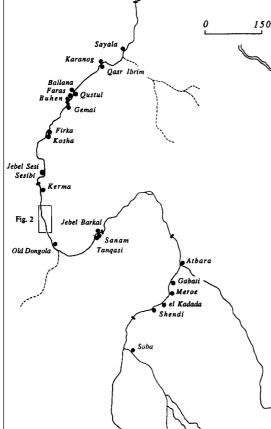
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Survey in the Northern Sudan 1993 – 1995

In the winter of 1992/3 The Sudan Archaeological Research Society, in conjunction with the National Corporation for Antiquities and Museums in Khartoum began a four season campaign of survey in the northern Dongola Reach. The Society holds a concession for survey and trial excavation for an area 80 km north-south by a maximum of 18 km east-west on the east bank of the Nile (fig. 1). The concession extends from opposite the town of el Khandag to Eimani and from the river to the edge of the plateau. In the time available to us a detailed survey of the whole area is clearly impossible so we are adopting a two pronged approach. On the one hand we are undertaking a systematic survey of a number of east-west transects at 5 minutes of latitude intervals (approximately 9.25 km) from the plateau to

Fig. 1: Map of Northern Sudan showing the location of the Survey area.



the Nile recording all sites along the way. This will allow us to gain a general impression of the spread of occupation over the whole area. At the same time we are not neglecting the major highly visible sites which we observe as we travel through the survey area.

To date the whole of the northern and central part of the survey area has been investigated (Welsby 1993; Welsby et al. 1994). Figure 2 shows the location of all sites discovered to date with topographical features derived from the 1:250,000 maps of the area. At this stage in the project the map reflects to some extent the progress of the work rather than the actual distribution of sites with little work having been undertaken in the southern parts of grid squares J, L and M and virtually none further south.

Of particular interest was the evidence recovered for the palaeohydrography of the area. At present the Nile flows in a single channel (hereafter the Dongola Nile) although a number of small islands lie within it. At the northern end of the survey area is the large island of Argo separated from the east bank by a narrow seasonal watercourse. The most numerous sites located by the survey date to the Kerma period, occupation extending at least as late as Kerma Classique and probably well beyond. These sites were concentrated in two areas and are clearly occupying the banks of channels of the River Nile. The eastern branch (the Alfreda Nile) runs north-south close to the eastern edge of the plain before turning westwards to join the central branch (the Hawawiya Nile) a little to the west of the modern village of Hillat el Nakhla. Thereafter the combined streams, the Seleim Nile (pl. 1), flows north close to the eastern edge of the Seleim (Kerma) basin, but certainly did not flow into the basin at least within the SARS concession. In grid squares O, P and R the channel of the Alfreda Nile, with a minimum width of 75 m and still surviving to a depth of 2.8 m below its banks, makes a dramatic sight. The presence of sites, which were certainly occupied contemporaneously, along the Alfreda, Hawawiya and Seleim Niles

indicates that these river channels were operative at the same time. Furthermore sites of the same period were noted by the Dongola Nile. The palaeochannels marked on figure 2 in grid square X were located by satellite imagery and some of these can also be located on the ground (Marcolongo and Surian, n.d.).

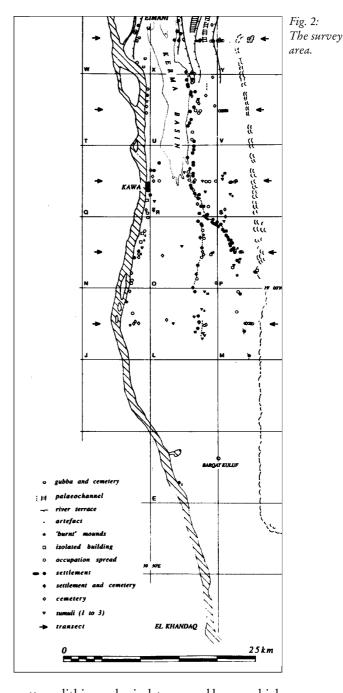
On the basis of a preliminary study of the ceramic evidence there appears to be no pottery later than Kerma Moyen (2050 – 1750 BC) from sites along the Hawawiya Nile. This would suggest that that channel ceased to flow during this period forcing the inhabitants to relocate their settlements elsewhere.¹⁾ The sites along the Alfreda and Seleim Niles on the other hand were occupied in the succeeding period and perhaps for some time thereafter. Apart from a few scarabs no much later Pharaonic or Kushite material was recovered in the vicinity of the palaeochannels.

Later sites are rare. The evidence for Pharaonic and Kushite occupation at Kawa is well known. A small Meroitic cemetery (Q2) was observed some 3 km to the south of Kawa. In the region around Timinar are some Christian burials and occupation scatters and other sites of this kind were noted at the northern end of the survey area opposite Argo Island. An impressive Medieval settlement at el Ugal (E1) well to the south will be surveyed in the final season. Occupation perhaps dating from the period 17th to 19th century was noted at Timinar and at Kawa. In the Kerma period the area supported a massive population but to where these people moved when the eastern Niles dried up is unclear. Kerma sites on the east bank of the present river were generally not extensive nor are sites of a later period before the medieval known there.

The physical remains

A small amount of rather poor quality Palaeolithic material was found by two Polish colleagues²⁾ on the edge of the plateau.

Neolithic material was recovered from occupation scatters on the sloping ground running down from the plateau into the Wadi el Khowi. This consisted of small amounts of lithics. Along both banks of the Hawawiya Nile was an almost uninterrupted spread of occupation material,



pottery, lithics and grindstones and bases, which appears to date to the Neolithic period. Occupation spreads of this type were found elsewhere in the survey area and indicate the dispersed nature of settlement at that period. For their burials the Neolithic inhabitants utilised the large mounds which stand several metres above the general level of the plain and are a feature of the area. They occur on the eastern side of the Hawawiya Nile and to the east of the Seleim Nile with a few examples to the west. They do not appear to be closely associated with any settlements. A number have a very large robber pit dug into their centre suggesting that there was a

¹⁾ See, however, the dating evidence derived from the scarabs discussed by Quirke 1995.

²⁾ Prof. M. Kobusiewicz and J. Kabacinski, Institute of Archaeology and Ethnography, Polish Academy of Sciences, Poznan.

Pl. 1: View looking upstream along the Seleim Nile. The far bank is particularly clear.



rich primary burial. Rescue excavations were undertaken on one of these (L14) where aeolian erosion was severely damaging a number of the burials. Four skeletons were excavated, all of which were in an extremely fragmentary and friable condition.

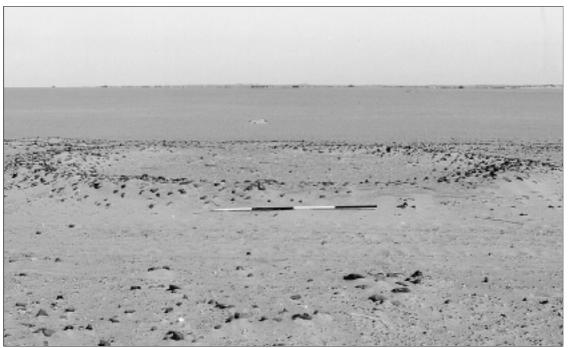
The occupation sites of the Kerma period are large mounds frequently with clear traces of buildings. The most common type of structure was built of large rough blocks of feruginous sandstone placed at intervals to form rectilinear buildings. These were presumably of timber frame construction, the posts being supported on the large stone post-pads. At one site there was clear evidence to suggest that the panels were infilled with mud brick walling. One of the largest of these buildings (P4) was 11 m square and had a series of parallel walls between 1.1 and 1.7 m apart centre to centre, covering the whole of the interior.3) Another was a five-aisled structure with a very shallow internal apse at the north end of the central aisle beyond which was an additional three-aisled room (fig. 3). Traces of mud brick buildings have also been noted one of which was at least 22.5 m long by 16 m wide. Many dwellings may have been totally of timber and will thus be invisible during the surface survey we are undertaking. At a few sites there were the remains of kilns or ovens although the form of these was unclear without excavation. On the east bank of the Alfreda Nile a little upstream

from the confluence was a low settlement mound on which were several dense concentrations of small fragments of bone. These together with the large number of finely worked lithic backed blades suggests that this was a specialised butchery site rather than a typical settlement. Stone tool and debitage concentrations on other sites indicate the presence of tool manufacturing centres.

The largest concentration of Kerma sites was along the Alfreda and Seleim Niles (in grid squares O, P and R) where the west bank had an almost continuous settlement for 8 kilometres interspersed with cemeteries and with a number of discrete settlements on the opposite bank.

Three different types of cemetery have been noted. Cemeteries of the Kerma Ancien (2500 – 2050 BC) consist of large low mounds covered in small black stone fragments and white quartzite pebbles. There are some very low and small mounds within these cemeteries, but these may be upcast mounds, the result of robbing activities, rather than the remains of tumuli. The morphology of those cemeteries with individual tumuli each of which has a ring of black stones revetting the lower part of the tumulus (pl. 2) and with the low domed centre covered with white quartzite pebbles, suggests that they are Kerma Classique. Robbing of one tumulus of this type revealed the mouth of the rectangular grave pit. Both these types of cemetery are found some distance to the east of the settlements with which they must be associated. They are also rather uncommon and quite small while pottery of those periods is widespread.

³⁾ For a photograph of this building see Bonnet 1990, 21, pl. 13.



Pl. 2: A Classic Kerma tumulus in cemetery U4.

The most common cemeteries are those where each grave is covered by a circular tumulus. All are covered with brown quartzite pebbles. Rare examples have a dished centre within which are much smaller pebbles. These appear to be an original feature, not the result of robbing. These cemeteries are of very large size, approximately 600 tumuli were noted in cemetery R44 alone. They are also found closely associated with the settlements, the cemeteries on occasion partly enclose the settled area and frequently lie between the settlements and the river banks. It would be tempting to suggest that these cemeteries date to Kerma Moyen but if this is the case we are left with the difficulty of where the inhabitants of the later period were interred. The typical Kerma Classique cemeteries are too small and too far apart to have been the sole burial grounds in use. A detailed study of the pottery from the cemeteries and from the settlements is needed before this discussion can be carried further.

Two cemeteries of Kerma Ancien were investigated. The skeletons of a juvenile and of an adult male,⁴⁾ were recovered from site L1. Each individual was buried in a crouched position on its right side with the head to the east facing north. The other cemetery, O16, lay only a few hundred metres to the east of the Hawawiya Nile. Ten burials were investigated, all of which

had been partly visible on the surface before work began. Although partly destroyed by erosion which particularly affected the skull, the other parts of the bodies, protected by a few centimetres of sand, were often extremely well preserved. In a number of cases extensive remains of leather were found and one body was buried on an hide, a type of burial well known from Kerma.⁵⁾ Human skin also survived in some cases. Although the sample of skeletal material was small the material displayed a wide range of pathologies and exhibited a number of nonmetric traits. Further study of the material recovered will be undertaken but the potential for more extensive excavation is already clear.

North of the confluence, as the Seleim Nile approaches the Seleim basin, the settlements are located on the east bank and are rarely more than 1 km apart and frequently less. Towards the northern limit of the survey area an absence of sites over several kilometres may be the result of recent human activity. A large modern village lies in this area and, although information was sought from the locals, no sites could be found. All the settlement sites hitherto described will have relied for their economy on the river and on the potential if offered for irrigation. Settlement was, however, not confined to the river banks. A number of sites were also located on promontories extending into the Seleim basin on which their economies will have been based. Today this area is extensively irrigated and far-

⁴⁾ The skeletons were excavated and studied in the field by Margaret Judd to whom the writer is grateful for permission to use the results of her preliminary analy-

⁵⁾ E.g. Bonnet 1990, 75.

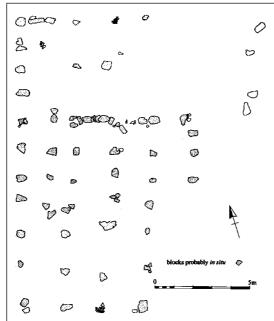
med although in the past, with the much more primitive water lifting devices, it may have had a greater importance for grazing.

Only one site was found on the western margin of the basin although again the presence of the modern village of Seleim, which extends north-south for over 15 km, may be held to account for this. In a number of instances there was evidence for the recent total destruction of Kerma settlements, the sites only being represented by a few large stone blocks. A group of such blocks was found within Seleim perhaps indicating the site of at least one settlement. Kerma sites have also been located on the banks of the Dongola Nile. A little to the north east of Kawa a cemetery of Kerma Classique date (1750 - 1550 BC) was examined and extensive evidence for Kerma occupation was found in the vicinity. Occupation in this area appears to have spanned the whole of the Kerma period (2500 – 1450 BC).

Artefacts were abundant on the Kerma period settlements and cemeteries and sample surface collections were made at all sites located in the survey. Apart from the pottery, stone objects, particularly stone grinders and grinding bases, were extremely common. We also recovered well over 100 stone axes, both polished examples of types found at Kerma and roughout axes of a hitherto unknown type. Ostrich eggshell beads were ubiquitous.

The present work has gone some way to explain the rich agricultural base of the heartland of the Kerma Kingdom. The existence of up to three branches of the river Nile will have great-

Fig. 3: Plan of the building at site R28



ly increased the potential for sedentary occupation and animal husbandry. With the drying up of these channels the fortunes of the Northern Dongola Reach went into decline. Although the area retained some importance, later power bases lay further upstream near Jebel Barkal in the Kushite period and at Old Dongola in the Medieval period.

Prior to the present survey Kawa, which lies a few kilometres upstream and on the opposite bank from the modern town of Dongola was the only archaeological site in the area to have been investigated. Excavations in the late 1920s and 1930s revealed evidence for occupation dating from the Pharaonic, Napatan and Meroitic periods. The present project undertook a cursory examination of three mud brick buildings visible on the surface of the southern town site. The most interesting of these was a rectangular structure 6.6 x 4.3 m in size which was either a kiln or an oven. Structures of this type are extremely rare in the Nile valley where kilns and ovens are almost invariably circular in shape. Close parallels can be found, however, in the contemporary Roman world, particularly in Italy and the north-western provinces of the Empire. Such kilns were used most commonly for the production of brick and tile, but also for pottery (for kilns in Britain see McWhirr 1979b; in Italy see Cuomo di Caprio 1979). Three contemporary cemeteries were noted to the east and north and ceramics and human bone were collected from the surface of the robbed tumuli. A tumulus was excavated revealing a primary crouched inhumation and three secondary burials, one with two late Meroitic pots placed by the head (Hamid 1994).

Sites dating to the Pharaonic, Napatan, Meroitic and post-Meroitic periods, apart from Kawa, were either rare or non-existent. All the evidence for medieval and post-medieval settlement was located on the bank of the Dongola Nile except for modern settlement and one or two Muslim cemeteries. Several medieval settlements and occupation scatters were found opposite Argo Island, the island itself lies beyond our concession area. One of these settlements, which covered a considerable area was of particular interest. Much of the evidence for occupation consisted of mounds a few metres in diameter which appeared to be made entirely of pot sherds. Other finds of medieval pottery were made south of Kawa and one cemetery of five box graves all aligned east-west must also be of that date. In the same area were a number of Muslim cemeteries, some still in use. Seven gubba

(pl. 3) were recorded all at the northern end of the concession. Many of these are in a ruinous condition. Modern cemeteries are found in proximity to these and other modern cemeteries lie close to the river over 1 km to the east of the modern settlements.

Much of the area to the east of the present day course of the river has been largely unoccupied since the mid second millenium BC. However, over the last two decades this has begun to change. There is now extensive and rapidly expanding agricultural utilisation particularly of the land immediately adjacent to the old river channels. This is having a disastrous effect on the archaeology and already there has been considerable destruction of sites. In the light of this threat, which is extremely difficult to avert, we are undertaking as detailed a survey as possible. It seems inevitable that the opportunity to excavate most of these sites will never come and the detailed survey of them may be the sum of the information which we are able to salvage.

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Pl. 3: Gubba at site W9 near Eimani.