WADI SURA

Field Report
Season 2009-1

University of Cologne

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Wadi Sura 1: Report on the first field season of the Wadi Sura Project (Gilf Kebir, SW Egypt), spring 2009

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In beginning of 2009 the Institute of Prehistoric Archaeology at the University of Cologne and the Heinrich-Barth-Institute e.V. in cooperation with the Cologne University of Applied Sciences and the German Archaeological Institute in Cairo started new archaeological investigations in the Western Desert of Egypt under the project’s title “Wadi Sura”. The first of two primary objectives of the project is the systematic documentation of the rock paintings at what has been named the “Cave of the Beasts”, a huge rock shelter discovered in 2002 at the south-western Gilf Kebir in Egypt’s southwest (Figs. 1; 2). In order to avoid further confusion due to the fact that this and other denominations of this shelter are distributed through the literature, the site is named here simply Wadi Sura II (or, according to our site list, Wadi Sura 09/2), because it is situated only a few kilometres west of the famous “Cave of the Swimmers” where L. Almásy, in 1933, coined the name Wadi Sura (“the valley of images”). Both sites share a number of painted motifs that are rather unusual for the whole Gilf Kebir/Jebel Ouenat region, and range among the most important rock art sites in the eastern Sahara (cf. Zboray 2005; Riemer 2009).

The second focus of the project is the landscape archaeology of the Wadi Sura micro-region. It aims at integrating the rock shelter and its imagery into the archaeological context displayed in the distribution, dating, and functions of prehistoric sites in the Wadi Sura micro-region.

The program of the first field season, which took place in April 2009 (07/04–29/04/2009), fell into four parts:

(1) A drilling section to explore the sediment fill of the Wadi Sura II (09/2) shelter.

(2) The development of a catalogue of attributes to record the thousands of figures painted on the rear rock face of the Wadi Sura II (09/2) shelter, including test records and photo documentation.

(3) The archaeological recording of the prehistoric site in front of the shelter (denominate as site Wadi Sura 09/1).

(4) A first archaeological survey in the Wadi Sura micro-region.

(5) A reconnaissance of some recently discovered prehistoric sites situated in the area between the Gilf Kebir and Jebel Ouenat.
Fig. 1 Satellite map of the Gilf Kebir/Jebel Ouenat region showing the position of the Wadi Sura area.
Fig. 2 The Wadi Sura II (09/2) shelter on top of the sand slope (view from east). In the foreground the camp of the spring 2009 mission.

Fig. 3 One of three drillings carried out in the sand fill of the Wadi Sura II (09/2) shelter.
1. Drilling programme at Wadi Sura II (09/2)

The field program in 2009 started with three test drillings in the sediment fill of the shelter to locate the possible former habitation floor and to explore the archaeological potential of the subsurface material (Fig. 3). The drillings indicated a thick and almost sterile eolian sand fill of the shelter. While two drillings reached sandstone rubble at c. 2.4 m and 3.0 m below the surface, the third drilling stopped at c. 3.5 m in eolian sand due to technical reasons. The primary outcome of the drilling program is that the level of the original living floor has not yet been reached. The vast material in the shelter is wind-blown sterile sand, with some broken rock falls embedded.

2. Rock art recording at Wadi Sura II (09/2)

Due to a delay in the issuing of security permits it was not possible to carry out, as scheduled, the systematic recording of the visible rock art in the Wadi Sura II shelter by means of digital photogrammetry and high resolution 3D laser scanning: In early April, Prof. H. Leisen, co-director of the project, and his team from the Cologne University of Applied Sciences had, after two weeks of vain waiting, to return to Germany for academic duties. This totally unexpected and, as yet, unexplained delay not only wasted time and money (the costs for the rent of the technical equipment, as well as for a specialist handling it, are rather high and seriously affected the project’s budget). It also resulted in the postponing of a major step in recording and analysing the rock art, which has to be completed before excavations in the shelter can be started.

Therefore, the recording of the overwhelmingly numerous and detailed rock art scenes – mostly painted (Figs. 4; 5), but there are also some engraved and/or picked images (Fig. 6) – had to be restricted to a preliminary photo documentation and the development of a catalogue of attributes to record the thousands of individual figures. In the present state, the latter comprises the following categorisations: subject (human, animal, hand/foot stencil, etc.), different types of style and size, basic configuration (such as sitting, standing, running, dancing, etc.), orientation and posture, special features, attributes and equipment, shown action, part of a larger scene or group, superimpositions, technique of representation, used colours, state of preservation, and others. This catalogue will allow to enter all figures individually in a standardized database and, when recording is completed, to search for various patterns in representations, their combinations, and the organisation of scenes, both spatial and in terms of relative chronology. For a first test record, a section of the rear wall, covering about four square metres, has been selected and systematically photographed in units of 40x60 cm (Figs. 7). The digital photos have been printed on site and the colour-prints used for the consecutive numbering of the individual figures, which were afterwards recorded according to the above-mentioned categorisations. All in all, the selected portion covered almost 500 figures (or fragments thereof), and this is just a small part of the decorated area of the shelter’s rear rock face which is c. 18 m in width and up to 6 m in height. It can reasonably been estimated that the whole rock art that is visible at present consists of at least 4,000 to 5,000 figures, and in view of the results of the drillings a huge number of additional representations can be expected below the present level of the sand fill.

The preliminary photo documentation also included the recording of the stylistic variety and distribution of selected motifs, such as the so-called “swimmers” (Fig. 8) and “headless beasts” (Fig. 9) that already attracted much attention (and raised most speculative interpretations as for their possible meaning and relation to ancient Egyptian mythology, cf.
Le Quellec et al. 2005; Le Quellec 2008). One representation of the mysterious “beasts”, apparently consisting of parts of different animals and missing the rendering of a head, has been found close to what appears to be an attachment point for looped ropes, carved into a protusion of the rock wall (Fig. 10). There are some more of these artificial attachment points elsewhere on the rock face, mostly at favourable crevices, but in this particular case it is clear that the device has been produced before the image has been drawn, because the beast’s tail partly runs into the former.

3. Archaeological investigation at Wadi Sura 09/1

In front of the dune slope, that leads up to the shelter of Wadi Sura II, a basin with largely wind-eroded playa mud and silts exists (Fig. 11). Prehistoric artefacts scatter especially along the western, southern and eastern edges of the basin, designated here as site Wadi Sura 09/1. As it is indicated that tourists have re-arranged and collected artefacts from the surface (Fig. 12), and to prevent further looting and destruction of the site (cf. in general Kuper 2007; 2009), a systematic surface mapping and collection of potsherds and retouched tools and a topographic measurement of the basin were carried out. Chipped cores were selectively collected. Large cores as well as grindings stones were mapped and photographed systematically.

Three test excavations were carried out, one on the western edge of the “Upper Middle Playa Terrace”, two on the dune surface east of the basin. Although the surface of the dune is heavily impacted by trampling and car tracks left by tourist visits, the testing of the dune produced many transversal arrow heads made of quartz, chalcedony, and quartzite. The latter, as most of the pottery found at the site, can be attributed to the Gilf B phase, c. 6800/6600–4400/4300 calBC, following the chronological sequence established in Linstädtter 2005. Only a few thin-walled and partly impression-decorated potsherds of the later Gilf C phase, c. 4400/4300–3500/3000 calBC, have been found at Wadi Sura 09/1.

In addition, the playa terraces have been mapped and recorded to understand the playa development in accordance to the artefact distribution pattern, as well as to explore the potential of the playa for research in the climatic history of the area.

4. Archaeological survey in the Wadi Sura micro-region

Different from a survey to locate simply archaeological sites, the survey approach applied here is that of systematic sampling of evidence for human uses of a landscape, and at relating these data to changing palaeoenvironmental conditions. The recording of archaeological sites, mainly surface sites, is consequently directed by ascertaining the distribution of sites and their setting in the landscape. Further information to be obtained by site documentation is the dating of the sites and the affiliation of their structure and function.

As part of an extended field walking survey program in the Wadi Sura area (Fig. 13), the primary goal during this initial field campaign was the survey of a transect from the plateau surface of the Gilf Kebir in the north to the southern piedmont edge in the south to get a first impression of site distribution and archaeological potential in different landscapes or geo-zones. For logistical reasons while based in the camp at Wadi Sura II, the initial work has concentrated on surveys in walking distance from the camp (i.e., up to a distance of c. 5 km). Archaeological sites and their setting in the landscape were systematically recorded by means of a survey form in order to develop a standardised data basis for inter-site and inter-regional
comparison. Surface collections and sampling of artefacts took place at some selected sites; in particular potsherds were collected systematically, as decoration pattern and fabric analysis currently provide the best basis for typo-chronological affiliations. Additionally so-called “off-site” information was gathered, such as GPS recordings of vegetation, old water pools, animal tracks, and potential paths and corridors of human mobility, in particular passes through the mountainous zone between the lowland and the Gilf Kebir Plateau surface (Fig. 14). The survey of this season has covered an area of approximately 35 km² where some 50 sites have been recorded.

Artefacts and field data collected during this season now need careful examination before further results can be presented. However, some preliminary information can be given based on the observations in the field.

The study of the landscape allows for drawing up a sequence of five landscape or geo-zones with changing relevance for site distribution and function. They are listed in order of their geographical position from south to north:

1. Lowland (open landscape in the foreland of the Gilf Kebir);
2. Lowland with isolated hills
3. Piedmont (foothills and ridges)
4. Escarpment
5. Plateau surface

Regarding the distribution pattern of archaeological sites, it seems that sites, in particular larger sites, concentrate in the southern margins of the piedmont zone. This is exactly where the shelter of Wadi Sura II is situated, and where playa deposits possibly indicate locations where surface water was episodically available during the Holocene humid phase.

In view of the, as yet, incomplete examination of the artefacts, the chronological affiliation of the sites needs further study. It is, however, possible to say that the bulk of pottery found during the survey falls into the Gilf B phase, c. 6800/6600–4400/4300 calBC, following the sequence of Wadi Bakht in the south-eastern Gilf Kebir (Linstädter 2005), while typical pottery of the Gilf C, c. 4400/4300–3500/3000 calBC is poorly represented. Given that this very preliminary picture can be corroborated by our future surveys, Wadi Sura would not exactly parallel the situation in the valleys of the south-eastern Gilf Kebir, namely Wadi Bakht and Wadi el-Akhdar where Gilf C sites are well represented.

Six sites yielded rock art; except for one already discovered by A. Zboray in 2002 (Zboray 2005) all were previously unknown. The rock art comprises engravings of wild animals, humans, or simply scratch marks and erratic lines. Among the rock art discoveries there is one exceptional panel found on the plateau surface (listed as Wadi Sura 09/29) where a group of giraffes are depicted attacked from both sides by hunters with bows and arrows (Fig. 15). In terms of technique and style, the panel seems to be unique among the known rock art in the Wadi Sura region.

5. Reconnaissance of recently discovered prehistoric sites situated between the Gilf Kebir and Jebel Ouenat

After having completed the work in the Wadi Sura region, it was decided – in accordance with the accompanying inspector of the SCA – to visit some prehistoric sites which have most recently been discovered by Mark Borda and associates in the area between the southern Gilf Kebir and northern Jebel Ouenat. A short-termed investigation of these sites promised to
reveal possible interferences between both regions, which might help understanding the cultural embedding of the archaeological sites in the Wadi Sura region (for the close cultural affiliation of the regions see Linstädter 2007). Close parallels, both to the Gilf Kebir and the Jebel Ouenat, are to be found among the pottery, such as potsherds with Dotted Wavy Line decoration (phase Gilf B) and Herring Bone decoration (phase Gilf C) indicate (Fig. 16).

The short reconnaissance in this transit zone proved the existence of a number of sites remarkably rich in stone tools and pottery, the latter being of primary importance for their allocation to the prehistoric occupation phases of the Gilf Kebir/Jebel Ouenat region. Rock art is also present at a few sites, one of which is especially remarkable for a large number of well-preserved paintings at the ceiling of a shelter (Fig. 17). In general, it turned out that this region holds much more archaeological potential than hitherto assumed. Further investigations seem most rewarding, but in view of increasing off-road tourism it has also to be stated that this area is in rather urgent need of protection.

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The team of the field season in spring 2009 comprised: Dr. Rudolph Kuper (head of the mission, prehistorian at University of Cologne), Dr. Heiko Riemer (prehistorian at University of Cologne), Frank Förster M.A. (Egyptologist/archaeologist at University of Cologne), Dr. Frank Darius (botanist, Egyptian Environmental Affairs Agency, Cairo), Dr. Karin Kindermann (prehistorian, Egyptian Environmental Affairs Agency, Cairo), and Beatrix Kuper (photographer). The Supreme Council of Antiquities was represented by inspector Ahmed Gouma.

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Fig. 4 Detail from the shelter’s rear rock face showing numerous painted figures.
Fig. 5 The painted decoration of the wall, consisting of thousands of figures, continues below the present surface of the sand fill.

Fig. 6 Some of the rather few engravings situated in a height of up to six meters.
Fig. 7 Provisional photo frame covering an area of 40x60 cm as a practical unit for recording.

Fig. 8 Row of so-called “swimmers” in the Wadi Sura II (09/2) shelter.
Fig. 9 Some of the so-called “headless beasts”, hybrid creatures apparently consisting of parts of different animals.

Fig. 10 A “headless beast” close to what appears to be an attachment point for looped ropes, carved into a protusion of the rock wall. Note that the creature’s tail partly runs into the artificial device, thus attesting a younger date of the drawing.
Fig. 11 Wadi Sura II: The rock shelter above the dune slope (Wadi Sura 09/2) and the wind-eroded playa basin (Wadi Sura 09/1).

Fig. 12 More than 300 potsherds, stone tools, and grinding implements were recorded on the playa surface at Wadi Sura 09/1. Unfortunately, large parts of the site have been found heavily disturbed by unknown visitors who had collected and re-arranged several artefacts, as exemplified in this picture.
Fig. 13 Map of the Wadi Sura area showing the positions of the most famous rock art sites of the “Cave of the Swimmers” (Wadi Sura I) and the “Cave of the Beasts” (Wadi Sura II [09/2]). The white outline shows the area surveyed by systematic fieldwalking in spring 2009, while the black frame represents the proposed area of future surveys.
Fig. 14 Field walking survey in the piedmont zone of the Wadi Sura area.

Fig. 15 Wadi Sura 09/29: Group of giraffes attacked by two hunters with bows and arrows (incised).
Fig. 16 Pottery discovered on prehistoric sites in the area between the Gilf Kebir and Jebel Ouenat:
1 Potsherd with Dotted Wavy Line decoration (phase Gilf B, c. 6600-4400 calBC);
2 Potsherd with Herring Bone decoration (phase Gilf C, c. 4400-3000 calBC).

Fig. 17 Well-preserved paintings showing cattle as well as humans at one of the sites recently
discovered in the transit zone between Gilf Kebir and Jebel Ouenat.