Rudolph Kuper

## Between the Oases and the Nile -Djara: Rohlfs' Cave in the Western Desert

That part of Egypt west of the Nile Valley traditionally referred to as the "Libyan Desert", can be divided into two main regions: The "Libyan Desert" sensu strictu, which covers most of the Eastern Sahara and stretches from the Cyrenaica in the north down to Wadi Howar in Sudan, and the so called "Libyan Plateau" or "Limestone Plateau" between the Egyptian oases and the Nile, which on most maps also is called "Western Desert". In spite of the fact that this vast area lies relatively close to the Nile Valley it has until now not attracted the same attention from scientific expeditions. From the early days of Bagnold, Clayton, Almasy and Frobenius up to Wendorf and our own B. O. S. project such remote areas like the Gilf Kebir or the Great Sand Sea have been preferred. 120 years ago, however, it was part of the exploration work of the first (and for another hundred years the only) interdisciplinary expedition carried out in this part of Egypt. The expedition was headed by Gerhard Rohlfs, who provided a general description of the results in his famous book "Drei Monate in der libyschen Wüste" (Rohlfs 1875).

The main objective of this unique enterprise and the reason it was financially supported by the Khedive Ismail of Egypt, was to reach Kufra in Libya and particularly to find a solution to the so called "Bahr-bela-ma problem", the idea of a supposed former Nile bed in the Western Desert. It was hoped that there land could be reclaimed which even at that time was seen as a possible solution for the over-population of the Nile Valley. With regard to the chronological relationship between the two river beds, during a session of the "Institut égyptien" directed by Mariette Bey, the members of the expedition were also asked to pay special attention to "des instruments de silex fabriqués de main d'homme" as indications of a formerly moister climate (Mariette Bey 1873: 174).

The extensive logistic preparations for the journey included 500 iron water cases made in Germany and transported to Egypt. The expedition left Assiut on December 18th, 1873 with one hundred camels and reached Farafra 12 days later. In the account of this route Rohlfs mentions that on Christmas Evening, 1873

they set up camp near a place called "Djara", which he describes as a spacious dripstone cave with beautiful stalactites. No further details are given and later generations might not have taken this report seriously since for almost 120 years (in contrast to the other results of the expedition) the cave seems to have fallen again into oblivion.

Rohlfs' team was comprised of 10 members from Germany, whose names can be found on a column of the Roman temple of Deir el Hagar in Dakhla oasis: 1. Gerhard Rohlfs, who was a doctor, 2. Georg Zittel, Professor of Geology, 3. Wilhelm Jordan, a geographer, 4. Paul Ascherson, a botanist, 5. Philipp Remele, a photographer, to whom we owe the earliest pictures of the Western Desert, - and each had a German servant.

Following a short stay in Farafra, the expedition moved to El Kasr in Dakhla oasis, where the inhabitants offered them a spacious house to serve as the base for their further march to the West. Indeed the original plan to reach Kufra had to be abandoned. The expedition advanced 150 km into the Great Sand Sea but the giant dunes became larger the further west they went and finally impassable for the heavy loaded camels. Plans had to be changed and the expedition followed a route parallel to the longitudinal dunes northward to Siwa, which was reached two weeks later. From there they returned to Dakhla and then via Kharga to Cairo. At the place where Rohlfs was forced to change the goal of the expedition the group experienced two days of continuous rainfall, from February 2 - 4, 1874. In a cairn erected at their camp they left a message naming the site "Regenfeld" (rainfield), a name still indicated on today's maps.

Although they failed to reach Kufra, the scientific results of the expedition were of great importance for all represented disciplines. The first geological map of Egypt, published by Zittel, was for nearly a hundred years the basis of the geology of Egypt (Zittel 1880); the first botanical descriptions of the area were published (Ascherson 1874); a large number of climatological observations and measurements were documented; and a photogrammetric view of El Kasr taken by Jordan and Réméle was one of the earliest applications of this method (Jordan 1876).

Only archaeology seems to have played a minor role. It was not until 1989 that Dr. Carlo Bergmann, who treks hundreds of kilometres through the desert each winter with his camels, re-discovered the dripstone cave marked by Rohlfs on his route to Farafra. He not only fully confirmed Rohlfs' description, but also made reports of rock art in the cave and rich prehistoric remains in its immediate surroundings. In fact, this could already be inferred from Rohlfs' map, where we find the word "Feuersteinsplitter" (stone splinters) close to the name "Djara".

As a consequence of Carlo Bergmann's publications the archaeological context of this location was threatened to be soon endangered by tourists attracted to the site. In order to see what could be done to salvage this unique natural and cultural resource a small group of geographers and archaeologists from Berlin, Cologne and Cairo visited the site together with Carlo Bergmann in November

1990. Approaching the site from the north we found the broad camel route that Rohlfs used when he started out from the Nile Valley and followed it westward to the cave, whose entrance lies in the centre of a featureless, flat depression. Sliding down into the narrow opening on a flat sand slope we encountered after a few metres a great stalagmite densely covered with rock engravings, which partly overlap and are executed in different techniques (Fig. 1). They depict mainly animals like ostriches, Addax antelope and other bovids, some of which obviously represent goats (Fig. 2).

From here one slides another ten metres down into a great hall that extends over approximately 50 metres. Impressive stalactites hang from the roof while the floor is covered with plain sand. The depth of this sand layer is clearly the most important question, since it can be assumed that a cavern of this type could have served for thousands of years as a sediment trap for microfossils as well as for human debris. There was clear evidence of water that had quite recently been standing on the sand, which would have made this site even more attractive to prehistoric settlers, whose traces indeed can be found in the cave's immediate surroundings.

There the surface is scattered with thousands of lithic artefacts, mainly concentrated in an area of 300 to 100 metres immediately north of the entrance. The site seems to be widely deflated. There are no visible stone structures, but a number of "Steinplätze" (hearths) and larger areas indicating intensive working of flint. The material used was tabular flint as well as flint nodules that can be found close to the site. As documented by many primary forms and several cores, a fine blade technology was in use. Contrary to this no geometric microliths and only a few backed elements have been detected. Judging from a rough estimate the tool kit is dominated by large, bifacial pieces made by a fine pressure flaking technique, that produced parallel ripples, and an additional sharpening of the edges (Fig. 4: 4. 5). The spectrum also comprises elongated forms with nearly parallel edges as well as pieces whose shape suggests the term "knife". These seem to be made of tabular flint and some of them are only partially retouched. Another group consists of smaller bifacial pieces of oval shape, while also side blow flakes occur (Fig. 3: 12) and side- and round scrapers are well represented (Fig. 3: 11; 4: 2). Common items at the site are planes or tranchets, made from thick flakes, the ventral side always without retouch (Fig. 4: 3). The smaller artefacts include carefully worked arrowheads of different sizes and shapes (Fig. 3: 1-9), most of which are worked bifacially. They comprise leaf-shaped points, sometimes with serrated edges, and stemmed pieces of different type, but no hollow based forms could be observed. Perforators seem to be well represented by the *meche de foret* type (Fig. 3: 10).

In comparison with other sites, for example in the Great Sand Sea, grinding material is relatively scarce. Complete milling stones are missing - they may have been taken and reused by caravans which passed by - while some handstones represent the circular type known from the oases and Sand Sea sites.

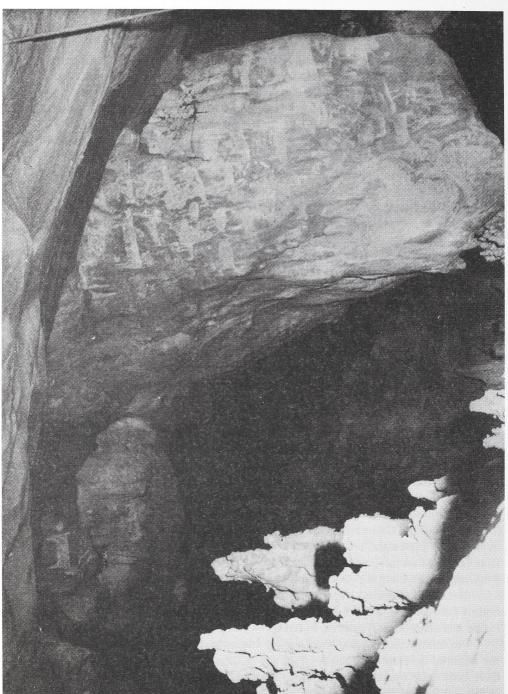


Fig. 1. Djara cave. Stalagmite with rock engravings near the entrance.

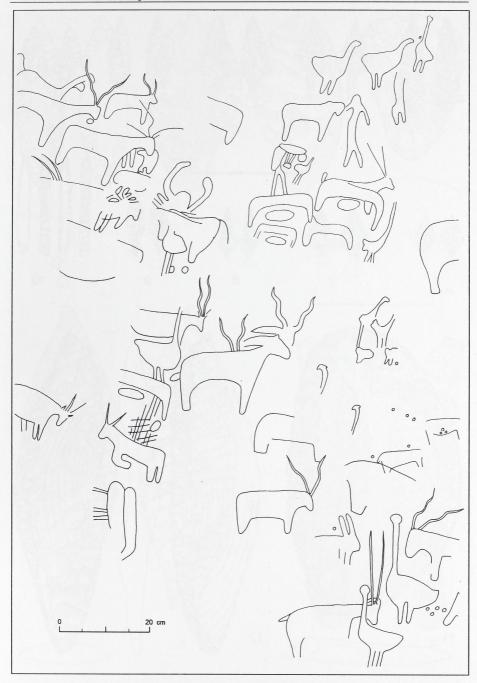


Fig. 2. Djara cave. Section of the rock engravings.

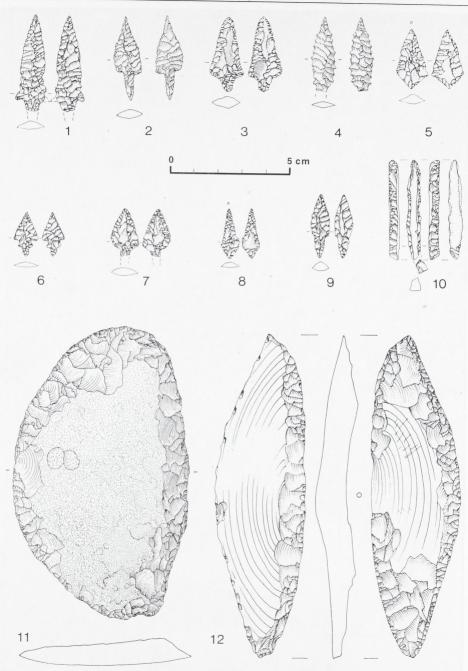


Fig. 3. Djara site 90/1. Stone artefacts.

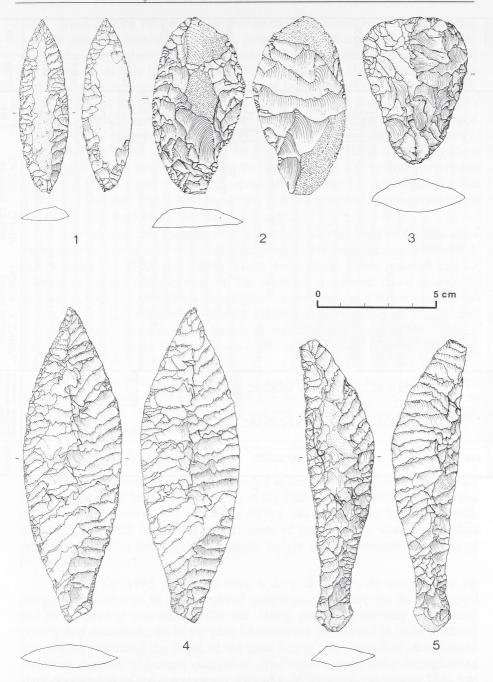


Fig 4. Djara site 90/1. Stone artefacts.

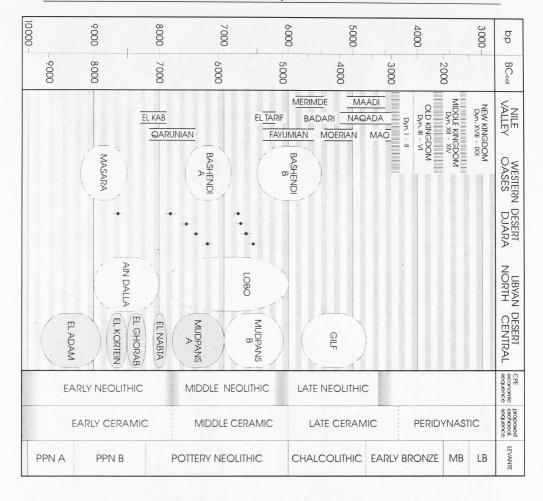


Fig. 5. Radiocarbon dates from Djara site 90/1-1 and 90/1-2 within the Holocene cultural sequence of Western Egypt (for details see: Kuper 1995).

When looking for parallels to this assemblage it must be kept in mind that it might comprise several occupations, despite the fact that at first glance it may give a relatively uniform impression. With regard to the carefully worked bifacial pieces one needs only look to the Nile Valley, where for example the main sites of the Badarian culture lie only 200 km east of Djara. Within our B. O. S. project, the Sitra area as well as the eastern Great Sand Sea have produced comparable inventories. The Sitra material consists of large, bifacial foliates as well as tanged and leaf-shaped arrowheads (Cziesla 1989: Fig. 1). Geographically and typologically closer is the site of Lobo, near Abu Minqar in the Great Sand Sea (Klees 1989: Fig. 1, 2, 4). Here not only are the large foliates, knives and arrowheads found, but also the planes are well-represented. It must be mentioned that the scarce, but characteristic undecorated ceramics from this site strongly resemble the pottery from the Fayum Neolithic settlements.

Other comparable material comes from the surroundings of Dakhla oasis where recently two closely related artefact groups have been defined: Beshendi A and Beshendi B (McDonald 1991). Many traits of the Djara material can be detected within the Beshendi context. The Beshendi A material, dated between 7, 600 and 6, 900 bp, of foliates, leaf-shaped arrowheads and perforators corresponds to the Djara material as does the material of Beshendi B (6, 500 -5, 500 bp), particularly the planes, the tanged arrowheads and the side blow flakes. Recent research near the Farafra oasis has also revealed some corresponding artefact material (Barich and Hassan 1990).

With this specific composition of its artefact spectrum and its geographical position between the oases and the Nile, the site of Djara appears to be able to make an essential contribution to the cultural and chronological relationship between the Sahara and the Nile Valley.

## Addendum

Since the above report was presented at the 1992 Dymaczewo conference additional research has been carried out at the Djara site including two small test excavations in January 1993. In 1996 a survey was made of the larger surroundings of Djara which confirmed the existence of several other similar sites, thus promising to future investigators a deeper insight into the settlement pattern of the period concerned.

During the 1993 expedition only 6 days of work were available to us, during which we tried to clarify several questions concerning the archaeological and environmental potential of the site. Using ground penetrating radar some geophysical measurements of the cave bottom were carried out in order to obtain information regarding the depth of the sand filling and a possible stratification including remains of human occupation. The signals were quite disappointing since they indicated a homogeneous structure of the entire sediment. This was verified by the results of drilling six bore holes of up to six metres in depth using

a simple auger which only showed sterile sand. Therefore little hope exists of finding archaeological remains in the lower regions of the cave.

Efforts have been made to clear the base of the stalagmite near the entrance of the sand which covers some of the engravings - unfortunately due to continually falling sand with little success. Some new pictures were revealed, like the well designed figure of a goat (Fig. 1, lower right side), but the copy made of the main panel had to be left uncompleted at the bottom.

Outside the cave the surface scatter of artefacts has been surveyed and the more significant pieces were marked and mapped by means of an electronic tachymeter and then collected in order to protect them from possible looting by subsequent visitors. Two test excavations have been carried out - one immediately south of the cave entrance and the other some hundred metres further south within an artefact concentration characterized by bladelet technology. The latter (site 90/1-2) provided some radiocarbon dates around 7,500 bp (6,400 BC), while the oldest feature of the place, a hearth ("Steinplatz") which lies close by, dated about 8,600 bp (7,600 BC) (Fig. 5). The sondage carried out near the cave (site 90/1-1), despite measuring only 2x6 metres, uncovered two fire places lying close together and extending about 20 centimetres below the surface. Both of the fire places contained several flint artefacts, including four bifacial retouched pieces: three arrowheads (Fig. 3: 3, 6, 8) and one side scraper (Fig. 4: 2). Associated charcoal samples date this assemblage between 6,500 and 6,800 bp (about 5600 BC), i.e. some hundred years earlier than the first appearance of the bifacial technology at the sites of Fayum and Merimde. 1

## References

- ASCHERSON, P. 1874. Vorläufiger Bericht über die botanischen Ergebnisse der Rohlfs'schen Expedition zur Erforschung der libyschen Wüste. Botanische Zeitung 38-40: 609-647.
- BARICH, B. & F. A. HASSAN. 1990. Il Sahara e le oasi: Farafra nel Deserto Occidentale Egiziano. Sahara 3: 53-62.
- CZIESLA, E. 1989. Sitra and related sites at the western border of Egypt. In: L. Krzyzaniak & M. Kobusiewicz (eds), Late Prehistory of the Nile Basin and the Sahara: 205-214. Poznan: Poznan Archaeological Museum.
- JORDAN, W. 1876. Le levé topographique a l'aide de la photographie (Photogrammétrie). Bulletin trimestriel de la Société Khédievale de Géographie du Caire: 278-293.
- KLEES, F. 1989. Lobo: a contribution to the prehistory of the eastern Sand Sea and the Egyptian oases. In: L. Krzyzaniak & M. Kobusiewicz (eds), Late Prehistorry of the Nile Basin and the Sahara: 223-231. Poznan: Poznan Archaeological Museum.

<sup>&</sup>lt;sup>1</sup> I would like to thank Lee Love and Vance Haynes for reading the manuscript for corrections.

KUPER, R. 1995. Prehistoric Research in the Southern Libyan Desert. A brief account and some conclusions of the B. O. S. project. Actes de la VIIIe Conférence Int. des Etudes Nubiennes. Lille, Sept. 1994. CRIPEL 17: 123-140.

MARIETTE BEY. 1873. Séance du 5 Décembre 1873 au Caire. Bulletin de l'Institut Égyptien 12: 159-181.

MCDONALD, M. 1991. Origins of the Neolithic in the Nile Valley as seen from Dakhleh Oasis in the Egyptian Western Desert. Sahara 4: 41-52.

ROHLFS, G. 1875. Drei Monate in der libyschen Wüste. Kassel. (Reprint Köln 1996).

ZITTEL, K. 1880. Ueber den geologischen Bau der libyschen Wüste. München.