Two new Aterian sites in the Southern Gilf al-Kebîr
(Western Desert, Egypt)

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The Gilf al-Kebîr plateau is a hardly accessible waterless sandstone formation situated at the southwestern borders of Egypt, about 600 km west of the Nile. The area reaches a height of 1100 m asl and is dissected, especially in the south and east, by numerous steep-sided wâdis (dry valleys). Cliffs are higher in the south and decline to zero in the north. The plateau is divided into two parts by a broad erosional valley separating the « Northern Plateau » and the « Southern Plateau » (Bagnold et al., 1939).

Fig. 1. Map. Distribution of the previously known (squares) and newly discovered (circles) sites in the Southern Gilf al-Kebîr Plateau.

The first archaeological work was carried out by the German Inner African Expeditions in 1933-1935 (with Lazlo de Almásy, Leo Frobenius and Hans Rhotert), followed by Oliver Humphrys Myers who investigated the eastern edge of the Southern Plateau with the Bagnold-Mond Expedition of the Egypt Exploration Society in 1938, but most of the collected material was destroyed during World War II (de Almásy, 1936; Rhotert, 1952; McHugh, 1975).

After the war, archaeological investigations restarted only in 1975 with the Combined Prehistoric Expedition in Wâdi al-Bakht, followed by Pachur and Gabriel in Wâdi Arâd al-Akhđar (1977), El Baz and McHugh et al., in both valleys (1978) (McHugh, 1981; Wendorf & Schild, 1980: 216-222) and three seasons by the B.O.S. (Besiedlungsgeschichte der Ost-Sahara) team in the al-Akhđar and al-Bakht Wâdis in 1980 and the following years.

In Egypt, the Aterian evidence is absent from the Nile Valley, but it was encountered in a few Western Desert locations,
namely Bir Tarfawi (Wendorf et al., 1987), Dakhleh, Kharga and Dungul (Kleindienst, 2009). In the Gilf al-Kebir, the literature mentions only a handful of specimens which were, for the most part, randomly collected.

In Wādi ‘Abd al-Malik, one of the largest valleys of the Northern Plateau, only one Aterian location was found during five field surveys carried out by Maria Emilia Peroschi and her team, but this discovery is not published yet (Peroschi, 2009). In the Southern plateau, among the 879 artifacts collected by Myers in Wādi al-Bakht (Fig. 1, No. 7) and deposited in the Musée de l’Homme in Paris, there are two pedunculated pieces, but they are broken off, and this led McHugh to estimate these basal fragments could not be considered to represent the Aterian culture in the Gilf al-Kebir (McHugh, 1975: 42 and fig. 3: 22, 23). In the western part of Wādi Ard al-Akhdar (Fig. 1, No. 6), a small set of Aterian artifacts (3 tanged points, 14 bifacially retouched points and 6 small Levallois cores) was found upon a small ground elevation measuring some 300 m by 200 m, apparently without any recognisable concentration on the surface (Schön, 1996; Schön & Cziesla, 1996: 511 & pl. 60-65).

During our own field surveys in the Gilf al-Kebir Plateau in 2004-2011 we could explore the following valleys and their surroundings: Wādi ‘Abd al-Malik, Wādi al-Qubba, Wādi Hamra, Wādi Sura, Wādi Talh and several unnamed valleys in the Northern Gilf, and in the Southern Gilf: Wādi al-Akhdar, Wādi Dhayyaq, Wādi Maftūh, Wādi Māshi and Wādi Wasa’. We documented 251 archaeological units, 133 of which were clearly attributable to the Holocene and 15 to the Pleistocene. This confirms previous observations, which show a high proportion of Holocene evidence compared to Palaeolithic sites, maybe because the oldest sites could have been obliterated by wādi deposits, as Palaeolithic evidence appears mainly on high terraces and on the plateau (Schön & Cziesla, 1996; Peroschi, 2009). Aterian material was found in only three places in the North of the Southern Plateau, one in the South and one in the plain which extends to the eastern escarpment. The most important place in the North (Fig. 1, No 2) includes a reduction site and a small cluster of artefacts (bifacial points, side-scrapers, and tanged pieces) on each side of a stone line (for site nomenclature, see Gauthier et al., 1996). The second one (Fig. 1, No. 1) is a reduction site with Levallois
flakes, cores and Aterian points spread over an area of ca. 15 sq m. The third one (Fig. 1, No. 3) is an isolated Aterian looking tanged bifacial piece found among a rather heterogeneous material spread around a dhaya: 1 milling stone and 1 fragment of another one, abundant fragments of ostrich eggshells, 1 large thick scraper, and at least 6 tethering stones. To the south of the Plateau, the only clue for an Aterian presence was an isolated bifacial tanged piece with a scalariform retouch (Fig. 1, No. 5). To the east, but outside the Plateau, another location (Fig. 1, No. 4) yielded a more typical material with a broken bifacial tool, and several Aterian-looking artefacts: denticulates, foliates, pedunculates. The two northernmost sites No. 1 and No. 2 are the only ones to be characterised by a homogeneous material which deserves a brief description.

No. 1 is a sparse lithic scatter site located during a quick assessment of the so-called « Wâdi Shallow. » It is on a large terrace at the base of the northern bank, at around 955 m asl, with no evidence of intact deposits (Fig. 1: No. 1, and Fig. 2). Two tanged implements (Fig. 3, No. 1, 2), a typical Levallois core (Fig. 3, No. 3), several Levallois flakes and a double straight-convex scraper (Fig. 3, No. 4) were observed on a surface of ca. 15 sq m. All these artifacts were made from variants of locally obtained quartzite.

No. 2 was located on the plateau edge at around 1025 m asl, at a site which would have provided a superb vantage point for hunters scouting animal herds in the valley below (Fig. 1: No. 2, and Fig. 4). The cliff here is very indented, due to small rivers which flowed down into the valley. On the right side of one of these, seven small heaps of stones are roughly aligned at 90° (Fig. 5). These blocks of sandstone (L = 30 cm on average) were probably used for blocking a line of small poles. Such a structure can be interpreted as the remains of a windbreak or a net-hunting site. The southwest end of this line, which is 21 metres long, reaches the right bank of one of the dry watercourses. A reduction station was observed on the southern side of this line, and on its northern side, a cluster of 4 x 4 m yielded a strangled denticulate (Fig. 6, No. 1) and a bifacial point (Fig. 6, No. 7), a small denticulate (Fig. 6, No. 9), one impacted tanged point (Fig. 6, No. 4) and four broken ones (Fig. 6, No. 2, 3, 6, 8).

**Discussion**

Aterian is a Middle Stone Age (MSA) Levallois-based culture technologically characterized by the presence of tanged tools (points, scrapers, burins, and borers) and small bifacial foliates. The production of tanged points is generally thought to be implemented for hafting hand-cast or thrusting spears. As these tangs are often the thickest part of the tools, whereas the cross-sectional area at the base of modern projectiles is normally less than that along the midsection of the shaft (Knecht 1997: 201), it has been suggested that these pieces were not used as projectiles (Garcea, 2012: 135). Technological, microwear and functional analyses of 26 pedunculated pieces from Rhafas Cave, Morocco, confirmed that they mostly showed traces of longitudinal and transversal movements on dry skin and other animal materials, and that only few of them were used as projectiles (Bouzouggar, Barton, & Igreja, 2004: 478). Massussi and Lemorini even suggested that the double notches of the Aterian tangs were the active functional area of these tools (Massussi & Lemorini, 2004). However, the fact that Aterian people used pedunculates for cutting, boring, scraping or other activities, as this was also the case in al-Jebel al-Gharbi, Tripolitania, Libya (Garcea, 2012: 139) does not imply that none of the Aterian tanged points were used for making hafted spear points. Moreover, the apparently excessive thickness of the tangs can be interpreted as concern with reliability of the haft. In Dakhla, Hawkins has convincingly shown that by preparing such strong tangs, the flint knapper was able to produce hafted tool which should not break in the handle when in use (Hawkins, 2012: 172).
Conclusions

According to the small extension of the lithic scatter on Site No. 2 (less than 100 sq m) and considering the organisation of lithic industry on both sides of the stone line there, this location can be considered to be a specialized site. It has been recently suggested that the Aterian could represent an elaboration of earlier industries arising in response to changing climatic regimes (Hawkins, 2012). Here, the fact that all the tanged tools are broken except one point showing the stigma of a strong distal impact, and their disposition behind a line of wooden poles which might have been used to stretch a hunting net (Le Quellec & Civrac, 2010), strongly suggests the possibility of a hunting site.

Be that as it may, the new locations reported here reinforce the Aterian presence in the Southern Gilf al-Kebîr Plateau. However, it must be remembered that this analysis is based on surface material, as it is the case for most Aterian sites in the Western Desert. Nevertheless, these documents deserved to be recorded here as they add new points to a little explored area, previously reported, as they add new points to the Aterian complex in the Southern Gilf al-Kebîr Plateau. Nevertheless, these documents deserved to be reported, as they add new points to a little explored area, previously left blank on the distribution maps of this culture (Scerri, 2012: map. fig. 1). It must be stressed that all material findings were left in their original place.

References


