



KEYWORDS: *Petroglyphs – Animals – Egypt – Interpretation*

WHAT THE ‘ANIMAL’ ROCK ART IMAGES OF THE EASTERN DESERT OF EGYPT TELL US ABOUT THE PEOPLE WHO DREW THEM

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Abstract. ‘Animal’ petroglyphs of the Eastern Desert of Egypt are reviewed with the intention of determining what they reveal about the people who drew them. It is argued that attempts to determine what they meant to the artists are fruitless and likely to be misleading. It is nevertheless possible to deduce, simply from the form of the images, certain conclusions about the artists and the communities in which they lived, which have the advantage of being reliable because they are not based on conjecture. They provide insights into certain aspects of the way of life of the people who frequented the Eastern Desert in the 4th and 3rd millennia BCE.

Introduction

Recent discoveries have revealed that there is a large amount of rock art in the Egyptian Eastern Desert, between the Nile and the Red Sea. The publications resulting from these discoveries give brief details of about 300 rock art sites, more than half of them unknown to the outside world before the 21st century, having several thousand individual rock art images. Their proximity to the centres of Ancient Egyptian civilisation (they all lie within 100 kilometres of the Nile Valley) raises the question of what if anything they can tell us about the people of Pharaonic Egypt or their forebears. This paper is a suggestion as to how that question should be answered in a reliable manner, and makes a preliminary attempt to provide part of the answer.

The part of the Eastern Desert to which the publications refer lies east of the stretch of the Nile between Kom Ombo and Qena, roughly from 24° 30’ to 26° north and 33° to 34° east. Figure 1 shows the locations of the known rock art sites. The rock of this part of the Eastern Desert is mainly Nubian sandstone, much of which has a natural black or brown patina. The rock art consists almost entirely of petroglyphs made by removing part of the rock surface by pecking or scratching: there are hardly any pictograms made by applying colouring material to the rock (unlike the Western Desert which is famous for its paintings).

Most of the rock art consists of what appear to be representational images, mainly of animals,



Figure 1. Known Eastern Desert rock art sites.

anthropoids or boats. We are unable to say that the artists understood them as pictures as we do, giving accurate information about the appearance of the subject. In fact it is argued below that we have no way of being certain what the artists 'meant' by their work. Nevertheless, so many of the images call to a modern mind so clearly an identifiable animal species, or a being in human form, or a boat, that it seems sensible to refer to them accordingly. Thus when we say below for example that an image that looks like a giraffe or reminds us strongly of a giraffe, 'is' of a giraffe; we do not imply by the use of the verb that the artist saw it as 'being' a giraffe, or indeed anything at all about the artist's thoughts.

The present paper is based on a detailed analysis of the Eastern Desert rock art (Judd 2006a, 2007, 2009) but is confined to consideration of the animal images only. There are a lot of them: there are at least 59 giraffes, 41 elephants, 20 felines, 18 crocodiles, 23 hippopotamuses, 102 asses, 14 addaxes, 27 oryxes, 30 gerenuks and 178 cattle, together with many ibexes and ostriches, and several 'unidentified' zoomorphs we cannot identify. The presence of so many images of animals that could not survive in the present arid habitat suggests very strongly that they date to a period when what is now desert was moister and supported a significant flora. The last such period in north-east Africa came to an end in the third millennium BCE (Kuper and Kröpelin 2006; Kröpelin et al. 2008) and it is therefore concluded that the animal images were, in the main, drawn then or earlier. The question of dating is addressed in more detail below.

The rock art of this part of the Eastern Desert was brought to public attention by the work of Winkler as a result of his 1936–37 expedition. Some of the images he discovered were published in 1938. The most important subsequent publications in the 20th century were compilations by Resch (1967) and Červíček (1974), both of which included some of Winkler's material. Further discoveries near the roads that border the region were made by Redford and Redford (1989) and Fuchs (1989). The many recent discoveries stem from an initiative by David Rohl (Rohl 2000; Morrow and Morrow 2002).

Without exception no archaeological work has been reported in connection with any of the expeditions that have recorded the rock art, and it seems unlikely that permission for archaeological examination of the sites would be granted in the near future. It has to be recognised that the attempt to deduce information about the people of ancient Egypt presented here would probably be more convincing if it had the benefit of archaeological corroboration, but if such support is held to be essential then the rock art can add nothing, for the time being, to our knowledge. This paper is written on the basis of not accepting defeat on this score: it is an attempt to make use of such information as we have, even though it is incomplete.

Dating

An understanding of Holocene climate changes in north Africa, based mainly on archaeological and archaeobotanical data, has been reached by Kröpelin and his co-workers (Kuper and Kröpelin 2006; Kröpelin et al. 2008), and has been helpful in dating, within fairly wide limits, the rock art of the Western Desert of Egypt (Riemer 2009). Broadly the conclusions are that a major climate change resulted in the relatively rapid onset of humid conditions in the eastern Sahara (that is the region of modern Egypt, Sudan, Libya and Chad) around 8500 BCE. This was followed by a gradual desiccation which started in the north of the region around 5300 BCE and moved slowly southwards to reach 22° N (the modern Sudanese frontier) about 2000 BCE. It is still moving south.

This sets fairly precise, although very wide, limits to the date of the rock art. In the case of the Gilf Kebir in southwest Egypt, for example, it indicates that it must have been drawn at some time in the period 8500 – 3000 BCE. Archaeological evidence suggests that cattle were present there from about 6000 BCE but that they may not have been domesticated until later – Riemer suggests around 4400 BCE. Thus rock art representations of wild animals might have been drawn at any time in the humid period but the images of cattle – of which there are many in and near the Gilf Kebir, many in a domestic context, would date from after about 4400 BCE.

It is tempting to apply a similar argument to the Eastern Desert rock art, particularly as there is no reason to expect the climate in the narrow region east of the Nile to have been different, in general, from that of the rest of north-east Africa. However, Kröpelin et al. (2008) show that there were significant local variations from the general trend due to local 'accidents' of hydrology, and there is good reason to believe that the Eastern Desert may be subject to such an 'accident'.

The Eastern Desert is now, and presumably always has been, watered by runoff from the western slopes of the Red Sea mountains. These form a near-continuous chain, most of the peaks of which are over 1000 metres high and several over 2000. As a result they attract precipitation, sometimes in the form of violent thunderstorms which intermittently release flash floods into the wadis of the Eastern Desert. Butzer (2001) suggests that at present these occur once or twice a century, but anecdotal evidence suggests that they are rather more frequent. The result is that although the Eastern Desert receives no more rainfall than the Western, some of its wadis receive rather more water and therefore have more vegetation: only a little more, but enough to support a few domestic animals even now. In the past the overall drying trend would not have been uniform, and some parts of the Eastern Desert would have been able to support cattle for longer than others. It might have been possible, for example, to find summer grazing in some of the more favoured wadis well into the third millennium,

the period of the Egyptian Old Kingdom.

It has been argued that the large wild savannah animals such as elephants and giraffes were displaced from the Eastern Desert around the end of the fourth millennium partly by the desiccation of the climate and partly by human intervention to protect crops (Osborn 1998). There may also have been wild cattle in the Eastern Desert, but they were either domesticated or displaced by domestic stock. The grazing land may have been used by herders for their domesticated animals, possibly in the summer months when the Nile Valley was inundated. This may have been taking place in the fourth millennium and on into the third, although places where it was possible would have become fewer and more isolated as the climate became dryer. It has been suggested that the Old Kingdom was brought to an end around 2200 BCE by severe droughts. These might have marked the end of the pasturing of cattle in the Eastern Desert.

The search for 'meaning'

In principle the most reliable way to determine what rock art meant to the people who drew it is to ask them, or to ask people who understand them, or to consult such records as they may have left (i.e. to use *informed methods* of interpretation in the sense of Taçon and Chippindale 1998). As far as we know the people who were present in the Eastern Desert in the third millennium have left no cultural descendents whom we can consult, but they, or their contemporaries, did leave documentary records in the form of inscriptions on temples and tombs, and many extant papyri. Unfortunately nothing has been found in this literature that has anything to say about the desert rock art. This may be because no explicit search for rock art references has been made, but even so the fact that none of the experienced Egyptologists who have studied the rock art has detected any suggests strongly that there are none, or very few. It would be helpful, no doubt, if a thorough search of the ancient literature were made, but the chances of its finding anything of importance are not great.

There are at present a few inhabitants in the Eastern Desert. The region north of the Wadi Hammamat is the home of the Ma'azi people of the Ma'aza tribe. Hobbs, who lived with them among the Red Sea mountains for two years, reports rock art scenes resembling ibex hunts that he witnessed. He also reports contemporary copying of (ancient) ibex-hunting images (Hobbs 1992: 42, 114), but he says nothing of images of any other animals, and nothing of the meaning to the Ma'azi of the images or the reasons why they portrayed them.

South of Hammamat, the region where most of the rock art under discussion here lies, is where the 'Abadi people of the 'Ababda tribe live (Morrow and Morrow 2002: 237). When Winkler travelled through the Eastern Desert in 1936–37 he was accompanied by an 'Abadi guide (Winkler 1938: viii) who clearly knew about the existence of the rock art but does not seem

to have been consulted about its meaning. Among Western researchers only Červíček seems to have asked a local resident, and in the context of images in the Galt el-Aguz region (to the south of our part of the desert) was told that animals had been drawn 'by a sheikh ... in order to bring real animals to the dry district' (Červíček 1986). His informant was of course a Muslim, as are the 'Abadi and Ma'azi people, and saw the images through Islamic eyes. While it is certainly appropriate to ask the local people their views, and as Hobbs' information shows they can provide insight into what the rock art may be *about*, it seems unlikely that they are able to help to any significant degree with what it *meant* because their culture is different from that of the artists.

We have therefore only Taçon and Chippindale's *formal* methods to help us. We can ask only what the images themselves tell us, by their subject matter, form, style, context or location, about the meaning they had for their originators. Several researchers attempted to do this, but the answers they deduced are, in the main, unconvincing because they approached the rock art with preconceived ideas about what it might have meant. It is no surprise that they were able to find examples of images that coincided with their expectations, but to extrapolate from such successes by concluding that an explanation of all the rock art had been found is not warranted. Le Quellec (2006) likens this approach to that of a man with a bunch of keys attempting to open a series of locked doors. He may find that one of his keys opens a particular door and reveals the treasure — the meaning of that specific rock art image — that is hidden behind it, but he has no reason to expect that it will open the others.

Červíček insisted that the 'religious' key would open all the doors (Červíček 1986: 71–72). He started his evaluation of the Eastern Desert rock art from the explicit premise that all rock art is primarily religious in character. As a result he found religious significance in, for example, the choice of animal species represented ('taboo' species are absent), in the postures of the anthropoid images (they are 'cultic'), and in the preferred locations where large numbers of images are found (they are 'cult' centres). In doing this he had not found the meaning of the rock art because he had assumed the meaning in advance and then selected the evidence to justify his assumption.

Winkler also used the religious key, but much more cautiously. From an observation that at one particular prominent site there are images of two cows, one with a disc between its horns and the other with deformed horns, and of a woman in childbirth, he deduced that the people who drew them had religious beliefs involving cattle (Winkler 1938: 22). Further, he asserted that his Site 18, which is a small cave, was of 'religious importance' because it is crowded with images and because two of the images are of anthropoids wearing what appear to be Pharaonic crowns (*ibid.*: 25, Pls XII.2 and XIV.2). He did not consider any other possibilities,

such as that the cave could be crowded with images because it was favoured as a place in which to seek refuge from the midday sun, for example, or that the crowned images might have had political rather than religious significance.

There are other keys. One is that of shamanism, as proposed by Lewis-Williams (2002). He showed that it might unlock the meaning of certain rock art images in southern Africa and North America. It is, however, ineffective in Egypt. There are very few indications in the ancient literature or among archaeological artefacts that shamanism was ever an important feature of Egyptian life (Morenz 2003). If the shapes which appear as 'entoptic phenomena' seen by a shaman in a trance (such as zigzags, grids or nests of curved or meandering lines) were common in the Eastern Desert this key might work, but they are rare.

It is possible that the 'magic' key explains some of the images, particularly those that appear to refer to hunting activities. They may have to do with the casting of a spell to ensure success in a hunt, or alternatively they might be of a more religious nature, denoting places where hunters prayed for success in the future or gave thanks for success in the past. Because there is no unequivocal indication that this was their purpose, any connection with magic has to be regarded as conjecture.

A key that might be expected to work in Egypt is that of language. Since many of the Egyptian hieroglyphs have the form of representational images — of animals, birds, anthropoids etc. — related images or their precursors might be expected among the rock art. However, there is no indication of standardisation of the animal rock art images, such as would be expected if they were a stage in the development of a hieroglyphic symbol. The possible exception to this is the case of images of ibexes: these are often shown with simple rectangular bodies and exaggerated semi-circular horns, but no indication (from context or location, for example) has been found to indicate that they have a symbolic meaning, and their form is not like that of any of the familiar hieroglyphs. There are several true hieroglyphic inscriptions in the Eastern Desert, notably in the Wadi Hammamat quarries and near the wells at Bir Shallul and Bir Mineh. Darnell (2009) proposes that certain elaborate rock art tableaux in the Western Desert close to the Nile are related to early hieroglyphs, but no such connection has been found in the Eastern Desert.

The hopelessness of the search

Not only has it proved impossible to determine the meaning of either the whole corpus of Eastern Desert rock art or any major subset of it by either informed or formal means, but also there are reasons to expect that many of the images had no meaning at all. While the suggestion that they were doodles, the artist having nothing in particular in mind as he or she drew

them (Watson 2008), probably applies in only a few cases, it seems possible that some were drawn for what today would be called amusement. There seems no reason to assume that there were never people in the Eastern Desert who had time on their hands, who had to while away the hours while they watched over grazing cattle, for example, or waited in hiding for the quarry of their hunt, and who would occupy the time by drawing on the rock.

Many of the Eastern Desert images are simple and could have been drawn easily, quickly and with little forethought. Gauthier and Gauthier (2006) report an instance of a simple camel image being drawn in 10 to 15 minutes. The tools and materials — a patinated rock surface and a hard stone from the ground — are and no doubt always were readily to hand. In economic terms many of the images were very cheap, representing very little physical investment and therefore requiring little mental investment.

That is not to say that all the images are trivialities or meaningless. On the contrary some exhibit considerable skill both in technique of execution and in imagination of form and location. But this in itself raises another difficulty for interpreting meaning, for the skills thus shown must have been learnt. The artists must have practised and, as even a practice image has to be made by removing the patina, it is ineradicable other than by cleaning the patina from the whole area. No instances of rocks cleaned in this way have been identified. Therefore some of the images now extant must be the 'apprentice works' of artists learning or being taught their skills. Moreover, even the best of artists must from time to time have made mistakes: he or she must have started on an image and then found that it did not turn out as intended. The mistake could not be removed: it is still there, confusing the modern observer.

For all of these reasons the search for meaning, the quest to determine what was in the minds of the rock artists, seems quite hopeless. We shall never be able to know with certainty the 'meaning', except possibly in a few cases, of the rock art images of animals in the Eastern Desert. Furthermore in some cases, and we cannot determine which, there was probably no meaning. To Le Quellec's simile about the keys that open some of the doors to meaning might be added the possibility that some of the doors, far from treasure, have nothing behind them at all.

(It should be noted that this conclusion applies, in the author's opinion, to the images of animals but not necessarily to the other images, and in particular not to the 'boats'. They are different, because they are similar, in many cases, to the boats that appear in the decoration of the tombs of the Pharaohs in the Nile Valley, the meaning of which is documented. This provides an *informed method* by which to ascertain the meaning of the rock art boats.)

An alternative to searching for meaning

The difficulty the modern researcher faces can be illustrated by imagining a rock art enthusiast in the distant future examining a petroglyph of a motor car with the date '1942' that he or she has found (and which is to be seen today) in the Wadi Beizah (Figure 2). It would be a laughable error if he or she concluded that it had had semiotic significance or had marked a religious site. We know that it was probably drawn casually, without deep thought, for the amusement of the artist and (probably) his friends.

But that does not mean that the Wadi Beizah motor car could tell the archaeologist of the future nothing. It would reveal for example that there were people in the wadi in 1942, that they had certain technical and artistic skills, and that they knew about and were interested in cars. In a similar way whatever the meaning of the ancient petroglyphs was when they were drawn, and even if they had no meaning at all, they can still give present-day researchers a great deal of information about the people who drew them. This information can be retrieved by means of a series of simple logical deductions leading to conclusions that are based merely on the existence and form of the images, not on any conjecture about their meaning.

What the existence of the images reveals

Rather in the manner of establishing the truth of a mathematical theorem, it is necessary to make an initial assumption with which to start the chain of reasoning. This is an axiom, a proposition that has to be accepted, without proof, as being self-evident. The axiom on which the following conclusions are based is that the images *have to do with what they look like*. This is not to say that the images were representations, but it is to assert that an image that looks to the modern observer like a giraffe had, for the artist, something to do with a giraffe, that the elephant image was connected in some way with an elephant, and so on. From this axiom we proceed by small steps, some of which are very simple, almost to the point of banality.

1. Someone was present to draw the images

The most fundamental deduction is that there were people present in the part of what is now the Eastern Desert where petroglyphs have been found. There is no direct indication of how many people there were, whether they were resident or occasional visitors, or how the population of the region changed with time. The absence of archaeological evidence of widespread settlement suggests that the people were visitors, but the very



Figure 2. 20th century rock art (Wadi Beizah).

large numbers of sites and images suggests that, in the period when animals were being drawn, the visits were frequent.

2. The artists had drawing skills

This in itself is not remarkable because the techniques used are easily acquired. It is not possible to infer that the animal petroglyphs were drawn by Stone Age people, but it suggests that the artists were at home with stone tools.

3. Some, but not all, of the artists had the ability to draw realistic images

Some of the images, of giraffes in particular, are remarkably realistic, while others seem to modern eyes more like cartoons or caricatures, in that the prominent features of the animal are exaggerated (Fig. 3). It is not possible to say with certainty which came first, and indeed both types of image might have been drawn in the same period. There is a little evidence



Figure 3. 'Giraffes' (L – Wadi Mineh; R – Wadi Umm Salam).



Figure 4. 'Elephants' (L – Wadi Hammamat; R – Kanais).

from relative patination to suggest that the caricature giraffe images are older than the realistic ones but no such sequence can be discerned among the images of elephants, cattle or other animals. There is also a little evidence (such as showing animals' horns as if seen from in front) to suggest that the Eastern Desert rock art was connected with the development of the Old Kingdom classical artistic tradition (see Judd 2007).

4. Some of the artists knew about wild savannah animals

The realism of some of the images of giraffes shows that some of the artists were very familiar with the animal, so much so that they must have seen them. The lack of realism of most of the elephant images is more problematic (Fig. 4). Clearly the artists knew about elephants but apparently they did not draw them from life. Most of the images have unrealistic features such as raised ears, elevated tusks, cleft feet or V-shaped trunks. There seem to be two possible explanations: either elephants were not in fact present in the region, so that the artists were relying on descriptions of the animals by travellers from afar who had seen them; or lifelike images were drawn later than the caricatures (either because the artists' skills improved or because fashion changed) and elephants became extinct in the region before giraffes. Remains of elephants and giraffes, dated to around 4000 BCE, have been found in the Western Desert but not the Eastern (Osborn 1998), so either alternative is possible. A third possibility, that



Figure 5. 'Ibexes' (Wadi Mineh).

the elephants date to the Ptolemaic period (when elephants are known to have been imported into Egypt), seems very unlikely because most of the elephant images appear at sites with other animals and with similar patination.

5. The wild-animal artists were interested in large savannah animals but not small

It is noticeable that there are no images of the small mammals that must have been and still are present, such as hares, foxes, hyraxes, mice or gerboas, none of small birds, none of insects, only a few of scorpions and few of snakes (if some indeterminate wavy lines are excluded). Clearly the artists were not attempting to record all the wildlife of their region. It seems very unlikely that they did not notice the smaller creatures. There must therefore have been something to excite their interest specifically in the large animals. Huyge (2002) has suggested that the giraffes had a religious significance as bearers of the sun in its daily movement. This may be correct, but the petroglyphs, by themselves, neither support nor deny this conjecture.

6. The wild-animal artists were especially interested in ibexes, and rather less so in antelopes

There are many images of 'ibexes', more than of any other species. Most of them are 'caricatures' with exaggerated horns and simplified outline, rather than being realistic (Fig. 5). The interest seems therefore to have been different in nature from that in giraffes. The difference may be connected with when the images were drawn, because unlike the savannah animals, ibexes have probably been present in the mountains at all periods down to the present. There are a number of images of antelopes. 'Gerenuks' and 'oryxes' are in general fairly realistic whereas some of the 'addaxes' are 'caricatures' with exaggerated horns (Fig. 6). Addaxes, being animals of the semi-desert, were probably always present until the early 20th century. Thus there seems to be a tendency for imagery to be less realistic after the region became arid and the giraffes, elephants and many of the antelopes disappeared. The animals thought to be wild asses (see Judd 2006b) were also of widespread interest. Many of their images were drawn with precision and therefore may be realistic (although we cannot be certain because we do not know what they were intended to refer to). This, together with the fact that they were sometimes shown as being 'hunted' (see below) suggests that they date to the less arid period.

7. The wild-animal artists showed little interest in predatory animals

There are a few images of 'felines' that

might be leopards or lionesses and only one possible hyena. There is no archaeological evidence that felines were present but it seems most unlikely that they were not, given that there were many antelopes. Lions and leopards are impressive and exciting to modern people and it is hard to imagine that they were not so to the people of the Eastern Desert. But clearly this excitement, assuming it was felt, did not cause the artists to show as much interest in drawing lions as giraffes. There may have been some form of taboo against depicting dangerous animals, or some other reason for not drawing them. This all suggests quite strongly that there was a purpose, a meaning, behind some of the petroglyphs, but gives no indication as to what it was.

8. The wild-animal artists were predominantly interested in drawing animals that were present in the locality

There are fewer images of animals that could not have survived in desert, semi-desert or savannah environments. These exceptions are the hippopotamuses and crocodiles. It seems unlikely that the region ever had enough large expanses of permanent water for these animals to have been resident (although of course they were plentiful in the River Nile). The presence and frequency of the images may be another indication of a purpose in the minds of at least some of the artists relating to some special significance the animals had, but that is by no means certain: it might record only the fancy of some herdsmen to recall the remarkable things they had seen when they visited the river bank. The absence of any images of rhinoceroses presumably indicates that these animals never inhabited the region. There is no archaeological evidence of them.

9. Some of the wild-animal artists appear to have been interested in hunting and trapping

There are several images that appear to represent hunting. In most cases the quarryies are 'ibexes', 'ostriches' or 'wild asses', less frequently 'oryxes' or other 'antelopes' (Fig. 7). The hunters are shown using 'bows' and accompanied by 'dogs'. Some animals are shown as having been caught in 'traps' (or possibly having been tethered). The presence of dogs as well as archers suggests that it is hunting, rather than ritual or symbolic killing, that is the interest of the artists.

10. Some artists were very interested in cattle, but not in sheep or goats

It is not possible to say for certain whether the cattle were drawn in the same period or by the same people as the 'wild animals'. However, since cattle, either wild or domesticated, would have been present

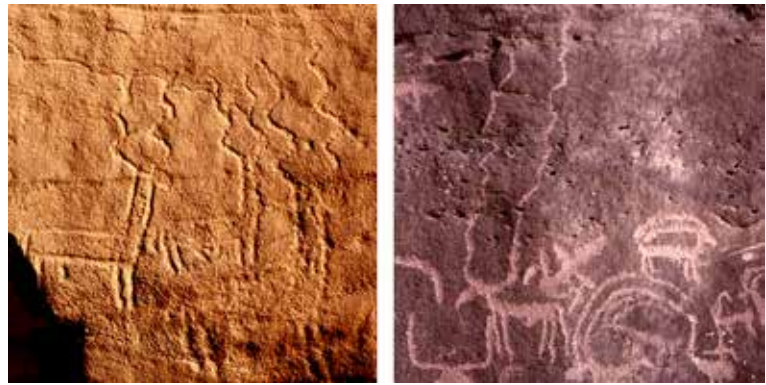


Figure 6. 'Addaxes' (L – Wadi Barramiya; R – Wadi Muweilhat).

only when pasture was available drawings of cattle and giraffes, for example, might have been contemporaneous. The large numbers of cattle images show clearly that cattle were of great importance. The almost complete absence of images of sheep and goats (unless some of the images that have been assumed to be ibexes are really goats) is surprising. It might imply that the petroglyphs refer only to wild animals and that there were no wild sheep, or that there were no domesticated sheep in the region, or that there was some reason for people to draw images of their cattle in preference to their sheep. The first possibility seems very unlikely because some of the cattle images refer clearly to some form of domestication (see below), and the second is also rather unlikely in view of the fact that even in today's arid conditions domestic sheep are still to be found in the Eastern Desert. Thus we have to conclude that there was some reason for drawing cattle beyond their mere presence, whether they were wild or domestic.



Figure 7. 'Ibex hunt' (Wadi Mineh).

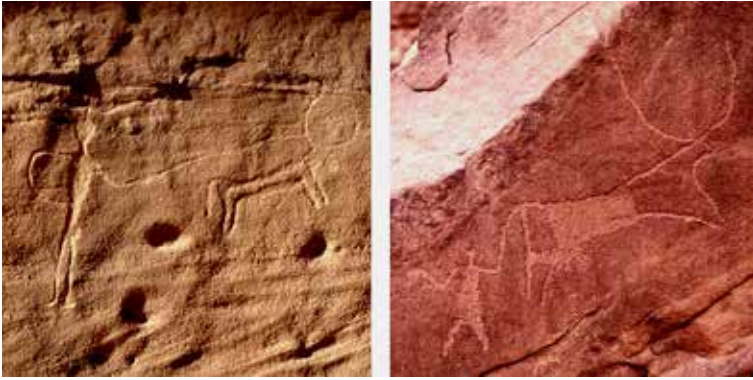


Figure 8. 'Cattle' (L – Wadi Muweilhat; R – Wadi Sha'it).

11. *Some of the interest in cattle related to a form of domestication*

Some of the images of cattle show the animals in close relationships with humans that suggest that they were domesticated, at least in some degree. There are twenty-six images that show a bovid joined to an anthropoid by what appears to be a rope attached to its horns and five images showing an anthropoid apparently grasping the tail of a bovid (Fig. 8). In addition there are eight of a bovid with some sort of artificial 'structure' on its back (Fig. 9). These images indicate close contact with people and therefore some degree of domestication involving ownership. The attention paid to the markings of some of the cattle, and the possible scenes of herds, tend also to suggest ownership. However, there is at least one image of cattle apparently being hunted so it cannot be concluded that all the cattle images are of domestic animals.

12. *The artists of the Eastern Desert knew each other's work*

Similar images can be found all over the Eastern Desert. The 'ibexes' are the most obvious example, but also the 'elephants with raised ears', the 'wild asses' with their 'manes', the 'cattle' with girth bands and the 'addaxes' with exaggerated horns indicate that people travelled throughout the region so that artists were able to see images in one location and

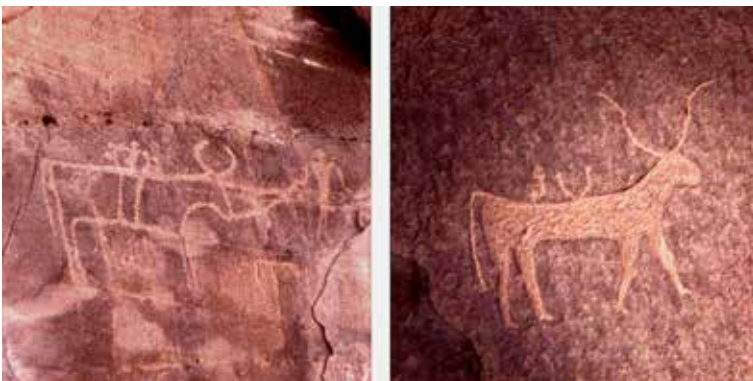


Figure 9. 'Cattle bearing structures' (L – Wadi Muweilhat; R – Wadi Sha'it).

reproduce them in another. There is, however, evidence from close similarities of style that individual artists did much of their work in or near specific locations, presumably where they resided or visited habitually. These observations give the impression that the area was occupied by a series of small communities that were self-contained but shared a common culture.

Summary: what we can be sure of

The final conclusion about meaning is that the animal petroglyphs must have had some sort of significance for the artists and their communities but that we have no means of knowing for certain what it was.

Even though we can be certain of little or nothing about their meaning, however, the presence and form of the petroglyphs tell us an amount, detailed in the above twelve propositions, about the people who drew them and their societies. They show us that at some time before the end of the third millennium the valleys in what is now the Eastern Desert supported a flora similar to the present-day savannahs of East Africa, which in turn supported herds of giraffes, antelopes of various species, flocks of ostriches and probably elephants. The region was frequented by people who hunted ibexes, oryxes, wild asses, ostriches and other animals using bows and dogs, and also trapped them. We do not know whether they lived in the region or visited it on hunting trips from homes by the Nile. They took a great interest in some of the animals, especially the giraffes, but we do not know the nature of the interest.

During the periods of hunting and pastoralism different wadis were frequented or inhabited by separate groups of people. They were in touch with the other groups in the region and there was a certain amount of travel between them.

Probably towards the end of the fourth millennium cattle became important. Initially wild cattle were hunted but in due course cattle were domesticated. We do not know whether the herds were kept all the year round in the valleys that are now the wadis or whether their owners practised a form of transhumance, wintering their animals by the Nile and moving them to summer pasture in the wadis at the time of the inundation. Possibly both were done in different periods or different localities. The practice may have persisted until the climate finally became too dry, possibly towards the end of the third millennium.

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