Inora Newsletter #45
Discoveries

LATE PREHISTORICAL PAINTINGS IN THE ZEMMUR (WESTERN SAHARA)

Abstract

In this paper we briefly introduce the results of our research on the painted rock-shelters of the Zemmur (Western Sahara). Efforts have been devoted to documenting, describing, classifying and dating the images. Almost all the styles defined belong to recent prehistoric and protohistoric periods (3,800-2,000 BP).

Introduction

The first published identification of a rock-art site in the Western Sahara appeared in 1941 (Martínez Santa-Olalla 1941). Paintings were discovered the following year in Bir el Farsia (Morales 1942). Subsequent archaeological surveys mainly reported engraved sites: only in the Lejuaad area were some more rock-paintings found (Pellicer 1974). The paintings in Bir el Farsia and most of the ones in Lejuaad are not figurative. Only a very few from Lejuaad could be described as figurative, although they are highly lineal and schematized. The paintings from both those sites have been dated to protohistory due to the presence of Lybico-Berber painted texts and riders (Pellicer et alli 1973-74, Nowak & Orter 1975, Baibin 1975).

Unfortunately, thirty years ago the research in the Western Sahara had to be interrupted. In 1975 Spain left its colony and the war between Morocco and the Sahrawis began. However, during the current ceasefire (since 1995), a team from the University of Girona has been there studying many rock-art sites in cooperation with the Ministry of Culture of the Sahrawi Arabic Democratic Republic (Soler et alli 2005).

As a result of this cooperation, many new rock-art and other archaeological sites have been discovered. This time many of the discoveries are painted rock-shelters, which are mainly located in the Zemmur region (Fig. 1), in the north-eastern Western Sahara. The rock-shelters are located along and into the low hills of the region (Fig. 2). Those rock-shelters appeared in the Ordovician sandstone of the region as the result of physical erosion, chemical dissolution processes and wind erosion (Fig. 3).
These new sites of the Zemmur, which have been studied in depth and which we introduce here, are Wadi Kenta (26 rock-shelters), Wadi Ymal (2 rock-shelters), Asako (1 rock-shelter), Rekeiz Ajaflun (1 rock-shelter) and Rekeiz Lemgasem (80 rock-shelters) (Fig. 1). The sites were not known by the scientific community before the research carried out by the University of Girona. Although some new ones appeared some time later (Soleilhavoup 1997, Pastor & Carrion 1996), no in-depth studies were done. In 2003 a study of one rock-shelter was published (Escolá 2003).

**Thematic description of the paintings**

In total we have reproduced and studied more than 2,700 images and assembled all the data in the author’s doctoral thesis. Most of them are painted in red but many white and bicolour (red and white) figures also exist. Almost all of them are small or medium sized (between 10 and 20 cm); very few of them reach one metre in length. 53.6% of the identified images are figurative (25.2% human, 28.2% animal, 0.2% others), 26% are stamped hands and the last 20.4% are non-figurative images.

A wide range of animals are depicted: gazelles (Gazella dama mhorr, Gazella dorcas), antelopes (Alcelaphus buselaphus, Damalisus lunatus, Hippotragus equinus), elephants (Loxodonta africana), giraffes (Giraffa camelopardalis peralta), rhinoceroses (Ceratotherium simum), oxen (Bos taurus), ostriches (Struthio camelus camelus), hyenas (Crocuta crocuta), donkeys (Equus africanus) and many other unidentified quadrupeds. The bovines seem domestic because they are sometimes depicted in herds near human beings, although they do not show other signs of domestication like ornaments or saddles. All the depicted animals indicate a landscape of savannahs or semi-desert steppes, not very different from the current environment, but a bit wetter. On the other hand, the absence of depicted camels is noteworthy. Stamped hands are found almost everywhere in the Zemmur. Both left and right hands are stamped on the walls of many rock-shelters. They appear alone or in series or in semi-circular fans. Almost all the reproduced hands are stamps (so they are “positive” hands) and only one hand stencil has been discovered. Very few have been half-stamped and half-drawn.

Non-figurative images are also very extensive throughout the Zemmur, although they are most common at the Wadi Kenta site. These images dominate in some rock-shelters. They are drawn with linear “geometric” shapes (squares, circles, straight traces, crosses, dots) and wide clear red lines. The edges of their lines are not continuous but irregular and faded. Very few among them suggest highly schematic representations of human beings; almost all are true non-figurative images. They recall, but are not, tifinagh writings, which are also present in the Zemmur rock-shelters. Finally, a sole Arabic inscription is also present.

The interpretation of the paintings is very difficult because very few of them are narrative. The clearest themes are a series of giraffes, lines of gazelles, people in processions or dancers, fans of stamped hands and elephant hunts. Compositions with non-figurative images are nearly impossible to interpret.

**Stylistic classification of the paintings**

The recurrent appearance of characters shared by many paintings convinced us to study them from a stylistic point of view. However, it was also clear from early on that the traditional sequence of styles from the central Sahara could not be used. The Zemmur images are stylistically very different from those in the central Sahara: the morphological and technical criteria used there are useless in the Zemmur where central Sahara styles have not been found. However, both groups of paintings depict similar themes.

In this context, the aim of this first research on the Zemmur paintings was to identify and define some styles, order them chronologically and propose dates for them. The interpretation and
attribution of the images was deliberately dropped because we could not find ways to accurately interpret their meaning.

Five different pictorial styles have been defined. The new names (in English) for these new pictorial styles of the Western Sahara are: Dancer’s Style (Fig. 4), Shaped Style (Fig. 5) (with an Outlined sub-style, Fig. 6), Stroked Style (Fig. 7), Dark Figures Style (Fig. 8) and Lineal Style (Fig. 9-10). In the smaller rock-shelters there usually are only depictions in one style but in the bigger ones different styles are present: some superimpositions have been detected and it has been possible to sequence the styles defined. At this moment a definition for these styles can be found in the doctoral thesis of the author

(left)  Fig. 4. Dancers’ style scene, now very damaged by vandalism, from Rekeiz Lemgasen. Remark the unstable position, the fingers, the bent legs and the belt or skirt.
(right)  Fig. 5. A pair depicted in Shaped style from Rekeiz Lemgasen. Remark the triangular shaped feet and the ability to have one leg behind the body.

Fig. 6. Giraffes in Outlined sub-style (Shaped style), painted on the roof of the rock-shelter, from Rekeiz Lemgasen.  
Fig. 7. Bovines in Stroked style from Rekeiz Lemgasen filled with a soft gradient.

(left)  Fig. 8. Hunting scene with elephant, archers and a row of women in Dark Figures style from Rekeiz Lemgasen.  
(right)  Fig. 9. Superimposition of a scene in Lineal style with an ostrich hunted by two horsemen over Stroked style giraffes from Rekeiz Lemgasen. The few figurative Lineal style depictions like these ones are highly schematic.

The Dancers’ Style is always below the others. Above it the Shaped, Stroked and Dark Figures styles are found. Most of the superimpositions show this sequence for these three styles, but in one rock-shelter a Stroked Style giraffe seems to be over a Dark Figures Style gazelle. So we should consider the Shaped, Stroked and Dark Figures Styles as contemporaneous. The most recent style is the Lineal, always on top of the others whenever superimpositions occur.
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(right) Fig. 10. Non-figurative images in Lineal style from the Wadi Kenta site.

It was not possible to get a radiometric age for any style: the chemical tests on some samples of paintings did not detect enough organic material to allow 14C dates. So we did not continue with the samplings. We have dated the paintings on the basis of depicted weapons and texts (Fig. 11).

The most ancient, the Dancers' Style, belongs to an early or medium Bronze Age (3,800-3,200 BP), as the depiction of halberds shows. The most recent, the Lineal Style, should be dated between 2,400 BP and the beginning of the Christian era (or still later) because of the presence of Lybico-Berber texts and the lack of camels. The chronology of the Shaped, Stroked and Dark Figure styles lies between the ages of the Dancers and the Lineal styles. Finally, there is also a unique ancient Arabic text, which might represent the historic ages after the XVth century AD.

All but the Lineal Style depict similar subjects although not the same themes. In the Dancers' Style, the processions of people, which carry throwing-sticks and seem to dance, constitute the most typical theme. There are also people with bovines depicted and meetings in which children are also present. In the Shaped Style, depictions of very dynamic people and very realistic bicolour antelopes are found. In its Outline style, only antelopes, giraffes, bovines and ostriches are depicted, always in large dimensions (more than one meter long). The same kinds of animals and with similar sizes are depicted in the Stroked Style in which series of giraffes are the most typical theme. In the Dark Figures style, men, women, gazelles, elephants and small quadrupeds (maybe dogs) are depicted. The compositions are always organized in lines of these main subjects. The main theme is a series of small gazelles (each one being about 10cm long). Another common theme among the Dark Figures style is the hunting of an elephant. Some bicolour gazelles longer than one meter belong to this style too. Finally, in the Lineal Style, non-figurative images and very schematized humans and quadrupeds are depicted. In this style, the typical pan-Saharan theme of an ostrich hunted by two horsemen is also found. The Lybico-Berber texts belong to this latest style.

Regarding the relation between paintings and engravings in the Western Sahara, we think that it
is possible to link a pictorial style with a style of engravings. As the comparison of the images shows, the Dancers’ Style, the most ancient, can be related to the Tazina Style of engravings on the basis of the human depictions, morphologically very similar in both styles. In the examples coming from the Wadi Ben Saccra (Milburn 1971) and the Meccâch well (Malev 1945-46) all the figures have bent legs, always abstentions with L-shaped feet and fingers on their hands. Although the following are not strictly stylistic elements, in both cases humans carry similar weapons, skirts and headdress too. So the research on the paintings of the Zemmur indicates that the Tazina engravings might also be dated to the early Bronze Age.

Extension of the styles

The Dancers’ Style is found in several sites but always in the Zemmur: Rekeiz Lemgasem, Wadi Kenta, Asako and, as Theodore Monod’s publications show, in two nearby sites in Mauritania: Oummat Chegag and Oummat el Lham (Monod 1951). The Shaped Style is only present in the Zemmur too: Rekeiz Lemgasem, Wadi Kenta, Wadi Ymal and, judging from the photographs published, maybe in Bou Dheir too (Brooks et alii 2003). The Outlined sub-style is only present in a few rock-shelters in Rekeiz Lemgasem. The Stroked Style images are also found only in Rekeiz Lemgasem. The Dark Figures Style is mainly found in the Zemmur (Rekeiz Lemgasem, Wadi Kenta and Oummat el Lham), but recently a rock-shelter has been discovered in Laouianate (Searight & Martinet 2001). Laouianate is found in South-eastern Morocco still in a Saharan context. After seeing the published photographs we would classify many of them in the Dark Figures Style. Finally, the Lineal Style spreads over the southern Western Sahara too, mainly around Lejuad. These paintings were already known before the discovery of the Zemmur rock-shelters (Balbin 1975, Nowak & Ottner 1975) and had always been related to recent prehistory.

Discussion and conclusions

At the beginning of the research we assumed that most of the pictures belonged to prehistoric times because they depicted elephants and rhinoceros and people were carrying bows. We thought so because many researchers tend to use the presence of those animals and weapons as evidence to consider these kinds of depictions as very ancient ones, anterior to 4,000 BP. Around that period, a progressive aridification might have begun and those researchers guess that those animals could not live in the Western Sahara anymore. Our later research has shown that most of the images of the Zemmur are certainly prehistoric but also demonstrate that the use of those species as dating elements could be misleading. It is true that many of them were extinct in the area many centuries ago, some of them before the Christian era, as we know from the classic and Arabic sources. But it is also true that they still lived in the Western Sahara in the Bronze Age and later. For example, an elephant and a rhinoceros appear in a panel with people carrying swords, which are recent weapons.

So we must conclude that in the Western Sahara the presence of those species does not automatically assign a date previous to 4,000 BP to the style in which they are depicted. At least in the Western Sahara, we should not use the depictions of those wild animals as reliable dating elements.

The depiction of some weapons like bows and throwing sticks has been used in a similar way. In our opinion this should be avoided too, at least in the Western Sahara, where people using throwing sticks and bows appear at the same time and later than people carrying halberds. On the other hand, swords, spears and shields always appear related to the most recent style, the Lineal Style, itself related to Lybico-Berber inscriptions.

Because very few archaeological excavations have been done in the Western Sahara, we still have no clear and safe sequence of the prehistoric cultures that occupied the region. As a consequence, it is difficult to link any of the rock art remains with a prehistoric culture. If we could obtain an absolute radiometric age for any of the styles, it would still be difficult to relate it with any cultural period or other material remains. Thus, two of the major problems concerning the Zemmur paintings — the interpretation and the cultural identity of their authors — still remain unresolved.

We can also conclude that most of the prehistoric painting styles of the Western Sahara are different from those in the central Sahara. However this mainly applies to the technical side of the styles. On the other hand, the subjects and some themes are similar to those depicted in some Ecodes du Bovidien Final (Iheren-Tахilali, Ouan Amil and Ti-n-Annouin) in the central Sahara (Muzzolini 1995). The dates we propose here for the rock-paintings of the Zemmur agree with the ones Muzzolini proposed for the Ecodes du Bovidien Final too.

Some of these newly-defined styles are found only in the Zemmur rock-shelters but this fact could change soon as the research continues further. At this moment we can state that one of them, the Lineal Style, is also present in the Tiris region, at the Lejuad site. We suggest the
presence of the Dark Figures Style near the Wadi Draa area too (Laouinate site).

Finally, we should warn about the conservation problems that face the rock-paintings of the Zemmur. The physical and chemical processes, which formed the rock-shelters thousands of years ago, are still active today and destroying the paintings by flaking the rock-shelter walls. Other conservation problems are related to vandalism. The local authorities and our team are working together in order to control the visitors and to document as many sites as possible.

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Bibliographie


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