Sudan

Meroitic Archaeology along the Nile in the Third Cataract Region

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Introduction

As a result of successive dam buildings on the Nile in Aswan, much of the Nubian Nile Valley saw an increase in archaeological investigations all throughout the twentieth century (1907-1969). The Mahas Survey Project of the University of Khartoum (1990-2012) has built upon this body of work (Edwards *et al.* 2012: 450). The focus of this project is on the Third Cataract, approximately 700 km upriver of the First Cataract, within a survey concession extending over some 80 km of the Nile and its immediate hinterlands, an area now under threat by the construction of Kajbaar dam (Edwards *et al.* 2012: 451) (Figure 1).

In this region, the river runs through a course of Nubian sandstone where limited down cutting contributes to a varying width of alluvial plain. Numerous small islands and banks occur in the river above the Third or Hannek Cataract which is composed of biotite gneiss, locally associated with marble bands to the west (Berry & Whiteman 1968: 28). The river changes its direction many times in the region. For instance, at the Arduan Islands, the river flows east-west to the Kaibar Cataract, near Fareig, where it again turns northwards and flows on towards Delgo (Berry & Whiteman 1968: 28).

The Third Cataract region of the Nile begins at the northern end of the Dongola Reach extending from the area of the villages of Hannik (west bank) and Tombos (east bank) at the top of the Third Cataract, downriver as far as the area of Jebel Dosha (west bank) and Wawa (east bank), in the north (see Figure 1). Its northern boundary is most visibly marked by the cliff-face known as Jebel Dosha, overlooking the west bank of the river some 5 km downstream of Soleb, the end of a long ridge which runs about 3 km into the desert, forming a prominent natural feature (Osman & Edwards 2012: 37).

The archaeology of this region has revealed evidence of prehistoric and historic period occupations. Evidence of the New Kingdom, Meroitic, Christian, and Islamic sites have been identified in this region. Kerma (2500-1500 BC) and Nabatan (eight to sixth century BC) sites are easily identified in this region (Osman 1984: 228-229). In addition, the recent archaeological work has also demonstrated the limited nature of the Meroitic sites (350 BCE-350 CE) compared with other periods (Osman & Edwards 2012: 126). The Meroitic presence in the region is dominated by a small number of cemeteries separated in the entire region and the only prominent settlement site with its associated cemetery is located at Kedurma, some 9 km north of Khajbar rapids which forms the north end of the Third Cataract (Edwards 1995:37).

Archaeological material indicates that while there is some Meroitic presence in the area, there is very little evidence for permanent settlement within the cataract zone. This is well indicated by the few sherds scattered in several areas (Osman & Edwards 2012: 463-64). Drawing on this information, this paper is an attempt to explore the Meroitic presence in the region and to shed light on the conditions that led to the limited occupation. Specifically, I am reporting on the field survey conducted by the University of Khartoum's Department of Archaeology in the region in 2018.

The survey occurred over two weeks during the winter of 2018 season with the aim to examine the region's archaeological features and was designed using available archaeological reports on known Meroitic sites. This paper examines the Meroitic settlement patterns in order to establish an understanding of the factors that may have affected settlement in the region. Indeed, Meroitic settlement patterns, like any other settlement patterns, are the outcome of a long and well-established adaptation to environmental conditions, geography, and human needs.

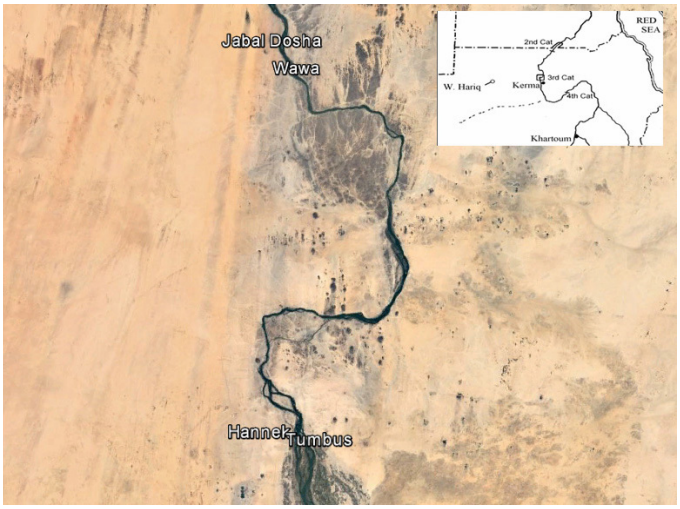

Figure 1: Satellite image of the Third Cataract region.

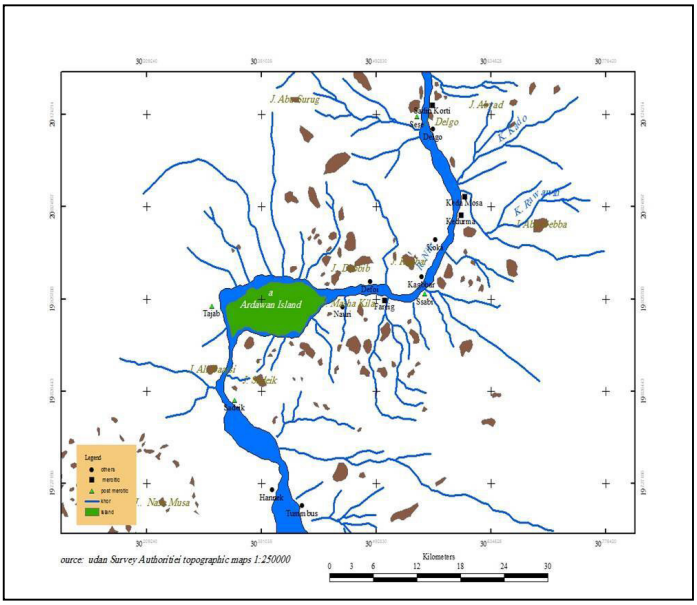

Figure 2: Landscape of the Third Cataract region.

The geography of the Third Cataract

The Third Cataract region of the Nile represents an environmental unit in itself. It is characterized by many elements, such as the fact that the river here runs in through channels, and between two cataracts. The cataract of Tombos in the south and the cataract of Sabu-Kajbar in the north are very rocky and rugged, which is part of the cataract system itself (Osman 2004: 34). Whiteman (1971: 11) has described the geographic subdivisions of the area and its geological formations as consisting of a pre-Cambrian basement complex enclosed by Nubian sandstone. The basement complex consists of sedimentary rocks as well as a variety of igneous and metamorphic rock. Also reported are a variety of conglomerates, grits, sandstones, and mudstones (Whiteman 1971: 54-55). Furthermore, Edwards (1989: 13) states that the Nubian sandstone and the basement complex consist of sands and clay deposits and Barbour (1961:138) points out that the river leaves the zone of blackened igneous rocks and flows over the Nubian series, which is represented by orange-yellow sandstone.

In this area, the character of the Nubian Desert landscape has been determined almost entirely by different erosion patterns of the two formations. The surface configuration of the granite zones is narrow and consists of deep *Wadis* (Adams 1977: 22). For that reason, the riverbed is narrow, steep and broken by several islands and cataracts (Adams 1977: 23).

As usual, in most parts of the Nile, especially in cataract areas, available agricultural land is restricted to a narrow strip along the banks. However, in contrast with other cataract regions, this strip in the Third Cataract region is rich alluvial land, especially the area between Nauri and Sabu-Kajbar which has a width of about 3 km on the southern bank and is more than 13 km in length (Osman 2004: 34-35).

The archaeological survey

Throughout the two-and-a-half-decade course of archaeological research conducted by the University of Khartoum Mahas Survey Project in the region of the Nile Third Cataract, a substantial amount of archaeological and ethnographical data pertaining to the region has been amassed. These include the results of archaeological surveys and excavations which have been carried out since the early 1990s. The first of these were extensive surveys meant to document the entire region (Edwards et al 2012: 450). A summary of this combined data comprises the Third Cataract Region Database, which includes information on the location, dating, size, and settlement types, among other information that were presented in the final report of the Mahas Survey Archaeological Project in 2012 (Osman & Edwards 2012).

From 2018 intensive systematic surveys focusing on more discrete areas have taken place. This paper will present the results of that season which was carried out under the direction of the author. Several goals were accomplished in this short two-week season; several already investigated archaeological sites are located within the

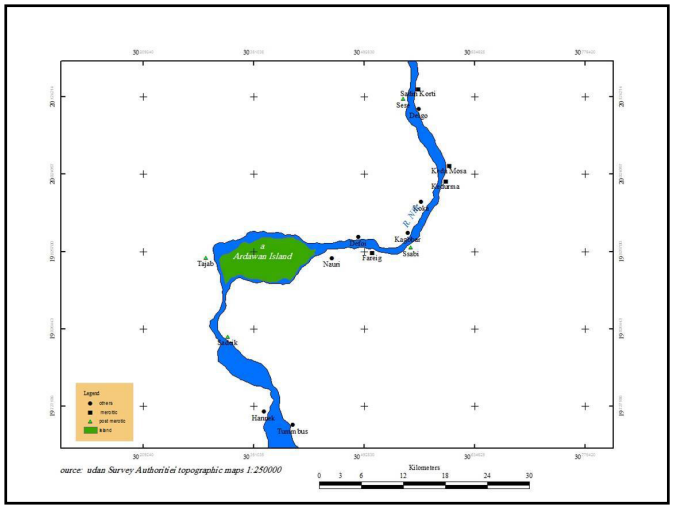

Figure 3: Distribution map of the Meroitic sites in the Third Cataract region.

area such as Arduan and Kedurma, while other new sites were recorded in Saddin Korta and Kada Musa. At the same time, the problems for archaeological ground survey became evident as well. Gold mining activities and intensive agricultural practice during a very long period appears to have resulted in a high rate of destruction of Meroitic sites and of individual finds. The total number of sites examined to date as part of this study is five. Most of the remaining sites were recorded by Edwards and Osman in the Mahas Survey Project (Osman & Edwards 2012: 93-110).

In the cataract zone, Osman and Edwards (2012: 463-64) have noted that there was some Meroitic presence in the area, while there is little evidence of permanent settlement. This is well indicated by the few sherd scatters found. Looking to the south, it seems that the Kerma basin presented greater opportunities for Meroitic occupation than the cataract zone. There, many archaeological sites were recorded by the Harvard-Boston archaeological expedition and Swiss mission in the area and included settlements, workshops, and cemeteries (Reisner 1923: 21; Bonnet & Valbelle 2006: 40-45; Ahmed 1999: 45-46).

Kadruka

The previously known Meroitic cemetery site of Kadruka was first mentioned by Reinold (1987: 44). He reported the presence of a Meroitic cemetery near the modern village of Kadruka on the margins of the Kerma basin. A revisit to the area was undertaken and the site was relocated. Unfortunately, a significant amount of damage has occurred in and around the site from gold mining attempts.

Arduan Island

The one substantial Meroitic site identified by Edwards and Osman (2000: 58-60) within the cataract zone was located on Arduan Island. This cemetery site (ARD013) is located on a low bank on the desert edge to the south of Arduan Village. Moreover, Osman and Edwards (2012: 97) have excavated three graves in the area. Unfortunately, there is no evidence for related settlement with this cemetery in the area of Arduan. The project did find that recent construction efforts and cultivation in the area precluded any systematic survey.

Edwards and Osman (2012: 93) also identified a small number of Meroitic sherds amongst scatters of Kerma and Medieval material north of the village of Saadeeg (SDK015). Another thin scatter of early Meroitic handmade sherds was found to the east of Arduan Island at Faad (Faad002). Again, few Meroitic sherds were identified on what may be another burial site at the east end of Freig village (Osman & Edwards 2012: 93).

Although our mission recorded and tested two sites in the northern part of the region (Kad Musa and Sadden Korta), the site of Kedurma was already known from previous Mahas Survey studies.

No further Meroitic sites were identified within the cataract zone, although it is possible that some rock drawings of this period may be found amongst the large group at Sabu-Jeddi, (GED011) or on the west bank at Jebel Noh (KJB005). Some carved rocks have been investigated and appear to date to the Kushite period in the Sabu-Jeddi area (Osman & Edwards 2012: 84-85). Those are the most likely to be Meroitic and some may be carved footprints, which are now documented as a feature found in several Meroitic temples, included Meroe (Shinnie & Anderson 2004: 27). Such carvings have also been reported from Kerma (Ahmed 2004: 26), Qasr Ibrim (Wilson 2008), as well as Philae (Griffith 1912: 42-42). These rock scenes are sometimes accompanied by brief Meroitic inscriptions, though not at this site (Rilly 2007: 202-203).

Kedurma_

A major Meroitic site is located at Kedurma about 10 km south of Delgo and 9 km north of the Kajbar rapids, which form the north end of the Third Cataract (Edwards 1995: 37).

The substantial settlement of Kedurma covers 2-2.5 ha and has not yet been excavated; only parts of its overall plan have been recovered through the 1991 surface survey at the season of the Mahas Survey Project (Edwards 1995: 37). Additionally, the area of interest here

has been tested by the University of Khartoum mission (2018-2019). The investigated settlement area includes domestic structures and official buildings, an industrial area, a small temple and cemeteries (Osman & Edwards 2012; Bashir 2019: 28-29).

This work has demonstrated the importance of the site as a Meroitic headquarters of the Nile Third Cataract region. The existence of both the settlement and its associated cemetery mark these off as a site of major importance with great research potential. It is worth stressing that despite intensive survey and excavation programs carried out in more northerly areas of Lower Nubia, no substantial Meroitic settlement and its associated cemetery have yet been investigated together (Edwards 1995: 46).

Kada Musa

A Medieval and Meroitic cemetery site was recorded at Kada Musa and includes several graves located on top of Kada Musa hill, a little to the north of Kedurma, that were exposed by the effects of erosion, quarrying and random gold mining activities. It seems likely that at least 50 cm of surface soil has eroded since the graves were originally disturbed by gold miners. Scattered bones near the surface were poorly preserved and had been exposed by robbing. In addition, different kinds of pottery sherds and Meroitic beads were recovered.

Sanden Korta

The cemetery site of Sadeen Korta, located ca. 7 km north of Kedurma, is one of the more prominent cemetery fields reported by our mission in the area. This cemetery is on a low hill in the middle of the modern village extending about 50 m in length from north to south and 60 m from east to west. Once again, this site has been heavily damaged by gold miners. As part of this survey, one grave was selected for a test excavation. This grave had previously been damaged by quarrying and gold mining activities. Overall, the grave was greatly disturbed both from robbing in antiquity as well as more recent activity. The individual was buried in an east-west oriented grave with a sloping shaft at least 2 m long leading to a chamber at the west end. The chamber entrance was blocked by a stone, parts of which remained *in situ*. Large parts of one body were recovered from the shaft fill including the well-preserved skull.

Small pottery sherds and other materials were found on the surface of the site. Orange-burnished, wheel-made wares appeared to be the most common find, including some decorated fragments. No sherds of the distinctive Meroitic black-burnished or brown handmade wares were found.

Site Name	Type	GPS location
Kadruka	Cemetery	(N19 23/ E30 30)
Arduan Island	Cemetery	(N19 56 112/ E30 19 609)
Kedurma	Settlement and cemetery	(N 20 01 971/ E 030 35 732)
Kada Musa	Possibly cemetery	(N20 03 686/ E30 35 320)
Sanden Korta	Cemetery	(20 08 259/ E30 33 860)

Table 1: Inventory of the Meroitic sites in the Third Cataract region.

Conclusion

The field assessment in this region draws attention to the overall lack of Meroitic settlement in the Third Cataract region. There are many factors that could explain the dearth of Meroitic settlements and the possibilities for future archaeological investigations in the region. Environmental factors must have played some role in the degradation of the potential Meroitic settlements. Likewise, contemporary human activities such as local gold mining, building, and farming contributed significantly to the degradation of archaeological sites in the area.

It seems reasonable to assume that there were Meroitic settlements in the region despite the current lack of evidence. This assumption could possibly be supported by the limited amount of pottery scatters and a large number of Meroitic cemeteries in the entire region. It is known that a cemetery is a random sample of the living population. Therefore, the Meroitic cemeteries are indeed direct evidence of a population that inhabited this region. On the other hand, Osman and Edwards (2012: 110) attributed the limited size of Meroitic settlements in the area of the Third Cataract to severe environmental conditions. Yet environmental conditions in this area cannot be held principally responsible for the absence of a human settlement. All over the world, human settlements were not achieved by the agency of several factors including environmental conditions.

It is both interesting and frustrating that previous archaeological work within the Third Cataract region has not located a significant number of Meroitic sites in this region. It must be supposed that Meroitic settlement was confined to areas close to the present course of the river

like today. Along the river, farming and limited animal husbandry can support settlements along the riverbank. No doubt that if such settlements ever existed, they may lie under modern villages thus preventing archaeological identification. Moreover, Edwards (1999: 68) raises the possibility that Meroitic settlement between Kawa and Kerma was confined to areas close to the present course of the river. To date, all identified Meroitic sites have been found in the core of modern villages.

Therefore, the issue of Meroitic settlement remains a crucial aspect of understanding the whole civilization of Meroe. Meroe was not restricted to political and religious centers. It must have been rich in a population close to the centers. Nonetheless, this vital aspect of the Meroitic civilization remains elusive. Accordingly, the situation demands more urgent focused archaeological investigations in the region. This urgency is motivated by current gold mining activities, which will eventually preclude future archaeological investigations that address the question of settlement patterns.

Of course, there is still a lot to do to gain a better understanding of Meroitic existence in the study region. More generally, it may be hoped that we can begin to develop some of the wider potential for settlement archaeology. Past macro-settlement studies have considered the role of basic environment determinants and subsistence regimes on the nature and patterning of settlements (Edwards 1999: 93) but have not gone beyond this. We suggest that a natural expansion of this includes conducting intensive and comprehensive archaeological surveys and test pit excavations at the Meroitic sites in the region, as well as introducing a landscape approach. We also suggest highlighting the role of this region in the international trade of Meroe, especially with the Roman Empire through Roman Egypt during the last century BC and the first century AD. This is in addition to the establishment of interdisciplinary projects for the study and discussion of the issue of Meroitic settlement in the North.

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