Survey and Excavation at el-Multaga, a Resettlement Area related to the Construction of the Merowe Dam: preliminary results

Francis Gens and Yves Lecointe

Introduction

The idea of building a dam on the Fourth Cataract of the Nile was first suggested in 1943 then revived in about 1980, but it is only at the end of the last century that it finally became a reality under the Ministry for Energy and Mining Resources of the Sudan. The project, which began in 2001 should be completed by 2007. It will result in the flooding of the Nile valley between the island of Mirowy, on the Fourth Cataract, and Mograt Island, near el-Kab (see Salah Mohamed Ahmed, above). Meanwhile, the population currently residing here will be resettled in four different areas where the Sudan Government will develop agricultural schemes and build new villages: Goshabi-Abu Dom, the lower valley of Wadi Muqaddam, an area located north of Abu Hamed and the lower valley of Wadi Mukarabat. The task of the French Unit of the National Corporation for Antiquities and Museums will be to carry out comprehensive surveys and excavations in those areas prior to the implementation of the projects.

So far, the area located in Goshabi-Abu Dom is the only one that has been affected by the project (Figure 1). It has been named el-Multaga - the crossroads - because the new Bayuda road, which links Omdurman to Abu Dom, divides there into two branches, one going upriver towards the Fourth Cataract and the other downriver towards Dongola. The project, involving the building of three new villages, a pumping station and a network of canals, is now completed (Plate 1, Colour plate VI). Since a few weeks ago the villages were inhabited and the scheme will certainly be in operation soon.

During five months, from November 2001 to April 2002, the French Unit, assisted by inspectors of NCAM, made a thorough investigation of the area, where 147 archaeological localities were recorded, including Neolithic burial sites that were only identified at the end of the season. Owing to a significant delay in the implementation of the scheme and thanks to the financial support of the French Ministry of Foreign Affairs, a second campaign, mainly devoted to the excavation of the Neolithic burial sites, could be carried out in November-December 2002.

The scheme covers an area about 5.5km wide and 15km long and, except at the pumping station, it lies at a distance of about 2km from the river (Figure 2). Eastward, the area is covered by small dunes of aeolian sand surrounded by deflated areas, while in the centre and westward it looks like a flat sandy plain with scattered low gravel mounds. Salam bushes are present almost everywhere.

Former research was limited to survey and excavations carried out between ed-Debba and Korti from November 1966 to January 1967 by members of the Combined Prehistoric Expedition under the leadership of J. L. Shiner (Shiner et al 1971). They published few maps, all rather imprecise, which show 32 localities apparently located inside the scheme area. Unfortunately, since GPS was not available at that time, no sites were given co-ordinates and consequently, in great part because of continuous sand movement in the area, we failed to re-locate them.

The survey

As we had to survey the whole area, we prepared a map based on the 1:250,000 Survey Department sheets and on a sketch map of the project provided by the Ministry of Energy and Mining, to which we added a detailed GPS recording of the

Figure 1. Location of el-Multaga.

Plate 1. Bulldozers at work in the scheme.
contour of the scheme and the layout of the canals. In accordance with Fritz Hinkel's AMS system (Hinkel 1977), we divided the area into 3’ squares which, in turn, were divided into 1’ squares (nine units in each 3’ square, numbered 1 to 9 from north west to south east) and subdivided into 30” squares (four units in each 1’ square, labelled NW, NE, SW and SE). The side of a 1’ square is about 300m long and the side of a 30” square about 150m.

Once in the field, using the grid system of our map, we located with a GPS several 30” squares, marking out their sides with survey markers placed at a distance of 10”. Then two different teams covered by car the marked squares and examined on foot all places displaying features distinct from clean aeolian sand. Any locality bearing evidence of ancient human activity was then recorded and classified with its GPS co-ordinates and the number of its 30’’ square. Whenever appropriate, the recording was completed by a random collection of archaeological material.

The survey led to the identification of 147 sites (Table 1) including remains of single occupation (119) and mixed occupation (28) pertaining to Palaeolithic (23), Early Ceramic (105), Christian (34) and Late (13) horizons. Except for MTG 1, a settlement located near the river at the pumping station site, which produced only disturbed surface material (infra), Christian and late remains were restricted to a few pottery sherds that did not indicate significant activity. As a consequence, the main contribution of our work pertains to prehistory.

**MTG 1, a Christian site**

Our first involvement was the excavation of MTG 1, a medieval site located on the bank of the river in the area where the pumping station was soon to be built. The site had already been scraped some years before during the construction of an irrigation canal of a much smaller size (Colour plate XVIII). A 10 by 10m square, located west of that
canal, was excavated to a depth of 400mm in order to evaluate what actually remained of the archaeological sediments and whether structures were to be expected. It quickly became obvious that the archaeological material, which was plentiful on the surface, was much rarer in the underlying layer and non-existent below 300mm, where the subsoil was pure aeolian sand. Since all available information indicated that the archaeological remains were mostly surface material lying on a thick sand formation, we closed the work at that stage.

The material collected consisted of pottery sherds, lithics, beads, ostrich eggshells, animal bones, red bricks, white plaster and human bones indicating the presence of both a settlement and a cemetery. The pottery included a wide variety of painted, incised and stamped wares. Fragments of *qawadis* may indicate the use of *saqia*. The beads, which were particularly numerous, are most of annular or discoid shape and made of ostrich eggshell.

**The Palaeolithic occupation**

The Palaeolithic remains are particularly numerous in the south-eastern part of the scheme (Figure 2), in an area where Shiner’s team recorded a site that was numbered 91 and classified with two others as a “flake assemblage with Levallois technique” (Shiner et al. 1971). Those remains are mostly situated in square NE-36-1/6-J, where they occupy a 1km broad east-west strip of land that borders a large sandy plain over 2km. The surface displays numerous flakes and tools, mostly made of wadi chert, of which unworked blocks are scattered on the surface.

On his way to Sai Island, Philip Van Peer made a short inspection of those sites and identified them as Middle Palaeolithic workshops where local chert was processed for manufacturing tools. In one of the localities, a small sounding showed that the lithic material, which was quite eroded on the surface, occurred also in an underlying deposit of Nile gravel, where it was remarkably fresh. He also described the associated industry as similar to the Middle Palaeolithic assemblages described by Shiner’s team (*supra*) as “flake assemblage with Levallois technique”. He therefore concluded that those sites are of great archaeological interest; hence our decision to investigate them in more detail during the second season.

That further investigation was carried out by Elena Garcea, who identified through four soundings three Middle Palaeolithic industries in stratigraphic position. The earliest is a generalised Middle Palaeolithic industry while the other two display respectively Nubian and Aterian features. This led her to suggest that the latter belong to two different cultural contexts that were in contact in this part of the Nile valley.

**The Early Ceramic sites**

The early ceramic sites occupy a 2km broad east-west strip of land that borders the northern edge of the agricultural scheme. They are in great part covered with sand dunes, more particularly in the north east. Whenever the natural ground is visible, lithics and pottery sherds indicate ancient occupation sites that, according to the pottery wares, belong mostly to the Early Khartoum and Khartoum Neolithic related industries. The latter were described by Shiner’s group as the Karmakol and Karat industries but, following a more general use, they will be labelled here Mesolithic and Neolithic. Some random discoveries, including rippled pottery, also indicate the occurrence of a later Neolithic phase.

Most recorded settlements are small surface sites displaying mainly lithics and ceramics and documenting limited occupations. Seven of them may be classified as Mesolithic and 65 as Neolithic. The only significant one was MTG 3, a Mesolithic settlement extending over 7000m², where several soundings showed that no occupation remains were to be expected under the surface. Consequently, we carried out, over an area of 3400m², a systematic collection of material (Colour plate XIX) that provided large quantities of lithics and pottery sherds but almost no organic remains. The pottery (Plates 2-5) is characterised by thick walls, tempers of vegetal fibre, quartz sand and mica, surface colours ranging from dark red to light grey, and finally by dotted decorative motifs identical to those found in all Khartoum Horizon sites. As usual for such sites, microliths were abundant and display a high ratio of finished tools, mostly lunates. Surprisingly, grinding tools were almost absent.

During the survey, a large number of low gravel mounds were recorded as potential sites (Plate 6). None of our tests provided results until the end of the campaign when some were examined which appeared to contain Neolithic
Plate 2. MTG 3. Mesolithic pottery sherd.

Plate 3. MTG 3. Mesolithic pottery sherd.


Plate 5. MTG 3. Mesolithic pottery sherd re-used as a potter’s comb.

Plate 6. A gravel mound.
burials; hence our decision to carry out a second campaign to examine as many as we could.

A total of 65 mounds have been tested. Their diameters ranged from 1 to 15m and their height from 100 to 300mm. They were made of a mixture of silt and sand displaying no internal stratigraphy and underlying a thin layer of gravel and aeolian sand and, consequently, they were interpreted as natural features. In point of fact, only 29, mostly located in the western part of the area, contained archaeological remains. These were not only Neolithic graves but also, most surprisingly, isolated artefacts and shafts filled with gravel.

Altogether 53 graves containing a total number of 55 skeletons have been excavated. Except for three, which were discovered in flat areas, all were found in the mounds, which contained between one and six burials each. All are small shallow shafts containing a single burial (Figure 3, Colour plate XX), except for two that contained double interments. All skeletons were lying on their side in a very contracted position with no particular orientation. They include 34 adults, 18 juveniles and three undeterminable individuals. The bones were so poorly preserved that determining the sex and adults’ age at death was almost impossible. Only a few had associated material, never abundant, that included in total several pottery vessels, one mace-head (Colour plate XXI), two bone awls and some personal adornment, the latter being restricted to several strings of amazonite beads, two zeolite curved lip plugs (Plate 7) and three ivory armlets.

Besides the graves, some of the mounds, eight of which were devoid of burials, yielded pottery vessels that were not associated with any particular feature and, more surprisingly, 43 rounded shallow shafts filled with gravel, 25 of which contained pottery vessels and/or sandstone grinders but no human bones.

The most interesting of the isolated finds was a complex deposit that included polished celts, bone tools and numerous microliths that certainly were packed originally in a bag of which all material evidence has since vanished. The bone tools included the hafts of three sickles, which had been grooved on one side for inserting the microliths found in the deposit.

Most of the pottery vessels found in the graves, the mounds and the gravel shafts (Figure 4, Plates 8-11) display strong affinities with those of cemetery KDK1 at Kadruka (Reinold 2001), including decorated caliciform beakers, which, significantly, never occurred in graves. In the absence of C-14 dating, the Neolithic occupation of el-Multaga should, therefore, be provisionally dated like KDK1 somewhere between 4500 and 4000 BC.

Conclusion

Apart from an eroded Christian site and Middle Palaeolithic concentrations of artefacts associated with quarrying and tool-making activity, salvage work carried out at el-Multaga mainly dealt with sites related to two main phases of the earliest ceramic tradition of the Upper Middle Nile, most usually referred to in the literature as Mesolithic and Neolithic.

The Mesolithic is mainly documented by an extensive settlement that provided large quantities of lithic and ceramic material related to the dotted phase of the Wavy-Line tradition, while the Neolithic is documented by settlements and burial sites that provided pottery vessels displaying strong affinities with those from cemetery KDK1 at Kadruka.

The small size of the Neolithic settlements, the lack of grave concentrations and the scarcity of grave goods contrast with what is known from other sites of the same horizon excavated in Southern Nubia and Central Sudan such as Kadero, el-Ghaba and Kadruka, where intensive occupation is associated with large and medium-sized cemeteries. They certainly indicate an adaptation based on nomadism or semi-nomadism, which may have been related to the
Plate 8. Neolithic pottery vessel.

Plate 9. Neolithic pottery vessel.

Plate 10. Neolithic pottery vessel.

Plate 11. Neolithic caliciform beaker.

Figure 4. Neolithic pottery vessels; 1. MTG 37/1/1, 2. MTG 18/1/1/1, 3. MTG 37/1/1, 4. MTG 19/6/1.
exploitation of the large wadis that join the Nile in the area. The discovery of three sickle shafts shows that such exploitation included the gathering of cereals, whether wild or domesticated.

El-Multaga has, therefore, revealed an aspect of the Neolithic of the Upper Main Nile that would certainly not have been documented without salvage pressure. It is significant in this respect that the survey carried out in 1966-67 by Joel Shiner in a larger area did not lead to the discovery of any Neolithic burial site, not even a single grave.

Acknowledgements

The following participants have contributed to the field work at el-Multaga: Francis Geus, director; Yves Lecointe, assistant director; Carolina Geus-de Bosch Kemper, recorder; Jan Moeyersons, geomorphologist; Frédéric Adam, Vincent Francigny, Raphaël Pouriel and Suad Osman Mahgoub, archaeologists; Philip Van Peer and Elena Garcea, prehistorians; David Peressinotto and Aurore Schmitt, physical anthropologists; Ali Mirghani, Fawzi Hassan, Habab Idriss and Nakhla Mustafa, inspectors of NCAM; Aiman el-Tayeb, curator of NCAM; Awadallah Ali el-Basha, foreman.

Bibliography


Colour plate XVIII. El-Multiqa. Aerial photograph of the pump station site showing the location of the earlier irrigation canal.

Colour plate XIX. El-Multiqa. Collecting surface material at MTG3, a Mesolithic occupation site.

Colour plate XX. El-Multiqa. A Neolithic grave.

Colour plate XXI. El-Multiqa. Stone mace-head from a grave.