

# From the Sahara to the Nile: the low representation of dangerous animals in the rock art of the Libyan desert could be linked to the fear of their animation

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(Translated by Geoffrey Kolbe\*\*\*)

*Abstract: Fleeing the increasing aridity of their territory in order to reach the more favourable regions of the Nile valley, perhaps following what was to become the Abu Ballas trail, the inhabitants of Jebel Uweinat and the Gilf Kebir may have taken with them their fear of representing dangerous animals.*

## 1. Introduction

A number of authors have proposed an influence of the Saharan rock art on the art of the Egyptians. These hypotheses are very plausible. In effect, due to the progressive drying up of desert greenery in the middle of the Holocene, there was a migration of humans out of the Sahara to populate the Nile Valley and contribute to its culture. (Brook 2006: 35-37; Hassan 1998; Keita & Boyce 2005: 234-5; Kobusiewicz 1992; Kobusiewicz *et al* 2004; Wendorf & Schild 1980; Wendorf *et al* 2001). Throughout this period, the affinity of the pre-dynastic Egyptian with the Sahara desert is obvious.

This latest hypothesis on the influence of the Saharans on the Egyptian culture is on the representation of fantastic animals without heads, the bodies of cats and which were surrounded by humans which they swallow, or spit out (Fig. 1) and individuals who are "floating" or "upside down" prefiguring mortuary beliefs during the dynastic pharonic times (La Quellec & de Flers 2005: pp 260-5; Le Quellec 2005, 2008).

Never-the-less, all the propositions put forward up to now which have attempted to bring together on the one hand, the paintings and engravings of the Sahara and on the other hand, the representations and beliefs of the ancient Egyptians, have not been completely convincing (Dupuy 2008).

Until now, researchers have tried to identify possible common forms between Saharan rock art and Egyptian art, or a common mythological content which was conveyed by these two forms of art. To our knowledge, nobody has ever tried to show a similarity in attitude of Saharan and Egyptians *vis-à-vis art*. Based on the evidence, there would appear to be many similarities.



The art of the Eastern Sahara is surprising in many ways, notably the apparent absence of representations of animals dangerous to man or their cattle. We think there is clear evidence of the similarity of attitude with the Egyptians, based on the images.

**Fig. 1** One of the mythical "beasts" of the Libyan desert which seems to be swallowing (or regurgitating) a person. (DAO Julien d'Huy).

## 2. Method

What do we describe as dangerous animals, since we may be influenced by, "the subjective character of our appreciation" (Clottes 1995)? Five animals, significantly called "the big five" have the reputation of being particularly dangerous for man in Africa: the lion, the elephant, the buffalo, the rhinoceros and the leopard (Burton & Burton 2002: 305; Kilgo 2003: 83; Shomon 1998: 13; Prato & Fagre 2005: 368). We also think it is a good idea to look at animals dangerous to cattle as well as small game, adding the lynx, the jackal, the crocodile, the cheetah, the hyena and the African wild dog.

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For a valid hypothesis, we should not include dangerous animals that were not present during the period that the artists lived in the Eastern Sahara and, having done a careful survey of the relevant literature, they are not on our list.

The principal scientific criterion for a hypothesis is the ability to be submitted to a test and be refuted by experiment. (Popper 1985). For example, it is easily refutable if we discover a significant number of representations of dangerous animals in the Libyan desert, or if we show the effective absence of cats, hyenas, wild dogs, elephants and crocodiles in this part of the desert during the period of concern.

### 3. Results

#### 3.1. Cats

Do we find evidence of cats in the Libyan desert during the period of the artists? How were they depicted by the artists?

#### **The lynx** (*Caracal caracal*, Schreber 1776)

At Djera, the remains of the wildlife found there echo the rock art images at the site: antelopes, gazelles and ostriches. But although the lynx is present in the fauna record, it is not seen on the walls of the cave. (Gehlen, Kinderman, Linstäder & Riemer 2004).

The period of the artistic work at Djera is not known with precision, but it must date before 5400 BC when the region was definitely abandoned. The material of two sites near the entrances to the cave date from about 5680 to 5400 BC (Kuper 1996). Also, the presence of the lynx is confirmed elsewhere in the Libyan desert during this period (see notably Wendorf & Schild 2001: 620-1).

To our knowledge, despite this presence, there is no representation of the lynx in the rock art. At the core of our hypothesis, this absence of "the most ferocious small cat in Africa" (Alden *et al* 2001: 552) is hard to explain as it predates so successfully on small game, notably antelope (Sunquist & Sunquist 2002: 40-1).

We would point out that the lynx will take domestic animals just as easily.

#### **The cheetah** (*Acinonyx jubatus*, Scheber 1776)

Of note is the absence of any representation of the cheetah. Actually, the presence of cheetah during the epoch of the artists is yet to be proven as the fossil remains of this animal have yet to be discovered in Egypt (Osborn & Osbornová 1998: 122). Yet, cheetah are able to cope with aridity (Hamdine *et al* 2003; Marker 1998).

Almasy made the same observation at Wadi Howar. Hoogstraal *et al* (1996-1996) imply that the species may be extinct in Egypt today, but they have been observed in many places in the Northern Libyan desert prior to 1990 and there were a number of cheetahs seen between 1950 and 1960 in the Northern part of the Egypt-Libya frontier.

It is the extermination of the gazelle – their favourite prey – in recent times that has led to the gradual disappearance of the cheetah in these marginal habitats.

The question that remains to be answered is: were they present, and not painted, or were they actually absent?

In the shelter of Saddle Talh at Jebel Uweinat, one representation displays an animal attacking a cow. Some investigators propose that the animal is a cheetah or a savage cat (Böckli & Marai 2008: 145). The identification of this representation is very doubtful without further evidence of the cheetah's presence in the Libyan Sahara during the period the paintings were made. This should be treated with a good deal of circumspection.

#### **The leopard** (*Panthera pardus*, Linnaeus 1758)

Are there any leopards in the Eastern desert? To our knowledge, this has not been proven. This species is known in the upper Palaeolithic, and the pre-dynastic Eastern desert from 7000 to 3000 BC (Goodman *et al* 1992).

A mistaken claim of a discovery was made in a limestone shelter on the Plateau of Galala, where there was a picture which supposedly showed a group of leopards being chased by several men armed with spears (Hobbs & Goodman 1995). It is uncertain if the paintings, possibly dating from 3957 to 3500 BC, represent leopards (Midant-Reynes & Muzzolini 1995). But the remains of this species which have been excavated in this area date from 9570 to 2276 BP and so confirm the presence of leopard in this region. This is not surprising from an animal that can tolerate a certain aridity (Al-Johany 2007: 26-7). But we note that no trace in the archaeological record has been found (yet) in the desert West of the Nile.

So if this species was present in nature, the absence of any representation of it in the rock art possibly comes from a fear of predation from this cat on small game, cattle, and on man.

### **The lion** (*Panthera leo*, Linnaeus 1758)

Three lions, being stalked by two archers, have been discovered in the famous Cave of Swimmers in Wadi Sora (Le Quellec & de Flers 2005: 216; Le Quellec 2006: 59).

In one scene we see two archers, their bows drawn and pointed in the direction of a cat painted in a flat white, which seems to threaten their colleagues (Fig. 2). It could be a lion or a leopard, both are equally dangerous to man. And yet, amongst the dangerous cats, the leopard will often (but not always) ambush by swooping down from a tree, whereas a lion uniquely will charge out of the sun. Too, the coat of the animal depicted has no markings, so we tend to think that the animal is a lion.

The use of white paint in this representation is a typical characteristic of the later painters at Wadi Sora (Le Quellec & de Flers 2005: 287), and is a sign that the population of lions survived for a relatively long time in that region. However, it is a mistake to think that if an animal is rarely represented in the rock art then this must be due to aridification of the Sahara. Possibly, we should not be surprised at the presence of lions in the desert. These animals are capable of not drinking for many days where water is rare or unavailable and can survive on the liquid content of their prey (Sunquist & Sunquist 2002: 289). There have been kills seen in remote regions of Somalia without any watering holes and where the nearest water is 50 kilometres away (Herman *et al* 1994: 16). What is more, they still survived at the limit of Aïr and Adrar des Iforas at the start of the last century (Gauthier *et al* 1996: 58) and Michael Mason (1935) tells of his discovery of an abandoned lion den in the arid Wadi Howar region of Sudan. The fossil remains of this species are rare in Egypt and are limited to two bones found by Von de Driesch and Boesneck (see in Osborn, Dale J. & Osbornová 1998: 114).

The question of representation of lions in Egypt is complex, because certain pre-dynastic and First Dynasty figures show Mesopotamian styles which influence their interpretation of the natural environment. Notable are the ornate lions on the ivory sceptre from Herakleopolis (Quibell 1900, I pl. XIX-6), and the ones on the famous knife handles from Jebel el-Arak and also Jebel el-Tarif (Hemmer 1963).



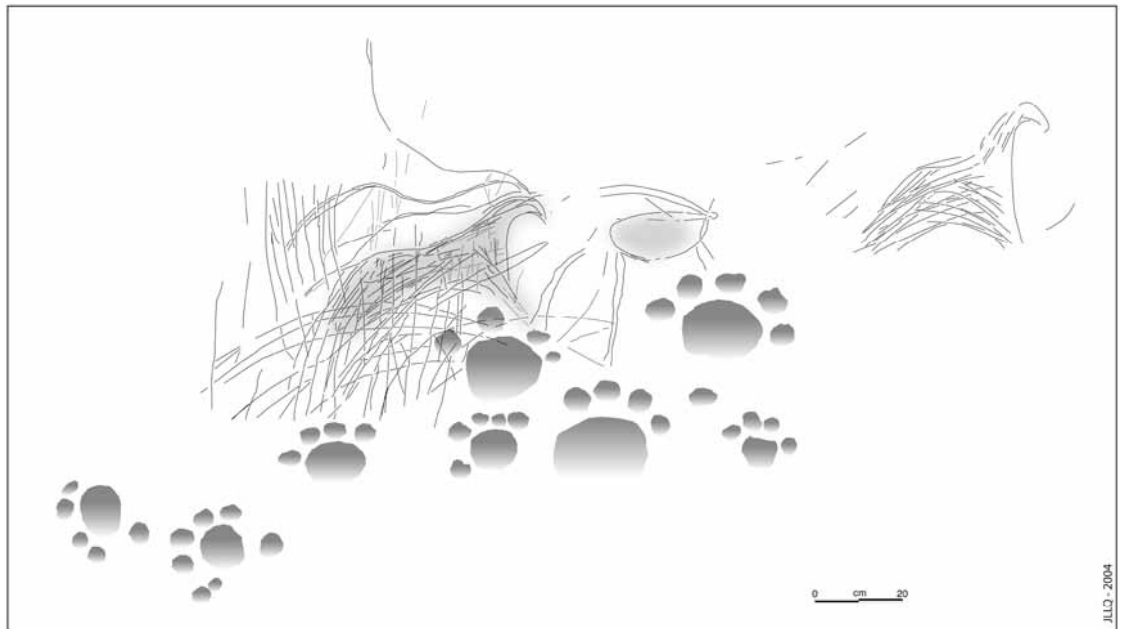
And yet, with its superb adaptation between the two extremes, the population of lions was maintained in the Sahara region throughout antiquity.

The magical grave stones of the First Age show Horus controlling a lion and oryx, and the god Shed who, mounted on a chariot, tramples crocodiles and hunts animals in the desert: snakes, scorpions, lions and oryx (Brunner-Traut 1997; Quaegebeur 1999, Fig 47a & b).

Their capacity to adapt and the persistence of a population in the Egyptian desert throughout antiquity refutes the idea of the rarity of lions as a cause of their poor representation. And so, it is shown that equating the poor representation of this species to its population density is of little value. As game is less plentiful in the desert, each pride of lions would need a large extended area. It would be wrong to say that the animal was poorly represented as a consequence of it being less common. The usual prey of lions are the large and medium sized ungulates. It has been calculated that one lion gets through from ten to about sixty animals of prey each year (Sunquist & Sunquist 2002: 202). A small pride, with about six or seven lions of different ages, hunts about twice a week (*La Faune* 10: 192). An average pride can get through more than a hundred ungulates a year, to give some idea

**Fig. 2** Detail from the paintings in the Cave of Beasts. At the top, two people in dark colouring appear to bend their bows (white) in the direction of a cat (in uniform white) which seems to be threatening their friends.

**Fig. 3** The pawprints of a cat in the cave of Obeydh.



of how much territory is required to support them. But if their territory in certain areas of the Serengeti is about 260 km<sup>2</sup>, this is not sufficient to justify the small number of their representations. How do we explain why they appear with great regularity in the ancient Egyptian Nile valley and they are given such mythological importance (Schweitzer 1948).

The small number of images can be explained by how dangerous the lion was for man. Also, significantly, in the rare representations of cats in the Libyan desert, the animals present a threat to the archer.

Much later, the species continued to survive but was hardly more represented, there is little to add to the reason they refused to hunt cats in a group. Elsewhere in the Sahara, in engravings from the period when camels first appeared, lions are seen to take domestic cows (Gauthier *et al* 1996: 58).

### The "Beasts" of Wadi Sora

There are a little over thirty representations of "beasts" of the same type as discovered in Wadi Sora. Morelli *et al* (2006) described them as "ancephalic lions". These beasts are apparently dangerous, mythological creatures which, for sure, are shown in the act of swallowing humans.

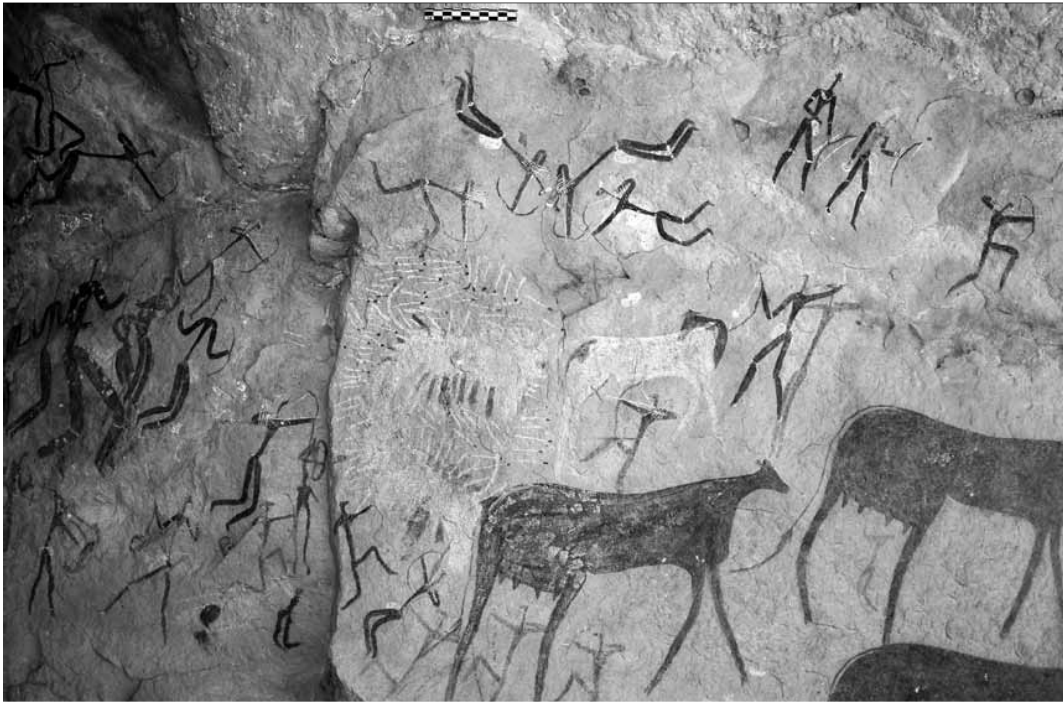
They show one characteristic feature which most critics are reasonably content to accept. "On the beasts, in place of a head, there is a curious cleft between two humps of unequal size which do not correspond with the anatomy of any known quadruped." (Le Quellec 2005: 7d1). As we come to later on, it is possible that this is a very significant detail.

### The pawprints of cats in the cave of el-Obeydh

The shelter of Wadi el-Obeydh has a series of cat pawprints carved into the wall, made between the 6<sup>th</sup> and 4<sup>th</sup> millennium before present (Barich 1998). The majority of these imprints show more than four digits, which is the number normally seen in cats in nature. (Fig. 3). We therefore think that these sacred engravings represent the passage of a cat which is without doubt mythical and not natural. Too, we think that the pawprints are not a token representation of the animal itself, but assume a synecdochical function, in which a part stands for the whole and permits the presence of a dangerous animal to be signified without taking the risk of representing it in its entirety. If this is the case, the engravings of these supernatural pawprints are closer to the "headless beasts" of Wadi Sora (Le Quellec & de Flers 2005: 49-50).

### The unidentified cats

In Jebel Uweinat, on the slopes of Wadi Wahass, we noted two giraffes pursued by a cat (Le Quellec & de Flers 2005: 80). In the same mountain, two scenes (Figs. 4 and 6) and probably a third (Fig. 5) show a group of archers attacking animals which resemble cats. These scenes date from the pastoral period of the region and show that the cowherds of Jebel Uweinat used their bows to defend their herd against attacks from cats. These tawny beings were therefore present in the mountains at the same time as the archers. What these ancient hunts show is that the cats were without sufficient numbers to exercise significant pressure on the herds. And yet, the cats are represented in small numbers which contrasts greatly with the quantity of engravings to be seen in Tassili n-Azjer, Tibesti and the Fezzan.



**Fig. 4.** A painting from Karkur Talh (Jebel Uweinat) shows a group of archers, with arrows in abundance hanging from a cat (in flat white). Other people are running to the right away from the group. One of the cows is turning its head towards the dying cat, recognisable from its long, erect tail (photo JLLQ).

### 3.2. The Hyena

**The striped hyena** (*Hyaena hyaena*, Linnaeus 1758)

The remains of the striped hyena, dating from 4800 – 3750 BC have been found in the Libyan desert (Peters 1988: 75). The presence of this animal during the period of the engravers has been confirmed to the North East of a line from Siwa to Abu Simbel (Wendorf & Schild 2001: 620), without there being any representation in the rock art to our knowledge. The striped hyena occasionally attacks cattle (Kruuk 2005:86; Mills & Hofer 1998: 23-4), and human beings, notably children (Mills & Hofer 1998: 87; Nowak *et al* 2005: 226). These are dangerous animals.

### 3.3. The dogs

**The African Wild Dog** (*Lycaon pictus*, Temminck 1820)

The African Wild Dog which subsists in the central Sahara (Burton & Burton 1973: 2752; Le Quellec 1998: 352), probably co-existed with the artists of the Libyan desert. Mason and Szechenyi have indicated their presence in Wadi Howar. They also had a widespread presence in Egypt. But elsewhere, according to the archaeozoologist Achille Gautier, the absence of a species which was not normally part of the prehistoric diet is hardly surprising (1993: 262-4). The apparent ferocity of this animal, which these days does not attack man, perhaps explains why it is not represented: "The spectacle of a pack of wild dogs tearing at a live animal still on its feet is dreadful and without doubt one of the most impressive sights on the plains of Africa. And when we are on

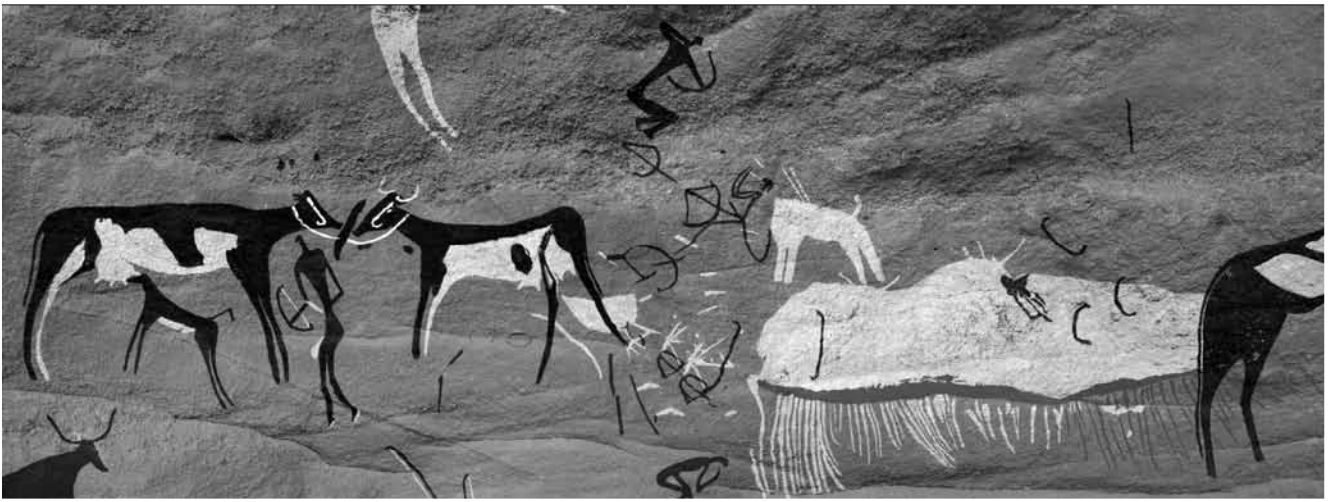
hand at a tragedy of this sort, we would not be greatly surprised if these carnivores are considered the most cruel" (*La Faune* 13: 250).

But elsewhere, the East Africans have an eloquent saying about the dog which is, "the running death on the plains" (Le Quellec 1998: 356). The wild dog is strong enough to take on the very large antelopes, also giraffes and even lions, in isolation (Burton & Burton 1973: 2752). The end is so dreadful that they are feared as much as large cats, such as the panther (Le Quellec 1998: 357).

It is this terrible ferocity which makes them appear such a menace to the inhabitants of the desert. One engraving in Wadi

**Fig 5.** Other paintings in Karkur Talh are difficult to make out. But we can recognise an archer bending his bow towards two cats with missing heads, which are reminiscent of the mythical "beast" in Fig. 1 (photo JLLQ).





**Fig.6.** Another painting in Karkur Talh showing a cat in a uniform glossy white without its head, which is shot in the presence of cows and an elongated enigmatic form (photo JLLQ).

Imrawen, in the Libyan Messak, showed how a wild dog leapt at the throat of one person (Le Quellec 2004: 31; 1998 362-4). It is also possible to see in several valleys of the Messak, engravings showing packs of dogs – without doubt African Wild Dogs – assailing herbivores and sometimes men (Gauthier et al 1996: 59).

The absence of representations of these dogs, able to exercise such strong predation on cattle (Kruuk 2005: 86; Woodroffe *et al* 2005), shows how dangerous they were.

### **The Jackal** (*Canis aureus*, Linnaeus 1758)

The Jackal is at home in the desert and is actually found in the Western Sahara. In consequence, it would clearly be surprising if they were absent from this region during the epoch of the engravers. Fossil remains have been discovered at the Neolithic level at Bir Tarfawi, Hakhla, esh-Shaheinab, Saggai and Merimde-Beni-Salama (Gransard-Desmond 2004: tabl. 3). And yet, none figure in the rock art of Egypt with any certainty (Osborn & Osbornová 1998: 56).

While this animal may show a predatory behaviour towards the herd (Yom-Tov 1995) there is no authoritative zoological criterion which can be identified with any certainty in any artistic representation (Gransard-Desmond 2004: 44), but its absence in the bestiary is also explained by a universal reaction of man facing carnivores which is inherited from our evolution. In effect, it is an instinctive reaction to the great strength and killing ability of large predators, such as the lion, the leopard and the wild dog. Also for the many lesser predators which do not have imposing fangs and claws, such as the jackal, the reaction is the same – although a little less (Kruuk 2005; 166-7).

This could explain the equivalence in the way small and large carnivores were treated in the rock art of the Libyan desert. It could also explain the absence of the Fennec fox in the iconography of prehistoric Egypt, although there is little evidence of it in the fauna record (Gransard-Desmond 2004: 40). An animal such as the jackal which in reality is somewhat timid, non-the-less inspired a powerful myth for the ancient Egyptians. Isheb, a kind of deep red jackal with a long tail, reputedly came into barns at night to devour animals, starting with the largest (Vernus & Yoyotte 2005:167). Also, in Libya in the 1960s, a lynx attacked sheep with such cunning that shepherds thought it was some sort of monstrous jackal, capable of avoiding their dogs and remaining elusive (Hufnagl 1972: 42).

This unique reaction, caused by the sight of a majority of carnivores, is strongly reflected in Egyptian mythology. The gods who are represented by large carnivores are generally very dangerous. Pakhet, the lion-goddess is the "Ripper", legendary for the ferocity which it met the enemies of Egypt (Bunson 2002: 294). The lion-god Mahes is also a devourer of the enemies of Egypt (Bunson 2002: 221). Mati, and the feminine form Matit, are lion divinities with a war-like function (Borghout 1978: 112, n. 328). Mafdet, a goddess in the form of a lioness mentioned in the Pyramid Texts as a "killer of serpents", possibly protected and avenged the pharaoh. She embodied a judicial authority and it is thought was originally represented by a leopard (Wilkinson 2005: 249-51). Sekhmet "the powerful", another lion-goddess, ruled over wars and disasters. Hathor, daughter of the god Re, changed

into a lioness for her secret mission to exterminate the human race and in this form was identified as Sekhmet (Shaw & Nicholson 2002: 257). Mekhit, leonine consort to Onuris, was one of the divinities that appeared as the vengeful eye of Re, like Mestjet, the goddess with the head of a lion (Wilkinson 2003: 179). The goddess Meresger, charged with punishing wrongdoers by eating them, is described as a "savage lion" (Bunson 2002: 239). The iconography of Tutu, "the one who hunts the enemies", shows him as a walking lion and as a sphinx who has a human head and the body of a lion (Kaper 2003: 35). Although he was later considered quite benign, Shezmu was best known for his cruelty and was also represented as a lion or a man with the head of a lion.

Their dangerous nature predisposed the lion-gods to become effective guardians. So it was that Akeru, a pair of lion-gods, were guardians of the horizon and protectors of the solar-boat on its celestial voyage (Bunson 2002: 18, 171). Matit, who has already been mentioned, served as guardian of royal residences (Bunson 2002: 228) and Mehit, also a lion-goddess, was essentially a protector. Mahes "the lion", the divine warrior already mentioned, also functioned well as a guardian of sacred areas, and the underworld god Kherty, at once hostile and a protector, took on the form of a lion amongst others (Wilkinson 2003: 178).

One magical use of the lion's aggressiveness was in the figureheads on the prows of Egyptian navy ships when fighting against the Sea People. They were lion's heads with teeth showing (Shaw 1991: 63-4). This negative vision is extended to the small carnivores, such as Anubis, the god with the head of a jackal, who accompanied the dead to the underworld (with one other leonine divinity, Aket, who was also associated with mortuary rituals). Only Bastet, a goddess with the head of a cat represented joy and fertility, but we should remember that under the name of Shesmetet, she could take the form of a lion-goddess (Bunson 2002: 372). It is worth noting a magical ceremony that took place during the Middle Kingdom period (ca 2040-1640 BC) to "close the mouth of lions, hyenas and all the species of animals with erect tails who feed on flesh" (Borghouts 1978: 50). This magic formula was actually addressed to an assembly of carnivores – and it is remarkable that the "erect tails" which is mentioned is exactly what we see as a constant feature in the strange ancephales from the "cave of the swimmers" and the cave of beasts (Fig. 1). In what is effectively an aquatic world, it should be noted that Ammit, who, as her name indicates (*'mt-mwtw'*), devoured dead sinners in the underworld, is a composite, "combining the characteristics of dangerous animals as was typical of the ancient Egyptians" (Wilkinson 2003: 218); a terrestrial carnivore, the lion, and its aquatic equivalent the crocodile, and a dangerous amphibian animal the hippopotamus. Finally, Zandee notes that the lion

is feared above other animals who eat those who have lately passed into the underworld and how the "Book of the Dead" gives a spell for protection (Zandee 1960: 195).

### 3.4. The elephant (*Loxodonta africana*)

There are a number of indicators that attest to the presence of the elephant in the Libyan desert during the epoch of the artists, or at least the beginnings thereof.

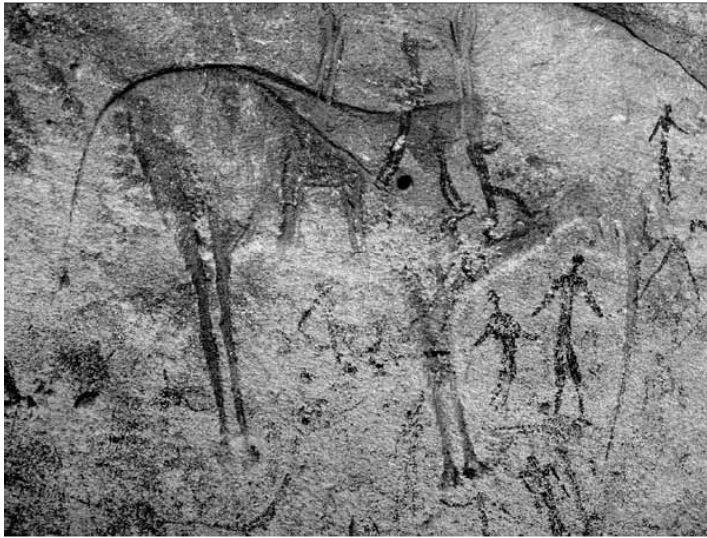
To the South West of a line from Siwa to Abu Simbel, one engraved elephant is to be seen at Jebel Suba, amongst a large number of giraffes, to the East of the track from Kufra to Uweinat (Berger & Berger 2003: Fig. 2). An elephant is also represented in the Cave of Beasts (Fig. 8). This representation is one of the oldest locally. One giraffe was nicely engraved on the internal surface and the people added over it (Le Quellec & de Flers 2005: 287, 326-7). Lastly, we should also note an elephant amongst the many ancient engravings in a shelter discovered at Wadi Sora (Morelli *et al* 2006: 180) and one or perhaps several others at Wadi Hamra (Zboray 2008: 150).

If we look to the North East of a line from Siwa to Abu Simbel, we do not find any elephants.

Certain observers think that the representations of elephants are from prior to the commencement of rock art (Zboray, personal communication) – in that case, have the images of the elephants survived despite the harshness and aridity of the environment? Their non-representation may result from a choice by the artists and not as a consequence of the facts of nature.



Fig. 7. Engraving of an elephant at Jebel Suba (photo JLLQ).



**Fig.8.** Engraving of an elephant in the Cave of Beasts (photo JLLQ).

Very late fossil remains of elephants have been discovered in the Libyan desert, particularly in the Calancio Serir. They date from  $3420 \pm 230$  BP for the most ancient, to  $2385 \pm 49$  BP for the most modern (Gabriel 1977: 51). These traces appear to confirm the proposal of Lucian, who writes in *Dipsas, the Thirst Snake* that the Garamantians hunted elephants in the desert, where the pachyderms were resistant to thirst and the heat (2; 1968: 76-7). This assertion of the ancient historian is, however, open to question. (Gsell 1913: 80; n.3; Le Quellec 2004: 46).

Between the time when the Saharans engraved elephants and when we actually find traces of them, it is considered that there probably were pachyderms in Eastern Sahara. This hypothesis is corroborated by the biology of the species. The limits of population today are between the isohyetal lines of 150mm and 510mm of rain. Incursions to the North of the lower isohyetal show that the elephant can perhaps adapt where there are seasonal highs in temperature and conditions are quasi-desert (Huard & Leclant 1980: 27; Le Quellec 1998: 221; 1999: 168, 172; Rodrigue 1999: 64).



**Fig. 9.** A Small group of engravings from the Libyan desert (M20o14-06) shows two people being attacked by crocodiles with a boat seen close by (photo F. Berger cf. Berger 2009 Fig 16).

For example, until very recently these animals walked across the plateau of El Aagher in Mauritania, which is practically desert, where there is some scarce water in the East. The rain only falls for about three months of the year and the vegetation is very scattered (*La Faune* 16: 16). The Pachyderms survive easily in the Kaokoveld desert in Namibia where there is less than 150mm of rain fall per year (Le Quellec 1998: 204; 1999: 168; Le Quellec & de Flers 2005: 327; Viljoen 1993: 131-3). In these conditions, even the smallest thing would stop a small, but permanent presence of elephants in the Libyan desert surviving during the period of the engravers.

The small number of representations of pachyderms is probably a consequence of the low density of the species at the time of the artists (Le Quellec & de Flers 2005: 327), but it could also be explained by an unwillingness to represent a very dangerous animal, capable of charging powerfully without any apparent cause (Bere 1966: 82; Estes 1991: 267). Also, in West I-n-Djeran, in the Algerian Tadrart, an individual armed with a curved sword fled the wrath of a pursuing elephant (Gauthier et al 1996: 99). These explanations are, of course, not the only ones.

### 3.5. The crocodile (*Crocodylus niloticus*, Lanrenti 1768)

This animal, which can be up to seven metres long, would have been very dangerous to the men of the Holocene and their cattle. Today in Africa, they are responsible for a large number of human deaths and attacks on animals, drawing ahead of the hippopotamus. Every year, many hundreds of people are devoured by Nile crocodiles (Grzimek 2003, vii: 163). This reptile is on the brink of extinction in Egypt, but since the end of the 1980s they have reputedly proliferated in Lake Nasser (Boesneck 1988: 108, Houlihan 1996: 113). According to Patrick Houlihan (1996: 114-6) "There is evidence, from graphic and textual documentation, that the ancient Egyptians were very afraid of this reptile", so that they looked for protection from a number of incantations (Houlihan 1996: 114-6). And yet, we know of only a single image of crocodiles in the Libyan



desert (Fig. 9), despite its confirmed presence for most of the Holocene period in Wadi Howar in the Sudanese part of the desert (Wendorf & Schild 1976; Smet 1999: 82 Fig. 1). The question to be answered - and which needs to be put into context with the shortage of water draining into the water courses - is regarding a taboo or something similar which prohibits the representation of dangerous animals.

### 3.6. An apparant counter-example: the Oryx

When seeking to overturn a hypothesis, it is necessary to find a counter-example: a dangerous animal that was well represented.

The Oryx (*Oryx dammah*) when at bay will face the pursuer, threatening and striking with its horns (Burton & Burton 1974: 3339). In the same way, this bovid will not hesitate, when injured, to charge the hunter (Lavauden 1926: 56). This therefore an animal that can appear extremely dangerous.

And yet, the oryx is very often represented in the Libyan desert (Fig. 10 and Le Quellec & de Flers 2005: 292-6), which would seem to run counter to the hypothesis.

The answer is partly that the oryx prefers to flee when attacked; and partly that we know its charge is not really dangerous and is just display. The Hunter has simply to lay on the ground and the animal cannot reach him because of the shape of its horns. (Lavauden 1926: 56). This display would be common knowledge to inhabitants of the desert. In consequence, the Oryx only looks like a dangerous combatant at first sight.

### 3.7. Interim conclusion

In the Libyan desert, during the period of the engravers and painters, we have with certainty from the rock art images and the fossil remains, the lynx, the striped hyena, the crocodile, the lion and the elephant, which are all extinct today. The first two were never represented, but the last three were with successively greater rarity. We also have strong suspicions about the presence of the jackal, the cheetah, the leopard and the African wild dog. So, we should perhaps note the absence or poor representation in the rock art of animals dangerous to man, to small game and to cattle.



**Fig. 10.** Oryx being attacked by dogs, an engraved panel in Karkur Talh (photo JLLQ).

## 4. Discussions

The animals which killed the men and their cattle, who preyed on small game and which were strangely under-represented in the Libyan Sahara, were present during the period of the engravers and painter. How do we interpret the ban that seems to block their representation? One promising way forward is in relation to an Egyptian belief.

### 4.1. The Egyptian Belief

In the eyes of an Egyptian, all images are imbued with magical powers which are particularly effective. In their signs and hieroglyphic writings, there are images which, because they clearly retain their form and definition, retain their supernatural powers.

Among the hieroglyphics, many represented beings whose own action could be dangerous. Yet, in writing, scribes were often required to use these graphical elements which, taken individually, could become fatal. They would choose to leave out dangerous hieroglyphs and replace them with representations of inert objects (Lacau 1914; Pierre 1997; De Trafford 2004: 430). One simple precaution, adopted very late on, consisted of "killing" a dangerous sign by mutilation. That way, wild animals that constitute a threat, such as lions, elephants, crocodiles, snakes and scorpions, are often painted incomplete in one way or another so that they are less dangerous and can no longer come alive. The scorpion's redoubtable tail is amputated, the lion is cut in two (Fig. 11) (Gros de Beller 2003: 91; Lacau 1914; Mathieu 1996: 311; Pierre 1997; Posener 1959: 158; Vasunia 2001: 165). One other procedure that constantly appears is that hostiles are painted pierced with arrows so that they look like they have been stabbed with a ball of pins (which resembles the feline pin-cushion from Karkur Talh seen in Fig. 4!). If animated, the arsenal



**Fig. 11.** An example of a "neutralised" Egyptian graphical element (Pyr. §981bM, see Rull Ribó 2007: 1652).

which they carry on their back has just happened in the composition (Gros de Beller 2003: 91; Posener 1959: 158; Vasunia 2001: 165). These practices were used in a funerary context, principally in coffins and sepulchre chambers (Lacau 1914, 1926; Pierre 1997).

On sober reflection, we can probably conclude that the Egyptian belief in the effective reality of the image was not apparently *ex nihilo*, but obviously had its origins in the ancient populations of the Sahara desert. The bestiary of the Libyan desert confirms this approach in its own way. We could in effect suppose that the dangerous character of their prototypes and fear of animation of their images would justify their surprising absence, a policy of omission which the Egyptians have primitively adopted, but who in the end used these dangerous images while taking every possible precaution.

#### **4.2. Bringing together corroborating elements**

Many external factors corroborate the possibility of a transmission of the belief of animation of the image of the dangerous animals from people that inhabited the Eastern Sahara of the Egyptians.

The belief is not contradictory with our perception of the rock art of the Libyan desert, which is seen as vibrant and animated. Nicolas Grimal talked of "Groups of humans and animals who come and go in front of our very eyes" (Le Quellec & de Flers 2005: 9). Referring to the work of Jean-Loïc Le Quellec, Pauline and Philippe de Flers, Robert Vernet admired "the people in movement (and) a superb bestiary, with ostriches full of life." (2006: 184). From the impression of movement and its projection, this step, with belief, is easy to cross.

From a historical point of view, and in some ways very interesting, the theme of animation of a figurine of a dangerous animal, of which there is no doubt, appeared in Egypt in 2000 or 3000 BC in a popular story taken from the Westcar manuscript (Lalouette 1987: 171; Lichtheim 1973: 215). This story relates how a magician, betrayed by his wife, made a small wax figure of a crocodile and threw it into the stretch of water where his wife's lover was bathing. The crocodile was transformed into a monster of seven metres in length and took its victim down into the depths! (Féron 1985: 69-72; Lalouette 1987: 171-5; Quirke 2000: 77-89). The date at which this history was first noted is a little after the arrival of man from the desert, which possibly corroborates the transmission of the belief – especially from this story which, like

many others, were transmitted orally for a long time before they were written down. We find the belief in the animation of a figurative object in the texts of the tomb of Tutankhamen from 1327 BC, with innumerable and diverse operations necessary to give life to the statues (Fontisi-Ducroux 2000: 109). According to Jean-Claude Goyon, the word "statue" sometimes appears in funeral rituals, "where we expect the word mummy" (Goyon 1997: 91), which would appear to indicate that the ancient ritual of animating statues was ultimately integrated in the later animation rite of the opening of the mouth.

It is interesting to note that at the cave of Djera, where the lynx is not represented, in line with our hypothesis, and at the cave of Ouadi el-Obeiyd, where cat's paw prints are engraved, there are resonances with the valley of the Nile. In the first cave, a large mollusc bi-valve has been found which could only have come from a stream, and in the second cave, Barbara Barich (2001) has identified a plausible representation of embarkation taking place on Egyptian boats of the style of Nagada II (Barich 2001). These contacts confirm the transmission of the beliefs of animation from the Sahara to the Nile.

These observations could explain the headlessness of the "mythical" feline representations (Le Quellec & de Flers 2005; Morelli *et al* 2006: 181-2) peculiar to Wadi Sora, which all show the long erect tail typical of ferocious animals depicted by the ancient Egyptians (Bernus & Yoyotte 2005: 64), and which recall the mutilation of representations of dangerous animals by the ancient scribes. It is the same for the lions threatening the herdsmen of Karkur Talh (Figs. 4 – 6). Their heads are not fully represented to prevent their hostile spirits taking life. Not allowing their head to appear also deprived the image of eyes – always very feared (Otto 1975) and particularly dangerous in felines. For example, in the Texts of the Sarcophagus, Pakhat has a look about the eyes which is either characterised as "wise" (Lalouette 1991: 66) or "flashing" (Faulkner 2004: 105), he is able to "see in the night". Also, the determiner in the form of the eye is utilised for the objective in the common expression *mai-hesa*, "the terrible lion" (Fig. 12) shown in the *Pyramid Texts* (Erman & Grapow 1971, 2: 12; Borghouts 1978: 50; Faulkner 2002: 101). One popular old etymology elsewhere justifies the incorporation of the eye hieroglyph in certain of the same writings for the name of the lion, as shown for the words *mai* "lion" (Fig. 13, 14) and

maa "to see" (Erman & Grapow 1971, 2: 10-12; Faulkner 2002: 100-101, Bernus & Yoyotte 2005: 153, 157).

This simple key could also account for the net that seems to enclose eight of the beasts that we know of (plus another one to four) (Le Quellec 2005: 72). The leonine parts of the "beasts" of the Libyan desert are not a little reminiscent of the "devourer of the dead" hybrid mentioned in the Book of the Dead (chap. 153) where the body is precisely that of a lion and where the ankle part of the leg holds the net used to catch the guilty dead swimmers with no warning, which are later drained and eaten like fish (Eyre 2002: 91 n. 76, see also *Coffin Texts* 473-81, see also Faulkner 2004).

The belief in the animation of an image of a dangerous animal also allows recognition of the contrast between the beasts engraved in the Eastern desert and those of Tassili n-Azjer, of Tibesti and of Fezzan, where "the elephants, the rhinoceros and the cats are common" (Aumassip 2004: 271). But elsewhere it should be emphasised, *au contraire*, the presence of one original culture in this part of the Sahara reduces the possibility of a "coincidence" of a "common cultural community" between Egypt and the groups in the Sahara (Dupuy 2008: 39). Note, however, a similar belief in animation still lingers in the high Moroccan Atlas, where cats are frequently represented as having been shot (Rodrigue 1999: 65).

One confirmation of our thesis is found in certain paintings of mythical cats in the Cave of the Beasts, where the object is given strong vertical stripes sectioning their bodies (Le Quellec & de Flers 2005: Fig. 709). This is, in effect, exactly the procedure set out by the authors of the *Pyramid Texts* who in the same way cut the bodies of their lion hieroglyphs to act as a neutraliser (Rull Ribó 2007: 1652). To render the hieroglyphs of dangerous animals inoffensive, it is noted that the custom was to inflict one or more cuts (Pierre 1994, Vernus & Yoyotte 2005: 75).

In conclusion, it would appear quite probable that the inhabitants of Jebel Uweinat and the Gilf Kebir, their territory succumbing to aridification, were tempted to retreat to the more clement regions of the Nile valley, perhaps using what was to become the Abu Ballas trail. It is feasible that they took with them their beliefs on the representation of dangerous animals.

The difficulty with this thesis of transmission of a belief from the Sahara to the Nile would be the very long preservation that would be necessary across time. But the longevity of such a belief, as well as that of certain myths (Dumézil 1992: 29; Lévi-Straus 1958: 284, 1964: 346, 1971:571; Pouillon 1966: 105), might have been favoured as they resonated with a world view that was already imprinted on the architecture of the mind. The belief in animation would go hand in hand with a tendency of the human mind to animate certain images (d'Huy 2007, 2008).

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Fig. 12. *mai-hesa* "the terrible lion". Note the determinator in the form of an eye utilised in the hieroglyphic notation for this expression, seen in the *Pyramid Texts*.



Fig. 13. *mai* "lion" in ancient Egyptian.



Fig. 14. *mai* "lion" a graphical variation of the hieroglyph incorporating an eye.

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