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## **A Revision of the Identified Prehistoric Rock Art Styles of the Central Libyan Desert (Eastern Sahara) and their Relative Chronology**

by

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**KEYWORDS.** — Libyan Desert; Rock Art Styles; Relative Chronology.

**SUMMARY.** — The massifs of the central Libyan Desert, Jebel Uweinat, Arkenu and the Gilf Kebir plateau have emerged as one of the principal rock art bearing regions of the Sahara. New discoveries over the past ten years have vastly increased the corpus of available data, permitting a revision and improved definition of the observed rock art styles and the underlying prehistoric cultures. The analysis of paintings reveals a succession of four hunter-gatherer societies centred on Jebel Uweinat, with the unique Wadi Sora culture occupying a narrow belt along the western Gilf Kebir. As evidenced by demonstrable superimpositions and relative weathering, all these distinct cultures were replaced throughout the investigated region by a homogeneous culture of cattle pastoralists.

### **Introduction**

The great massifs of the central Libyan Desert (eastern Sahara), the mountains of Uweinat, Arkenu and the Gilf Kebir plateau have long been known to harbour prehistoric rock art. Since their discovery in the 1920s and 30s, the paintings and engravings have been subject to much study and analysis, with several attempts made to produce a systematic description and establish their chronology.

Already Ahmed Hassanein, who reported the first engravings of giraffe and other wild animals at Jebel Uweinat (HASSANEIN 1924), speculated on their great antiquity. Spurred by Hassanein's discoveries, Prince Kemal el Din visited Uweinat in 1925 and 1926, and documented several more rock

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art sites, including paintings of some strange unidentified animals. Based only on photographs, *Abbé* Henri Breuil identified several periods based on the subject matter, and summarily concluded that the oldest bear similarity to South-African bushmen engravings, “hunters from the upper paleolithic” (EL DINE & BREUIL 1928).

Hans Winkler published the first monograph on the rock art of the area (1939), having visited the area with Bagnold in 1938. He identified several distinct styles of paintings and engravings mainly based on subject matter, and presumed that the “Uweinat cattle breeders” (which he equated with the “Autochonus mountain dwellers” of the eastern desert) postdate “early hunters”, the latter lacking any representations of domesticated fauna. In his opinion “the faded appearance of many of the earlier paintings, and the freshness of the latest, and the many grades of patination in the engravings prove that the occupation of Uweinat lasted for a very long period ... from predynastic until far into historic times”.

Hans Rhotert, accompanying the 1933 Almásy/Frobenius expedition, made the first detailed and systematic scientific survey of the engravings and paintings; however, his work remained unpublished till 1952. Rhotert accepted Winkler’s general chronology, however noted that no evidence may be found of any contact with Egypt. He considered the engravings and paintings to be the result of ‘intense intercourse’ between indigenous hunters and cattle herder immigrants from the south-east (upper Nile basin). He analysed stylistic development within the cattle pastoralist paintings and engravings, but did not recognize that some of the paintings he recorded at Jebel Uweinat might be dated to much earlier periods.

The Belgian expedition of 1968-69 (LEONARD *et al.* 1969) significantly expanded the number of known paintings; however, all the new discoveries were of paintings depicting cattle pastoralists at a single outstanding location encompassing a series of contiguous shelters (a fact that is not made clear in the published reports). This considerably narrowed their perception of the entire regional rock art, and skewed the resulting chronological interpretation. VAN NOTEN (1978) recognized five main periods of rock art at Jebel Uweinat: A first period without any depiction of cattle, only wild animals shown. These are almost exclusively engravings. This was followed by a period of engravings of several styles, depicting among others domesticated *Bos primigenius*. He estimated this period to postdate 4500 BC, the appearance of these animals in Egypt. The third period was of the paintings, dominated by cattle of *Bos brachyceros* type. The fourth recognized period was contemporary or later than the previous, with depictions of goats replacing cattle, which was attributed to the increasing aridity of the area. Finally there

was a period of protohistoric date, with present-day arid climate fauna and dromedaries shown on engravings.

Van Noten was the first to take note of a group of curious ‘round-headed’ paintings in western Uweinat discovered some years earlier. He observed that “in Ennedi as well as Uweinat representations of ‘round heads’ exist (Karkur Idriss)... They are not directly related to the Karkur Talh, where nothing similar seems to exist”.

Van Noten himself realized that the classification and chronology established was questionable. “We have tried to develop an internal chronology of the Uweinat rock art based mainly on the representations of the bovids; we realize that the basis upon which we built is extremely fragile”.

Muzzolini included the Gilf/Uweinat area (which was usually ignored by authors dealing with central Saharan rock art) in his 1995 monograph on the rock art of the Sahara. Disagreeing with Van Noten, he considered the absence of large ‘Ethiopian’ fauna proof that the engravings were of a later date than the paintings, from a period when the climate dried and could no longer support cattle. Based on Ennedi analogies, he considered the bulk of Uweinat rock art to be “recent & terminal bovidian”. He noted the absence of horse/camel paintings, and concluded that by that period conditions were too dry to support human habitation. He also noted the anomalous paintings of Wadi Sora and the Karkur Idriss ‘round heads’ which he considered ‘impossible to date’ but pointed out the analogies to the well-known Tassili ‘roundhead’ style.

Le Quellec visited Uweinat in 1998 and made several chronological observations (LE QUELLEC 1998). He was critical of Van Noten and Muzzolini implying a possible relationship between the Karkur Idriss paintings and the central Saharan ‘round heads’, partially on the ground that based on the accepted Saharan chronology, they would have to be significantly older than other paintings at Uweinat, yet they are at an exposed vertical location, and still preserved.

Following a further visit in the company of the author in 2003 to the Gilf Kebir – Uweinat region, Le Quellec prepared a descriptive listing of observed styles, and revised his chronology (LE QUELLEC *et al.* 2005) to allow for a slightly greater age than previously thought, conforming to recent palaeoclimatic studies, by KROPELIN *et al.* (2005).

The author began a systematic survey of the Gilf Kebir & Jebel Uweinat region in 2002, and in 2005 produced the first edition of a catalogue documenting all known sites in the area (ZBORAY 2005b). The first edition contained over six hundred sites, of which about two hundred and fifty were new finds in the 2002-2005 period. The author also developed a categorization of

styles based on the information available from sites known at the time. The second edition (ZBORAY 2009b) was expanded to over eight hundred sites, all new finds in the elapsed three-year period. The style listing was partially revised to reflect the new findings. Since then a further approximately two hundred new sites have been documented by the author and others, bringing the total count of localities to over a thousand (BORDA 2010; 2011a, b; ZBORAY & BORDA 2010; MENARDI-NOGUERA & ZBORAY 2011a).

With this corpus of new data, a number of early cultural horizons may be identified, principally in the Jebel Uweinat environs, all predating the cattle pastoral period which were unknown or unrecognized by authors of earlier studies. Substantial new light had also been shed on the known and recognized styles, mostly confirming to, but in a few cases adding to or contradicting previous thought, both on the definition of distinct recognized styles and their chronological order. In the following an attempt is made to integrate all available information derived from rock art on the main cultural periods in the Gilf Kebir – Jebel Uweinat area (central Libyan Desert) and produce a series of definitions and chronological sequences that fit the presently available evidence.

All previous principal publications made attempts to categorize the paintings and engravings into distinct recognizable styles. While most had merits, the vast increase of known sites and styles have made such earlier divisions obsolete. The present work will use as a basis the categorization originally developed in 2005 and amended in 2009 (ZBORAY 2005b, 2009b), however significantly revised to reflect new finds and valid critical observations. LE QUELLEC (2005, 2009) used a slightly different categorization and terminology, the differences will be noted under individual styles.

One particular problem in rock art literature when dealing with styles is the habit of authors using the terms style, culture and period as synonyms, putting an equation sign between them whether founded or unfounded. While clearly individual styles, when present in large numbers and in a well-definable geographical scope, may be considered as the product of a distinct culture that may be placed into a definable time period, this is not always the case. Some styles may be the product of the same culture (as apparent in certain cases at Uweinat). Several more or less related cultures may be contemporary, occupying different geographical niches.

While the definitions of style and culture may fill several volumes and are far beyond the scope of this work, for the sake of clarity the following definition will apply to all of the styles described and defined in the following: a group of people sharing the same subsistence strategy, customs and manners is said to share the same culture. If this culture produced any rock art,

it will be expressed through a distinct style with some fundamental distinguishing traits. A culture will have a defined geographical and temporal range. While the first one is readily evident from the geographical distribution of sites, the second may or may not be identifiable based on current evidence. As a working assumption, a culture may be associated with only one of each of the rock art styles of engravings and paintings.

In rock art studies, a style is defined by a recognizable set of conventions (here called stylization conventions) in rendering on the rock surface the animate or inanimate entities of choice from the real or imaginary world. Obviously the chosen medium and technique (like pecking, carving, engraving or painting) will result in very different expressions, even when produced by the same people. The medium and technique employed is as integral to style definition as the subject matter. Variations in the way of depicting certain subjects (most commonly humans), while the subject matter remains identical and the overall set of stylization conventions remain similar, may be called style variations. However, as long as the similarities are far in excess of differences, defining them as individual styles (and by implication presuming them to be the produce of different cultures) is considered inappropriate. Of course any such classification is dependent on the considered and available samples, and often the samples and the defining stylization conventions are selected in a subjective way. As new finds emerge some definitions may need revision, as has been the case since the original classification scheme was compiled by the author in 2005.

All references in the following to individual sites use the numbering system developed and revised by the author (ZBORAY 2009b) unless otherwise noted.

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The accompanying black and white illustrations were processed and enhanced using dStretch, a software tool for the digital enhancement of pictographs written by John Harman, freely available to the rock art research community at [www.dstretch.com](http://www.dstretch.com).

### **Main Rock Painting Styles of the Region**

In the autumn of 2009, when the list was closed for the second edition of the catalogue (ZBORAY 2009b), a total of eight hundred and three sites had been recorded. Of these, ninety-five may be found in the Gilf Kebir, the

remaining majority at Jebel Uweinat and the surrounding massifs of Arkenu, Kissu and lesser rocky hills. The rock art sites are almost evenly balanced in the proportion of engravings to paintings, with four hundred and two sites recorded with engravings and four hundred and fifty-six sites with paintings. However, the proportions may shift significantly depending on local geography. In the Gilf Kebir engravings slightly outnumber paintings, the latter predominantly concentrated along a short section of the western Gilf, centred on Wadi Sora. Engravings are more scattered, mainly in the three principal valleys of the northern Gilf Kebir. At Jebel Uweinat there is a very noticeable pattern of engravings (with few paintings) appearing at lower altitudes around the base of the mountain and in the lower courses of wadis, while paintings are concentrated in the upper sections of the wadis, reaching up to the highest altitudes of the mountain. This geographic distribution will probably have chronological implications for the engravings, however at present remains unexplained.

The western, granitic part of Jebel Uweinat is completely void of any engravings while paintings are prolific, without doubt explained by the unsuitability of the extremely hard medium for engravings.

In the introduction, attention was already drawn to the problem of dating engravings and paintings. Author's views ranged from engravings in general being much earlier (or later) than paintings to both being contemporary and the work of the same people, with stylistic variations being purely the result of the differences in the artistic medium.

Unfortunately with engravings the technique and medium allows for much cruder execution than the fine detail resulting in paintings, thus the distinction of individual styles is based more on subject matter and overall execution than any finer detail. Patination, often used to establish relative ages for engravings, is a very unreliable indicator, as even on the same panel one may observe different degrees of weathering depending on the exposure of the rock to prevailing wind and sandblasting. Even the categorization of the engravings, beyond very simplistic terms like cattle present or absent, or the very recognizable late dromedaries, is very problematic. One thing is certain: the numerous engravings depicting cattle (more than half of all engravings) are with a very high degree of probability the work of the same people who made the paintings depicting cattle and pastoral themes, the differences being easily explainable by the different media. However, for the wild fauna depictions, of which there are probably ones predating the cattle period, and some postdating, it is very hard to make meaningful and consistent distinctions. It will require much future effort to categorize the various engravings into the currently established cultural and chronological framework.

Due to the above limitations, the evidence from engravings will be excluded from the present study, and focus will be on the main styles of paintings and the associated cultures, which are readily identifiable.

There are around twenty ‘anomalous’ paintings, usually with single examples and often in a bad state of presentation, that do not seem to fit into the categorization presented in this study. As individual examples are always problematic (the case example being BH 4 which for a long time was the only known “Uweinat roundhead” site), they will not be discussed in this work. With new finds likely to continue into the future (at time of writing more than two hundred new sites have been reported from the Jebel Uweinat area, not included in the above count), hopefully more and more of the anomalies may be allotted their place in a revised framework.

It is to be noted that more than one style may be observed at some of the sites, both adjacent and superimposed. As a result, in the following discussion of individual styles/cultures, the summing of site numbers given for individual styles will give a number greater than the total recorded sites.

### **Uweinat Cattle Pastoralists**

The vast majority of the paintings at Jebel Uweinat depict cattle and associated humans. Of four hundred and fourteen sites with paintings, three hundred and thirty-seven contain paintings that may be assigned to the cattle pastoralists. Most of the other styles have been recognized only very recently, earlier authors dealt exclusively with cattle-themed paintings when discussing classification and styles of the Jebel Uweinat paintings.

VAN NOTEN (1978) noted that some of the pastoralist paintings also contained goats depicted in the same style as cattle, and noted the numerous layers of superimpositions at several sites. He attempted to categorize the paintings based on the observation that the style of clothing depicted on the human figures corresponds to variations in human body stylizations. Based on this observation, paintings were assigned to three styles equated to different ethnic groups of pastoralists: “People in double loincloths”, “People in simple loincloths and women with skirts” and “Naked people and people with belts”.

LE QUELLEC (2005, 2009) followed the approach of Van Noten, but focused only on the depiction of human figures among the cattle pastoralist paintings belonging to Van Noten’s second style. Within this group he distinguished two styles: *longiligne* (thin long-limbed) and *filiforme à tête en bec d’oiseau* (thread-like with head shaped like a bird’s beak). However, he

observed that the two were closely related, the latter a variant of the former. LE QUELLEC (2009) did not consider or discuss at all Van Noten's "People in double loincloths".

The definition of styles based on human depictions masks the most important aspect of the pastoralist paintings. The dominant theme of paintings is cattle, with some panels showing hundreds of them in a great variety of form and colour. Some paintings show goats, with or without cattle, but depicted in the same style as the cattle paintings. Many of the paintings contain human figures, commonly with accessories like body decoration, waist pouches or loincloths, shoulder bags, footwear, bow & arrows. However, the variations in the styles of depicting humans noted by Le Quellec are not reflected in the style of depicting the animals which accompany the humans.

The author (ZBORAY 2005b, 2009b) used the term "Cattle herders" referring to these paintings, with others (MENARDI NOGUERA & SOFFIANTINI 2008, BOCKLI & MARAI 2008) referring to the "Uweinat pastoralist style". However, LE QUELLEC (2009) justly pointed out that the term while intuitive, is meaningless without a proper definition, which all authors failed to provide.

In the following an attempt is made to provide such a definition, under the proposed term "Uweinat cattle pastoralist style", combining in the name the two most important attributes of the style and the underlying predominant culture with its geographical distribution densely centred on the massif.

While cattle pastoralist paintings dominate Jebel Uweinat and the surrounding massifs, a number of scattered sites attributable to the same style may be found in the Gilf Kebir. SHAW & KENNEDY (1936) reported a shelter in the southern Gilf Kebir (SG 1) with paintings identical to those found at Uweinat, and after visiting Wadi Sora with Bagnold, PEEL (1939) recognized the paintings in the smaller of the two main shelters (WG 53) to be of the same type. Further finds by the author (ZBORAY 2003, ZBORAY & BORDA 2010) and BORDA (2008, 2009) have provided conclusive evidence that the cattle pastoralist people roamed across the entire region encompassing Jebel Uweinat, the surrounding smaller massifs and the Gilf Kebir plateau. There are several scattered cattle pastoralist sites (eighteen in all) in the Gilf Kebir, and many more at the numerous inselbergs on the 100-km plain separating the southern tip of the Gilf Kebir and Jebel Uweinat. It is the opinion of the author that the relative scarcity of sites in the Gilf Kebir is more due to the relative lack of shelters suitable for paintings rather than being indicative of human activities. In practically all of the recently found shelters that appeared from afar as suitable localities for rock art, paintings of cattle have been found. The style of these paintings is so identical to those at Jebel Uweinat



that there can be no doubt the same people have made them, despite the most distant being over 300 km apart (figs. 1 & 2)\*.

The style of depicted cattle is instantly recognizable on sight; however, the large variation does not lend itself to an easy verbal description. The most distinctive feature of the Jebel Uweinat cattle is the depiction and spacing of the legs; however, this is a statistical observation valid for the majority, and a large number of outliers do not conform to this definition.

The rear legs are spaced wide apart, with a prominent udder in between in case of cows, or the penis in case of bulls. In contrast, the front legs are spaced closely together. The rump above the rear legs is usually exaggerated, giving the animal a distinctly rear-heavy appearance. The tail is commonly depicted as a thin line following the curve of the rump, exaggerated in length, with a wider elongated tuft at the end. In contrast to these rather standardized elements, the head and especially horns are shown in varied postures and views, with horns both long, short or absent, shown in profile, curving forwards or downwards. The body decoration ranges from plain monochrome to elaborate polychrome decoration. Body postures are usually static, either standing or resting with bent legs, with a few rare dynamic examples. Figure 3 depicts an ensemble of typical examples of both cows and bulls. When goats are present, the same defining characteristics may be observed (allowing for differences in overall body anatomy), and there are a few rare examples of giraffes dispersed among cattle which have a similar, instantly recognizable style.

These cattle are associated with humans depicted on a wide ranging scale and degree of elaboration; however, the key defining stylistic traits of all of them conform to the *longiligne* style of Le Quellec. The *têtes en bec d'oiseau* defined by Le Quellec as having thread-like bodies are also known with bodies exactly matching those of the *longiligne* definition (figs. 4 & 5). Furthermore, there are several thread-like human depictions without the bird-like head, identical to the *longiligne* type in everything except upper body proportions. It is interesting to note that the very scene Le Quellec used to illustrate the two styles (LE QUELLEC 2009, fig. 2) shows two figures side by side as part of the same composition, probably drawn by the same artist, with the only distinction being the depiction of the heads and the upper body proportions, with all other attributes practically identical. Similarly, the differences in clothing noted by Van Noten is spread across a wide range of body proportions, with no clear definable distinguishing traits, all unified by the commonality of animals and other depicted accessories.

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\* Cf. figures at the end of the text (pp. 242-255).

There is one attribute of the humans, which is common across all of the depicted variations, and may be used as a further defining feature of the Uweinat cattle pastoralist style. This is a peculiar shoulder bag, probably a combined quiver cum utility bag (MENARDI NOGUERA & ZBORAY 2011b) with a tail-like decoration that frequently appears carried by male figures. This bag had been noted from the whole geographical range of the Uweinat cattle pastoralists, and lacks any analogies among other cattle pastoralist art of other Saharan regions (fig. 6).

There are a number of recurring themes and standardized scenes that appear in a large number of paintings, common to all variations among human figures attributed to the Uweinat cattle pastoralist style, further supporting unity for this cultural group. These include the depiction of shelters with utensils and accessories hanging from the ceiling, occupied by humans that in some cases may be interpreted as families, with a clear male/female couple and a number of figures on a smaller scale, most likely children. Cattle or more commonly calves tethered to a stake or tree are also a recurring theme, as is the almost standardized depiction of cattle with a (usually male) human figure standing immediately behind.

Apart from goats and cattle, the only domesticated animal shown are dogs, but very few in numbers. At present, only three unambiguous examples are known, two in hunting scenes, one depicted with a collar and a leash held by a person. Wild fauna is occasionally shown, but only very sparingly. VAN NOTEN (1978) noted only two painted examples of giraffe, including one scene where they were hunted by men with bows and dogs. However, in the meantime several other examples of painted giraffe were found with the depiction of the animals and any associated humans being in the same style as the cattle (MENARDI NOGUERA *et al.* 2005). Thus, giraffe are rare but not unique in the period, and appear to be a supplementary source of food. In one exceptional shelter (KTW 26/B) numerous hunting scenes are shown, including giraffe and dama gazelle; however, the rarity of such scenes implies that the principal means of subsistence was based on the cattle herds.

The principal Uweinat cattle pastoralist sites present several layers of superimpositions. While the essentials of the style remain unchanged in all the layers, suggesting a cultural continuity over a period of time, it must be emphasized that the stylistic variations observed by Van Noten and Le Quellec could form the basis of internal subdivisions and a possible chronological sequence. However, any such study must include the cattle and other elements of the depictions, not only human figures. With the vast number of sites, some containing in excess of a thousand individual depictions, this will be an immense task to perform.

VAN NOTEN (1978) noted a distinct style of human depictions, with the men wearing double loincloths (with associated women wearing skirts). His observations were made in a single large shelter (KT 83/A-B) with relatively few examples intermingled with the much more numerous Uweinat cattle pastoralist figures. The same type of figures exist in a shelter in northern Karkur Talh (KTN 11/A) originally described by WINKLER (1939). However, neither LE QUELLEC (2005, 2009) nor the author (ZBORAY 2005b, 2009b) made special mention of them, nor was their significance realized.

It was only after the finding of site CC 21 (BORDA 2008), which contains a remarkable group of dancing bicolour girls or women (fig. 7), that this style was re-studied. The human depictions are quite different from the elongated figures of the Uweinat cattle pastoralists. Generally they are much smaller on scale, with natural body proportions, often with digits depicted on the hands. The cattle associated with these human figures also do not conform to the definition of the 'standard' Uweinat cattle, being more rounded and even proportioned, well illustrated by the ensemble of site KTN 11/A (fig. 8). These elements by themselves point towards defining the "people in double loincloths" as a separate distinct style.

However, one of the female figures of site CC 21 is wearing the same type of shoulder bag/quiver which is considered a defining feature of the Uweinat cattle pastoralist style (fig. 7, left). This suggests a cultural continuity and leaves open the question of whether these paintings should be treated as a separate style or a mere variation of the pastoralist style. With the very few available samples, this question may only be decided if more "double loin-cloth" paintings are discovered.

### Wadi Sora

Ever since their discovery by the Hungarian explorer László ALMASY (1935, 1936), the paintings of the large shelter at Wadi Sora (WG 52) have been something of a mystery. The depicted humans (and the few animals) were very unlike anything else seen in the region, and interpretation was made more difficult by the very eroded nature of the shelter, with only a fraction of the original painted surface remaining. RHOTERT (1952) used the term *Keilstil* (wedge-style) on account of the triangular shape of the upper torsoes of some of the figures; however, this is a mere repetition of a descriptive term coined by FROBENIUS (1931) for rock art in a very different geographical and temporal context. MUZZOLINI (1995) made a comparison with the 'roundheads' of the Tassili, but till 2002 no analogies or better preserved

examples were available. The only observation one could make was that the paintings contain a very high degree of abstract symbolism (fig. 9).

With the discovery of the “cave of the beasts” (WG 21) in 2002 the picture changed dramatically. The new shelter contained the same type of paintings, showing humans and wild fauna, superimposed on a “wallpaper” of negative hand (and occasionally foot) prints, in perfect state of preservation. One partially damaged figure in WG 52 proved to be a strange “headless beast”, of which dozens of examples were depicted in the new site, together with some of the characteristic “swimming” figures, thousands of other human figures and pictures of wild fauna (mainly giraffe, dama gazelle, ostrich). While some isolated individual human figures (and animals) are comparable to those at some Jebel Uweinat sites, the complete ensemble of figures points to a very distinct well-definable culture. One notable feature is the complete absence of any domesticated fauna on the depictions with the exception of very few dogs, the themes depicted suggest a hunter-gatherer society with no indication of any organized food production.

The most distinctive defining feature of the style is the “headless beast”, an abstract composite creature that appears to be at least in part feline, with no readily identifiable head. A feature that could be interpreted as a ‘mouth’ is evident on a couple of the examples, showing the creature appearing to devour a human being (fig. 10). However, these scenes could equally be interpreted as human figures emerging from the beast. In many cases it has apparent male attributes, with a group of people surrounding and touching the penis and other body parts as if restraining or adoring it. An alternative suggestion is that the ‘penis’ may in fact be the navel (Tilman Lennsen-Erz, personal communication).

While elements of the Wadi Sora style appear elsewhere (see “Uweinat elongated roundhead” and Wadi Wahesh styles, below), the “headless beast” is unique and appears to be the central feature of many of the larger compositions depicted on the paintings. A further five shelters have been recorded, all in the Wadi Sora vicinity, containing recognizable depictions of this “headless beast”.

In both the principal shelter of Wadi Sora (WG 52) and the “Cave of Beasts” (WG 21) there is a row of small figures in a contorted posture which ALMASY (1935, 1936) called “swimmers” (in fact they might be doing any number of things, swimming being the least likely). They appear to form a part of the composition involving the “headless beasts” and are considered another defining feature of the style (fig. 9). Both the beasts and the swimmers, together with the compositions surrounding them, suggest a very high

degree of abstraction and symbolism; clearly these images and their connotations carried a very special significance to the people who made them.

Certain authors (D'HUY & LE QUELLEC 2009, BARTA 2010 ) compared some elements of the Wadi Sora style with elements of the Egyptian iconography and professed to see the origins of Ancient Egyptian religion in the Wadi Sora paintings. However, invariably the basis of such conclusions was the process of taking isolated elements out of context from both cultures and only treating the similarities, while ignoring the differences and the lack of any systemic relationship within the remaining corpus of evidence. It is the firm opinion of the author that there is no demonstrable link between Wadi Sora (or any of the discussed other prehistoric cultures of the central Libyan Desert) and the Nile Valley. This is not to say that such a link is entirely inconceivable, however at present there is no evidence to support it.

In contrast to the above two unique elements, the remainder of the Wadi Sora repertoire is less diagnostic. Human figures are depicted in a number of ways, with or without body decoration, with varying body proportions. The same may be said of the depicted wild fauna and the negative handprints. Some admitted similarities with paintings found along the southern side of Jebel Uweinat prompted LE QUELLEC (2005, 2009) to use the term “Wadi Sora style” to encompass the entire Gilf Kebir – Jebel Uweinat region. However, more recent finds of the so-called “Wadi Sora” type human figures at Jebel Uweinat present a clear pattern, distinctly different from Wadi Sora, and allow for the definition of distinct styles on their own right.

LE QUELLEC (2005, 2009) considered the small “swimming” figures to be a separate style, mainly on account of a single figure located at site SU 16 in southern Uweinat. While the similarity is acknowledged, the author is of the opinion that the two known examples of Wadi Sora “swimmers” are an integral part of the Wadi Sora iconography associated with the “headless beasts”. The single southern Uweinat example is unrelated if the full context is compared (in fact, it fits comfortably into the definition of the “Uweinat elongated roundhead” style), there is no need for separate terminology.

In light of the above, the “Wadi Sora style” needs to be re-defined as one with a very narrow geographical range, associated with a culture that inhabited a 30-km stretch of land below the cliffs of the western Gilf Kebir. Based on the large number of superimpositions at WG 21, the culture appears to have lasted for a significant period of time. However, the similarities with some Uweinat paintings are too strong to be ignored, they seem to be evidence of cultural contacts or perhaps cultural continuity between the Wadi Sora people and groups with similar subsistence strategies living at Jebel Uweinat some 200 km away. These similarities will be discussed in detail

below, in the sections describing the respective styles restricted to the Jebel Uweinat area.

### **“Uweinat Roundheads”**

The first known “round-head” site was instantly recognized as being distinctly different, unlike all other Jebel Uweinat paintings hitherto known. It was the panel at Bu Helega in Karkur Idriss (BH 4) described by VAN NOTEN (1978). However, this was not the first time such figures were observed. Rhotert had already recorded and reproduced a site in Karkur Talh (KT 72/D) with such figures, although in a very damaged condition (RHOTERT 1952, plate XXV/11,12). As an isolated example, its significance was not recognized. Winkler also found a site with such paintings (KTN 21/A), however did not even publish the photo, which laid unnoticed in the Egypt Exploration Society archives in London for over sixty years (EES, Winkler archives, photo M1107).

In the past ten years over fifty further sites were found with these characteristic paintings, mostly at Jebel Uweinat in all the principal valleys and among the scattered inselbergs to the north-east, with a few additional ones at Jebel Arkenu (BORDA 2009, 2010, 2011b; ZBORAY 2003, 2006). This provides a sufficiently large sample to define the style.

The exclusive subjects of the paintings are human figures. Sometimes only one is being depicted, but they are generally found in groups. The main defining feature is the circular round head, exaggerated in size compared to normal body proportions, and is completely void of facial features. The rest of the body is of normal proportions, with a triangular torso and narrow hips, the arms and legs are robust and proportionate, hands and feet are drawn without any digits (fig. 11). Sometimes a secondary white circle or oval is seen attached to, and partially overlapping the head. Often but not always split white bands are depicted on the upper arms. In some cases the white paint weathered away, resulting in an appearance as if the arms were dangling on thin threads. The figures are shown in contorted body positions which are being repeated across the range of sites. The figures are mostly plain monochrome, but in some cases body decoration can be observed (arm and leg bands, stripes and chevrons on trunk), in some rare examples some kind of dress is discernible (fig. 12), and some figures may be seen holding bow and arrows (fig. 13). The human figures range from approximately 15 to 30 cm in size. Despite the complete lack of any animals associated with human figures, depicting bows suggest hunting to be the primary means of subsistence.

The nomenclature for this particular style is still open to some debate. The term “Uweinat roundheads” (to be always used within quotation marks) signifies the geographical range and defining characteristic of the style, while maintaining the very necessary distinction from the roundhead style as used in central Saharan rock art terminology. The problem comes from the very similar visual appearance, combined with the hesitancy to use the same terminology for two groups separated by distances of several thousand kilometres of hyperarid desert. MUZZOLINI (1995) noted that had the BH 4 paintings been found in the Tassili, there would be no hesitation in assigning them to the later roundhead period. For the time being there is no evidence for any relationship, however nor is there any for the contrary, leaving the nature of these people, and their affiliation with the central Saharan roundheads one of the most exciting questions to be answered by future research.

Originally LE QUELLEC *et al.* (2005) used the same “Uweinat roundhead” term, but more recently (LE QUELLEC 2009) proposed “Libyan Desert roundheads”, on account of a single figure attributed to the Wadi Sora area (2005, fig. 745), which would extend the range of this style to the Gilf Kebir. However, the attribution of the published figure remains in question, as it is not located in any of the known and recorded sites in the area (which the author and Le Quellec visited together in 2003), and could be the result of accidental mislabelling of the photograph. However, in any case a single site in the Gilf Kebir would not materially change the centre of the distribution, firmly located within the Uweinat massif. The “Uweinat roundhead” terminology is appropriate even if a few sites are found in the future away from the immediate vicinity of the mountain.

### **“Uweinat Elongated Roundheads”**

In 1998 Le Quellec recorded (but did not publish at the time) a number of sites to the immediate south of Jebel Uweinat which had distinct round featureless heads, and bore some resemblance to some human figures at Wadi Sora, and also to some extent to the “Uweinat roundhead” figures. Initially the author (ZBORAY 2005b) considered them to be a variation of the “Uweinat roundhead” style, while LE QUELLEC (2005, 2009) used the “Wadi Sora style” to describe them. Fortunately, in the elapsed years several well-preserved new sites were recorded containing paintings of this peculiar style (BORDA 2009, 2010; ZBORAY 2005a, 2006) and the corpus of evidence (a total of twenty sites, all at Jebel Uweinat and environs) permits the definition of a distinct style.

The theme of the paintings is exclusively human figures, echoing the classic “Uweinat roundhead” style; however, the depiction of the figures is markedly different. The head is completely round and mostly featureless, but here the similarity ends. The head is small in comparison to the rest of the body and is joined to the trunk by an unnaturally long neck (usually executed with white paint which in many cases disappeared), which is the main defining characteristic of the style. The body is unnaturally thin and elongated, with legs being relatively thick and short in proportion to the rest of the body. The arms are very disproportionate, short and stubby, sometimes just shown as a short featureless line. The figures often bear extensive body decoration and some hold bow and arrows, sometimes in a shooting posture (figs. 14 & 15). Some (but not all) depicted bows appear to be composite ones (fig. 15), a technologically more advanced construction than the simple bows appearing on practically all other known depictions, irrespective of style. There appears to be a complete absence of animals shown; however, in some very weathered shelters it is possible that some adjacent animals appearing to belong to later styles may in fact be a part of the earlier scenes. Regardless, they appear to be a hunting society, like the “Uweinat roundheads”.

While some elements of the body decoration and the disproportionate small round head may be compared to human figures of the Wadi Sora style, there are some key differences. Most importantly, none of the Wadi Sora style human figures display the elongated white neck that joins the head to the upper body, while all the figures attributable to this style do. Wadi Sora figures display a wide range of body proportions, while the ones at Jebel Uweinat always present the long neck and body with disproportionately short arms.

There are some similarities with the “Uweinat roundhead” style, principally in some body postures and the round head, however here the similarity ends. Enough examples of both have now been found to state with confidence that the overall body proportions are consistent and distinctly different across the two styles. Furthermore, the two styles are almost never mixed. In the very few sites where both styles may be observed, the two are either on separate panels or at widely spaced areas of the site (with the single notable exception of EH 33, the significance of which shall be discussed below).

In light of recent finds (BORDA 2009), the geographical range of this style appears to overlap that of the “Uweinat roundhead” style, but the frequency of the sites is less than half. Most of the known sites are along the southern foothills of Jebel Uweinat, with a few known in Karkur Talh, Jebel Arkenu, the inselbergs immediately to the north-east of Uweinat and at an isolated site near Clayton’s Craters about 50 km further to the north-east. On account



of the geographical range and the key defining features of the bodies, the term “Uweinat elongated roundheads” is proposed for this distinct style.

### Miniature Style

The first of these characteristic figures were observed by RHOTERT (1952) in a shelter in southern Karkur Talh (KTS 15/C), underlying several layers of cattle pastoralist paintings. He called them *miniaturstil*, aptly describing their main feature. The author (and others quoting the author) used the term “small human figures” in the past; however, LE QUELLEC (2009) correctly pointed to the nomenclature used by Rhotert, which should have precedence.

Rhotert could only work from a single example; however, finds in the past decade brought the total of known sites to twenty-eight, including an excellently-preserved large shelter (KTN 31, ZBORAY 2003) that allows the proper definition of the style.

The subject matter is human figures and wild fauna. The human figures are depicted on a very small scale, adults 8-15 cm, with tiny figures of children as small as 2-3 cm. Family scenes are common, with mothers holding children in various but realistically depicted postures. This ‘mother with miniature child’ scene is perhaps the best defining element of the style. Males and females are clearly distinguishable, females having prominent breasts and wearing skirts, while males wear loincloths and frequently carry bow and arrows. Hunting scenes are common, with males shooting arrows at very well-drawn and proportioned giraffe. There is no hint of any domestication. Overall, the style has a very high degree of realism in comparison with any of the above-mentioned styles (fig. 16).

LE QUELLEC (2005, 2009) identified one giraffe hunting scene (found at site KTW 21/A, which also contains classic family scenes of the Miniature style) as a different style, *Petit rayé* (“small-striped figures”) on account of the hunters having striped decoration on their bodies (fig. 17), as opposed to the undecorated torsos in the family scenes. However, the author believes that such distinction is unwarranted, especially based on a single example. There are several giraffe hunting scenes attributable to the Miniature style with unstriped bodies that are practically identical to the single striped one at KTW 21/A except in this one detail, associated with other miniature-style figures in the same shelter (fig. 18). The *Petit rayé* figures are considered to be just a variation of the Miniature style, and not a distinct style.

The geographical range of the style extends throughout Jebel Uweinat, with the main concentrations in Karkur Talh and Karkur Ibrahim, the style

being conspicuously absent from the southern part of the mountain. A recent find by BORDA (2010) extended their range to Jebel Arkenu.

### **Wadi Wahesh Style**

The Wadi Wahesh style, named after the locality where most of the principal examples are located, was the last distinct style of paintings to be recognized at Jebel Uweinat. Already in 1998 Le Quellec found some figures of wild animals at southern Uweinat which did not appear to fit any of the known categories, but bore resemblance to some of the paintings at Wadi Sora. In the absence of any further analogies, these were assigned to the Wadi Sora style (LE QUELLEC *et al.* 2005) together with the figures now recognized to be “Uweinat elongated roundheads”.

In March 2005 a group of large and well-preserved sites were found in shelters located in the upper reaches of Wadi Wahesh (ZBORAY 2005a) which placed these isolated and mostly damaged earlier examples into context. A very distinct style was revealed, centred on the southern part of Jebel Uweinat, with a few isolated (and sometimes doubtful) examples occurring in the Karkur Talh area. At present there are about twenty sites that may confidently be assigned to this style, the majority of them in the very narrow geographical confines of the upper Wadi Wahesh, with a few scattered sites along the southern side of Jebel Uweinat and in Karkur Talh. Recently one isolated site with paintings possibly attributable to this style was found near Clayton’s Craters about 50 km north-east of Jebel Uweinat (BORDA 2009). The style is not easy to define, if individual human figures are observed many features are common to both “Uweinat elongated roundheads”, the Miniature style and to some of the Wadi Sora paintings.

Perhaps the biggest set of commonalities are with Wadi Sora, with similarities in body decoration, all digits shown on the hands, and having negative handprints underlying some of the paintings. Undoubtedly, if some Wadi Sora figures were transplanted into Wadi Wahesh scenes (and vice versa), they would comfortably blend in with the rest of the scene.

The most conspicuous feature of the style is the frequent depiction of individual digits on the hands of human figures, sometimes in an exaggerated manner. However, these are intermingled in apparently the same or related compositions with figures lacking the depiction of digits. Admittedly the scale, posture and appearance of some of the depicted humans echo the Miniature style, suggesting some possible contact or relationship. However, the key feature of the Miniature style, the family scene of mother and child, is

absent. There is a presence of non-human elements common with the Wadi Sora style (negative handprints, ostriches without body), a variety of wild fauna is shown (giraffe, various gazelle and antelopes), and there are numerous depictions of domesticated dogs (fig. 19). The depicted wild fauna (including a giraffe held by a tether tied to its neck) suggests a hunter-gatherer society. There are however some elements of the Wadi Wahesh style that are unique and do not readily give themselves to interpretation. These are abstract shapes made out of dots (fig. 20) without any known analogies.

It is to be stressed that the separate definition of the Wadi Wahesh style does not preclude a connection with the Wadi Sora people. The key defining features of Wadi Sora, the “headless beast” and the “swimmers” (and many other motifs), are missing. However, the large number of superimpositions observable in the “cave of beasts” (WG 21) suggest that the Wadi Sora style may, with further study, be subdivided into internal periods. It is not inconceivable that the Wadi Wahesh style will be found to correspond to one such subdivision, which lacks the “headless beast” and associated figures, but retains other common elements.

One clue supporting a possible link between Wadi Sora and Wadi Wahesh was the recent finding of a shelter (BORDA 2009) at Clayton’s Craters, about one third of the distance between Jebel Uweinat and Wadi Sora. The shelter contains very weathered paintings, but it is possible to recognize several negative handprints, and small-scale human figures that are identical to the more crudely executed ones at the principal Wadi Wahesh sites in every detail. The shelter also contains “Uweinat elongated roundhead” figures, a style frequently found in shelters in association with Wadi Wahesh style paintings.

### Relative Chronology

The key to the establishment of a relative chronology in the area is the existence of superimpositions, suggesting a temporal succession of identifiable styles in a given geographical location. However, a fundamental hypothesis is made that cannot be confirmed by the overpainting sequences alone. It is assumed that the styles may be associated with different cultures as defined by their characteristic traits and geographical range, occupying overlapping geographical areas in different time periods, or occupying separate geographies in possibly overlapping time periods.

One indirect confirmation of the above hypothesis comes from the lifestyles of the depicted people, as inferred from the paintings. Both hunter-

gatherers and nomadic herders require a large area of land for subsistence in marginal environments. Ethnographic analogies suggest that it is extremely unlikely for two rival groups of hunter-gatherers to coexist in the same area. While there are some examples for the coexistence of distinct groups of pastoralists and hunters, they are restricted to areas of abundant resources, which is very unlikely in a climatically-stressed environment like the Jebel Uweinat region. If we associate the distinct styles with distinct cultural identities, it seems very unlikely that these coexisted at the same time in the same space.

Different degrees of weathering of paintings of distinct styles at the same locality, whether in a superimposition relationship or adjacent to each other, may provide evidence to confirm that styles were separated in time. This would depend on the assumption that the makers of the later paintings did not attempt to erase by washing or other means the earlier ones. This assumption is supported by observations of panels where there are multiple superimpositions of paintings in the same style. In these cases it is clear that earlier paintings were not erased, but were simply painted over, a practice very common among cattle pastoralist paintings. In such cases, there is little observable difference in weathering. In contrast, all of the styles predating the cattle pastoralist paintings are distinctly fainter and more weathered, both when observed overpainted by cattle pastoralist paintings or where only the older styles are found at a site. This suggests that relative weathering may be a good indicator of temporal differences.

### Superimpositions

Although superimpositions are fundamental to the establishment of a relative chronology of rock art in a given area, until recently few opportunities arose for such dating in the Gilf Kebir – Jebel Uweinat area. The already mentioned KTS 15/C site was one of them, which ALMASY (1935) called the key to the chronology of the region. In this site he recognized three layers from the cattle pastoral period, and the fourth and oldest one was what Rhotert called the Miniature style.

Fortunately, in the last ten years several new sites have been located which allow for the establishment of a firm sequence of styles both at Jebel Uweinat and the Gilf Kebir.

In the Wadi Sora area, four sites contain Wadi Sora style figures that are overpainted by cattle pastoralist figures (figs. 21 & 22). While none of the sites have a figure of the “headless beast” in a superimposition, the earlier

paintings are clearly of the Wadi Sora style, based on analogies with the large key sites. Thus, demonstrably the Wadi Sora style predates the cattle pastoralist style in the western Gilf Kebir. In the remainder of the Gilf Kebir only cattle pastoralist paintings may be found without any association with other styles.

At Jebel Uweinat there are several sites where cattle pastoralist paintings are found superimposed over older paintings. The key site is KTW 21/A, where small red figures of the cattle pastoralist style overlie a giraffe-hunting scene attributable to the Miniature style, which are yet over larger “Uweinat roundhead” figures (fig. 23).

In the already mentioned KTS 15/C site the Miniature style is clearly under the cattle pastoralist paintings, while at KTN 13/B a series of “Uweinat roundhead” figures are under the cattle paintings. In the large shelter of Wadi Waddan (WWD 21), MENARDI NOGUERA & SOFFIANTINI (2008) uncovered with image enhancement software a pair of very faint large “Uweinat roundhead” figures under vivid cattle pastoralist paintings. Some recent finds (site KTW 51, ZBORAY & BORDA 2010) provide further evidence for the Miniature style – Cattle pastoralist style sequence. The combined evidence points to the following sequence: “Uweinat roundheads” predate the Miniature style, which in turn predates the Uweinat cattle pastoralist style.

In the key site of the Wadi Wahesh style (WW 52), there are a number of superimpositions involving cattle pastoralist scenes over earlier Wadi Wahesh type figures, also observable in one of the adjacent shelters (fig. 24). There are a couple of “Uweinat elongated roundhead” figures in the same shelter. Fortunately, there is a small overlap with one of the Wadi Wahesh style figures (one that would be categorized as Miniature style were it in another shelter out of context), clearly establishing the earlier date of the “elongated roundheads” (fig. 25). A recent find (site KTW 53, ZBORAY & BORDA 2010) also confirms the placement of the “elongated roundheads” before the cattle pastoralist paintings. Thus, the following sequence may be established: “Uweinat elongated roundheads” predate the Wadi Wahesh style, which in turn predates the Uweinat cattle pastoralist style.

A fortuitous observation made recently on a detail of a photograph taken by the author at site EH 33 at the end of 2010 finally provides the long-sought link between the two sequences at a point before the cattle pastoralists. While the scene is very faint and weathered, using dStretch image enhancement software it is possible to ascertain (partially based on the surrounding context) that a “Uweinat roundhead” figure executed in dark red partially overlaps several small “elongated roundhead” figures executed in yellow, barely visible on unenhanced photographs. The evidence suggests

that the “Uweinat elongated roundhead” style is the earliest of the Uweinat cultural sequence (fig. 26). However, given the weathered state of this single example, it is hoped that further finds will be made to support this conclusion.

At present, the position of the Wadi Wahesh style relative to the “Uweinat roundhead” and the Miniature styles remains unknown. The lack of any apparent geographical overlap does not preclude a possible contemporarity of the Wadi Wahesh and Miniature styles, though inconclusive evidence from relative weathering (see below) may suggest an earlier date for the Wadi Wahesh style.

### Relative Weathering

The relative weathering patterns by themselves provide few and unreliable clues to the age of various styles. Apart from the assumption of the lack of intentional erasure, allowance must be given for more intense weathering in wetter climate periods, thus the magnitude of faintness cannot be directly equated with absolute age differences. However, when the full range of available data are looked at, they may be used to support conclusions derived from other evidence.

In all four mentioned examples, the Wadi Sora style paintings are much more weathered than the overlying cattle pastoralist ones. In three of the four cases, the cattle pastoralist paintings appear practically unweathered, with faint but recognizable Wadi Sora figures underneath (figs. 21 & 22). In the fourth case the cattle pastoralist paintings themselves are much weathered, and the underlying Wadi Sora style figures are so faint that they can only be recognized using image enhancement software. In addition, all of the Wadi Sora style paintings in the area show much more intense weathering than the cattle pastoralist paintings. The evidence suggests that a considerable time period elapsed between the Wadi Sora style paintings and those made by the cattle pastoralists.

The “Uweinat roundhead” sites are consistently among the faintest and most weathered sites, which is only partially explained by the fact that their makers favoured vertical rock faces as opposed to the more protected shelters. Even in sheltered locations the “Uweinat roundhead” paintings are faint, more markedly so than any of the other pre-cattle pastoralist styles with the exception of the “elongated roundheads”. In the case of superimpositions, at KTW 21/A the “roundhead” figures are markedly fainter than the overlying Miniature style (fig. 23). In cases where “roundhead” paintings

are overlain by cattle pastoralist figures, there is a similar or greater difference in faintness as observed relative to the Miniature style paintings.

Essentially the same may be said of the “elongated roundhead” paintings. In terms of weathering there is little to differentiate them from the classic “Uweinat roundhead” paintings. There is a marked difference in faintness compared to the Wadi Wahesh figure at WW 52 (fig. 25) and an even greater difference compared to cattle pastoralist paintings at a recently discovered site in upper Karkur Talh (KTW 53, ZBORAY & BORDA 2010).

The Wadi Wahesh and Miniature style paintings show a moderate degree of additional weathering in comparison to the cattle period paintings, and some well-protected shelters show very good preservation (comparable or better than that exhibited by the Wadi Sora style paintings in more favoured locations).

There is a single shelter in Karkur Talh (KT 99/D) where a couple of Miniature style figures are shown in the company of a pair of larger and smaller figures with distinct digits on the hands, which may tentatively be assigned to the Wadi Wahesh style. The figures with digits are considerably more weathered than the Miniature style figures; if we accept the style assignment, this would imply an earlier age for the Wadi Wahesh style (fig. 27). It is appealing to consider the similarities between Wadi Wahesh and the Miniature style combined with a sequential chronology as a sign of cultural continuity, with the Wadi Wahesh style giving rise to the Miniature style through time. However, more sites need to be found before such a relationship may be suggested with any level of confidence.

Overall the relative weathering patterns support the conclusions derived from the superimpositions and point towards a substantially greater age for the “Uweinat roundheads” and the “Elongated roundheads” than for the cattle pastoralists. The Miniature style and Wadi Wahesh styles occupy a period in-between with their relative positions at present open to debate.

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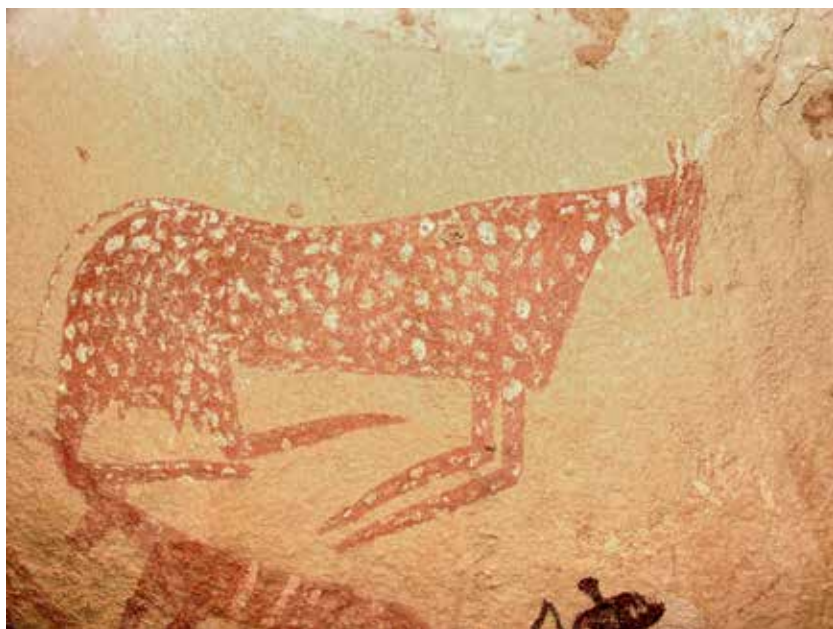


Fig. 1. — Cattle painting, site KTW 26/B, Karkur Talh, Jebel Uweinat.



Fig. 2. — Cattle painting from site AM 51 in the central section of Wadi Abd El Melik, Gifl Kebir.



Fig. 3. — Cattle from site KT 85/B, Karkur Talh, Jebel Uweinat.



Fig. 4. — Male and female couple conforming to Le Quellec's *filiforme à tête en bec d'oiseau* definition, KTW 51, Karkur Talh, Jebel Uweinat.



Fig. 5. — Pair of female figures conforming to Le Quellec's *longiligne* definition, KTW 16/B, Karkur Talh, Jebel Uweinat.



Fig. 6. — Running archer, site KTW 26/B, Karkur Talh, Jebel Uweinat.



Fig. 7. — Dancing females, site CC21, on plain north of Jebel Uweinat (note shoulder bag/quiver on figure at left).



Fig. 8. — “People in double loincloths” and associated cattle, site KTN 11/A, Karkur Talh, Jebel Uweinat.



Fig. 9. — Wadi Sora main shelter (“Cave of Swimmers”), site WG 52, western Gilf Kebir.

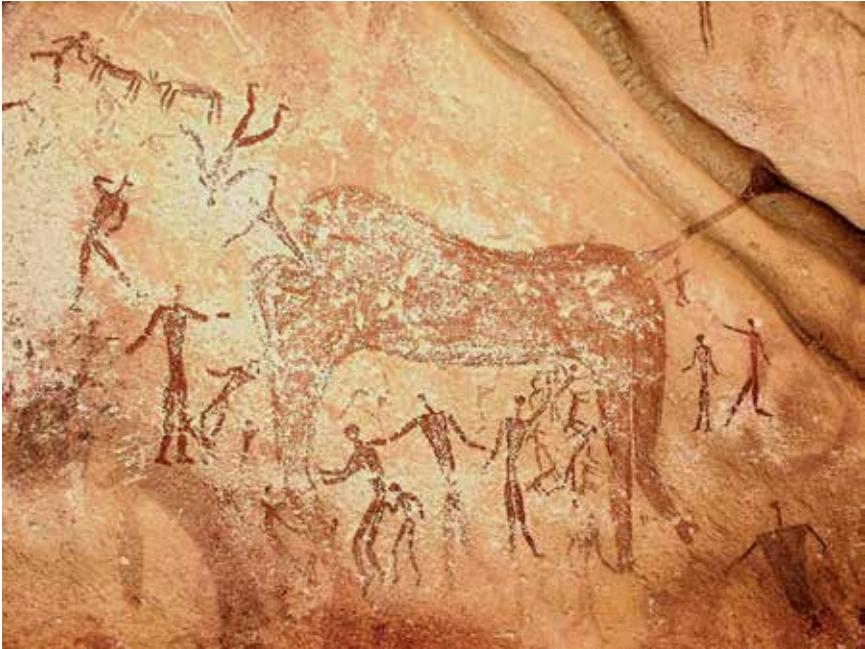


Fig. 10. — Headless beast, site WG 21, “Cave of Beasts”, near Wadi Sora.



Fig. 11. — Typical “Uweinat roundhead” figure, site KTW 31, Karkur Talh, Jebel Uweinat.



Fig. 12. — Elaborately dressed and decorated “Uweinat roundhead” figure, site KTW 11/D, Karkur Talh, Jebel Uweinat.



Fig. 13. — “Uweinat roundhead” figures with bows, site WH 41/D, Wadi Handal, Jebel Uweinat.



Fig. 14. — “Elongated roundhead” figures with elaborate body decoration, originally assigned to “Wadi Sora style” by Le Quellec, site SU 16, south Uweinat.



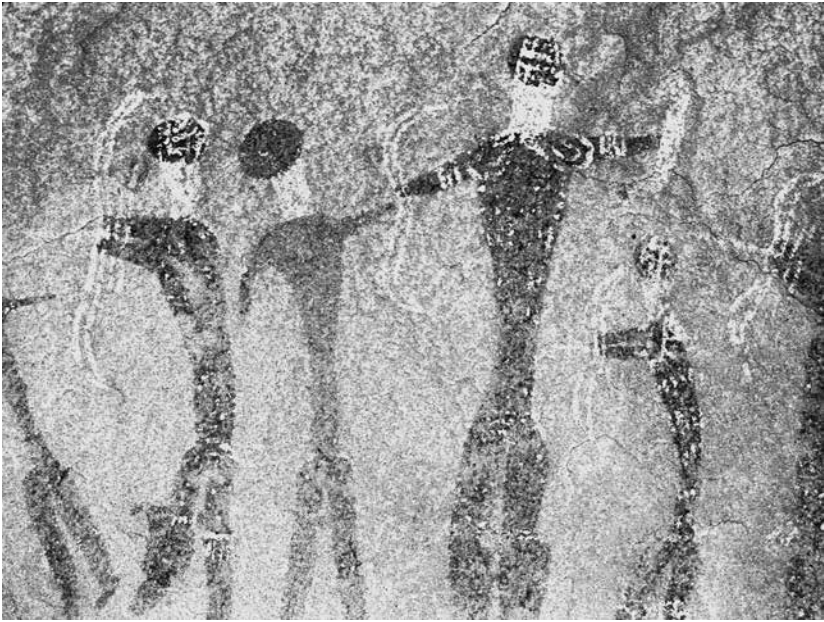


Fig. 15. — “Elongated roundhead” figures with bows and arrows, site KTW 27/G, Karkur Talh, Jebel Uweinat.



Fig. 16. — Miniature style figures, site KTN 31, Karkur Talh, Jebel Uweinat.



Fig. 17. — Giraffe hunt assigned to *Petit rayé* style by Le Quellec, site KTW 21/A, Karkur Talh, Jebel Uweinat.

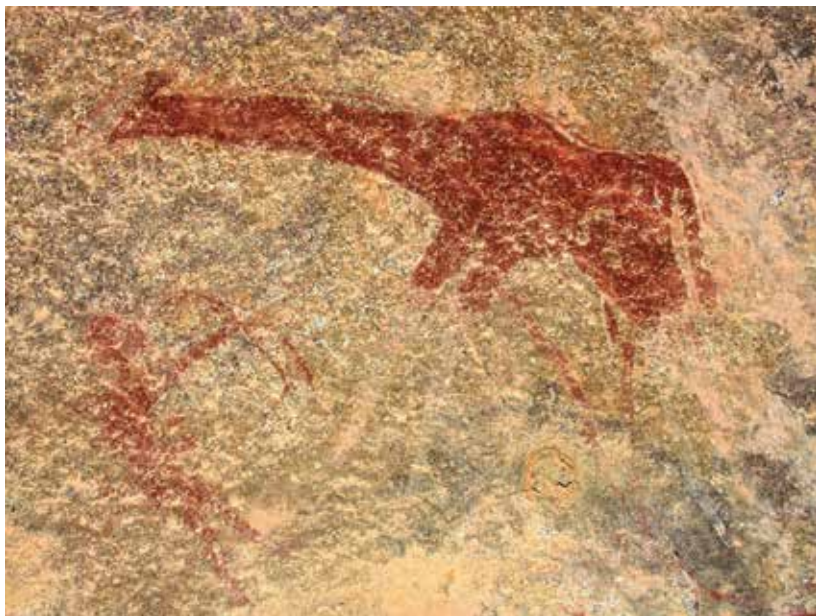


Fig. 18. — Giraffe hunt (Miniature style), site KTN 31, Karkur Talh, Jebel Uweinat.

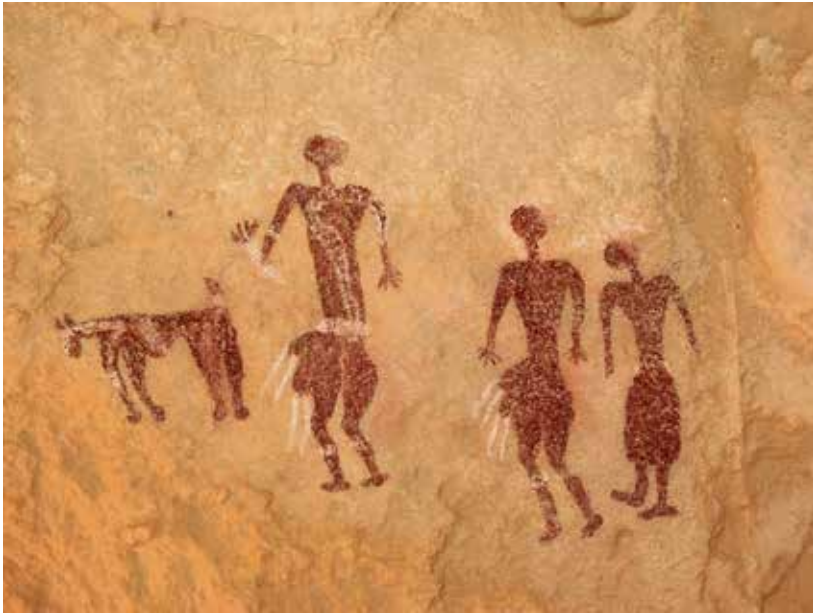


Fig. 19. — Wadi Wahesh style figures, site WW 52, Wadi Wahesh, Jebel Uweinat.



Fig. 20. — Abstract composition, site WW 56/A, Wadi Wahesh, Jebel Uweinat.



Fig. 21. — Archer of the cattle pastoralist style superimposed on faint Wadi Sora style figures, site WG 72, Wadi Sora environs, Gilf Kebir.



Fig. 22. — Cattle painted over Wadi Sora style giraffes, site WG 35, near Wadi Sora, Gilf Kebir.



Fig. 23. — Superimposition sequence of three successive styles, site KTN 21/A, Karkur Talh, Jebel Uweinat.



Fig. 24. — Cattle painted over Wadi Wahesh style figures, site WW 52, Wadi Wahesh, Jebel Uweinat.



Fig. 25. — Wadi Wahesh style figures superimposed on an “Elongated roundhead” figure, site WW 52, Wadi Wahesh, Jebel Uweinat.



Fig. 26. — “Uweinat roundhead” figure superimposed on small yellow “Elongated roundhead” figures, site EH 33, Emeri Highland, western Uweinat.



Fig. 27. — Possible Wadi Wahesh and Miniature style figures on the same panel, KT 99/D, Karkur Talh, Jebel Uweinat.

