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More archaeological work in Lower Wadi Howar (Northern Sudan) – a preliminary report on the 2003 field season

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Introduction

From October to December 2003, the ACACIA Project of the University of Cologne carried out large-scale survey and excavations in the region of Abu Tabari in Lower Wadi Howar (NW-Sudan) (Figure 1). One main task of the 2003 season was the excavation of settlement sites and burials, which were recorded during the 2002 field season (Jesse 2003:45). A second main task was to carry out a large systematic archaeological-geomorphological survey to gather a data for a more detailed investigation of the settlement history of the Abu Tabari region. The well of Abu Tabari was apparently still in use during the 20th century, but numerous archaeological sites in the region point to a settlement history reaching much farther back in time. An area of 26 km² northwest of the well was chosen, because here two old branches of the Wadi Howar were coalescing and the confluence area probably benefitted from a higher ground water influx for a long time. The survey area was divided into a grid of 2 km² and surveyed by car, using online satellite navigation with GPS (cf. Haberlah 2004). Around each junction of the survey grid, an intensive survey by foot was made. Most of the survey area is a rather flat sandy plain with not much relief, where scattered surface finds can be seen from far against the background of the bright sand. As most archaeological sites in this area tend to be large clusters of artifact concentrations stretching over several hundred meters or in some cases even 1-2 kilometers, not many sites should have been missed, apart from very small camps.

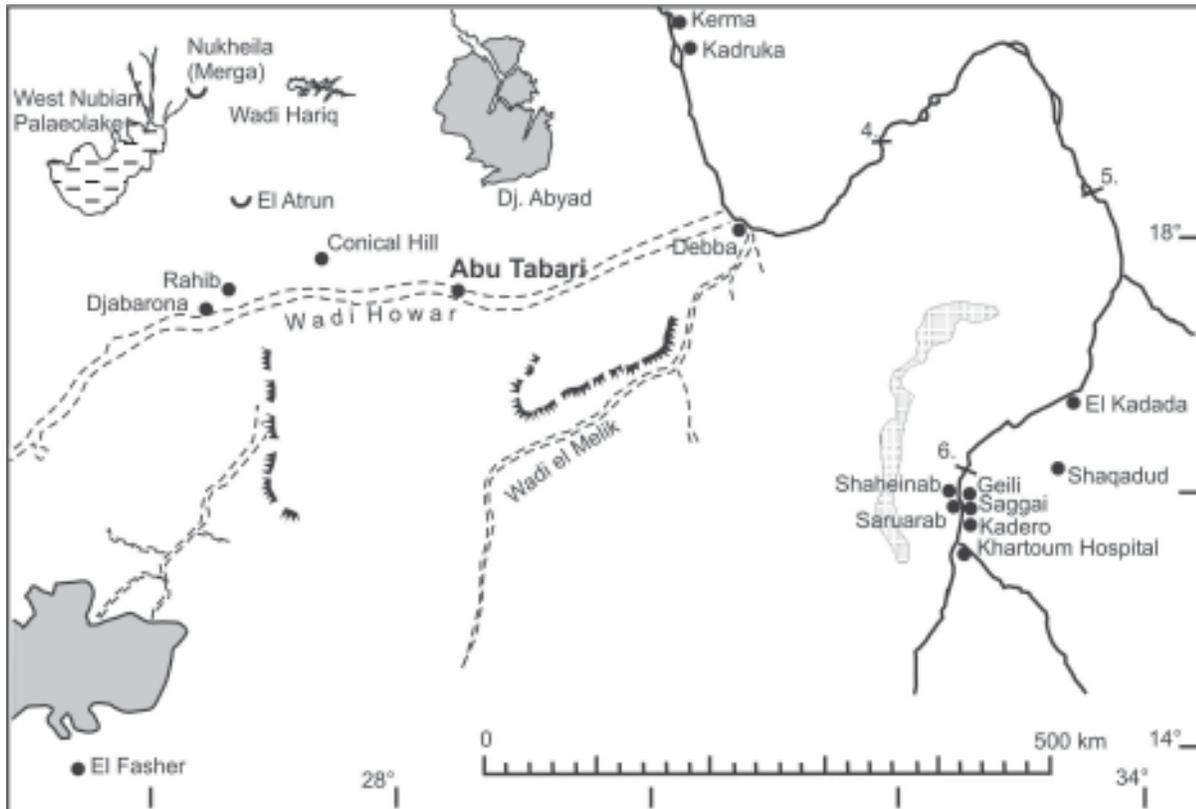
Survey results

The survey area was intensively used during the Holocene. More than 100 new sites were described and can be added to the already large number of sites found during previous seasons of the BOS and ACACIA projects (Jesse 2003; Keding 1998, 1998-2002, 2000; Gabriel et al. 1985, Richter 1989). Occupation started in Palaeolithic times (one site yielded a number of bifaces and other heavy duty tools of the Acheulean) and ends with the late pastoral Handessi Horizon (Jesse et al. 2004, Jesse in prep.). Pottery decoration styles include wavy line, Leiterband, herringbone and typical Handessi-decoration patterns.

Most remarkable were several sites with numerous stone settings. Two different types of stone settings could be differentiated. Type 1 consists of sandstone blocks or cobbles of sizes up to 30-40 cm forming simple circular structures 1 m in diameter. These stone circles mostly appear in groups of ten or even more, so far as could be judged according to the preservation conditions, because sometimes the cobbles of the stone circles seem to have been re-used by later occupations of nomads for building fireplaces. Type 2 was built of granitic stone slabs of 5-10 cm thick and up to 1.5 m long. These slabs were, as far as could be judged, unworked and originated from the exfoliation (weathering) of granite rocks in the near surroundings. This second type of stone settings was documented in detail at the site of Abu Tabari 03/13. Here a number of these stone settings was grouped in a circle-like arrangement on a slightly elevated circular mound. The stone settings have an oblong trapezoidal form with a maximum length of 2.5 m and a width of 1 m. The appearance of one or the other type of stone setting seems to depend only on the locally available raw material, although a chronological differentiation might appear feasible as well, despite the presence of Handessi pottery on most of the sites. The excavation of one such trapezoidal stone setting on site Abu Tabari 03/13, as well as the results from a geological profile of the surrounding sediment on the same site, allowed us to interpret these stone settings as watering-places for livestock.

Another important result of the survey is the rather frequent appearance of sites with pottery of the Handessi-horizon (3rd and 2nd millennia BC). This alters the previous picture of the history of settlement in Lower Wadi Howar which pointed to an

Figure 1: Map of Lower Wadi Howar.



early abandonment of this region as permanent settlement area (Keding 1998). The large number of Handessi sites probably correlates with the above-mentioned hydrologically favored situation of the survey area. Pottery found on the Handessi sites mostly is typical of the Handessi B phase, but a limited number of sherds with Bouton decoration, characteristic of Handessi A, also appeared.

A further outcome of the survey was the frequently observed appearance of pottery with decoration patterns of Leiterband, herring-bone and rocker-stamp zigzags at the same site. Leiterband-motifs are the predominant decorative pattern of the earliest pastoral phase of Middle Wadi Howar, but also occur further west in the Chad, while the herringbone pattern and rocker-stamp decoration rather point to the Nile valley. Thus, the Abu Tabari Region appears to present a zone of cultural contact and exchange between two distinct zones, a western zone orientated towards the Chad-Basin and an eastern zone in the Nile valley. Therefore, the region of Abu

Tabari holds a key-position for the general objective of the whole Wadi-Howar-project: the role of the Wadi Howar as a trade- and exchange-route between east and west.

Excavations

Excavations were carried out at four sites. On site Abu Tabari 02/52 apart from a rich faunal material containing many cattle bones, an astonishing number of small axe-heads and several palettes of an oval type, comparable to the palettes of the A-Group, were found. The palettes were made of local sandstone though. Pottery from this site is mostly undecorated, but some sherds with Leiterband-decoration appeared, assuming a dating to the fourth millennium or the first half of the third millennium BC.

At the site of Abu Tabari 02/1 (cf. Jesse 2003) four more burials, were excavated. These were, apart from a stone pendant, lacking any grave-goods. The preservation of the skeletons was extremely poor,

due to heavy abrasion by wind and sand. At Abu Tabari 03/13, a watering place and the filling of a well were excavated. In the profile of the excavated stone setting, under loose wind-born sand hardened, finely laminated layers of clay were found, pointing to a repeated evaporation of clayey water. The geological profile dug out near the centre of the circular mound up to a depth of 2.5 m clearly revealed oblique sandy layers refilling the pit of a large walk-in-well. A radio-carbon-date of charcoal found in a depth of 1.60 m in a lense-shaped fireplace brought a 14C-date of 824 ± 34 calBC (KN-5652: 2636 ± 54 BP). This is one of the youngest 14C-dates obtained so far in Lower Wadi Howar, extending the late settlement of the Abu Tabari Region almost into the times of the Napatan period. Also characteristic is the structure of the ditch-like circular mound, resulting from the digging of the well.

Other remarkable features of site Abu Tabari 03/13 are the appearance of a few scattered Acheulean bifaces in gravel banks, a few hundred meters to the east of the stone settings, testifying to the appearance of *Homo erectus* (or *Homo heidelbergensis*-editor) in this part of Wadi Howar. Furthermore, concentrations of sherds with wavy-line decoration and surface retouched stone-artifacts were found in two different parts of this site. One has to bear in mind though, that all the find-scatters of this site are dispersed over hundreds of meters. Thus, the different chronological phases are separated by some distance, horizontally as well as vertically.

One concentration with wavy line sherds, some of which were still embedded in the sediment in situ, was also excavated. Unfortunately it revealed that it belonged to a settlement horizon which was almost completely deflated by wind-erosion, so that only the very last finds were left in the sediment. No structures like fire-places or postholes were preserved.

The main part of the excavation work was carried out on site of Abu Tabari 02/28. The site is stretching over a flat, slightly elevated sandbank, which was probably built up by Pleistocene fluvial activity of the Wadi Howar and then shaped over by wind erosion during the Holocene, resulting in a general alignment from NNE to SSW. Eleven burials were excavated on this site, some of which contained grave-goods. The skeletons were very fragile, but still allowed examinations by the anthropologist during the excavation. Restricting preservation

factors were the ubiquitous, intensive activity of rodents, the frequent tracks of lorries disturbing the site and the strong deflation and abrasion by wind and sand. Especially on the northern, wind-exposed side of the site, bones and pottery both were preserved extremely bad.

Each burial contained only one skeleton. According to the preliminary anthropological classification in the field, four of the 11 skeletons were female and one male. Further two were children and therefore did not allow the determination of the sex. The male person and one female person were of a mature age, the other females were adult. No prevalent burial-position could be observed: Crouched position ("Hocker") on the right side was observed as well as upright sitting or upright squatted. One female burial was lying on the back, this is, however, due to post-depositional movements. This would point to the existence of an unfilled burial shaft or chamber, as was the case for the A-Group.

Grave-goods include pottery vessels and sometimes also large amounts of ostrich-eggshell beads. Four burials had no grave-goods at all. Whereas three burials contained only sherds, four others had rather complete vessels, cracked only by the sediment pressure. One of these was equipped with a bowl, a jar and an axe-head, two burials had three vessels each and one just one vessel. In most cases the vessels were placed above the deceased so that the burial was visible at first only by few sherds at the surface with the skeleton appearing only later after excavation of the first 10-30 cm. Other graves were so strongly eroded that already the bones of the skeleton were appearing at the surface and grave-goods, if they ever had existed, would have been totally abraded. A detailed measurement program was carried out on the site, in order to document features and single surface finds. During this four more graves were found, pointing to an intensive use of the site as a burial ground.

Apart from the graves other features have to be mentioned also. Numerous bone-pits were dispersed over the whole site, six of these were excavated. These contained cattle-bones amongst others, pointing to a pastoral way of life. The bones in the pit sometimes were still in conjunction, assuming that bigger parts of the corpses have been deposited here. This might suggest an interpretation as offering pits, as they have been found in large numbers

on the site of Djabarona 84/13 in Middle Wadi Howar together with Leiterband pottery (Keding 1997:216-240).

Pits with stone artifacts and potsherds also appear. These are probably normal waste-pits resulting from the settlement activities. Almost complete vessels found in the sediment might have been left for later use by the prehistoric groups, as it would happen among mobile herders, who intend to visit a site seasonally in order to reduce the luggage. Large artifact scatters and stone-knapping places on the site also result from settlement activities, in some cases also large lower grinding stones and upper grinding stones were found. Examination of the dispersion of the different features over the site will show, if the burials were part of the settlement area. The impression from field-work was, that they were situated in a marginal zone.

The examination of the pottery is still ongoing, but already during the excavation work it became obvious that in the graves pottery vessels with heringbone decoration and rocker-stamp zigzag were deposited together with those showing Leiterband-motifs, which suggest a date in the fourth or third millennium BC. This points even stronger to the melting of different, eastern and western, pottery traditions in Lower Wadi Howar.

The excavations at Abu Tabari 02/1 and 02/28 have considerably increased the number of burials in Wadi Howar (cf. Jesse and Keding 2002). Several other sites found during the survey around Abu Tabari also showed burials, suggesting a high potential of this region for future research on the social structures of the Neolithic in Wadi Howar and in Sudan in general, comparable even with sites like Kadero and Kadruka. All the sites of the region are surface sites and therefore highly in danger of destruction by erosion and wind-abrasion and also by the tracks of lorries. There is no other way to protect these sites than to excavate them, before they get totally destroyed. Therefore a long-time large-scale survey and excavation program would be needed to rescue the information provided by these sites.

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