed. Agricultural production is now focussed on the *jarf* land, i.e. the stretches near the shores of the lake which are inundated in autumn and winter when the reservoir is filling up. In spring, when the water is low, these stretches are exposed and crops, primarily sorghum, are sown and grown without additional watering.

As the lake was already high and still rising fast during our stay in early autumn, the zone of the *jarf* land could not be investigated systematically. An isolated observation was made at site US022, where the remains of a Medieval church had been excavated in 2005 (Näser *et al.* 2007). Formerly situated on a promontory near the eastern shore of Us, it is now located on a tiny island, split from the main part of Us and seasonally flooded. A site visit showed that the remains of the built structures of both mud brick and red brick had completely vanished. Only some large stone settings were still in place. Interestingly, also former depressions – in this case the outlines of a grave which had been excavated outside the church – were still visible. Local residents reported that also some Post-Meroitic cemeteries in the inner parts of *wadi* courses were still seasonally exposed. It will be interesting to check on these sites and study how the water impacts on them. One immediate consequence of the damming is heavy efflorescence or sintered layers of a light brown silty material and whitish salts which cover wide stretches of the shores, up to several metres above the current water level. Where they occur, they make the recognition of archaeological sites and related cultural material impossible. The nature of these deposits and their potential effects on the archaeological sites as well as on the people living by the lake will form a subject of further study.

The main focus of the current season was on the present habitation zone and the higher stretches of *saqiya* land which are made arable and cultivated when the *jarf* land is flooded and labour resources otherwise invested there are available. Activities in this zone were documented in a case study at Shamuma, the village next to site SHE084. There, a considerable expansion of agricultural land was recorded. Large tracts of what formerly was a rock-strewn desert were cleared, terraced, enhanced with mud brought up from the Nile and subsequently cultivated (Plate 11). It was also noted that agriculture in this zone is regularly accompanied by other activities, such as the processing of the harvest, herding of small stock and the production of mud bricks. While this massive transformation of the landscape is an impressive testimony to the will and the empowerment of the local people to build a new existence, it is an unhappy coincidence that it simultaneously endangers a core part of the surviving archaeological record. The zone of the new *saqiya* land coincides with the Kerma cemetery belt which spreads on the spurs and edges of the desert plateau; e.g. the view reproduced in Plate 11 was taken from the edge of site SHE084. In fact, the burial grounds may be favoured spots for new constructions as they have already in part been cleared of stones in antiquity, when the surface material was collected to build the tomb superstructures. It is much easier to remove stone cairns than to clear a desert surface in its natural state. Preservation of these sites thus constitutes a major challenge. Previous work has shown that archaeological heritage protection and management only stand a chance when they are integrated into local dynamics, perspectives and needs in a meaningful and sustainable way (Näser and Kleinitz 2012). Consequently, a first step in tackling this issue was to collect data regarding the awareness of local residents of these sites and the fact that their houses, fields and related activities encroach on them. It transpired that members of the local community usually are cognisant of burial sites with well-defined superstructures, like SHE084. In contrast, SHE098 had not been identified as an archaeological site previous to our work there. The information collected in the course of this season will allow us to generate maps marking endangered sites throughout the islands of the concession area, using pre-flood archaeological survey data and recent satellite imagery. Information drawn from these maps can then form the basis for developing a project raising public awareness and triggering the discussion about the preservation of these sites.

As it transpired from the initial MDASP salvage campaign at the Fourth Cataract and from numerous other projects, drawing attention to archaeological sites is a two-edged sword. It may well lead to an increase in looting and a deliberate destruction of sites. In order to assess the amount of plundering from which particularly Kerma and Post-Meroitic cemeteries in the study area have suffered, selected localities on Sherari and Us were re-visited. Generally, sites on Sherari were in a similar condition as when first recorded in 2005, without traces of recent plundering. In contrast, several sites on Us (e.g. US032, US098) showed heavy and very recent disturbances. Interestingly, cemeteries on Us – which has a remarkable funerary landscape – had already witnessed much stronger looting than sites on Sur and Sherari during the MDSAP campaign a decade ago. As the plundering of archaeological sites is a delicate, multi-dimensional issue, this observation requires careful investigation in the future.

In sum, the first season of the Archaeological Mission to the Fourth Nile Cataract showed the potential as well as the need of the region for a continued archaeological commitment. Beyond that, with the construction of more dams along the Middle Nile pending, it is vital to produce data which will help us to evaluate both the effectiveness of preceding salvage campaigns and the medium- and long-term effects which these dams will have on living communities and cultural heritage.

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Bibliography

Anderson, J. R. and D. A. Welsby (eds) 2014. *The Fourth Cataract and Beyond. Proceedings of the 12th International Conference for Nubian Studies*. British Museum Publications on Egypt and Sudan 1. Leuven – Paris - Walpole, MA.

Brickley, M. and J. I. McKinley (eds) 2004. *Guidelines to the Standards for Recording Human Remains*. Institute of Field Archaeologists Paper 7. Southampton and Reading.

Buikstra, J. E. and D. H. Ubelaker 1994. *Standards for Data Collection from Human Skeletal Remains. Proceedings of a Seminar at The Field Museum of Natural History*. Arkansas Archaeological Survey Research Series 44. Fayetteville, Ark.

El-Tayeb, M. and E. Kołosowska 2005. 'Burial Traditions on the Right Bank of the Nile in the Fourth Cataract Region', in Paner and Jakobielski (eds), 51-74.

Emberling, G., B. B. Williams, M. Ingvoldstad and T. R. James 2014. 'Peripheral Vision: Identity at the Margins of the Early Kingdom of Kush', in Anderson and Welsby (eds), 329-336.

Failer, E., M. Mutaz and A. El Tayeb 2006. 'Merowe: The largest water resources project under construction in Africa', *Hydropower & Dams* 6, 68-73. Online at http://www.merowedam.gov.sd/downloads/merowe_int_journal_hyp_dams_farbe.pdf

Gratien, B. (ed.) 2008. *Actes de la 4e Conférence Internationale sur l'Archéologie de la 4e Cataracte du Nil, Villeneuve d'Ascq, 22-23 juin 2007*. Cahier de Recherches de l'Institut de Papyrologie et d'Égyptologie de Lille, Supplement 7. Lille.

Haberlah, D. 2007. 'Cultural Landscape of Dar al-Manasir', in Näser and Lange (eds), 159-178.

Haberlah, D. and J. von dem Bussche 2005. 'Das Dorf Atoyah auf der Insel Sherari. Wandel der Siedlungsstruktur im Dar al-Manasir', *Der antike Sudan. Mitteilungen der Sudanarchäologischen Gesellschaft zu Berlin* 16, 125-135.

Hänsch, V. 2012. 'Chronology of a Displacement: The Drowning of the Manâsîr People', in Kleinitz and Näser (eds), 179-228.

Kleinitz, C. and C. Näser (eds) 2012. *"Nihna nâs al-bahar – We are the people of the river." Ethnographic Research in the Fourth Nile Cataract Region, Sudan*. Meroitica 26. Wiesbaden.

Kołosowska, E., M. el-Tayeb and H. Paner 2003. 'Old Kush in the Fourth Cataract Region', *Sudan & Nubia* 7, 21-25.

Kołosowska, E. and M. el-Tayeb 2006-2007. 'Old Kush II Burials in the Fourth Cataract Region', in Gratien (ed.), 205-218.

Mann, R. W. and D. R. Hunt 2012. *Photographic Regional Atlas of Bone Disease. A Guide to Pathologic and Normal Variation in the Human Skeleton*. 3rd edition. Springfield, Illinois.

Näser, C. 2005. 'The Island Survey of the Humboldt University Nubian Expedition: Report of the Campaign 2004', in Paner and Jakobielski (eds), 75-88.

Näser, C. 2007. 'The Humboldt University Nubian Expedition 2005: Survey and Excavations on the Islands Sherari and Us', in Näser and Lange (eds), 118-133.

Näser, C. 2008. 'The Humboldt University Nubian Expedition 2007: Fieldwork on Us and Sur', in Gratien, (ed.), 73-83.

Näser, C. 2012. 'The Humboldt University Nubian Expedition 2006 to the Fourth Nile Cataract: Fieldwork in the Island Concession', in Wotzka (ed.), 257-269.

Näser, C., D. Billig and M. Lange 2007. 'The church US022.A at the Fourth Nile Cataract', in Näser and Lange (eds), 143-158.

Näser, C. and C. Kleinitz 2012. 'The Good, the Bad and the Ugly: A Case Study on the Politicisation of Archaeology and its Consequences from Northern Sudan', in Kleinitz and Näser (eds), 269-304.

Näser, C. and M. Lange (eds) 2007. *Proceedings of the Second International Conference on the Archaeology of the Fourth Nile Cataract. Berlin, August 4th – 6th, 2005*. Meroitica 23. Wiesbaden.

Ortner, D. J. 2003. *Identification of Pathological Conditions in the Human Skeletal Remains*. 2nd edition. London.

Paner, H. and S. Jakobielski (eds) 2005. *Proceedings of The Archaeology of the Fourth Nile Cataract. Gdańsk – Gniew, 23-25 July 2004*. Gdańsk Archaeological Museum African Reports 4. Gdańsk.

Paner, H., S. Jakobielski and J. R. Anderson (eds) 2010. *Proceedings of the International Conference "The Fourth Cataract Archaeological Salvage Project 1996–2009". Gdańsk, 2–4 July, 2009*. Gdańsk Archaeological Museum and Heritage Protection Fund African Reports 7. Gdańsk.

Petrick, B. 2012. 'The Cologne Fourth Cataract Project 2005 Field Season on Boni Island', in Wotzka (ed.), 117-128.

Sjöström, I. W. 2012. 'A Note on the Occurrence of Yellow-Line Kerma Style Pottery in the Fourth Cataract, with Special Reference to the Kerma Classique Cemetery at 4-L-100', in Wotzka (ed.), 103-106.

Vincentelli, I. 2006. *Hillat El-Arab. The Joint Sudanese-Italian Expedition in the Napatan Region, Sudan*. Sudan Archaeological Research Society Publication 15. BAR Int. Ser. 1570. Oxford.

Walker, D. 2012. *Disease in London, 1st-19th Centuries: An Illustrated Guide to Diagnosis*. London.

Welsby, D. A. 2005. 'Survey in the Vicinity of ed-Doma (AKSE), 2004–2005', *Sudan & Nubia* 9, 2-8.

Weschenfelder, J. 2015. 'Preliminary Report of the Second and Third Field Seasons at the Bronze Age Cemetery MOG034 on Mograt Island, Sudan', *Der antike Sudan. Mitteilungen der Sudanarchäologischen Gesellschaft zu Berlin* 26, 153-168.

Weschenfelder, J. and G. Rees 2014. 'Preliminary Report of the First Field Season of the Kerma Cemetery MOG034 on Mograt Island, Sudan', *Der antike Sudan. Mitteilungen der Sudanarchäologischen Gesellschaft zu Berlin* 25, 145-154.

Weschenfelder, P. 2012. 'Manâsir Women's Contributions to Economic and Social Life: A Case Study from Kirbekân in Dâr al-Manâsîr', in Kleinitz and Näser (eds), 75-87.

Wolf, P. and U. Nowtnick 2005. 'The Second Season of the SARS Anglo-German Expedition to the Fourth Cataract', *Sudan & Nubia* 9, 23-31.

Wotzka, H.-P. (ed.), *Proceedings of the Third International Conference on the Archaeology of the Fourth Nile Cataract, University of Cologne, 13–14 July 2006*. Africa Praehistorica 22. Cologne 2012.

Żurawski, B. 2010. 'Facing the Deluge. A Preliminary Report on the Salvage Operations Conducted in the Manatiq of Umm Saffaya, El-Ar, Ashkot and Shemkhiya in 2007-2009', in Paner *et al.* (eds), 189-215.