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Archaeology of Farafra Oasis (Western Desert, Egypt)
A Survey of the most recent Research

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The Farafra Oasis (N from 26°40' to 27°30' / E from 27°30' to 28°40'), the smallest among the oases of the Egyptian Western Desert, is located at about 600 kilometres south-west of Cairo, in the middle of a vast 10.000 square kilometres depression. Although it has already been mentioned in Egyptian sources going back to the 5th Dynasty as ta-iht (« the land of the cows ») and in the « Karnak Inscription », referring to the 19th Dynasty, in which it is mentioned as a stop-over on a long route which linked the Egyptian Desert with the Libyan Fezzan (Fakhry 1974 : 158), the small oasis has not yet yielded any documents of the Pharaonic period. Therefore, up to now its most ancient monuments refer to the Roman occupation of the region (a series of tombs excavated in the rock at Ain Jallaw and at Ain Bishoi, near Qasr Farafra, the inhabited centre of the oasis).

The research of the Archaeological Mission of the University of Rome « La Sapienza », directed by Barbara E. Barich, began in 1987, and has since that time developed regularly over 11 field campaigns (the next is scheduled for January 2003). The investigations carried out until today have highlighted the significant role that the oasis has played as a mediator of exchanges between the Sahara and the Nile in the broader context of the Egyptian Western Desert. Today, enough documents testify that the Nile Valley was at first influenced by the eastern Saharan regions, and only later was affected by influences from the Near East. The particularly important contribution made by the desert populations

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concerning the beginning of agricultural activities in the Nile Valley are fundamental for the development of the Predynastic cultures (Badari and Naqada), which immediately preceded the formation of the Egyptian State. A starting point of this process was the establishment of a more stable form of settlement in the Western Desert, based on the exploitation of a broad variety of wild cereals. The local hunter-gatherer groups of the Early Holocene (e.g. the Ain e-Raml and Bahr Playa settlements at Farafra, the El Nabta Neolithic at Nabta Playa and the Bashendi horizon at Dakhla) mediated the first contacts with the western Sahara. Such relations were then further reinforced when, pressured by climatic changes and the drying up during the Late Holocene, the Saharan peoples moved towards the Nile Valley.

The methodology used in the context of the Farafra archaeological project foresees a multidisciplinary approach and puts a strong emphasis on the climatic and palaeoenvironmental reconstruction. Fekri A. Hassan, of the University College London, responsible for the ecological and palaeoclimatic study, has suggested a palaeoenvironmental reconstruction which featured the presence of at least three moist phases during the Holocene: the first occurring in the Early Holocene (9.300 - 8.800 or 8.600 - 7.100 bp); the others corresponding to the humid intervals of the Middle Holocene (5.900 - 5.000 and 4.800 - 4.600/4.500 bp) (Barich & Hassan 1984-1987: 139-140). During these moist phases, some water deposits, in various locations of the valley, represented attraction spots for the human groups. In fact, the archaeological investigation showed that the prehistoric campsites were always set up on the spots where water supplies were originally the most abundant.

The Qasr Farafra region
In the earliest years of field research, various archaeological assemblages were investigated in the area nearest to the inhabited centres, such as Qasr Farafra, Ain e-Raml, Ain Kifrein, Abu Kasseb and Abu Nuss. These were settlements having no real stratification, but were abundant in hearths. The most ancient occupation phase, brought to light at Ain e-Raml and dated 9.650 ± 190 bp (R-1983), represents an ephemeral occupation by hunter-gatherers, characterised by epipalaeolithic tools (high blade index, presence of backed bladelets, burin spalls, absence of pottery), which finds comparisons in the El Ghorab facies of the Western Desert (Barich & Hassan 1984-1987: 149-158).

A more recent occupation phase, begun in the Middle Holocene (around 7.000 bp) and represented by the sites discovered mostly in the Wadi el-Obeiyid/Bahr Playa region, in the northern sector of the Farafra depression, is characterised by the presence of more stable settlements, in which preliminary forms of plant cultivation made their appearance (Barich, Hassan & Mahmoud 1991: 36).

Wadi el-Obeiyid is a vast fossil valley which separates the two main parts of the oasis: the Northern Plateau and the Quss Abu Said. The high number of archaeological sites proves the density of population in the area during the
entire Middle and Late Holocene phases. The radiocarbon dates obtained can be placed mostly between 7.000 and 6.500 bp. Examination and stylistic analysis of lithic assemblages revealed a process of progressive increase of groups in the area, who were dedicated to the intensive exploitation of wild cereals (Barich, Hassan & Stoppiello 1996).

The « Hidden Valley » complex

Starting from 1995, the research was concentrated on the upper course of Wadi el-Obeïyid, particularly in the so-called « Hidden Valley » settlement area, from which direct confirmation of the above-mentioned interpretative model was obtained (fig. 1).

Hidden Valley, located at about 60 kilometres north-west of Qasr Farafra, dated between the eight and the seventh millennia, experienced various occupation phases in relation to favourable environmental conditions. Abundant rain caused the formation of several temporary water deposits, whose lacustrine fossil sediments (yardangs – little mud hills), still characterise its landscape today. The investigation area consists of a settlement system, exceptional for open-air desert locations, made up of a « village » and a complementary supply area for the raw materials used in stone manufacturing, located on the Northern Plateau, about two kilometres north of the village. A cave decorated with engravings and wall paintings is also part of the system, with its entrance opening on the slope of this plateau.

The village was the main inhabited nucleus of the area and was located on the shore of an ancient water basin characterised, today, by a Holocene beach residue (playa). The village is made up of stable habitation structures, outlined by large stones set in an approximately circular pattern (fig. 2). Many of these structures host several hearths inside. The long duration of settlement is confirmed by the thickness of the anthropogenic layer (over one meter) and by corresponding dates going from the eighth to the seventh millennium bp.

A confirmation of the abundant presence of water, which must have characterised the whole Farafra depression in the past, was found in the hearths of the village, which yielded plentiful palaeobotanical and faunal remains, typical of an environment totally different from the one of today. The region’s arboreal cover must have mainly been characterised by acacia and tamarix trees (from the charcoal remains analysed, the ratio is respectively 2 to 1) (Cottini 2002). The palaeobotanical analyses of soil samples, taken from some hearths, brought to light the massive presence of burnt cereal grains (Echinochloa colona, Panicum, Cenchrus, Brachiaria, Setaria), and in particular Sorghum sp. (Fahmy in press). This floral evidence suggested that the Hidden Valley village could have hosted an autonomous process of elaboration of proto-agricultural activities. Even the high presence, among the flint artefacts, of tools aimed at grain gathering and processing (such as the numerous sickles and the grinding equipment), clearly indicated the emphasis put on plant resource exploitation by the site’s occupants (Lucarini in press).

Along with game species (dorcas gazelle, ostrich), the utilised faunal resources also include domesticated species (sheep/goat). This would denote a mixed economy characterised by, besides cereal exploitation, hunting and herding activities as well (Gautier in press). It is interesting to note that the radiocarbon dates associated with bone samples belonging to sheep and goat bring the presence of these species in the region back to the end of the eighth millennium bp (7.251 ± 67, sample R-2456 and 7.110 ± 50 bp, sample GdS-271).
Although pottery is completely absent, the abundance of ostrich eggshell fragments collected (fig. 3), gives us evidence that ostrich eggs were probably used as containers, in place of ceramic vessels. Traces of fire, visible on some fragments, would suggest that the ostrich eggshells may also have been used for cooking some types of food after having been placed inside pot-holes containing ashes. Despite the total lack of pottery, the proof that manufacturing and heating up clay was not unknown was given by the exceptional find, during the 1996 field-campaign, of a little clay figurine (4.8 cm high) brought to light from an hearth dated 6,750 ± 50 bp (Gd-7823). The only decoration consists of short parallel lines incised on the upper part of the figure, probably representing hair. Although it has a very schematic character, a stylised female figure can be made out clearly enough on the object. This little statue would seem to anticipate the iconography typical of the neolithic Egyptian cultures. The female figure theme fully goes along with the ideological climate of the entire Predynastic period (myths linked with the fertility cycle, like the Mother Goddess images). The presence of a female figure does not in any way surprise us, in such a context which features proto-agricultural practices, which were, as is known, a prerogative of the woman (Barich 1998a: 549-550).

The importance of the whole complex is emphasised by the presence of the cave, located about two kilometres north of the village and fifty meters above the wadi floor. Geomorphologically it is a karstic solution cave, excavated in the chalky limestone of the Tarawan formation; it is about 13 meters in length, while its height varies from 1.5 to 6 meters and it can be entered through a 2 x 2 meter square opening. The cave consists of three adjoining circular chambers forming an elongated cavity. These three sections, termed «front» (south-western), «middle» and «back» (north-eastern) galleries, are characterised by rounded vaults and smoothed wall surfaces featuring engravings and painting (Barich 1998b: 11). The iconographic motives are quite varied and include engraved animal figures (goat, gazelle, giraffe), in the front gallery; the image, engraved once again, of a boat similar to those typical of the Predynastic period, in the middle chamber and, finally, hands painted in negative in the innermost section (fig. 4). Noteworthy is also a pattern made up of shallow rounded-off cavities (about 10-20 cm in diameter), each one surrounded by 4 or 5 smaller ones, chiselled onto the eastern wall of the first chamber, right below the animal figures (Barich 1998b: 14-16). Based on comparisons with analogous examples found at Dhor el-Gusa (Fezzan), it seems that they could be interpreted as lion paw print patterns, to which a magic ritual significance could be attributed (Le Quellec 1993). The cave’s role as a ritual and cult meeting place is quite clear, this hypothesis being supported by the presence, in the innermost chamber, of a large hearth.
The place was used for a substantial chronological span (as indicated by the radiocarbon dates, from 7,000 bp to the historical period), and perhaps by groups from various provenance. For example, the hand imprints painted with « negativo » technique on the rock walls, could testify a passing-by of Saharan communities (Barich 1998b: 17-18).

The latest research
The excavation work carried out during the 2001 field-campaign in the central area of the settlement (Sector A4), brought to light a large « hut », buried at about 50 cm below surface (fig. 5-6). The internal area of the hut, with an approximately circular shape and a 2-meter diameter, revealed the presence of numerous stone lined hearths, thanks to which it was possible to detect various occupation and exploitation episodes. Inside the hearths, burnt wild cereal seeds were plentiful, which are still under study but whose species should not be far from the taxa already recorded from other sectors of the Hidden Valley village (Fahmy in press). The complex brought to light, which can be dated to around 7,100 bp, is one of the most ancient examples of habitation structures in the Egyptian Western Desert. Besides plant remains, the stratification yielded numerous tools suitable for both plant harvesting and hunting (such as sickles, saws, arrow-heads, grinding stones and denticulated scrapers) (fig. 7). It is a very refined set of tools that shows a remarkable skill for chipping the local stone. Like for the other implements collected from Hidden Valley, the raw material used is a characteristic shiny brown-coloured chert. The zone where it came from is located on the Northern Plateau, about 2 kilometres from the settlement. The date 5,950 ± 70 bp (Gd-12284) was recently obtained from this area, seemingly indicating its last occupation phase in the Late Holocene. Furthermore, various stone assemblages, attributable to the same late Holocene phase, were recorded at a short distance from the Village. They were made up of bifacial tools similar to Predynastic items (knives, gouges, planes, sickle elements) (fig. 8), while the only ceramic fragments, up to now known for this context, were collected at site HV-2 (Barich in press).

During the 2001 fieldwork our investigation was extended further west, reaching Sheikh el-Obeiyid, at about 15 kilometres from Hidden Valley. This area, seemingly very favourable for human settlement, is a little valley suspended within

3. The same region has yielded notable traces of MSA (Middle Stone Age) occupation currently under study by P. Van Peer (University of Leuven).
the slopes of the Northern Plateau. The numerous concentrations, made up of stone artefacts, ostrich eggshell fragments, grinding stones, and a few pieces of pottery, show that nomadic groups repeatedly visited the area. The preliminary study of the lithic collections, often related to fireplaces, has revealed the presence of two aspects, typologically clearly distinct. The first, brought to light at site SK-OB/01/1, shows a survival of the microlithic tradition and can be attributed to the beginning of the Middle Holocene. Radiocarbon dates on ostrich eggshell fragments associated with lithics gave the date of 7.755 ± 60 bp (Gd-11648) for this assemblage, which agrees with another date (7.725 ± 60 bp, sample R-2234) obtained from a complex already investigated at El Bahr (Area 2A), only 2 kilometres south-west of the Village (Barich 1995: 42). However, other implements collected from Sheikh el-Obeiyid apparently belong to a more recent, Late Neolithic horizon: bifacial knives, spearheads, gouges, and Ounan-Arif points. This later horizon also includes a few ceramic sherds, one of which is characterised by a rather rough paste with sand temper and thin brown-coloured walls, recalling the Fayum-type pottery. Systematic investigation of the Sheikh el-Obeiyid territory is planned for the next field campaign.

During the same 2001 campaign, research was also extended to the Rajih region, 80 kilometres east of Qasr Farafra on the eastern side of the depression. This flat and plain territory is at the foot of the Eastern Plateau, on the caravan route which, leaving the Siwa oasis, through Farafra, led to Asiat and the Nile Valley. In a preliminary survey of the territory, in 1988 and 1989, we had recorded numerous scattered remains of prehistoric campsites near ancient lacustrine formations. Concentrations of lithic artefacts were brought to light associated with a rather small playa (labelled as «Playa I») and particularly meaningful seemed to be the blade industry which included a typical bifacial arrowhead (recalling the Ounan-Arif type). So was also the relative copiousness of thin-walled ceramic sherds with engraved decorations. Both ceramics and lithics showed similarities with the Bashendi repertoire of Dakhla Oasis (Barich, Hassan & Mahmoud 1991: 39-40).

The new investigations fully confirmed the preceding observations. Artefacts were collected still in relation with two playas indicated as «Playa II» and «Playa III». Playa II, in particular, yielded a great quantity of flint tools (including bifacial knives), ceramics and ostrich eggshell sherds. A sample coming from this same playa deposit provided the date of 5.650 ± 50 bp (Gd-11647) which goes along with the one already obtained in the earliest research (5.380 ± 110bp, sample R-2006) (Barich, Hassan & Mahmoud 1991: 52). Hence, the occupation would correspond with the last Holocene moist oscillation.
Regarding the very refined characteristics of the lithic industry, along with the ceramics, this region would seem to be the one most directly in contact with the Nabta Playa area. The human groups living in the Rajih region seem to have adopted a prevalently pastoral economy in which ovicaprids, animals suited for limited water supply conditions, represented the principal nutritional source. Subsequently, these desert nomads, attracted by the greater Nile Valley water resources, could have brought about the transmission of cultural elements. This is clear, overall, in the recognised technological traits, either in the above-mentioned lithic industry or in the ceramic decorations that feature the typical black-topped style, later widespread in the Badarian context. Therefore, the investigation in this part of the Farafra depression allows us to recognise a different occupation model and technological aspects until now almost completely unknown in the oasis.

Conclusion
The most recent archaeological investigations at Farafra offer significant contributions to the interpretative framework of the Western Desert during the Holocene. The occupation sequence of the oasis was sufficiently highlighted thanks to the differentiated strategies adopted. The spatial research techniques used during the first investigation phase, in fact, allowed to represent the whole entity of the occupation, and the widespread territorial dispersion linked to the ephemeral settlements of hunter-gatherer groups. On the other hand, in the Middle Holocene, the occupation pattern changed, tending towards greater stability, with intensive concentrations, above all where water collection basins were located. The Wadi El Obeiyid region, through the settlement at Hidden Valley, gives a significant example of this tendency. The stratigraphic investigation of the village offered a fundamental contribution to the knowledge of the middle-Holocene economic pattern. The gathering of an abundant plant sample, including sorghum, going back to the eight millennium bp, allowed us to resume the theme of this cereal cultivation in Eastern Africa and to deal with it on more concrete arguments. A similar old presence of sheep/goat indicated that the domestication activities went along quite early with hunting-gathering, once again emphasising the primary role taken by the Western Desert in providing the first foundations to pastoralism (Wendorf & Schild 1980, Wendorf, Schild & Associates 2001, Banks 1984). Finally, the latest investigations in the eastern area of the depression have shown the presence, in the Late Holocene, of nomadic communities related to the most southern region of Nabta Playa, indicating how the oasis was inserted in a broader circuit, whose ultimate destination was the Nile Valley.
BIBLIOGRAPHIE


