

4. WHAT'S NEW IN THE SAHARA, 2000–2004?

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“The Sahara has contributed virtually nothing to furthering our knowledge of rock art”

Christopher Chippindale, *in* Keenan 2005.

Introduction

The above epigraph shows the extent to which work on Saharan rock art remains poorly known, if not scorned, by certain archaeologists. There are doubtless several reasons for this, one of which is no doubt that a number of excessively reckless interpretations have recently led to the belief that, in this domain, it does not matter what gets written. But although, alas, this approach is still to be found in some authors, the tendency to let the imagination wander has calmed down a great deal, and every year it gives way a little to increasingly serious research. Another reason is that, apart from two non-institutional journals (*Sahara* and *Les Cahiers de l'AARS*) which are entirely or largely devoted to this subject, the literature is very dispersed, and often confined to periodicals that are privately distributed. The disaffection for work carried out in this region is doubtless also due to the fact that, apart from a few (highly unfortunate) attempts, the authors concerned remain outside current fashions, such as cognitivism. But the most important cause is certainly the fact that access to sources cannot only be done through English. Merely to inform oneself about the studies carried out in the subject from 2000 to 2004, it is imperative to read German, French, Italian, Spanish and Catalan. Barely a third of the publications have been in English, more than half in French, 6% in Italian, 5% in German. Spanish and Catalan form around 1%, but just those nevertheless represent several hundred pages. Personally, I find situation very interesting, but there is no doubt that it will have somewhat discouraged monolingual lovers of hasty judgements.

The following text summarises and analyses some

260 publications from 2000 to 2004 inclusive, directly concerning the rock art of the immense Sahara Desert. First we will present those reporting new discoveries, still numerous despite the difficulties inherent in the Sahara's geopolitical situation; then those which seek to specify the question of the identification of styles, and their interrelationships, their relative and absolute chronology. A special subsection is devoted to large-scale regional studies, theses and monographs. Finally, we conclude by reviewing most of the thematic analyses and general syntheses of which we are aware. I hope this will draw attention to an area of research which, whatever some people say, is developing rapidly.

New discoveries

Morocco

In this country where the destruction of sites is in full swing, publications on rock art, even when not true corpuses, are extremely precious (Rodrigue 2001a). Hence, some new isolated anthropomorphs were reported by Bouchra Kaache in the Moroccan pre-Sahara: one at Aït Ouazzik, accompanied by a rectangular shield and at least one sword (Kaache 2001, fig. 1), another at Bourkerkour (Msissi) (*ibid.*, fig. 2), a third at Anou n'Ouamersemlal (Tazzarine) (*ibid.*, fig. 3). Only tracings have been published, and the first specimen is attributed to assemblage Ib (with filiform legs and full body) corresponding to the Early Bronze Age, around 4000 BP. Some monochrome paintings (red to violet) – discovered by nomads in a shelter at Laouinat, 130

km south-east of Tan-Tan – have appeared in a preliminary publication by Susan Searight and the late Guy Martinet (Searight and Martinet 2001). One can see a collective scene implying very elongated, ithyphallic archers, a frieze of 23 small anthropomorphs, other people perhaps wearing a mid-length skirt, and three schematic chariots that look more recent than the rest, and are similar to those engraved everywhere in southern (Searight and Martinet 2001, fig. 3, 5). The bestiary comprises sheep, bovine, antelope, ostriches, a probable giraffe, and a mounted quadruped (donkey?). The importance of this discovery lies in the fact that these works are more similar to those of the central Sahara than all those in the other twelve painted sites in Morocco (as much through the style of the people as through the absence of geometric signs) – but the most direct comparison can be made with the paintings of Tifariti in the Saguiet el-Hamra, which are a hundred kilometres farther south (cf. *infra*). A few modest contributions to the inventories of already-known sites should be mentioned – such as those of Biouafen, Taouraght and Tamzarar, in the region of Akka (Desgain and Searight 2004), Wazzouzout in the region of Taghijit (Rodrigue *et al.* 2004) and Jebel Rat in the High Atlas (Rodrigue 2001b); or totally new sites, such as the engraved assemblage of Tazinian style at Jbel Talrazit to the south of Jbel Ouarkiz, the few paintings of Wadi Asleg (Masy 2004), site III at Taouz, comprising about forty engravings of gazelles and bovines (Pichler 2002, fig. 8, 9), seven new sites at Imâoun in which bovines predominate (Salih and Heckendorf 2000) or the two locations at Tiouli, which are unusual in that the engravings (of bovines) are situated on the plateau and not in a valley (Pichler and Rodrigue 2001a). The engraved site of Guelta Oukas, in Wadi Tamanart on the flank of the Anti-Atlas, was completely recorded, with a distribution map of all the figures (Blanc *et al.* 2003). Cattle are omnipresent (80 examples out of 178 engravings) but the originality of the place lies in the presence of about thirty caprines, which indicates the start of the plant cover growing poorer. Nevertheless, wild fauna is still represented, with a dozen elephants, ostriches, and antelopes, a feline, and a curious snake (Blanc *et al.* 2003, fig. 53) with a single, long horn: is this perhaps a mythical reptile of which several are known in the central Sahara?

Western Sahara

An Anglo-Italian expedition in September–October 2002 enabled its members to visit the rock engravings of Tazina style at Slugilla: antelopes, bovine, ostrich (Brooks *et al.* 2003, fig. 4), but also to discover other engravings at the same site: elephant, rhinoceros (Brooks *et al.* 2003, fig. 5) with a darker patina and of a different style, which looked older to the visitors. In fact, this site forms part of those being studied since 1995 by researchers from the University of Girona at Slugilla Lawaj, but also at Blubzeimat, Leyuad, Dirt and Gleb Dan Dan. Sluguilla is

a homogeneous site with engravings on horizontal slabs in Tazina style, in which 24 sectors comprising 471 localities, with more than a thousand engraved figures, have been documented. There are 180 zoomorphs including 84 bovines, 19 rhinoceroses, 17 birds (ostriches and others), 15 giraffes, a dozen carnivores (felines and canids), six elephants, four equids. Among the bovines one can distinguish twelve gazelles, eight oryx, various antelopes which one should doubtless not try to identify too precisely, two big ancient buffalos, three caprids, and 22 indeterminate figures. Out of the twenty “signs” observed, there are no less than sixteen “fishing baskets” (Soler Masferrer *et al.* 2005: 82–84). Blubzeimat (also previously called Gleb Terzug, by mistake) has only yielded pecked engravings, especially zoomorphs (bovines, giraffes, rhinoceroses), three definite anthropomorphs (and other doubtful ones) including an archer (*ibid.*, fig. 2) and a person probably holding a round shield (*ibid.*, fig. 3). Some enigmatic figures (ovals, sandal prints, lizard-shapes) have also been recorded (*ibid.*: 81). At Leyuad, a long-known assemblage of sites, a few paintings have been listed, but especially engravings of animals (some mounted), anthropomorphs, zigzags and other enigmatic figures (big arches stretching 1m and 2 m). In the big shelter of the “Cueva del Diablo”, a group of anthropomorphs in bas-relief, life-size, is particularly remarkable (*ibid.*: 82). The site of Dirt 1 is characterised by patinated engravings in Tazina style (five in all: 1 carnivore, 1 bovid, 1 elephant and 2 antelopes) as at Sluguilla Lawaj, but they were made on the vertical edges of sandstone outcrops and blocks. The other figures, pecked, consist of “geometric symbols” and inscriptions in Tifinagh characters, all spread out over horizontal surfaces and with a very light patina. The Tazina school is also represented at Dirt 2, by 4 figures: an ostrich, an elephant, a pair of bovines with a line on the neck that could represent a collar – all with total patina; then come geometric signs with a lighter patina, and an Arabic inscription (*ibid.*: 85–86). Gleb Dan Dan is a new site discovered in 2001, and currently the southernmost in the Western Sahara. About fifty engravings are superficially pecked there (the rock is very hard): zoomorphs, anthropomorphs, and complex geometric signs, but their study has only just begun (*ibid.*: 86). An inventory of painted sites has been published: there are five in the Zemmur, three on the plateau of the Tiris, seven in the massif of Leyuad. These localities contain images of the large wild fauna (rhinoceroses, giraffes, antilopids, felids, canids), anthropomorphs (including a few archers) and horsemen, as well as geometric figures and inscriptions in Tifinagh and Arabic characters, but it has not been possible to obtain direct dates, nor to place these images in relation with other archaeological sites (Soler Subils *et al.* 2005). Another member of the Girona group, Joan Escolà Pujol, produced a complete iconographic study of the big shelter of Rkeiz, located north-east of Tifariti: positive hands comprise more than 53% of the figures, and numerically are followed by anthropomorphs (22%) and

zoomorphs (25.4%) – especially giraffes and ostriches, with a few bovids too (Escolà Pujol 2003). A new painted site has been discovered at Bou Dheir by other researchers (Brooks *et al.* 2003, fig. 8–11). The wild bestiary is painted in “a specific local style” (*ibid.*: 69) often at great size (up to 140 cm), and a remarkable ancient buffalo is included (*ibid.*, fig. 10).

Mauritania

Since sites with rock paintings are quite rare in this country, the one that has been reported by Mie Suy and Jacques Choppy in the el-Aguer chain, south-east of Aïn Safra, deserves fuller documentation. It comprises elongated people, sometimes stick figures, and a herd of bovines with cloven hooves, two cows with the udders between the back legs, as in the eastern Sahara, albeit in a different style (Suy and Choppy 2001). Engraving sites have only been published occasionally, most often in the form of tracings, which makes the inventory underway by Pascal Lluch and Sylvain Philipp particularly promising (Lluch and Philip 2003). In a first overview, they have published photos from Wadi Ifenouar (engravings of big people and a rhinoceros following its young, paintings of bovines, people and horses), and el-Kneibis where there are two schematic chariots (*ibid.*, fig. 7). They also illustrate engravings from Wadi Enghegdâne (schematic people, bovines sometimes decorated with spirals and/or with a pendant, lizard, antelope frieze, elephant and its young near a rhinoceros and bovine) as well as, in the same site, a schematic chariot painted in red among geometric drawings (*ibid.*, fig. 21). Finally, they complete the documentation of the engravings of the vicinity of the circus of el-Beyyed: bovines with pendants (*ibid.*, fig. 31, 32), giraffe (*ibid.*, fig. 33), schematic chariot (*ibid.*, fig. 34), ostrich with spread wings (*ibid.*, fig. 35), and engraved assemblages around the spring of Tililit: horsemen, antelopes and Libyco-Berber inscriptions (*ibid.*, fig. 36), elephant with butterfly-wing ears (*ibid.*, fig. 37), ostrich and lancer with a small round shield (*ibid.*, fig. 37). All these images are for the most part linked to water sources, or are located at ancient points of passage.

Canary Islands

The huge inventory project begun at the initiative of Werner Pichler is going to make it possible to carry through a number of useful observations. The first section published concerns the engravings of the north of Fuerteventura with 2866 individual figures. All the precise locations are given, as well as numerous statistics and typologies, which in particular reveal a preferential orientation of decorated panels towards the South. The author distinguishes cupules (6 examples), lines (640), geometric signs (98), scripts (early Latin: 1251, recent Latin: 80, Libyco-Berber: 171), iconic signs (partial anthropomorphic representations such

as the 225 footprints, 102 boats, for only 2 zoomorphs and no complete anthropomorph). This exemplary work is accompanied by a visual catalogue of tracings (Pichler 2004). The publication of an engraved anthropomorph from Aripe 2 (Tenerife) has been added to the documents of the same kind which have already been compared to caballine Saharan engravings, and there is no doubt that a Saharan influence was felt on the islands of La Palma or Tenerife, in a protohistoric period that remains to be specified (Farruja de la Rosa and García Marín 2005). A new rock engraving of a boat has been reported at Guinate (Haria), but it is a vessel datable to the first half of the 19th century (Sommer 2003, fig. 2). It is true that a number of engravings resist all interpretation: for example, those inventoried by Hans-Marin Sommer, and which consist most often of parallel lines (at Haria, Tahiche, San Bartolome, Llano de Zonzamas), sometimes intersecting lines. “Grids” are rarer (San Bartolome) as are other “signs” such as squares, circles or crosses (Arrecife, San Bartolome) (Sommer 2000).

Tunisia

A few complements brought to the inventory of Tunisian rock art sites add (to the already-known elements) some anthropomorphs, an undetermined zoomorph, a bovine, groups of dots, and starred signs (Ben Nasr 2001). The decorated shelter of Aïn Khanfûs, 40 m long and 4 m to 5 m deep, was discovered in 1988, but Jaâfar Ben Nasr has noticed some new figures in it: eight anthropomorphs, including 4 archers (Ben Nasr 2003, fig. 3–5, 6, 8), a bovine with a single forward-projecting horn (*ibid.*, fig. 10) drawn in a brick-coloured ochre outline, and a quadruped with a missing front end, surmounted by a four-branched sign (*ibid.*, fig. 11). Since Tunisia’s rock art is poorly known, and doubtless still has some surprises in store, it is regrettable that only a photo of one of these paintings has been published, the rest of the article being illustrated with tracings (three of them with no scale) whose degree of reliability is difficult to assess. Equally regrettable is the identification, by the author, of the bovine as a *Bos ibericus*... a species which in reality does not exist (Gautier 1988).

Algeria: Atlas, Mzab

François Soleilhavoup has published old photographs of the rock engravings of the Saharan Atlas, taken by him at sites that are now difficult to reach, coupled with excellent analytical tracings (Soleilhavoup 2003a, 2004). About a hundred engravings, distributed over 80 horizontal limestone slabs, were recently discovered on the occasion of a building development on a rocky plateau east of Beni Isguen. They were produced by indirect percussion using a metal implement, and only one of them, depicting a quadruped with total patina, is figurative. All the others have a straw- or ochre-coloured yellow patina; many are arch-shaped, and a few make one think of images of daggers

or swords. As a hypothesis, Nadjib Ferhat has proposed an attribution to the Bronze Age, and the managers of the building project have suggested that this discovery's importance should be recognised by integrating it with their project. So the site's study will continue (Ferhat 2003a).

Central Sahara

In the far north of this vast rock art province, at el-Moor (Libya), some engravings in Tazina style have been reported, which add an interesting north-eastern extension to this school (Muzzolini and Pottier 2002). The publications of Philippe Masy and François Soleilhavoup have given an idea of the richness in paintings of the region of the Aramat, located at the border of Algeria and Libya around 26° N. In particular, one can note two big ancient buffalos painted in the Wadi Tabarakat, in a style evoking that of Abaniora, and especially two other buffalos "at a flying gallop" painted in the style of Iheren-Tahillâhi at I-n-Lalan (Soleilhavoup *et al.* 2000, fig. 4, fig. 3): these images prove that the idea that depictions of the big ancient buffalo characterise early periods is to be consigned to the past – as had already been realised Jan Jelínek and other researchers (Jelínek 2004: 63, 67). It is a pity that the very verbose commentary accompanying these documents provides very little information, and perpetuates another legend: that of the existence of "short-horned cattle" among the Saharan herders (Soleilhavoup *et al.* 2000: 57), not to mention the evocation of "shamanic" practices, which is practically inevitable with this author (ibid.: 60), despite being utterly unfounded, here as in Morocco where it has also been evoked by others (Otte 2000: 260). Apart from new paintings of Iheren style – including a ram with a cephalic ornament and a flock of sheep (Masy and Soleilhavoup 2001, fig. 13–14) – this zone has also yielded a few more-or-less typical Round Head images. So this painting style has some interesting extensions. Other interesting elements in the Aramat are: eight painted chariots, one of them pulled by two oxen (Soleilhavoup *et al.* 2000, fig. 39), two schematic (ibid., fig. 40), one unhitched (ibid., fig. 41) and one mounted by a "Libyan warrior" (ibid., fig. 42) – the others are two-horse chariots "at a flying gallop". Among the engravings in the same zone are some interesting ithyphallic anthropomorphs (Soleilhavoup 2003b, fig. 4, 5), some of which, clearly mythical (ibid., fig. 7, 15–17, 19), complete the series of those already known in the central Saharan massifs. Moreover, a shelter in Wadi Tabarakat has yielded the first known example of a painted homologue – in the Iheren style – for these surreal beings (ibid., fig. 22). Just as interesting are the new engraving sites discovered in the Wadi Kel Djanet, with mostly bovines, one of them mounted, and antelopes, but also an elephant, an ostrich, an archer, a few inscriptions in Tifinâgh characters. Others are located on the plateau of I-n-Tabakat: very big bovines (L = 3.2 m), a probable rhinoceros, elephant, feline, giraffe. Two sites

at Tissatin comprise a rhinoceros (Masy and Soleilhavoup 2003, fig. 6), six big elephants (ibid., fig. 4), at least five bovines (ibid., fig. 7) including one with a plaited collar (ibid., fig. 8), three giraffes; an ancient buffalo (ibid., fig. 6), a big anthropomorph seen from the front (ibid., fig. 9), a feline, and a big ithyphallic therianthrope two metres high and with a raised tail (ibid., fig. 5). Another site has animal engravings in Tazinoid style (small elephant preceded by an anthropomorph, three rhinoceroses, a cow), some concentric circles joined together, various lines and dots, as well as a "fishing basket" (ibid., fig. 10). The place called Wa-n-Khalia is characterised by big horizontal engravings: thirteen giraffes (ibid., fig. 11, 12, 17, 18), six rhinoceroses including one defecating (ibid., fig. 15, 19), sixteen bovines (ibid., fig. 13), three felines (ibid., fig. 16), an ithyphallic anthropomorph (perhaps a therianthrope?) armed with an axe (ibid., fig. 14), two elephants including one more than four metres long. Among the smaller figures, there are bovines, an antelope, a probable ancient buffalo, and a few engravings of Tazina style. Nearby there are a few atypical engravings, notably a monkey that seems threatened by a feline (Maestrucci and Giannelli 2004, fig. 1, 3), some concentric circles joined in a series (ibid., fig. 18), and a "fishing basket" (ibid., fig. 15). The assemblage is in Bubaline style which reminds one more of the Tassili engravings than those of the Messak. This impression is corroborated by the discovery of a pebble decorated with a double spiral and concentric circles – themes that are generally more western – in immediate proximity to the site (Soleilhavoup 2001c: 64).

Farther south, in the Tadrart Akâkûs (Libya), a miniature engraving discovered at Ti-n-Tabarak has made it possible to reconsider the relationship between rock paintings and engravings in the central Sahara (Le Quellec 2004a). In the same massif, an assemblage of Round Head humans is close to an elephant in the so-called "Martian" style, in the Wadi Afar (Maestrucci and Giannelli 2004). This animal's ears are of "butterfly-wings" type, which makes one refrain from seeing this stereotype as a late feature, as was commonly done until now. Among the fifteen anthropomorphs aligned on an eight-metre wall, one notices four women with hanging breasts, one of them perhaps wearing a mouflon mask. To the south of the Awîs, in the central part of the massif, Jacques and Brigitte Choppy have made an inventory of about fifty new sites, thirty of them in the Wadi Ta-n-Gurgur and a dozen in the Ti-Hedin, that is, a total of 920 subjects: 340 anthropomorphs and 580 animal figures. The latter are dominated by giraffes (9% of the animals), followed by elephants (5%), rhinoceroses (0.5%), a dozen hippopotamuses, including ten on the same panel (Choppy and Scarpa Falce 2004, fig. 3), a big bubalus, an oryx, a lion (ibid., fig. 4). One site in the Awîs is to be added to the list of those which contain engraved "fishing baskets" or "gourd motifs". These figures are not located in a typical Tazinian environment, and display no particular association with it (Masy 2003).

From the shelter of Wa-n-Telokat, Rosanna Ponti has reported a deteriorated ochre painting that is difficult to read ; it is about two metres long, and very unusual. In it one sees, from right to left, a group of a dozen signs of arrows with points upward, a group of Round Head people including one woman, a kind of big snake on which is superimposed a series of 35 crescents and arch signs: two of the people seem to be in a kind of “U”-shaped enclosure (Ponti 2003).

Close to the northern part of the same massif, the little engraved site of I-n-Leludj, known for a long time, was examined by Jan Jelínek, who recognised essentially bovines (a dozen), one of which probably has a tent attached to its horns (Jelínek 2000, fig. 7), but also a few people (seven in total), two giraffes threatened by two anthropomorphs (ibid., fig. 5), and four elephants (ibid., fig. 12–14). Particularly notable is a bovine, 155 cm in length (ibid., fig. 2). The affinities of several of these images with the engravings of the Messak are obvious, an important observation in view of the site’s geographical position, closer to the Tadrart Akâkûs than the Messak.

In a very southern part of the massif, Adriana and the late Sergio Scarpa Falce have discovered a fresco extending for more than ten metres, the main part of which comprises an enigmatic motif that reminds its discoverers of the processional “dragons” of Europe (strictly in terms of shape, of course). This motif is associated with a series of therianthropes, three of them with a rhinoceros head and one with a feline head, associated with (or holding) enigmatic bent objects – in an ensemble that is unique in the Sahara, albeit displaying affinities with the “Martian style” of the Round Heads (Scarpa Falce and Scarpa Falce 2001, pl. G-K and tracing fig. 3). The authors compare this “dragon” with certain motifs (the “formlings”) of southern Africa, but the resemblance is very superficial, and this image has more to do with the “digital motifs” which led Amadou Hampâté Bâ to an interpretation of the Tassili frescoes that is as famous as it is false. To the left of this extraordinary frieze there are a few paintings which are clearly attributable to the typical Round Heads (an elephant, two antelopes, a few people that are hard to see) (ibid., fig. 5–7, 15). One of them is superimposed by a painted rhinoceros that is clearly more recent ; its head displays characteristics (the rendering of the ears and muzzle) that it shares with those of the nearby therianthropes. Nor far away is a shelter decorated with juxtaposed ovals (ibid., fig. 8) which recall the engraved examples of the Messak, and whose juxtaposition forms a motif that greatly resembles the “dragon”. The same authors have also presented the paintings of one of the fifteen new sites they have discovered in the hydrographic basin of the Wadi Istanen. They are mostly Round Heads which greatly enrich the corpus of images of this style (Scarpa Falce 2003, fig. 2–6 and pl. A–D), but one also sees a group of varied dynamic people, recalling the style of Iheren-Tahilahi/Wa-n-Amil (ibid., fig. 7).

The use of infra-red film and oblique light made it possible for Fabio Mastrucci and Gianna Giannelli to make a precise recording of the little group of engravings beneath paintings at the site of Afozzigiar. The engraved part has a mouflon surrounded by anthropomorphs (Mastrucci and Giannelli 2005, fig. 3, 5, 6) and the paintings are only people which the authors consider to be Round Heads (ibid., fig. 2, 4, 15–17). Several “ichthyomorphic” or “Kel Essuf” figures (Ferhat et al. 2000), painted or engraved in the vicinity, have also been documented (ibid., fig. 9–14; see also Choppy 2004). Attention has also been drawn to some concentric arches next to one of them in Wadi Afar (ibid., fig. 7) and to vertical red lines running parallel above an individual in the shelter of Wa-n-Afuda (ibid., fig. 8).

In the Messak, where some operations of preventive archaeology have been continued within the framework of the search for oil (Ringebach and Le Quellec 2003), Brigitte and Jacques Choppy have carried out the photographic coverage of a big broken block (2.5 m × 1.25 m) bearing two large people, which made it possible for them to produce a tracing (Choppy 2003), while Gérard and Annie Garcin have presented a new engraved “portrait” in the Tilizaghen (Garcin 2001: 44, and fig. 6a, 6b) and Yves and Christine Gauthier have recorded an astonishing “scorpion” (Gauthier 2004, fig. 1). The northern edge of the massif has seen prospections by Tertia Barnett and her team, who have documented several hundred engravings. In the published reports, there is a frequent confusion of “style” and “phase”, and the construction of some of the stylistic categories remains imprecise; hence, phase I is called “*semi-naturalistic*” whereas phase II is called “*semi-schematic*” (Barnett 2001, 2003a, 2003b). The newly reported documents include three schematic chariots (Barnett and Mattingly 2003, fig. 8.28) and numerous inscriptions in Tifinâgh characters (ibid., fig. 8.30–31, 33–40), and in Libyc (ibid, fig. 8/32). This work was carried out by anglophone researchers who, for clearly linguistic reasons, were not sufficiently familiar with the work of their predecessors who published in other languages – an observation that is made regrettably frequently, as though the academic adage “*publish or perish*” had surreptitiously been changed to “*publish in English or perish*”...

At the Algerian side of the Tadrart, the first results of the programme of the pre-inventory carried out on the initiative of the Office of the Parc National du Tassili have received a preliminary publication. On this occasion, some engravings of the “Messak school” defined by Jean-Loïc Le Quellec (Le Quellec 1996) have been recognised in the Wadi I-n-Ezzan: a hippopotamus and some bovines with a double outline, therianthropes with canid heads and perhaps crocodile heads... (Striedter and Tauveron 2005). Other domestic bovines (with very clear collars) in the same style occur at Wa-n-Zawaten and at the confluence of the Wadis Iberdjen and Markawendi. They have horns of various shapes, and some very clearly are wearing a collar: they are therefore domestic (Tauveron 2003a). In



Fig. 4.1. Example of paintings in the "Round Head" style. Jabbaren, Tassili-n-Azjer (Algeria).

the abri Freulon, an assemblage of typical Round Heads comprises a mouflon framed by two archers, and a figure which seems to represent a person in a boat, beside some enigmatic figures. There is also another archer threatening a bovine, three hand stencils, an outlined hand, as well as a mounted quadruped. However, painted engravings are quite common in this region: for example, at Aman Smerdnin where drawings of a style resembling that of Iheren were produced with an ochre crayon (elephant, bovines, rhinoceros, people) (Tauveron *et al.* 2005). Others occur at Wa-n-Seklem and in the abri Freulon. Some paintings in the typical Iheren style (people with a tuft at the front) occur in a shelter in the Wadi Iberdjen wa-n-Tabarakat. A bovine with a "V"-shaped pommeled saddle bears two people, in the Wadi Tidunadj, where one can also see bovines painted in flatwash (doubtless in the Abaniora style). At Ti-n-Aressu, two people of Iheren style are shown drinking with straws from the same vessel. There is also a scene of lion-hunting (with a spear) in the same style, and which greatly resembles another at Ti-n-Hanakaten. Some painted assemblages in caballine style show that bovines were still very present at the start of this period, which confirms the hypothesis of a gentle transition from one period to the other. A few engravings of ribbed spearpoints, definitely metallic, and apparently polished on slabs, are illustrated in a photo with no precise location (Tauveron 2003a). It

should be noted that such depictions of weapons are very rare in the central Sahara, but some have been recorded in the Fezzân (Barnett and Mattingly 2003: fig. 8.22c et 8.23).

To the east of Aman Smerdnin, a rock-shelter with neolithic remains on its floor (including "a few fragments of ochre which could have been used as crayons"), contains rock art (bovines, elephant, rhinoceros, antelope, gazelle, people) which at first sight comprises extremely fine engravings, with unpatinated lines of less than a millimetre. Analysis has shown that, originally, these were drawings made with a very hard mineral crayon "which, when strongly applied to the rock, scores it deeply and, at the same time, leaves a coloured deposit in this fine groove" (Tauveron *et al.* 2005: 37). Some subjects were painted later, in both outline and internal flatwash, but in the course of time this painting may be the first to disappear; then it is the turn of the dry colouring applied by crayon, and today all that is left is a fine line, lighter than the support (since the colour protected it for a long time). This observation renews the approach to the question of the extremely fine engravings with a light patina that are also present in the Akâkûs and the Messak. The hypothesis put forward by Michel Tauveron and Karl Heinz Striedter is that these could be preliminary lines, and so what one has here are "sketches that remained unfinished" (*ibid.*: 38).

This certainly seems probable in the case of the biggest of these images, close to a metre, but it is less certain for the miniature works (Le Quellec 2004a), and this interesting idea remains very difficult to prove. Although it is regrettable that the authors only publish a few photos of the site they are presenting, and that they do not give a global record of it, their analysis should be kept in mind in all studies of “graffiti”-type engravings.

As for the Tassili-n-Azjer, while certain “discoveries” have received excessive media coverage (Coulson 2005) and in fact amount to very little for anyone with the slightest acquaintance with Saharan literature, that is not the case with the results obtained by Ulrich and Brigitte Hallier, who have published the big hippopotamus painting of Ifedaniouène (three metres long) as well as the other Round Head paintings (antelopes, people) which accompany it and the herd of bovines, of Bovidian age, which is superimposed on it (Hallier and Hallier 2000, fig. 1–5). Undated later renewals are visible both on certain parts of the hippopotamus and on several of the surrounding paintings. Other Round Head paintings have also been discovered in the region by these same researchers: an elephant in the sector of the Wadi Ti-n-Edjedjele (ibid., fig. 6); a group of seven people in the high Tasset (ibid., fig. 7–9) and an anthropomorph whose eyes are represented by circular gaps in the dark brown flatwash (ibid., fig. 10). Another anthropomorph, at Djebel Ifedaniouène, in flatwash with light spots (ibid., fig. 11), perhaps belongs to the same cultural horizon. Among the paintings photographed by B. and U. Hallier in the south-eastern zone of the Ifedaniouène mountains are some magnificent bovines with horns of different types (long, short and fine, forward-pointing, pendant), one of them being mounted (Hallier and Hallier 2001, fig. 1). A small crouching man bends his bow, a woman holds a child by the waist (ibid., pl. T), a very fine sheep and two men are running together, the men holding in their hands a throwing weapon of a type often depicted in the region (ibid., fig. 5 et pl. V); two rows of people, some armed (bow, curved weapon) and others accompanied by a child and bent under what seem to be *guerbas* (goatskin bottles) apparently should be grouped with the images that provide evidence for the sexual division of tasks among the herders of Iheren-Tahillâhi (Hallier and Hallier 2002: 117 et fig. 8). From the Wadi Tasset, the authors also publish a very fine fresco showing a herder accompanying a herd in which each animal is represented with peculiar properties, and in different attitudes, one of them with a striped coat: this is one of the most accomplished works by the painters of the Iheren school (Hallier and Hallier 2001, fig. 7 and pl. W-Z). Ulrich and Brigitte Hallier have also had the good fortune to discover magnificent paintings at Tissebouk and Irrekam Aharhar (central Tassili): a herd and its herders (Hallier and Hallier 2003a, fig. 1) or “boxers” in the first location (ibid., fig. 2 and pl. R), whereas in the second, a painter of the Iheren-Tahillâhi style produced an exceptional composition

that occupies the whole interior of a niche with a liberty of line, a variety of individuals and a general equilibrium worthy of the greatest masterpieces (ibid., fig. 3, 4, and pl. R). But the scene represented, albeit familiar in some respects, remains determinedly enigmatic.

Yves Gauthier and Denis Lionnet have made known some paintings on the plateau of Tadjelahin, from little-visited sites which Lhote did not see during his 1969 mission: a fight scene (Gauthier and Lionnet 2005, fig. 2, pl. Q-T) and a line of anthropomorphs with big bellies (fig. 4) at Imerda; a coitus scene (ibid., pl. U) and bovines that are partly superimposed on a group of three big people with Round Head affinities (ibid., fig. 5 et pl. V) at Tadrast (Tadghast). In the vicinity there are other images in the Abaniora style (ibid., fig. 7, 8, pl. W).

In the Immidir, Yves and Christine Gautier have noticed some assemblages that are particularly interesting through their style or their theme. One can note that if the off-white paintings of the big shelter of Ufsé have indeed been made with plaster, then one could take the opportunity of obtaining direct dates, since it is now possible to date this material. The authors also give several cases of relationships between paintings and engravings, including an exceptional open woman brandishing an axe and engraved on the white flatwash of a big bovine (Gauthier and Gauthier 2003, fig. 2). One also notes an elephant in white flatwash and butterfly-wing ears (ibid., fig. 3). The identification of two of the bovines of Anaserfa as ancient buffalos (ibid., fig. 14) is not very convincing. In a book devoted to this massif, Jean-Louis Bernezat devotes a full chapter to prehistory, which gives him the chance to publish colour photos of various remarkable paintings, especially Round Heads, but the regional styles are very varied (Bernezat 2002: 137–169).

In the Fadnoun, some paintings in Iheren-Tahillâhi style and, for the male figures, mostly of Abaniora, have been recorded at I-n-Selouf where two of the walls were prepared (perhaps by scraping) before being painted (Leeuwen 2001). A bichrome cow bears a big “pot” attached to its horns by very visible ropes (ibid., fig. 4b). The fine long horns of the bovines are in white, and often asymmetrical (one turned upwards and one down). Two women, both mounted on oxen, are wearing a pointed hat comparable to those known in the engravings of Djerât (ibid., fig. 8, 11b). One panel shows a battle of archers (ibid., fig. 12a), two of them with a false bushy tail and a median notch, like those also known in the engravings of Djerât (ibid., fig. 12b). In a scene that recalls the famous fresco of Iheren, a flock of about forty sheep face a circle of vegetation in which two women seem to be sitting (ibid., fig. 10a). Finally, Jean-Louis Bernezat has reported the existence of ancient or prehistoric tracks adjusted by displacing big blocks, probably in order to facilitate access to water-sources for the herds of bovines depicted in the paintings. Certainly such

tracks would have been too wide – and largely useless – for humans or ovicaprines (Bernezat 2004).

The discovery of two astonishing engravings on a rock in the centre of a palaeo-lake, north-west of the well of I-n-Azawa, has made it possible to identify a particular “school” of engravers who liked to depict antelopes endowed with numerous fantastic characteristics: the enormous belly of a pregnant female under which there hangs a curious appendage, and arched protuberances, and a zigzag line leaving the mouth... Another engraving of this type exists at Yuf Ehaket in Ahaggar, 140 km north-west of I-n-Azawa, and the circulation between these two points is facilitated by Wadi Ti-n-Tarabin, whence the name of the school of Ti-n-Tarabin” that has been proposed for designating this particular style (Scurtu and Le Quellec 2002).

Air

The only new work is a systematic inventory of the site of Dabbous, formerly studied by Christian Dupuy (Dupuy 1987, 1988). A team led by Jean Clottes (Clottes 2000) has recorded 828 subjects, including 704 zoomorphs, 61 anthropomorphs, and 17 inscriptions in Tifinâgh characters. Among the animals identified, bovines dominate (46%), followed by ostriches (16%), antelopes and gazelles (16%), giraffes (16%), and finally 12 dromedaries, 11 canids, 6 rhinoceroses, 3 equids (horses or donkeys), 2 monkeys, 2 elephants, 1 lion. The study's only conclusion is simply that this work, carried out by three professional researchers and heavily subsidized, produced results practically identical to those obtained by Christian Dupuy, a simple amateur working at his own expense. I confess that I have problems grasping what the authors of this publication are trying to say when they conclude that “this is of great importance from the methodological point of view for the study of rock art in the Air” (ibid.: 13). In any case one can certainly wonder about the cost and the interest of an operation that consisted of installing, at Agadez airport, an aluminium cast (of 23 m²) of the two biggest giraffes from this site (Clottes 2001).

Tibesti

Aldo Boccazzi and Donatella Calati have made known the extraordinary site of Ouri (eastern Tibesti) where the paintings, located on the vertical walls of a big inselberg, are exposed to the sun and to atmospheric agents (Boccazzi and Calati 2001, fig. 1) and yet are rather well preserved, which makes possible numerous observations about the material culture of their creators: the details of clothing are often very carefully depicted, especially the hides or fibres (ibid., pl. P) and one notices, for example, that during their journeys, the men carried their headrest on their shoulder (ibid., pl. Q). The main assemblage, in the Karnasahi style,

extends over 36 m², and comprises 146 people, very rich in ethnographic details (ibid., pl. N). In particular one sees (ibid., fig. 6) a group of men busying themselves around an antelope on its back (as in certain paintings of the Tassili and engravings in the Messak) while others are drinking or making music (ibid., fig. 7).

Ennedi

Jacques and Brigitte Choppy have produced the third instalment of their catalogue of the rock art sites of Ennedi, this time dealing with the centre and south-east (Choppy and Scarpa Falce 2003). On the high plateau of Bodhoué, in the central-west part of the Massif, Gérard Jacquet has visited 25 shelter containing some 300 paintings and engravings. The most interesting figure is the line-drawing of a crescent-shaped boat, probably made of tied reeds, with its pilot seated at the back and holding in this hand a long oar or scull (Jacquet 2000: 142 and pl. K). The author claims to see “analogies” between one of the people painted in the region and Egyptian depictions of Bes (ibid., fig. 7) – a comparison which has no confirmation. A number of the people painted in red flatwash (ibid., fig. 8, 9) could more usefully be compared with the “Libyan warriors” that are so abundant in the southern Sahara and which they resemble as much through their posture, their silhouette and their mushroom-shaped head as by the big-pointed spear they carry in their hand. Two paintings with a broad outline in dark red or violet, each comprising two people (ibid., fig. 12, 13), strongly recall the Round Head style and could represent an unknown extension of that style – but this still needs confirmation, because the works in question are very poorly preserved. Some enigmatic striped oval shapes have been noticed, two of them close to probably female figures (ibid., fig. 14–17). These figures differ from the enclosures or dwellings that are also present in the region (ibid., fig. 18, 19). Several engravings show a tapering object which defies interpretation (ibid., fig. 20a, 20b) and in an engraved couple, the man, wearing heeled shoes, seems to brandish what bears a close resemblance to a Bren gun (ibid., fig. 20c)! In the vicinity, there are about 150 tombs which can perhaps be related to the art; the published photo shows some kind of regular tumuli (?), and the ensemble suggests a very rich area, which should be carefully documented.

The eastern part of the massif was crossed by the 1999 Italian expedition “Cruise of the Sands” (Rossi 2004), which made it possible to discover new sites, briefly reported by Luciano Rossi (Rossi 2000). At the start, a painted bovine with a striped body, of a type common in Chad, was photographed to the north-west of Fada (ibid., fig. 2), and on the same site there is a schematic person with falling tresses (ibid., fig. 3). Farther to the north-east, on the Plain of Aloubo (Mourdi depression), a large tumulus is surrounded by smaller tombs, the whole lot being in a place abounding in pastoral engravings. An assemblage

of reticulated engravings has been found a few kilometres from Azrenga (ex.: *ibid.*, fig. 4) and the author interprets them as traps. Four decorated shelters occur close to the water source of Halenia. In particular one can see schematic feathered lancers, painted in flatwash (*ibid.*, fig. 7). The shelter visited in the Wadi Tegroba contains headless dromedaries mounted by people with “stick-shaped” heads, close to women in the same style (*ibid.*, fig. 10). With regard to them, the author revives the proposition of seeing them as “pre-Tuaregs” who entered into relations with the late herders of Ennedi and Tibesti.

Paintings of bovines in dark ochre flatwash, with a very massive body and very fine legs and horns, were later reported to have been discovered in the centre of Ennedi by the Acacia mission (“Arid Climate, Adaptation and Cultural Innovation in Africa”) from Cologne (Uwe 2004a, 2004b). The herders accompanying them are crudely bitriangular, with a big elliptical head (Kröpelin 2004: 116–117 and pl. T). Finally, a panel in the region of Ona Guif or Avoa, close to Archei, decorated with a group of horsemen at flying gallop in red flatwash, armed with spears, was presented by Giancarlo Iliprandi (Iliprandi 2003).

Sudan

Several engraved sites have been reported by Stefan Kröpelin. In the “Dry Selima” depression, some figures associated with a palaeo-lake show wild animals (antelopes, ostriches, moufflons, and giraffes that are older because more patinated) and domestic ones (probable donkeys, long-horned bovines), people with long objects (spears or sticks?) and signs (spirals, sandal prints, short parallel grooves). A few schematic boats pose the question of whether they were used in the neighbouring lake, which is about a hundred kilometres from the Nile (Kröpelin 2004: 111–113). Three other sites were studied along the Wâdi Howar, a former tributary of the Nile. Friederike Jesse counted 502 engraved subjects on 235 horizontal slabs between 110 and 150 km west of the Nile Valley. The assemblage is made up of schematic signs (66.5% “grids”, then 6.6% and less for “ovals”, “ovals with intersecting lines”, “horseshoe-shaped forms”, “floral motifs” and serpentiforms), animals (bovines, elephants, gazelles, giraffes, ostriches, dromedary, perhaps serpents and scorpions, that is, 1.2 % in total) and a few anthropomorphs (2.2 %). Other engravings occur at Zolat el-Hammad, 450 kilometres from the Nile, a site whose western part was already known through old publications by Newbold (Newbold 1924) and Rhotert (Rhotert 1952), but some new documents have now been reported in its eastern part. These are mostly bovines with long horns and with “a single horn at the front”, as well as moufflons and goats with a lighter patina. The ostriches seem to coexist with the bovines, and the giraffes are often obliterated by them, and are associated with elongated people with very big rounded heads, in a static position. These people are of a new type, different

from the “Round Heads” of the central Sahara, and belong to an early local phase, because some are associated with rhinoceroses (Kröpelin 2004: 114–116).

Alphabetical inscriptions

Among the zoomorphic and anthropomorphic figures in the five painted shelters of Ifran-n-Taska to the south-west of Zagora (southern Morocco) there is a rare Libyco-Berber inscription of twelve or thirteen signs painted in a lighter red than the other motifs, and which remains undeciphered for the moment (Skounti and Nami 2004). Also in southern Morocco, Foug Chenna is an engraved site on a small tributary of the Draa, about seven kilometres west of Tinzouline. Thirty inscriptions occur here among hundreds of caballine and cameline engravings and, although the site was discovered by M. Reine in 1942 and is very easy to reach, Werner Pichler is the first to have documented it correctly. He estimates that they date back to the second half of the first millennium BC, although they contain punctiform signs that are reputed to appear later (Pichler 2000a, 2000b). Since that publication, this site has been the subject of other studies which confirm its exceptional nature (Skounti 2004, Skounti *et al.* 2004). In the four inscriptions recorded in the Wadi Meskaou, punctiform signs only appear in that with the lighter patina (Pichler and Rodrigue 2001b). Certain inscriptions reported formerly have been reviewed and their recording has been corrected (Pichler 2002, fig. 5–7; Skounti *et al.* 2004: 193) while others, completely new, have been recorded at Ait Ouazik, Ikhn n’Ouaroun, Tazzarine, Tibaskoutine, Assif Wiggane (Pichler and Rodrigue 2003b) and Msemrir where the diabolo sign appears for the first time in Morocco (Pichler and Rodrigue 2000).

In Libya, Mario Liverani (Liverani 2000) has published the photo of a panel covered in Libyco-Berber inscriptions and engravings of horses and “ancient” camels, located in the pass of Irlarlaren (Akâkûs, Libya).

In Egypt, Giancarlo Negro reminds us that two inscriptions of Libyco-Berber aspect are engraved at the entrance of the Great Pyramid (Negro 2001, fig. 5–9), and returns to the subject of the eastern limit of the diffusion of this writing. Some architectural considerations make it possible for him to date these documents either to after the 14th century, or – as seems more probable to the author – to before 1240 BC (between these two dates, the place where they occur was not accessible). One of them is transliterated, extremely hypothetically, as R^ˆLBV, and supposedly is an allusion to the Rebû (Lebû), a Libyan confederation that appears on the Egyptian scene under Rameses II. For the author, the earliest Libyco-Berber inscriptions in the central Sahara, like that of Azib n’Ikkis in Morocco, date back to the 2nd millennium BC, which would thus make it impossible to derive the Libyco-Berber characters from the Phoenician alphabet, and leads some to favour the hypothesis of a local development from tribes (*wusûm*) and potters marks.

Two inscriptions discovered by Giancarlo Negro in the Libyan desert have been studied by André Lemaire. One of them, evoking a (poor) Aramaic script of the 6th–5th centuries BC, was recorded at the famous site of Wâdi Sûra, and the other is close to Baharia, a region where G. Negro has also found three chariot engravings. The first document could be the westernmost Aramaic inscription of the Achaemenid period – and the legend of the army of Cambyse is cautiously evoked in this regard – but it remains very enigmatic. The second is no less enigmatic, and makes one think of an inscription that is either Libyco-Berber (and thus one of the easternmost), or Thamudean (and thus the westernmost) (Lemaire and Negro 2000). In the Sudan, among the thousands of engraved signs all round the ruins of Selima, sixteen regular arrangements, which could seriously make one think of a script, have been analysed by Werner Pichler, whose cautious conclusion is the possibility of short, very eccentric Libyco-Berber texts (Pichler and Negro 2005).

Styles and dating

Totally unqualified opinions continue to be circulated about these topics, as is proved, alas, by a text by André Laronde which strings together falsehoods, claiming that “desertification had not yet begun in the 4th millennium BC” and that the purpose of the Messak engravings was “to attract success to these hunters of the 4th and 3rd millennia BC” (Laronde 2000: 10). But rather than spend more time on such howlers, we shall now examine the theories proposed by more serious authors.

For Andrew B. Smith, the earliest paintings, those of the Round Heads, date back to around 7500 BP “*before the advent of pastoralism in the Sahara*”, and the chariots appeared at the end of the Hyksos period, around 3300 BP (Smith 2004: 45). Michel Tauveron places the first paintings even farther back, before 10,000 BC for those of the Tadrart (Tauveron 2003a), but these dates are based on the most fragile reasoning, which cannot be accepted without discussion.

The same is true, by extension, for the dates proposed for the Kel Essuf of the Tadrart (Striedter and Tauveron 2002; Ferhat 2003b). A superimposition noticed in the rock shelter of Aman Smerdnin north shows a giraffe, 1.6m high, in red flatwash, unquestionably on top of several others. Since this giraffe has been attributed to the Round Heads (on the basis of criteria unknown), it has been said that the engravings below it cannot be later than 8500 BC, and a date of 10,000 BC has even been put forward (Tauveron 2003a). Although these speculations are not very convincing, it is true that typical Round Head paintings bear a strong resemblance to the engraved Kel Essuf, which suggests a certain form of continuity, at least in culture, between the two traditions. Nevertheless, one needs to bear in mind the existence of a few rare mounted quadrupeds among paintings which nobody objects to attributing to the

Round Heads, like those of the abri Freulon (*ibid.*), which could indicate a later date for this style.

Ulrich and Brigitte Hallier have tried to verify a hypothesis that they have been boldly defending for twenty years, and which can be summarized as follows (Hallier and Hallier 2003b: 28):

1. The rock art of the central Sahara originated in the Nile Valley;
2. The technique of the oldest engravings is pecking;
3. The theme of the earliest art is geometric (curvilinear signs, concentric circles, nested arcs, etc);
4. This “first” art spread westwards, evolving towards greater realism: hands, human and animal tracks, then simple quadrupeds and anthropomorphs, and finally narrative scenes;
5. A major part of this development took place in Djado (Northern Niger). This is also where painting developed;
6. This pictorial development went through several stages: first came the anthropomorphs of “Christmas tree” type, then the Round Heads, which in engraving gave birth to the Kel Essuf;
7. The creators of the Round Heads of Djado were the “ethnic and artistic” ancestors of those of the Tassili, and so these are the earliest paintings of the Sahara.

A vast programme!... and to demonstrate it, the authors first report a series of previously unknown engravings of Djado which they attribute to “an early phase of the Round Heads [...] for a very great number of reasons” (*ibid.*: 29) which they do not give us, and the nature of which escapes me totally. As an example of the “typical pecked engravings of the Round Heads” they first only present (*ibid.*: 30) four or five “long lines” and several “piles of semi-circles” (nested arcs) associated with circles, ovals, cupules and a few extremely schematic quadrupeds. If such an assemblage is “typical of the Round Heads”, as the authors write, then there must be Round Heads at least in the whole of Africa... or we need to be told why this particular assemblage belongs to that style, and not those of Malawi or Zambia. Next (*ibid.*: 31), U. and B. Hallier tell us that “another type of symbol that is very characteristic of the Round Heads [...] shows the tracks of different animals”... whereas this type of engraving abounds as far as South Africa, but is never present among the true Round Heads of the Tassili-n-Azjer. Concentric circles are also presented (*ibid.*: 35) as the “most typical form in the rock art of the Round Heads” (whereas they are no more abundant than tracks in the paintings of the true Tassili Round Heads). This time, there can be no more doubt: either the Round Heads colonized the entire world... or the authors are somewhat mistaken, and are making unmethodical comparisons. The “round kettles” formerly reported by Henri Lhote are also considered “very typical of the Round Heads” for the simple reason that this is also the opinion of Fabrizio Mori. But in fact, the latter simply wrote that this is very probable, on

the basis of a single date, that of Wa-n-Muhuggiag (7500 BC)... which is now recognized to be certainly wrong. One can certainly accept that, to demonstrate their starting hypothesis, the authors are keen to draw parallels between works of Djado and the Tassili-n-Azjer, but they only base themselves on undated and undatable elements made up of signs that are ubiquitous because very simple (lines, cupules, circles, arcs...). This only wins the conviction of supporters who are already convinced and hence, of course, they certainly do not have mine. This is not very serious, because I feel the essential thing is to establish a reliable documentation, a task that has also been tackled by the Halliers for some years, by publishing a number of new documents, or “revisiting” already known sites. In one of their publications, they return to the abri d’I-n-Temeilt discovered in the Tassili-n-Azjer by Jorgen Kunz in 1971, and they publish a more detailed recording of it. Hence they report some interesting Tassili Round Head paintings, in particular a probable Hippopotamus depiction (ibid., fig. 4–5), a curious horned quadruped with a long dorsal protuberance (ibid., fig. 7–8), a rhinoceros (ibid., fig. 9), a magnificent group of seven Barbary sheep depicted almost life-size (ibid. fig. 14–15), and an astonishing bird with legs 2.5 m long, which looks like a crane or a secretary bird (ibid., fig. 13). An interesting detail that is rightly stressed by the authors is that several animal figures show that, in the local Round Head paintings, the quadrupeds are depicted by dark flatwash edged in white (the opposite of what has usually been seen hitherto), and that this white outline was applied at the end, after the red flatwash silhouette of the quadrupeds.

For his part, Christian Dupuy has made an inventory of the bovine images left by the Round Head painters (Dupuy 2006, fig. 4), and raises a difficulty: if the artists had represented scenes concerning a neighbouring population, then their works might not testify to the practice of stockrearing among the Round Heads, but among these hypothetical neighbours. However, he recognizes that, in any case, these images cannot be earlier than the 6th–5th millennia (ibid.: 91). Nothing enables one to associate the traces of paint dated to the 8th millennium BC in the cave of Wa-n-Afūda with rock art, and a possible vestige of Round Head paintings at Wa-n-Telokat was covered by a layer of the 6th millennium. Basing himself on statistical considerations (three paintings made every four years in the central Sahara, from the perspective of a “long” chronology), Christian Dupuy proposes in conclusion that one should “shorten the chronological bracket and centre the age of full expression of the ‘Round Head’ art on the 6th-5th millennia BC” (ibid.: 95) – a proposition which, at present, is doubtless the most reasonable.

As for the Bubaline, which some persist in considering as a period when it is merely a style, some highly acrobatic speculations have tried to date it as far back as around 15,000 BC for its earliest forms (Tauveron 2003a) – even between 15,000 and 30,000 BC (Aumassip 2001: 100) – but

no new elements have arisen to contradict the refutation of such an excessive attribution (Le Quellec 1997). On the contrary, climatic and archaeozoological arguments allow the most moderate observers to demonstrate that the tradition of “naturalist” rock engravings of the central Sahara must be situated between the 6th and the end of the 4th millennia BC (Dupuy 2000; Van Albada and Van Albada 2000; Pigeaud 2003; Barnett and Mattingly 2003: 285). One can certainly be intrigued by the attitude of those who ignore these demonstrations. They generally do this at the cost of seriously imprecise vocabulary, for example a tendency to treat as synonymous (without defining them) expressions like “*naturalistic period*”, “*naturalist Bubaline style*”, and “*phase known as naturalist Bubaline*” (Soleilhavou 2004), whereas the recognition of a style does not imply *ipso facto* that of a “phase” or “period”. This type of association is certainly possible, but it requires some arguments. And the blurred nature of the definitions, when they are not completely absent, makes possible all claims, like the one – in reality untenable – by Mustapha Nami, who proposes that the “naturalist Bubaline” is present in Morocco (Nami 2005: 11).

Other authors content themselves with presenting the periodisation that distinguishes a “*Bubaline period*” saying that this is acquired knowledge that is “*accepted today*” (Vidal *et al.* 2003), whereas at best it is a hypothesis that remains more questionable than ever.

Yet others repeat their touching profession of faith in the chronology conjured up by Théodore Monod in the early 1930s, and even take their devotion so far as to write that “*nothing permits one to call [it] into question*” (Tauveron 2003c).

Some caricature or distort the theories which they want to oppose. One woeful example is to be found in the discussion by Mustapha Nami of the “long” and “short” chronologies, in which he gives a completely erroneous summary of Alfred Muzzolini’s position, going as far as to claim, for example, that “Muzzolini’s third period, corresponding to the ‘Bovidian’ dates to 1000 BC” (Nami 2005: 13). He has not even realized that this only applies to the “final Bovidian”, whereas the late Muzzolini placed the start of the “early Bovidian” in the 5th millennium BC! Of course, making an erroneous presentation of an author’s theories enables one to combat them more easily, and Mustapha Nami concludes by revealing to us that “the Bovidian period...is...much older than suggested by A. Muzzolini”, as if this author had ever claimed the opposite!

Finally, others try to reify their past hypotheses. An excellent example of this is given by the arguments linked to the terraces of Tidunaj in the Algerian Tadart (Ferhat *et al.* 1997). Whereas in the original publication it was written (p. 76) that “*the second level of the terrace may... constitute the break linked to the arid phase of the mid-Holocene period, and its deposits are perhaps earlier than this period which starts around 7500 BP*” (my emphasis), a

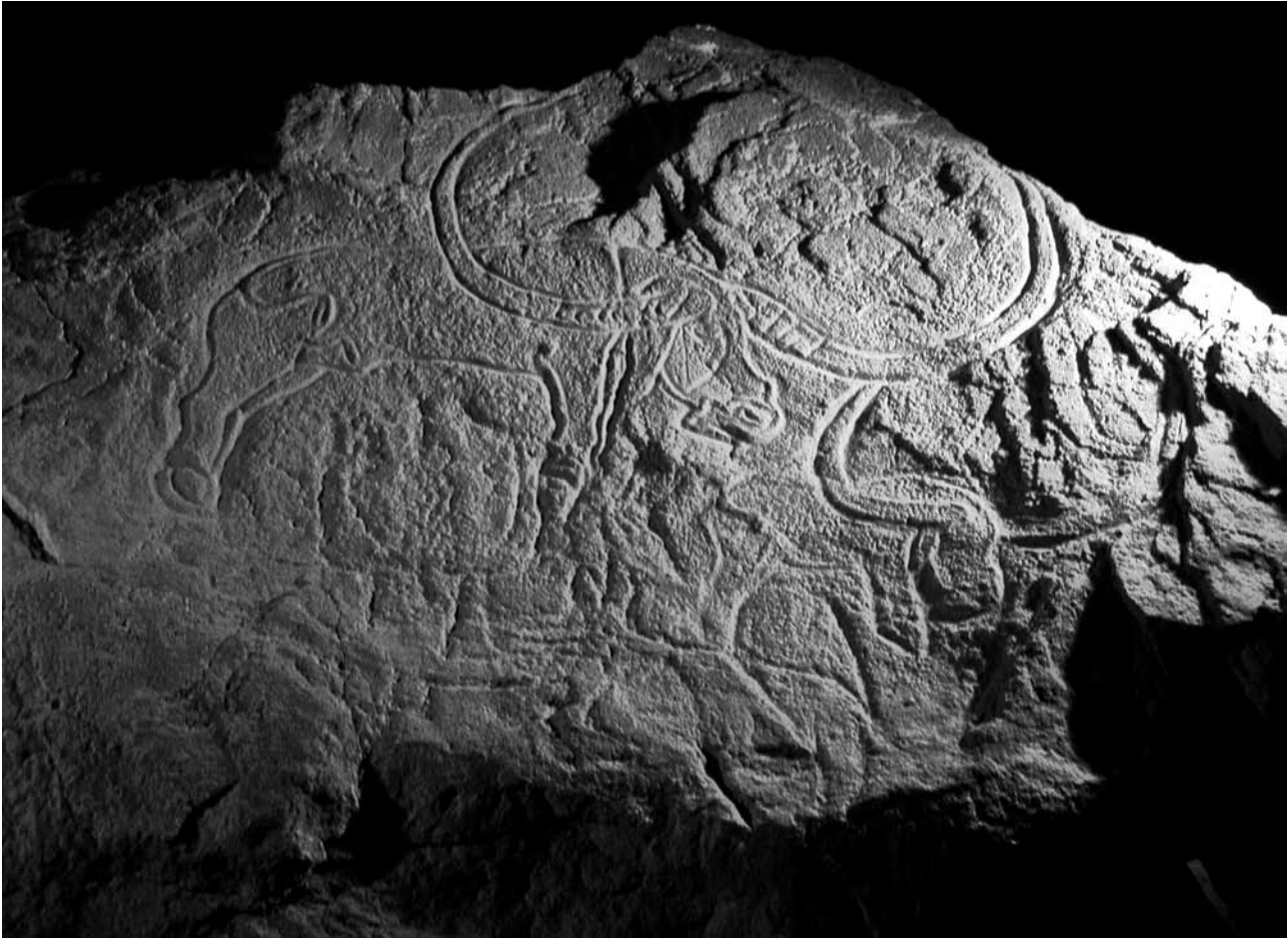


Fig. 4.2. Example of engraving in "bubaline" style: group of ancient buffaloes of Wadi Telisaghen in the Messak (Libya).

new article (Striedter 2003) cites this text and now claims that "the deposits of the upper terrace are attributable to the humid period preceding the arid mid-Holocene which starts around 7500 BP" (my emphasis again). However, the initial uncertainty remains, especially as, in another publication, the same author had placed the same terrace "beyond 6500, even 7000 BP" (Striedter 1996: 130). Hence, not only is this supposed "limit *ante quem* for the Bubaline art of the central Sahara" reified, but what's more, it is being pushed back in time as the references multiply, passing, with no further argument, from "6500, even 7000 BP" to a possible 7500 BP, then to a definite 7500 BP, although no new argument had been put forward. This is certainly an interesting phenomenon. For the sake of completeness, one should also cite those who content themselves with repeating, like so many mantras, phrases that take "Bubaline" art back to the Pleistocene: thus, Nagette Aïn Seba places "Bubaline art ... beyond 20,000 years" (Aïn Seba 2003b: 17), Michel Tauveron and Ginette Aumassip do not rule out "that rock engravings or paintings may be some tens of thousands of years old" (Tauveron and

Aumassip 2001: 243) and Yasmina Chaid Saoudi beats all records by writing that the engravings of the Sud-Oranais are situated "on the threshold of the Upper Palaeolithic (around 30,000 years ago)" – simply on the basis of a single engraving at Guébar-Réchim, and because Pomel had seen in it (with a great deal of wishful thinking) a *Loxodonta atlanticus* (Chaid-Saoudi 2003: 69). One hopes that these essayists will have a chance to contemplate this warning by Denis Vialou: "In general, the great classifications which have a domesticated fauna following a wild fauna on the walls of sites in Saharo-North-African art, as elsewhere, are based only on the *a priori* of the researchers who present them, with no archaeological foundation" (Vialou 2003: 46–47).

Having listed some 500 sites in the Algerian Tadrart between 1994 and 1997, Karl Heinz Striedter and Michel Tauveron have reported three of them where one finds "perceptible influences" of what they call "Fezzan rock art". This is a most unfortunate name, because in reality "Fezzan rock art" groups together assemblages which differ greatly from the stylistic, if not the chronological, as had already

been well observed by Paolo Graziosi in 1942. What the authors give this name to, is in reality what I defined more than ten years ago as “the classic art of the Messak culture” (Le Quellec 1996), or subsequently, and better, as “the Messak school” (Le Quellec 1998b: 145–154). Moreover, the authors (Striedter and Tauveron 2005: 17) use the expression of “classic theme [...] of the Messak”. Basing themselves on the theme of the engravings, and the single stylistic criterion of the double outline, they present a series of documents which display very convincingly a close relationship with the Messak. It is a pity that they use without any discussion – and thus give credence to – the chronology of the Ancient Bubali developed by the Lutzes, which, alas, does not hold water in any way (see demonstration in Le Quellec 1998b: 254–258). They even consider that “the only chronostylistic framework currently proposed for the rock art of the Messak” (ibid.: 17–18) is that of the Lutzes (Lutz 1995), which shows to what extent their wish to avoid quoting certain authors (Muzzolini, Gauthier, Le Quellec: *horresco referens!*) – who have nevertheless proposed different “chronostylistic” frameworks – leads them to write such flagrant falsehoods. To believe that the theories of certain colleagues are wrong is one thing, but to act as though they did not exist is quite another, the scientific motives for which escape me.

The remains of ancient images which can sometimes be seen partly, and with difficulty, under other more visible ones could perhaps make it possible one day to identify some “archaic” stages in rock art, especially for the Messak engravings, but this question of “retouching” – very poorly studied until now because it is distorted by a desire to make the art older at all costs (Tauveron and Striedter 2003; Tauveron and Aumassip 2001: 242) – needs to be taken up again entirely. Another approach, focused on the reconstruction of the “chaîne opératoire”, the *modus operandi* followed to achieve different kinds of images, has not yet produced many significant results (Holl 2002).

Increasingly numerous discoveries rule out the separate study of paintings and engravings, but researchers who are starting to accept that fact (Striedter and Tauveron 2003) continue in their desire to make an artificial dissociation of the so-called “Bubaline” engravings from those called Pastoral. Nevertheless, it has been possible to demonstrate that the engravings of Ti-n-Tabarak (Akâkûs) were incised in a style (called Iheren-Tahillâhi) that hitherto was only known in paintings, and that they belong to the same cultural horizon (Le Quellec 2004a). It depicts caprines, and it is known that they could not have been introduced to the central Sahara before the start of the 6th millennium BC, which gives an acceptable *post quem* date for this type of images. But this remark means that one also needs to place all images of sheep after this period, especially those found among the “naturalist Bubaline” figures. This notion thus needs some revision, because it no longer fits the “archaic” horizon or the “Hunters” stage which it was long thought to represent, and the question of the origin of Saharan rock

arts remains unresolved. For Noura Rahmani and David Lubell, however, such a rejuvenation of the “Bubaline” style, confirmed by the observations of Jan Jelínek (Jelínek 2003), “makes it possible to envisage some involvement of the final Epipalaeolithic cultures of the Maghreb in the appearance and blossoming of this art” (Rahmani and Lubell 2005: 52). Since Caspian territory expanded southwards after 8000 bp – certain Caspian sites of the northern edge of the Sahara are of relatively recent age (Rahmani 2003, 2004) – and since the study of pottery reveals a Saharan contribution to that of the Neolithic of Caspian Tradition (Aumassip 1987), everything leads one to evoke the possibility of mutual connections between Maghreb and Sahara around 7000 bp. That is also the opinion of Malika Hachid, who envisages such reciprocal interactions in the heart of a highly permeable Sahara (Hachid 2000). Hence, even if the question of the ultimate origin of this art remains unresolved, and despite certain reckless claims (Aumassip 2004: 269; Tauveron and Aumassip 2001) trying to take it back to the Palaeolithic, for the moment there are no grounds for associating the Aterian “or a mousteroid facies” with the artistic manifestations of the Bubaline style.

The paintings that overlie the engravings of Afozzigiar reported by Fabio Mastrucci and Gianna Giannelli are considered as Round Heads by these researchers (Mastrucci and Giannelli 2005), who thus add this document to the two other superimpositions of this type already known: that of Wadi Afar (Jelínek 2004: 42 and fig. 549), and that of Wa-n-Tabarakat in the Algerian Tadrart (Striedter 1996: 129 and fig. 2). But before drawing conclusions from the point of view of chronology, or assuming a continuity between engravings and paintings of the Round Heads, it is perhaps necessary to obtain more solid arguments for the stylistic attribution of these images, because neither the recordings nor the published black-and-white photographs are really convincing.

In the Tassili-n-Azjer, the observation of new paintings confirms the existence of a continuity, even a “gentle evolution” between the Abaniora school and that of Iheren-Tahillâhi (Gauthier and Lionnet 2005:135), and it is suggested that the bovines drawn in white (ibid., pl. V) belong to the first of these schools (ibid.: 135). In the same way, the dog-headed anthropomorph followed by a decorated sheep that is painted at Iheren, which was only known through a tracing by Lhote whose authenticity was challenged (Hachid 2000: 304), has been documented by a photograph and a new recording showing that they seem to be attacked by another archer, to the right (ibid., fig. 9, 10). The important point is that this group clearly belongs to the Iheren school, confirming the existence of therianthropes and of the theme of the “helmeted ram” in this assemblage. Two other therianthropes, engraved this time, have been noticed within the group of works attributable to the “Messak school” of the Tadrart, at I-n-Ezzan: this is a remarkable extension to the south-west of this style (Tauveron 2003a).

In the central Sahara, certain images at Immidir suggest some interesting comparisons with Tassili sites (e.g.: the bovines with pendant horns or the recumbent giraffe of Ufsé) (Gauthier and Gauthier 2003). In the same way, some curious humans hunched up in an ample garment at I-n-Eghal evoke a little some of those at Ti-n-Moussa (ibid., fig. 10), which leads one to extend towards Immidir the influence of the painters of the Iheren-Tahillâhi style – an extension that is, moreover, confirmed by the style of the recumbent giraffes (ibid., pl. N) and the bovines of the same site (ibid., fig. 6). Others display some resemblance with the Tekembaret group (e.g.: ibid., fig. 20), but nevertheless they are different. So one comes up against a problem of method, insofar as “similarities or associations of characteristic points can lead one, through successive analogies, towards sub-assemblages that one would find disconnected if one compared them *“harshly with strict criteria”* (ibid.: 144). A superimposition recorded at Tissebouk confirms that the Ti-n-Abanîher–Abaniora style is earlier than that of Iheren-Tahillâhi: all known superimpositions indicate the same (Hallier and Hallier 2003a, fig. 1b).

In the course of his useful synthesis on the prehistory of Morocco, Alain Rodrigue establishes that rock art began in this country with the arrival of engravers fleeing the increasing aridity of the central Sahara and “who would continue to express themselves on the rocks of southern Morocco, like their ancestors had done in the Hoggar or the Tibesti” (Rodrigue 2002a: 97). Although the Tibesti doubtless has little to do with this process, and since at least some of the engravings located there must have been made by people who had “come down” from the central Sahara, this type of scheme is broadly confirmed by painted humans at Bhou Dheir in the western Sahara, because they have a kind of raised quiff that has been compared to certain paintings of the Akâkûs (Brooks *et al.* 2003: 70), which does indeed indicate relations with the central Sahara. And it is true that the “manner” of the great buffalo at this site does resemble that of Iheren. Several dozen funerary monuments have been found in the surrounding area, especially simple tumuli (ibid., fig. 12), but also various arrangements of stelae in the Tifariti region (ibid., fig. 13–15), as well as platforms (ibid., fig. 16) up to ten metres in diameter, and crescent-shaped tombs at Bou Dheir and Erqueiz (ibid., fig. 17); in the latter place, the tombs are just above the rock art site, which again poses the problem of relations between the art and the funerary monuments. Moreover, axle-shaped monuments are found at Achach and close to Erqueiz Lahmar (ibid., fig. 18) and a monument with two “V”-shaped antennae has been recorded between Bhou Lahmar and Bou Dheir (ibid., fig. 19): the latter also point to Saharan traditions, while, for the authors, the bazinas of Wadi Tirit (ibid., fig. 20) and Erqueiz Lahmar (ibid., fig. 21) rather indicate relations with the Mediterranean region (ibid.: 75, 77). Alain Rodrigue also thinks that north-south relations must have been complex, concerning both the Saharan area and the Mediterranean



Fig. 4.3. Example of engraving in the Tazina style: gazelle at Ait Wazik (Morocco).

world (Rodrigue 2004). Regarding the engravings in Tazina style at Sluguilla, it is curious that certain authors think that “*the abnormal elongation of some features of the subjects represented at Sluguilla (mostly legs, but also horns and necks) may indicate a specific local tradition*” (ibid.: 68), when this is a widespread characteristic of the Tazina style, which is found in numerous other parts of the Sahara. In any case, in the zone in question, the variety of rock art styles and monuments indicates the succession of several different traditions through the ages. Among the rare painted sites of southern Morocco, that of Wadi Asleg, newly discovered, presents people in flatwash which, for the discoverer, “evoke the early Bovidian of the central Sahara” (Masy 2004). The published photos even let one envisage a more precise comparison, with the Abaniora style.

Among the images in Tazina style, “the presence of metal weapons that have come from the north and not the depths of the Sahara” prevents assigning an excessive age to this artistic expression that is apparently linked to topography, hydrology “and doubtless also the geological nature of the support” (Rodrigue 2002a: 100). Certainly, it is becoming clear that the fineness and the hardness of the support play a role in the distribution of the Tazina style. Rather than wondering “why [...] did the neolithic groups responsible for the engravings of the sub-naturalist Tazina style almost systematically choose surfaces on outcrops of fine sandstones [...] while their predecessors of the naturalist “Bubaline” school always left their (often monumental) engravings on big vertical surfaces,



Fig. 4.4. Example of “kettle” in the Tazina style, at Ait Wazik (Morocco).

sometimes cliff-faces?” (Soleilhavoup 2003a: 35), it would doubtless be better to wonder if, by chance, these are not two different expressions of the same culture, choosing its means in accordance with the size and nature of the available supports. Moreover, even François Soleilhavoup admits that it would be “risky to suppose that the works of the ‘Tazina school’ were produced by a different ethnic group from that which produced the works of a stylized naturalist style” (ibid.: 60).

Images of weapons have regularly been used to date Moroccan rock art thanks to their Cantabrian homologues, and it should be emphasized that “in the site of Rehamna, the northernmost of the country, are depictions of long sabres which make one think of Arabian curved sabres! Which would mean that in Morocco the tradition of writing on stone lasted until the Arab conquest” (Rodrigue 2002a: 109). In the same spirit, it should also be noted that the particular morphology, unique in Morocco, of the pots from the site of el-Kiffen (near Casablanca) recalls that of those found in the Almerian of South-East Spain, around 4000–2600 BC, which, unless one “envisages, for the Middle Neolithic, the possibility of imports to Morocco of pots made in the Almerian region” (ibid.: 68), could at least testify to stylistic influences. In the same way, the “Haouzian” (a technical phase with hoes on the plain of Haouz), probably around 2500 BC, has homologues in Portugal. Returning to the Tazina style, Werner Pichler and

Alain Rodrigue have produced the first serious statistical approach (Pichler and Rodrigue 2003a). After presenting a history of this style which has already caused a lot of ink to flow, the two authors consider it as a “sub-product” of the “Great naturalist style” (which they do not define), dating back to at least 4000 bc. Subsequently, they “revisit” the eponymous Algerian site, basing themselves on its publications, because this site is, alas, not accessible at present. They draw up a list of the variables observed in these images, in order to establish a test of correlation between the fifteen engravings concerned, and thus reveal the great coherence of the assemblage, and then they extend the same procedure to the whole Tazina region. This enables them to give a good definition of the animal engravings in the style of this name: they have to be in profile, facing right, with two vertical legs, without hoofs, drawn with an open outline (except if there are horns – which are generally straight and vertical) and with no indication of sex. This definition is then tested at five Moroccan sites selected because they are among the most important, which enables them to verify (or refute) as they go along the identifying criteria of the same style proposed previously by other authors. W. Pichler and A. Rodrigue also study the variation in outlines on the basis of the number of lines and the number of interruptions, greatly improving the system I proposed in 1987. The study shows that there is no significant difference between the images of all the locations analysed, the farthest of which are 900 km apart; but it is true that the locations of this style seem to be linked – at least partly through geographical and geological constraints – to the presence of very fine sandstones that can be scratched with a fingernail (Rodrigue 2002b). One of the somewhat surprising conclusions of this remarkable work is that the “kettles” are not significantly associated with this style. But while this is certainly the case at certain Moroccan sites like Imâoun (Garcin 2004, fig. 26, 28), this observation should not be generalized before one is sure that it does not depend on the choice of sites studied. To verify this, and to obtain more information, it would therefore be very useful to extend the procedure of Werner Pichler and Alain Rodrigue to all zones where engravings of the “Tazina Style” have been reported.

One particular case linked to the study of this style is that of the enigmatic “kettles” or “gourd motifs” (conventional names), which were defined by Philippe Masy before he continued the inventory of claims for this “bottle-shaped motif” endowed with an “appendage placed transversally at the narrow end of the body” (Masy 2003: 11). It is not known what these images depict, and they have been the subject of numerous imaginative hypotheses (these drawings supposedly represent: leaf, plant, fish, trap, gourd, sandal or G-string!). At Sidi Mulud in the western Sahara, Pellicer i Acosta had seen them as bovinds in a zenithal view, a hypothesis which has not sufficiently been taken into account, in my view. Their greatest concentration is found in Morocco and the western Sahara, but similar

engravings are known in the Messak, at Jebel Ben Ghnêma, in the region of Aramât, in Djerât, in the Ahaggar, Aïr, Djado, Adrar of the Ifoghas, the Saharan Atlas, and it seems premature to want to attach a functional label to this motif. However, as Philippe Masy remarks, “the variation of shapes makes one think of a class of object rather than a specific object” (ibid.: 15). It should be noted that the Catalan authors call them “zeppelins” and, while also stressing their diversity of form, rightly think that these figures could provide a good cultural indicator at the Saharan level (Soler Masferrer *et al.* 2005: 85).

At the eastern side, it currently appears that one can confirm the existence of two stages that are the earliest in the region, one comprising people with a triangular chest in “Sora style”, the other anthropomorphs with a discoid head which could be called “Round Heads of the Libyan Desert” so as not to force an excessively hasty comparison with the “true” Round Heads of the central Saharan massifs (Zboray 2003a, fig. 8, 9, 15, 28). Then come the groups of archers and pastoral scenes with huts, bovines and caprines, the latter sometimes shown tethered (ibid., fig. 19, pl. K). The fact that the little violet people in Sora style are earlier than these pastoral scenes is confirmed by new superimpositions observed at Wadi Wahesh (Zboray 2005a, pl. Cx).

Among the newly reported sites in the Wâdi Howar, the engraving of a giraffe at Gala Abu Ahmed 02/2 was partially covered by sediments dating back to 1200/1300 BC, which gives an *ante quem* date for all the engravings of this zone (Jesse 2005: 33 and fig. 11). Some comparisons have been made on the one hand with the sites with schematic engravings at Abka and Taar Doi in the central-southern Sahara, and, on the other, with Egypt since one of the signs recalls the Egyptian *ankh*. It is known that a humid episode occurred in the Wâdi Howar around 2000 BP (ibid.: 28), that a complete giraffe skull has been dated there to ca. 2200 cal BC, that elephant remains are older there (VIth and Vth millennia BC) and that the camel is known in north-east Africa by the first millennium BC (ibid.: 36). The comparison – certainly very vague – of the reticulated signs of this region with those of the Mourdi depression, 650 km farther west (Simonis 1996) seems to confirm the role of an east-west link that the Wadi Howard could have played (Kröpelin 2004: 113–114).

Friedrich Berger challenges the date proposed by Jean-Loïc Le Quellec (Le Quellec 1998a) for the artistic flowering of the Libyan desert (that is, after 4000 BP) by using an argument *a silentio*: supposedly there were never any elephants in this region throughout the Holocene, because of the climatic conditions, and so one could not use their absence in the rock art to make it younger. But since then, several images of pachyderms have been found in this zone – where they remain very rare – which leads one to think that the animal was indeed present, but that the huge majority of works are dated to after its disappearance (Le Quellec *et al.* 2005). The author rightly stresses the

fact that reasoning of this kind, based on domestic fauna, need to be modulated because man “helped” his stock to resist drought (Berger 2000).

The late Alfred Muzzolini has often been reproached because his “core method” ignored many paintings – something he never concealed – but when the quantity and quality of the documentation are sufficient, it becomes possible to reduce the number of the “unclassifiables”. Thanks to the very numerous new documents from the Libyan desert, Jean-Loïc Le Quellec has been able to identify or confirm the existence of several regional styles of anthropomorphs: the “long lines”, the “filiforms with bird-beak head”, the people in “Sora style”, the “little striped ones”, the “miniature style”. The existence of the “swimmers” type and the “Round Heads of Djebel el-Uweynât” (which must above all not be confused with the Tassili Round Heads) has been reinforced elsewhere (Le Quellec *et al.* 2005: 276–279).

For the most recent period of the southern Sahara, Christian Dupuy and his collaborators (Dupuy *et al.* 2001) have reported a double collection of documents: on the one hand, several dozen engravings of metal objects at the Adrar of the Ifoghas (Malian Sahara), and on the other, a furnace discovered near Koussané (Valley of the Kolimbiné, upper basin of Senegal). The age of the former is *estimated* at the IIInd millennium BC, while that of the latter is *dated* to the IIInd–IIIrd centuries AD. The authors wonder about the reasons for this great chronological difference, and put forward two hypotheses: either this chronological hiatus will soon be filled by the results of excavations and research to come, which may prove local manufacture, during the IIInd millennium BC, of the metal objects depicted in the rock engravings; or these objects were produced in remote workshops, which also functioned during the IIInd millennium BC but which have yet to be discovered. For the moment, and according to the terms of their own conclusion, the very detailed investigation by the authors “brings no decisive element to the problem”. And I will add a third hypothesis to the two already envisaged: that is, that the estimation of the age of the engravings is very hypothetical and excessively old. Because even taking into account the proposed stylistic comparisons, nothing proves that these images are not far more recent, and roughly contemporary with the period during which the furnace of Koussané was functioning. In fact this is the most economic hypothesis, and hence the most probable. It is advisable not to envisage rock art as a simple “reflection”, and caution is needed in relation to the possibilities of using the works to deduce a general view of the social organization of the societies within which they were produced. An example is the theory, championed by Christian Dupuy (Dupuy 2000), that the early engravings were made by men, which would explain the under-representation of females. In contrast, another position championed by this same author, that of the coming of warrior aristocracies (bearing spears, chariots, horses) in

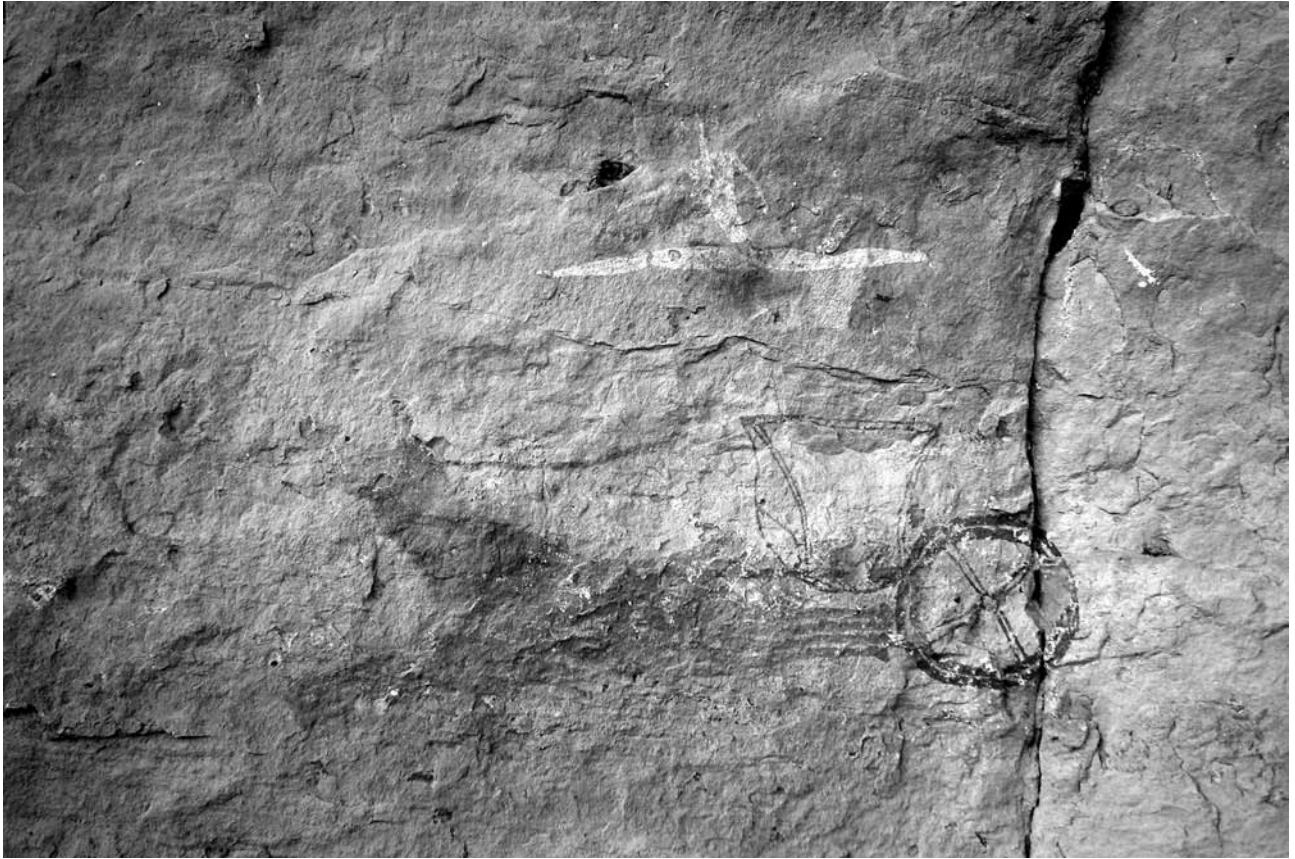


Fig. 4.5. Example of paintings from the horse period: chariot drawn by two horses in "flying gallop", and person running, shown with the same convention, in the Akâkus (Libya).

the most recent periods preceding the arrival of the camel drivers is totally convincing. Moreover, the material in tombs excavated in the Aïr displays Berber affinities testifying to "North African influences and exchanges with the Berber world, in a period when the Aïr and the Adrar of the Iforas were settled by horsemen and camel drivers, ancestors of the Tuaregs whose presence is confirmed by the VIIIth century AD."

It is regrettable to have to write that certain errors are caused by insufficient knowledge of the field of art history. The reading of some old authors is always profitable, and that of Salomon Reinach would have prevented Jörg Hansen from making the enormous blunder that he committed by re-opening the dossier of depictions of "flying gallop" chariots. He tells us that this stylistic type appears in the Creto-Mycenean group MM III (around 1730 BC), that it arrived in North Africa in the XVIth–XIVth centuries from Crete or *via* Crete, where the "flying gallop" is a completely characteristic part of the culture. Since the four-horse chariots of "classic" type appear around 400 BC (cf. that of Ikadnouchère in the central Sahara), there is gap of at least 1000 years between the "flying gallop" and

the appearance of the four-horse chariots. In the meantime, schematic chariots supposedly arrived from the west, via the Straits of Gibraltar, and had 1000 years to spread as far as the central Sahara (Hansen 2001). This pleasant fairy-tale is based on the idea that the "flying gallop" is culturally specific, as is clearly indicated in the title the author gave his study... but this idea had already been brilliantly – and definitively – refuted by Salomon Reinach in a series of articles published in the *Revue Archéologique* in 1900 and 1901 (Reinach 1901). So it needs stating and repeating: the "flying gallop" was certainly known to the Cretans, but also in Bactria, Sassanid Persia, and China in the 2nd century AD, not to mention that it is found in Europe from the end of the 18th century and especially in the 19th century, for example in a painting by Pierre Vernet depicting the "Chantilly Races in 1836" or in that by Géricault showing "The Epsom Derby" in 1821. This type was only abandoned by painters after the American Muybridge had shown, for the first time, through his photographs which broke down the movement, that it did not correspond to reality (Muybridge 1872). For Catherine Rommelaere who reports a few Egyptian examples from the XVIIIth dynasty, it is a

kind of depiction that one finds “more or less everywhere, in all periods and in all the civilizations that had the horse” (Rommelaere 1991: 64). So to wish to (re)make it into a cultural marker was a very bad idea.

Far better, from the methodological point of view, is that which consists of comparing not isolated features (like the flying gallop) but associations that are reckoned significant, for example that of the chariots and spirals and interlaced designs, as proposed by Christian Dupuy (Dupuy 2005: 71). This association, reported in the Adrar of the Ifoghas (Dupuy 2001, fig. 1) and at Weiresen in the Tassili-n-Azjer (ibid., fig. 2), reminds him of the motifs engraved on three funerary stelae from the shaft graves of circle A at Mycenae (XVIth century BC). Certainly – as he recognises – “the platform of Mycenaean chariots [...] is centred on the axle, whereas that of the chariots of Weiresen, farther forward, is supported by the shaft”, but that seems insufficient to him “to discard the hypothesis of cultural interferences between the Aegean and the Sahara, via the Libyco-Egyptian littoral” (ibid.: 25). Amongst other arguments, the reasoning is based on the fact that some Cretan painters supposedly decorated the palace of Avaris (in the eastern Nile Delta) in the manner of that of Knossos, probably in the reign of Amosis, around 1555–1530 BC. So, in the author’s view, “a transmission by degrees of a few cultural traditions and elements which percolated from relations between Libyans and Aegeans on the littoral of Cyrenaica and Marmarica, can explain the presence in the Sahara of interlaced designs comparable to those of the Aegean world” (ibid.: 28). This theory is not completely convincing, insofar as the comparison of the interlaced designs of the Aegean world with those of the Sahara shows above all that they are very different. Moreover, in those which are associated with chariots, the horse is “rearing at full stretch” in the Aegean, but in a flying gallop at Weiresen, whereas in the Adrar of the Ifoghas, they are schematic chariots with no horse depicted. And it is hard to understand why the association of the chariot and the spirals/interlaced designs, which is not found in the Aegean frescoes of Avaris, could have spread by this route, and not the themes of the acrobat or of bull-leaping, which are well attested at Avaris (Shaw 1995). All the more so since the religious meaning of the Avaris frescoes has been demonstrated (Davies and Schoffield 1995). One should also take into account the fact that numerous anomalies appear in the Avaris frescoes in relation to Cretan tradition (Rehak 1997: 401), and so the hypothesis of artists who were not Cretan but were perhaps trained in Crete seems to be more plausible. In this domain, a good question has been posed by Paul Rehak, who wants to know “*why we “need” to find resident Cretans in Egypt*” (ibid.: 402). Moreover Christian Dupuy rightly reminds us that the horse was mounted in Egypt in the reign of Thutmosis IV (around 1400 BC), that from the end of the 13th century the Libyan tribe of the Ribou possessed horses, and that after his victory against a coalition of Libyans and “Sea



Fig. 4.6. Example of spiralling meander at Ait Wazik in Morocco.

Peoples”, in the year 11 of his reign, the booty of Ramesses III comprised swords of Mycenaean origin and horse-drawn chariots.

Christian Dupuy has also stressed that, in the Tassili-n-Azjer, the engravings of spirals belong as a group to a tradition that is different from those called “naturalist”, without it being possible to place them chronologically in relation to each other (Dupuy 2003b). In the Ahaggar, by contrast, spirals and meanders are integrated with the drawing of certain animals (bovines, elephants), and the same author then puts forward the hypothesis of a relatively younger age, around the chariot period (ibid.) – contrary to the old theory of Paul Huard which saw these as archaic “hunters’ signs”. Let us add that in Morocco, spirals, meanders and interlaced designs of various types have been abundantly documented at Imâoun (Salih and Heckendorf 2000: 8; Garcin 2004, fig. 17–25, 30 and pl. C-E), at Taouraght (Desgain and Searight 2004, fig. 15, 17, 18) and three kilometres east of the site of Talrazit (Masy 2004). Michel Tauveron, who has taken up the inventory of the engraved and painted “meanders” of the Sahara, champions the “economic” hypothesis according to which these complex figures developed from spiral engravings present in the preceding periods, but whose existence is not taken into account in the hypothesis of a Mediterranean contribution. The latter theory comes up against an even greater difficulty, if one considers that the distribution of chariots and that of spirals are separate, the two assemblages being close in very few sites (Tauveron 2003b: 223). One is compelled to admit that no really convincing argument or comparison has yet come to support one or the other of the currently competing theories about the origin and chronology of the horse and chariot, and it is not sure that they had the monopoly on certain characteristics of the “Libyan warriors” (crossed belt,



Fig. 4.7. Some of the few fakes produced by Henri Lhote's team of painters had a great deal of success, like for example this pseudo-Egyptian scene reproduced on a mosaic in Djanet airport (Algeria).

feathers stuck in the hair). Moreover, nothing, in the recent excavations of Garamant sites, has brought the slightest support to the tradition (owed to Herodotus) of a use of chariots by this people (Mattingly 2003; Tauveron 2003b: 230).

Even more fragile than the previous proposition is the one put forward by Susan Searight and Christian Dupuy of linking the engravings of Imâoun (southern Morocco) and Issamadanan (Adrar of the Ifoghas, Mali) – sites that are 1500 km apart – with the Iberian traditions of the Chalcolithic and the Bronze Age, on the sole basis of the presence of “circles, spirals, wavy and cruciform lines” (Dupuy 2003b: 65; Dupuy and Searight 2005). Certainly, the links between Morocco and Spain are motivated by generally accepted archaeological reasons – the chronology of real metal weapons (Spain) making possible that of their engraved depictions (Morocco) – but the integration of Adrar of the Ifoghas with this assemblage on the sole basis of the rock art repertoire is not convincing, because it is too dependent on ubiquitous images of unknown meaning. Curiously, the authors have not taken into account the sign known as a “kettle” and which is highly specific (cf. *supra*), although there are several examples at Imaoun (Garcin 2004) and it also seems to be present at Issamadanan (Dupuy and Searight 2005, fig. 3).

Although they cannot be rejected *a priori*, such transcontinental comparisons need better arguments. Hence, one cannot agree with Ulrich and Brigitte Hallier when they claim that the presence of “pendant horns” on

bovines depicted in the Tassili-n-Azjer and in the Nile region is “a consequence of transcontinental migrations” which took place in the Vth Egyptian dynasty (Hallier and Hallier 2004: 7–8). This type of horn appears spontaneously in herds, unlike horns that are truly deformed artificially. In chapter XIV of *The Origin of Species*, Darwin already cited “the reappearance of small pendant horns in races of hornless cattle, and especially... in young animals”. In Rwanda, bulls afflicted with this anomaly are sufficiently well known to be cited in popular tales and be given the special name of *rutenderi* (Smith 1975: 284–288): so is it necessary to talk of migrations?

One question that is regularly debated is that of the fakes made by Lhote's team. This time, the painstaking enquiry by Bernard Fouilleux has established once and for all that the famous “bird-headed goddesses” were made in gouache by Claude Guichard, from a few old stains that were on the same panel as the “Young Fulani girls”. They were still slightly visible in 1961 (Fouilleux *et al.* 2005, fig. 2) but have totally disappeared since then. As for the so-called “Young Fulani girls”, they are authentic but, as admitted by their author, their recording was largely interpreted with inspiration from Modigliani (*ibid.*: 145)! The famous “Antinea” is also authentic, contrary to what has been claimed too hastily (Hachid 2003; Keenan 2004: 207–208, 217, 277). The same applies to the painting of the “dancers” of Ti-n-Tazarift, which had been suspected of being inauthentic by Alfred Muzzolini (Muzzolini 1995: 240). This last work is, on the contrary, very interesting, because it contributes some hitherto unknown technical elements, showing that the painter first drew the outline before doing the infill; the hands and head were drawn later (fig. 15). Moreover, it would be pertinent to take more interest in the artists' technique, as was done by Christian Dupuy for an engraving in the Adrar of the Ifoghas (Dupuy 2003a). In any case, the important thing here is that there is no reason systematically to doubt the honesty of the recordings by the Lhote team, as some people tend to do excessively, without the slightest evidence (Keenan 2002, 2004). It is obvious that these recordings vary in their degree of accuracy, but to talk of systematic “fakes” is a travesty of the truth. One is astonished at the monomania of Jeremy Keenan, who only attacks Henri Lhote and French researchers, whereas similar reproaches could be made, for example, of Fabrizio Mori and Italian researchers: it is now known that about thirty years ago (and thus during the work of Fabrizio Mori's team, and under his responsibility), several experiments were tried out on the paintings of the Akâkûs, with the application of an acrylic resin (“Palaroid B72”), which caused an alteration in colour. In the 2000s, an Italian team attempted to repair this mistake (Ponti and Persia 2002).

For the moment, the only direct datings of paintings ever carried out in the central Sahara have been obtained in the Akâkûs (Ponti and Sinibaldi 2005):

1. at Lancusi some traces of red paintings attributed to

- a vague pastoral phase have been dated to 6145 ± 70 BP;
2. at Ta-Fozziart, some “uncertain outlines”, perhaps forming to an animal figure attributed to the Round Heads because of the presence of “spaced circles more or less filled in with white colour”, have been dated to 5360 ± 50 BP, which certainly corresponds to the occupation dates obtained during the excavation (7900 to 5260 ± 160 BP), but seems very far from the period in which most authors place the Round Heads (IXth–VIIIth millennia);
 3. at A-Fozziart, a sample taken from a scene comprising red and white bovines has been dated to 4990 ± 50 BP;
 4. at Ta-Fozziart II, the sample was taken from a panel of small red anthropomorphs with a white outline, superimposed on small red circles, the whole thing considered as belonging to a final phase of the Round Heads, but the date obtained is 5580 ± 210 BP, and so, here again, it is much more recent than expected by the authors.
 5. at Ti-n-Torha Nord, a sample from a panel of red anthropomorphs has yielded a date of 4040 ± 200 BP, and thus more recent than those from the deposit in the shelter (7070 ± 60 BP to 5260 ± 130 BP) – hence, once again, well after the final phase of the Round Heads, as remarked by the authors. The latter end by stating that five dates are too few to draw definitive conclusions, but it is at least possible to note also that the two dates obtained for images assumed to be pastoral are no surprise, whereas the three paintings attributed to the Round Heads present a gap of several millennia from those which some people were expecting. If these dates were correct, this could mean either than at least certain Round Head paintings are far more recent than claimed by supporters of the usual “long chronology” – and that would be no surprise, since domestic bovines appear in certain images of this style, especially in the Akâkûs (Jelinek 2004: 100) – or the examined paintings did not belong to this style. So one regrets that no illustrations of the images concerned are given in the publication, which does not enable readers to come to their own conclusions on this matter.

Other dates have been obtained in Egypt by Dirk Huyge (see p. **, this volume) from what he considers to be engravings of enclosures and fish traps. He and his collaborators took forty samples at el-Hosh, but only four of them contained enough carbon to obtain AMS dates, and the results span a period between 6690 ± 270 BP and 2280 ± 320 BP. For the authors, the earliest date (corresponding to a period that was 68 % included between 5900 and 5300 BP) is “striking”, and it indicates that the images of this date “are certainly beyond the age of all other graphic activity known in the Nile valley” (Huyge 2002b, 2002c, 2005; Huyge *et al.* 2001, 2002) – which certainly does not

display an excess of pessimism.

Friedrich Berger has investigated the distribution of different ways of representing cows’ udders, and especially that which dominates in the eastern Sahara (Berger 2001). Others have wondered with him about certain peculiarities in the images of quadrupeds depicted in a “seated” or erect position, with a vertical (or almost vertical) dorsal line, and a psychologising explanation has been given (Deregowski and Berger 1997) which Maarten van Hoeck has excellently refuted (Hoeck 2005). It seems simplest to me to see these images as a result of a particular way of transcribing perspective, already described for other periods and cultures (Garlarza 1995; Magni 2003).

Seeking to go beyond the usual observations about figures of the recent periods, for example the geometrisation of forms (Amara 2003), and returning to the figures traditionally called “Libyan warrior”, Yves and Christine Gauthier complete and correct the positions of Alfred Muzzolini and Christian Dupuy, thanks to the contribution of a good number of images, mostly unknown: paintings from the Akâkûs, the Aramât and the plateau of Tadjelahin, engravings of the Messak, paintings and engravings of the Algerian Tadrart, Djerât and the Immidir. Among other activities, these people drive chariots, hunt ostriches, fight each other, lead their cattle; their shields are round or ogival, more rarely rectangular. The documents cited force one to extend to the north-east (Tadrart, Akâkûs, Messak) and north-west (Djerât, Immidir) the area of distribution hitherto attributed to this type, and to conclude that the Libyan warriors occupied the same region as the Caballines (Gauthier 2003b).

The first statistical data developed from those collected by the Italian researchers from Rome’s La Sapienza University have begun to emerge. These accounts have been produced from photographic archives constituted in the Tadrart Akâkûs since 1995 following a protocol comprising four kinds of forms (per site, per decorated wall, per scene and per subject) and the results from the north and south parts of the massif. Research in the first region has made it possible to record 42 sites with a total of 393 subjects (235 engraved, 158 painted) in the Wadis Tihedine, Ti-n-Tamat, Ti-n-Torha, Ajando, Ti-n-Tabarakat and Aghum-n-Udaden, whereas only twelve sites were studied in the southern part, with a total of 134 subjects (99 painted and 35 engraved) in the Wadis A-Fozziart and ta-Fozziart, which join together in the Fozziaren. Among the engravings in the north, animals outnumber humans (66% versus 19%), while the opposite is true in the paintings (22% versus 41%). In the engravings, domestic and wild animals are in roughly equal numbers, but the bovines dominate overall (45%, versus 19% giraffes, 9% elephants, 6% rhinoceroses, 5% antelopids, two donkeys, a mouflon, a feline and a goat). Where paintings are concerned, domestic animals clearly dominate (80%), with bovines once again dominating (66%), followed by dogs (11%) and mouflons (8%), the other recognizable species (horse, antelope, feline,

