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Rock art in Wadi Gorgod in the Western Third Cataract Region

Introduction

On 8 February 2016 and 29 December 2016 the Joint Sudanese Expedition (ISE) to the Western Third Cataract Region conducted a short survey in the area of Wadi Gorgod³. The aim of the project was to carry out an archaeological prospection in the wadi situated on the western bank of the Nile in the northern part of the Third Cataract region. A special attention was paid to palaeo-environmental data (e.g. palaeochannels) and prehistoric archaeological record, for instance the extensively distributed tethering stones (Hamdeen 2017), dated from the Holocene period. However, in the course of the fieldwork it appeared that the most abundant archaeological remains comprise petroglyphs, spread across a vast area. This was not a surprise, as rock art from this area had been reported and the findings - published before (see below). Nevertheless, this reconnaissance mission confirmed that Wadi Gorgod is a very rich rock art complex which requires comprehensive fieldwork and study in the future. In this article we would like to briefly outline the results of the prospection and share some basic information regarding both the already known and newly discovered petroglyphs from Wadi Gorgod.

Previous research

Petroglyphs in Wadi Gorgod were first briefly studied by the Italian mission of University of Pisa in the

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early 60's of the 20th century (Schiff Giorgini 1966; Schiff Giorgini, Robichon & Leclant 1971: 776-780). The expedition, directed by Michela Schiff Giorgini, had worked mainly in Sedeinga and Soleb, and a discovery of rock art in Wadi Gorgod should be treated as an additional outcome of the archaeological prospection. Basing upon this research, Léone Allard-Huard (in cooperation with Jean Leclant) begun her fieldwork which lasted from 1979 to 1985. This one-person extensive survey has been the most thorough to date, and has resulted in a number of publications issued across the years (e.g. Allard-Huard 1980; 1982; 1983; 1985; 1993; 2000; 2011; see also Huard & Allard 1977⁴). The results of this research, however, have been published in a specific way, for the Gorgod material, as featured in the books (Allard-Huard 1993; 2000; 2011), is largely mixed with other types of rock art from Egypt and the Sahara, being presented and discussed mainly from a typological and comparative perspective. In other words, the publications do not give us a clear view on the petroglyphic repertoire of Wadi Gorgod - its full content and distribution - as it is displayed selectively, and combined with other non-local elements. Of course, they still remain a valuable source, if only because of the large illustrative content.

Jean Leclant mentions activities in the Gorgod region undertaken by the Sedeinga Archaeological Unit (SEDAU) in 1991 and 1999 (Leclant & Clerc 1993; Leclant & Minault-Gout 2001). They would comprise photographic documentation and taking GPS coordinates of selected rock art sites. To the best of our knowledge, these works were not published. The Gorgod rock art sites were also briefly explored by the Mahas Survey Project directed by Ali Osman and David Edwards (2012: 287-8). They re-visited certain areas and re-located the main rock art clusters as defined by Allard-Huard. They note, however, that systematic fieldwork in this region is needed.

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³ The research was directed by Hamad Mohamed Hamdeen from El Neelian University. It was a joint expedition of the Department of Archaeology of University of El Neelian and the Department of Archaeology of University of Khartoum. The survey was done as a part of the Hamad Mohamad Hamdeen PhD research in the western Third Cataract Region.

⁴ For very brief notes on fieldwork and publications concerning Wadi Gorgod rock art see Jean Leclant's *Fouilles et travaux en Égypte et au Soudan* in the journal Orientalia of the years 1963, 1966, 1968, 1971, 1972, 1973, 1979, 1982a, 1982b, 1984, 1986, 1987, 1993, 1994, 1995, 2001.



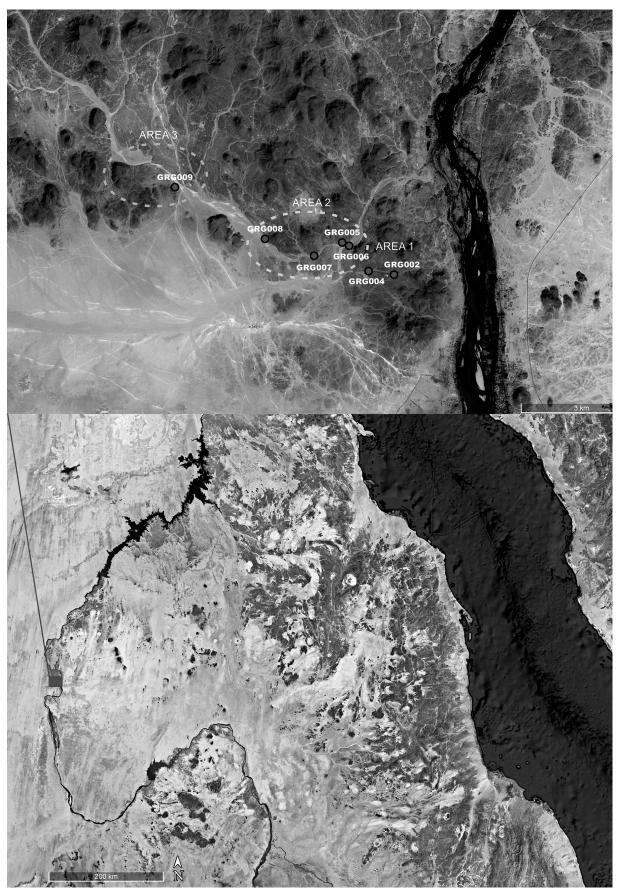


Fig. 1: Satellite imagery (Google Earth Pro) with indication of rock art clusters (numbering of sites by the Joint Sudanese Expedition).



The survey conducted by the Joint Sudanese Expedition was focused on the wadi itself and involved fieldwork in its three sections (fig. 1). These areas of prospection can be cautiously equated with Allard-Huard's A and B zones, although without a precise range and coordinates of the latter this remains uncertain. Moreover, the A-B zones are probably much larger, while the three investigated areas cover only some parts within their boundaries.

GENERAL INFORMATION

The Sudanese expedition registered seven rock art sites. Each site is actually a cluster of (in majority) flat rocks covered with petroglyphs, and can be fairly extensive. Because the nature of the mission was mainly exploratory and its main goal was to assess the archaeological potential of the area, just the basic activities were undertaken⁵. Coordinates of the relevant sites were obtained, leaving certain boulders/rocks unmapped. All recognised panels were photographed, but no tracings were made at the time. So far, only a small part of this vast region has been explored, thus it is clear that any potential future research must involve large-scale activities, if one wants to map and document all the rock art localities precisely. Today the archaeological remains in the area of Wadi Gorgod are also particularly endangered, as some of the rock art panels have been already destroyed by numerous gold diggers operating in this region. Hence inevitably, such a future research project would have to act also as a rescue mission.

Among the seven rock art scatters ("sites" 2, 4, 5-9), at least 199 surfaces with petroglyphs were noted. The majority of them can be considered as horizontal, although still many are more or less inclined – in addition to some rare vertically oriented panels. Hence, in the area of Wadi Gorgod one rather deals with an open landscape full of fairly flat rock scatters, where petroglyphs are not particularly well

visible from a distance. Instead, they continuously emerge as one traverses the area. During the survey, the Sudanese team focused on documenting both banks of a dry wadi bed, particularly its northern shores. They, however, did not explore the areas well away from the banks or higher elevations, such as Gebel Gorgod.

In Wadi Gorgod we are not dealing with a homogenous rock art assemblage, as can be seen also in other Nubian petroglyphic complexes. It seems that all major stages of Nubian history are represented here – from the prehistoric era to the fairly recent times. The majority of depictions can perhaps be situated in a time frame encompassing the Kerma/dynastic period until the Roman and Islamic periods, although at this stage of the research any chronological assessments must remain inconclusive.

The petroglyphs are varnished variously and for the purpose of the article, we decided to follow a scale established by Allard-Huard (1993: 85), in which she differentiates between degrees of complete "patination" (P5) and "very lightly patinated" figures (P1). The rest of the intermediary degrees comprise "lightly" (P2), "fairly" (P3), and "heavily" (P4) varnished petroglyphs. However, it is important to note that even though we have adopted the scale, in practice we had to define intensity of each varnish degree, as Allard-Huard did not provide a visual reference to her classification, but only a textual one. Moreover, we have evaluated varnish based upon a collection of photographs (not during the fieldwork). This means that our indications can be additionally biased due to the quality of pictures, lighting conditions, or (post-)processing of photographs. Analyses can be also hindered because of sand accumulated in petroglyphs, particularly in the pecked ones, often masking the true tone of varnish. Although we still find it helpful, we are fully aware that any inferences about chronology based on varnish evaluation can be tricky⁷, which was already noted by Allard-Huard.

In the following section, we would like to characterise separately the repertoires of all seven sites by providing general remarks and presenting individual figures which in our opinion might have a special value (e.g. because they are unique or very well pre-

⁵ In the course of the survey, besides rock art, various archaeological sites were recorded, for instance: [GRG001] a Palaeolithic workshop containing an Acheulean handaxe, Levallois and Mousterian points, and a small stone structure; [GRG003] with a wadi wall (80x30x70 cm); [GRG010] with another wadi wall (80x30x80 cm); a scatter of Christian pottery sherds in the Area 1. On dry-stone wadi walls (linear stone structures built along wadi beds or on slopes) see Osman and Edwards 2012; Tahir and Sadig 2014. Although these structures belong to the frequently encountered archaeological features in the Third Cataract region, their dating is uncertain, as artefacts are found rarely in a direct association with them.

⁶ Allard-Huard uses a term "patination"; we prefer to use "varnish" instead.

⁷ She refers to examples of petroglyphs which should be similarly dated (such as camels) but which are varnished in highly different ways. This is usually caused by a number of reasons, including exposition to light and other environmental factors. According to Allard-Huard (1993: 85), this makes rock art varnish (including the Gorgod petroglyphs) evaluation a difficult task.



served and/or executed). We finish in the last part with a discussion on the most representative types of rock art from Wadi Gorgod, and on possibilities and aims of future research.

SURVEYED ROCK ART SITES

SITE 2

Site 2 comprises 28 rock art surfaces, all of them placed horizontally. These are either loose boulders, or small flat rock outcrops. Most of the rocks have a dark blueish colour, that is why even the heavily varnished petroglyphs are fairly readable.

The site is clearly dominated by cattle depictions of which 18 specimens were counted. Most of them (n=15) have typical features of the so-called "early cattle" (having consistent body shapes, variously shaped horns, body markings, and sometimes pendants hanging from their necks, as defined by Kleinitz 2012: 36-8), and among them at least eight seem to be fully varnished, while the rest either heavily, or fairly "patinated". One of the cattle depictions is juxtaposed with what resembles a tethering stone (fig. 2), which is all the more possible, as many of such stones were discovered in the area. Among the cattle depictions at least one shares traits with the "younger cattle" category (Kleinitz 2012: 319, pl. 9.2). It has a rectangular shape, a muzzle and a neck indicated, but it is heavily/fairly varnished. We counted also nine undetermined quadrupeds and a canid, all heavily or completely varnished. To this we can add a pecked (P5) anthropomorph with long bent arms, and two other human figures (P3). They are accompanied by the only camel rider depiction on site 2.

Two sandal images were found as well, both pecked in outline and completely varnished. More recent are probably the five circles with rays (P4/P3), having from four to nine radiating strokes (similar are known, for instance, from Sherari island, see Näser 2007: 129, fig. 4). This diverse corpus is completed with a Christian monogram of Archangel Michael (of the type very similar to the owner's graffito no. 2 in fig. 237 in Adams 1986: 385).

SITE 4

This site consists of 55 horizontal rock art surfaces. Most of the rocks are varnished to a blue/grey colour, but some have been subsequently eroded to such an extent that a crust on them has largely exfoliated. In this area some of the potentially oldest petroglyphs in Wadi Gorgod are located.

To such motifs belong the pecked and very weathered oval petroglyphs. Two of them are outlined, but the majority are of the cup-mark type, being arranged as to form two parallel rows and a pseudospiral motif. Besides, one spiral/concentric circles motif was found, as well as at least three concentric arches (on two panels). This geometric assemblage is complemented by meandering lines whose quantity is difficult to establish, because a panel which contains them is also covered with more recent pictures. Moreover, some of the meanders seem to have been re-pecked. Except for this, all these petroglyphs are completely varnished and highly weathered.

On site 4, however, zoomorphic petroglyphs prevail. We counted four depictions of giraffes: three pecked and one engraved, all heavily/completely varnished. They are produced in outline and in a rather schematic manner. Long necks, ossicones and ears are the only characteristic features of these images. They are supplemented with a possible depiction of an oryx antelope and a gazelle. There is also a group of animals difficult to identify: nine completely/heavily varnished, six more angular (P3), and nine fairly young undetermined zoomorphs (including four with riders). One unidentified animal is chased by three dogs in a very dynamic position. They are engraved in a characteristic style specific to this area (see further below).

Clearly, the most represented species is cattle with 26 specimens. Usually depicted in isolation, or seldom in groups of two to three, all except six belong to the "older cattle" category. Most of them are completely/heavily varnished and some are so worn that they have partially disappeared. The remaining cattle depictions are younger and each was executed in an individual manner. In general, they are more schematic and angular in appearance.

This area contained only one depiction of an ostrich, apparently recent (P2), unless it had been repecked at a later stage (published by Allard-Huard 1993: 135, fig. 36.4). The younger rock art horizon comprises also six images of camels (P3/P2). Three of them are straddled by riders, whereas the other two seem to be led by lead rope by anthropomorphs. On a panel with one of the riders, there are two more human figures accompanied by at least four dogs. They are all lightly varnished.

Among the ten anthropomorphic figures we should mention four depictions in particular. They are all finely pecked. These human figures have very simplified bodies, rendered in a rather unrealistic manner, but what differentiates them from other anthropomorphs are weapons that they bear in hands. Each warrior holds a spear/javelin tipped with





Fig. 2: A heavily varnished cattle depiction juxtaposed with a possible image of a tethering stone (Site 2). Upper left: a tethering stone from Wadi Gorgod. Photo: H.M. Hamdeen.

a long triangular point, while in the other hand they wield a large and characteristic "bipartite" shield (resembling the shape of a conifer). They are all lightly varnished (mostly P2). As there are more such figures on other sites, we will come back to this motif in the final section.

Finally, the site's repertoire contains six sandal depictions (four heavy and two lightly varnished), two pecked rectangles (P3) which perhaps also depict sandals, and two offering tables (P3 or P4) (fig. 4)one inserted into the other (alternatively, they represent one altar; cf. similar example in Váhala & Červíček 1999: Taf. 52.204). To this we have to add three depictions of boats (only one of them published in Allard-Huard 2000: 397, fig. 215.3). The one which is the most varnished (completely), a sickle-shaped boat with a steering oar and a central cabin (fig. 3), is most probably of the New Kingdom date, as some parallels might indicate (e.g. Vincentelli 1999: 39, pl. XIX). The other two look slightly younger: one has a complex rigging, while the other consist only of a hull and perhaps a steering oar.

SITE 5

Site 5 is another flat rocky area, containing at least 35 rock art surfaces. Both rocks and the majority of petroglyphs are here heavily or even completely varnished.

Two panels are covered with curvilinear motifs, including a spiral and, twice, a concentric circles motif. They are very worn and were subsequently superimposed with other motifs. The large panel with a spiral and concentric circles contains also other "abstract" designs, perhaps meandering lines, but they are all hardly readable. On two other panels some small cupulae with visible peck-marks were noted. In one case they are arranged into five parallel rows, in the other they do not show a pattern.

Six depictions of giraffes were registered, each showing different stylistic traits. One shares space with a sandal, both being heavily varnished. The animal is executed in a similar style to "older cattle" and finds a good parallel in the 4th Cataract region rock art(*cf.* Kleinitz 2012: 39, fig. 11). There are three more



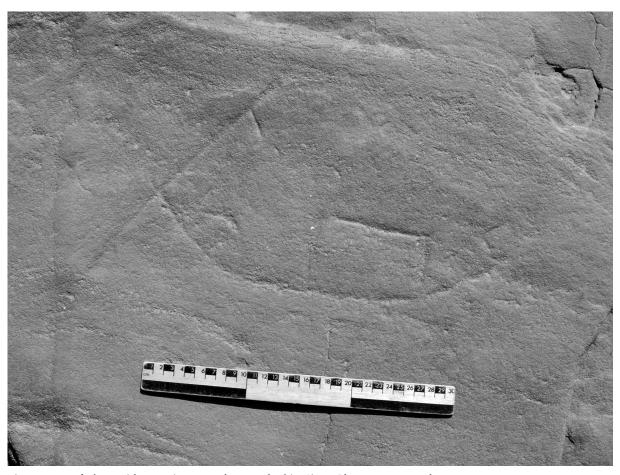


Fig. 3: Image of a boat with a steering oar and a central cabin. Site 4. Photo: H.M. Hamdeen.



Fig. 4: Two offering table motifs of different sizes. Site 4. Photo: H.M. Hamdeen.



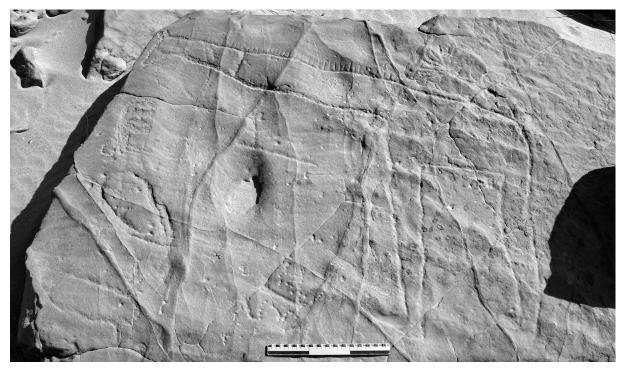


Fig. 5: A large pecked giraffe depicted in outline. It has an unnaturally long neck with short erect mane hair. Its tail is raised and highly exaggerated in size. Site 5. Photo: H.M. Hamdeen.

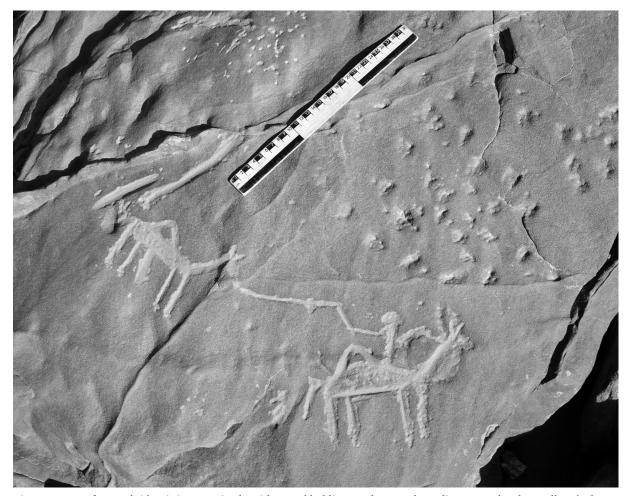


Fig. 6: A scene of a camel rider sitting on animal's withers and holding another camel on a line. Note also the small pecked cupmarks, doubtlessly much older than camels. Site 5. Photo: H.M. Hamdeen.



similar specimens, albeit one of them is fully pecked en creux and the other outlined but with sparsely distributed peck-marks. One giraffe is a fully pecked stick-like zoomorph – angular in shape and with an extremely long neck. It is juxtaposed with other quadrupeds, sandals and an anthropomorph, and they are all fairly varnished. Finally, a large onemeter giraffe pecked in outline has a raised tail ended with radiating hairs (fig. 5). It has a rectangular body, a very long neck, and its mane is indicated by a row of short erect strokes.

One possible oryx antelope and an ibex, both pecked and fully varnished, were registered as well. A scene of a dog hunting a gazelle also deserves mentioning. The animals are engraved and completely varnished. We counted 35 cattle images of which at least 22 refer to the "older" type. The latter are, as usual, heavily and completely "patinated". Many zoomorphs, however, prove difficult to identify (n=19), and although there is a good chance that many images also depict cattle, some definite features are lacking.

A relatively large number of sandals were registered on site 5 (n=18). Most of them are varnished either completely, or heavily. A panel with three sandals contains also 22 strokes carved at the edge of rock. Similar parallel short engravings are juxtaposed with a giraffe image.

More recent depictions can be limited to two camels, three camel riders, a horse rider, and an ostrich. In one scene a camel rider leads another camel on a leash (fig. 6). They are lightly "patinated". There are not many anthropomorphs in this assemblage. Except for riders, there is only one warrior figure wielding an oval shield and a weapon, and another anthropomorph involved in a scene with camels.

SITE 6

A substantial part of the 26 rock art surfaces documented on site 6 is heavily eroded and often exfoliated. The rocks have thus a more yellowish/brownish tone. Many petroglyphs seem to look younger than they probably are in reality, and any evaluation of their chronology based exclusively on varnish is particularly tricky here.

Although curvilinear rock art is present on the site, four pecked spirals and a spiral consisting of cup-marks are only lightly patinated. This means that they were either closely re-pecked (possible, but unlikely), or they are later imitations. On one of the panels they co-occur with a very simple human figure and a zoomorph, and one gets the impression of their more recent dating.

We have noted only seven "older cattle" depictions, varnished fairly or heavily, and three slightly rectangular bovids, similarly coloured. There are, however, at least 20 zoomorphic figures (some completely varnished) that we cannot identify at the moment. Wild fauna is represented by two depictions of giraffes (P4 and P3) (one in the manner of "older" cattle), two antelopes (P4), and two elephants (P3). The latter were produced in a very specific style, more naturalistic, with characteristically rendered ears (one pointed up, the other turned down; published in Allard-Huard 1993: 86, fig. 10.6). Both elephants are pecked in outline, and they are juxtaposed with six winged sandals – all in a similar state of preservation. There are also two depictions of ostriches and a dog, certainly more recent, as they accompany camel riders (P3).

One panel contains figures of six horses, all pecked in a stylized, angular manner. Their recognition is facilitated mainly by the properly rendered shapes of the heads. In a few places camels were encountered. Five specimens (P3, P2) do not have a rider, and another seven are being ridden (P3, P2). Particularly vivid is a scene showing a caravan consisting of three beasts of burden and four anthropomorphs, including a camel rider (fig. 7). Some of the "dromedarii" are equipped with weapons (e.g. javelins) and they seat on the withers of camels (in two instances there is an additional rider on the back of a camel).

Among 14 human figures (varied stylistically) spread among several panels, the main group consists of the fully pecked warriors wielding "bipartite" shields and large spears (and other unidentified weapons). They are accompanied by camel riders, also armed. The figures are known from other Gorgod sites and are also comparable to findings elsewhere in Nubia (e.g. Kleinitz 2008: 99, fig. 5A, D).

SITE 7

This site consists mainly of large slab-like flat boulders varnished to a dark blue colour. There are 18 surfaces covered with petroglyphs, mostly heavily or completely "patinated".

Some of the most interesting figures are distributed among several adjoining horizontal panels. We find there a complex network of meandering lines (P5), partially re-pecked(?) at a later stage. It is difficult to assess how many lines are visible, as they create a confusing wiggly mesh. They are accompanied by a pecked figure of a hippopotamus (P3) and a cattle image (P5?) of an "older" type. The neighbouring panels contain also two giraffes pecked in outline, and four sandals (three engraved, one pecked – all



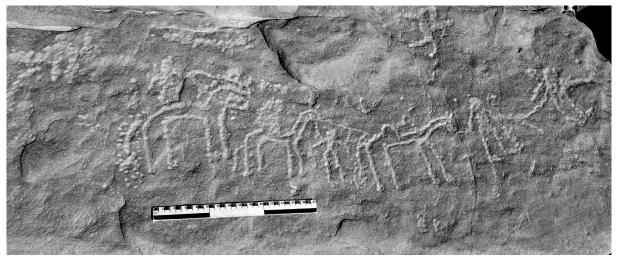


Fig. 7: A scene of a caravan of camels and anthropomorphs. All figures are heavily patinated. Site 6: Photo: H.M. Hamdeen.

with side-straps). Almost all of the mentioned figures have peck-marks which are completely/heavily varnished, and much lighter (P3) ones, possibly indicating an event(s) of re-working of those petroglyphs.

There are altogether 20 sandal depictions which makes them one of the largest concentrations of these in the surveyed area. They are all similar, representing a type of sandal with side-straps usually pointed forward, but also backwards. Many of them are completely varnished. Two sandals are directly associated with two giraffes, one being superimposed upon an animal figure.

What may be surprising is that cattle is not frequently spotted on site 7 panels. Only eight specimens can be ascribed to the "older" type, and further six display more idiosyncratic stylistic features, although the degree of varnishing is usually only slightly lesser. Another ten quadrupeds remain undetermined, while another five figures most probably depict gazelles (fig. 8) and antelopes(?). Finally, only three anthropomorphs were registered: one fully pecked, and two engraved in outline. The former is completely varnished and presents a person with a curl on his/her head, wielding something in his hand (a stick?), whereas the latter two have triangular torsos, oval pecked heads, and limbs depicted as straight lines. They are also completely varnished.

SITE 8

Only four surfaces belong to this site. All except one are located on higher boulders and are slightly inclined. Both the rocks and the petroglyphs (excluding one figure) are completely varnished.

The only easily recognisable motifs are one "older cattle" image and a sandal depiction (fig. 9). The animal is executed in outline, but both carving and

pecking must have been employed to produce it. The sandal was pecked in outline and looks very worn. It is juxtaposed with an unidentified engraved motif, partly damaged. The rest of the figures comprise a fully pecked and completely varnished zoomorph – perhaps another cattle – and an animal resembling a warthog.

SITE 9

On this site some of the most spectacular petroglyphs were noted. They are clustered among 33 rock art surfaces, mostly horizontal ones, but some vertical as well. Rock varnish is well developed in this area, and apparently the environmental factors have not had caused too much damage to petroglyphs, as they are in a fairly good condition despite their various age.

Here a prevailing motif is cattle. Among 44 depictions, around 40 share features of the classic "older cattle", although not without some reservations. Nevertheless, many – even though similarly "patinated" – have some unusual traits, such as an indication of hooves and all four legs depicted separately. Some are also more angular than the "classic" ones, although they all seem to belong to the same cultural tradition. We noticed eight giraffe figures: mostly resembling the style of the "older" cattle, but one is particularly different, as it is very disproportionate and their body and neck is filled with perpendicular strokes (in Leclant 1973: pl. XXXIII fig. 51).

Two scenes are of particular interest. They present hunting dogs leaping at a chased animal. In the first instance it is a giraffe which is attacked by at least three canids (in Allard-Huard 1993: 108, fig. 23.5). The giraffe has an upturned tail, indicating a threat. The dogs, stretched out maximally, jump at a victim



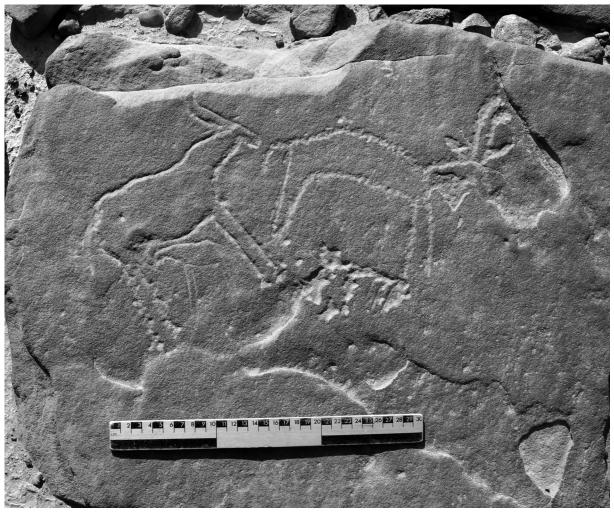


Fig. 8: Two pecked gazelles. Site 7. Photo: H.M. Hamdeen.

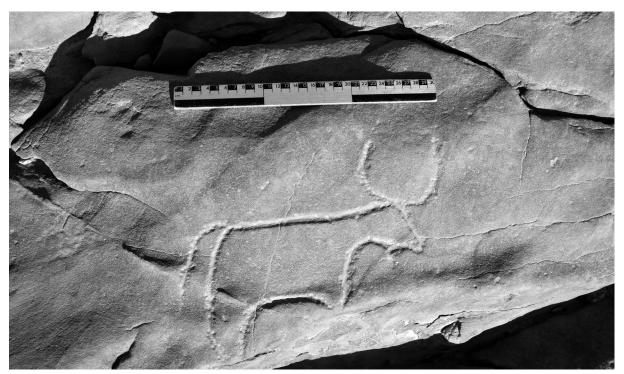


Fig. 9: A typical "Middle-Nubian" cattle depiction. Site 8. Photo: H.M. Hamdeen.



in an apparent fury. An analogical scene involves a beautifully executed gazelle also chased by three dogs (in Schiff Giorgini 1966: pl. XXXV; Allard-Huard 1993: 122 fig. 29.5). All figures are carved and completely varnished.

The list of zoomorphs can be supplemented by two undetermined antelopes, two ostriches, a crocodile, an elephant, and possible five horses, including four with riders. The latter probably represent the most recent rock art horizon on this site, if varnish is to be trusted. Further, four sandals, comparable with those from other Gorgod sites, were registered. Three other geometric petroglyphs were interpreted by Allard-Huard (1993: 146, 149, fig. 41.7) as wheel-traps. They consist of an oval with radiating strokes, which is filled in with a double-lined cross.

Finally, at least 20 anthropomorphs were found within this rock art scatter. The group comprises: one simple fully pecked figure associated with a herd of cattle, a similar figure with a bow, 12 rather stick-like specimens pecked in outline, a fully pecked warrior with a sword(?)

and an oval shield (juxtaposed with wheel-traps), two (pre?)dynastic figures, two stick-like bowmen (fairly "patinated"), and a unique depiction of a man(?) with a stave (fig. 10). The latter is more than 30 cm high and it was pecked in outline. The man's torso is a bit elongated and rounded, while the head is topped with three appendages. One arm is bent and the other holds a long stick ended with an oval element. The feet are indicated as well.

Remarks on the selected issues

The material collected by the Sudanese expedition allows us to conclude that each of the seven rock art clusters differs to some extent, when it comes to its repertoire of petroglyphic motifs and their numbers. As an example, site 7 provides a substantial number



Fig. 10: A unique anthropomorphic figure found on site 9. It has an elongated oval torso, head with three(?) protrusions pointed up, and a stave ended with an oval-shaped element. Site 9. Photo: H.M. Hamdeen.

of sandal depictions, while site 9 is dominated by anthropomorphs. Only in some localities the oldest(?) curvilinear rock art is to be found (site 4, 5, 7), and, likewise, there are areas where more recent petroglyphs, such as camels, are virtually absent (site 8, 9). Of course, such an uneven distribution of rock art motifs results, at least to certain extent, from a very restricted area subjected to survey, and from an arbitrary delineation of sites' boundaries. Nevertheless, it should be also considered as an outcome of deliberate choices of rock art artists in the past. If we want to provide some more reliable information regarding rock art landscape, a large-scale research would have to be developed, as the collected (and published) material apparently constitutes only a small sample of the rock art in Wadi Gorgod, and is not really sufficient for conducting any spatial analyses.



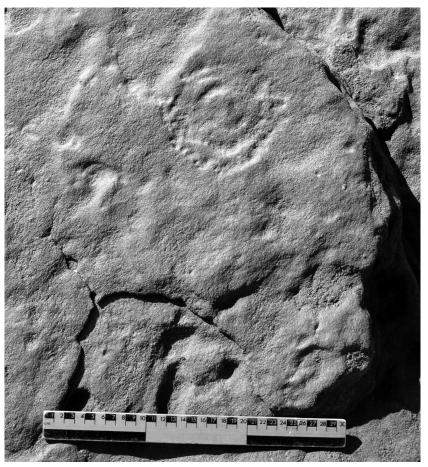


Fig. 11: One of the potentially oldest petroglyphs in Wadi Gorgod – a spiral or concentric circles. Site 4. Photo: H.M. Hamdeen.

The documented petroglyphs allow us, however, to say more about their formal traits and condition. Allard-Huard (1993: 129) noted several times that "patina" can be of a small value in evaluating chronology of rock pictures on the Third Cataract. Our initial observations of the collected material seem to confirm this statement. Except for some "obvious" cases, such as a formal comparison of curvilinear motifs with much later camel or horses depictions, varnishing does not provide a strong evidence which would enable us to construct reliable indirect sequencing for the region. Although there is a strong variability of motifs, one gets the impression that the majority of petroglyphs are weathered and varnished in a similar way. We deal also with confusing situations when petroglyphs of the same type (e.g. cattle or spirals) occur as varnished to a much different degree. Should this be interpreted as proof of long utilization of certain motifs? Or, does it result, rather, from different efficiency of environmental factors which affect distinctly exposed surfaces? Perhaps some petroglyphs depicting similar subjects, but differing in varnish cover, should be treated as a "model and imitation" phenomenon.

Doubtless, it is often a mixture of several factors that influences the condition and appearance of rock art. The collected data is too meagre, however, to allow for a more sophisticated analysis of varnish/chronology relationship – that requires a future study.

Instead we would like to share some remarks regarding several motifs occurring in Wadi Gorgod. They can be considered as representative for this region and belong to the most frequently encountered petroglyphs.

Curvilinear rock art

This rock art type deserves a separate entry, as it is possible that it belongs to the oldest petroglyphic tradition in this part of the Nile Valley. Moreover, similar designs are not known from many areas, so the Wadi Gorgod assemblage takes on importance as another small complex with geometric rock art.

The most characteristic elements of this tradition are: spirals, concentric arches and circles, meandering lines, net patterns, and other geometric designs (e.g. ovals). In the surveyed area five spirals/concentric circles (often difficult to tell apart) (fig. 11), three concentric arches (fig. 12), two ovals, and an undetermined number of meandering lines (at least three), were encountered (we exclude here the specimens with light varnish which also occur). They are all pecked, completely varnished, and their peckmarks are often smooth due to a long-lasting weathering processes. In Wadi Gorgod all of them are placed horizontally. Allard-Huard (1993: 148-164) found many more examples of curvilinear rock art in this region, which makes this area exceptionally important for prehistoric rock art research in the Nile Valley.

Similar petroglyphs in Sudan have been found in Abka (Myers 1958: 136, fig. 3; Hellström & Langballe 1970: corpus X), Nag Kolorodna (Almagro Basch & Almagro Gorbea 1968: 102-3), and also farther to the west in Wadi Howar (Kröpelin 2004: 113, figs. 6-8). We also know these petroglyphs from Egypt, where they have been discovered in the area



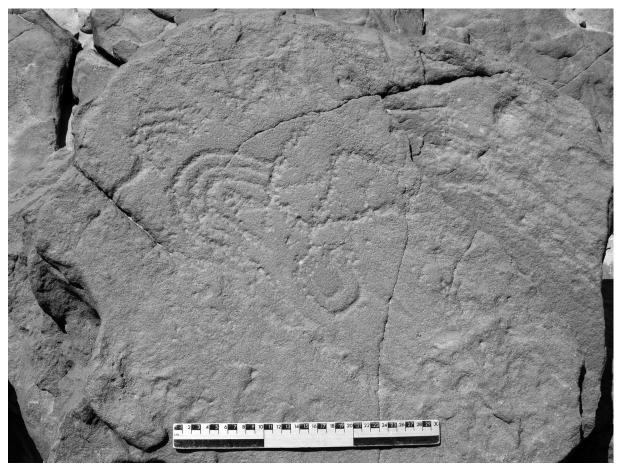


Fig. 12: Concentric arches and other undetermined pecked images. All figures are completely varnished and highly weathered. Site 4. Photo: H.M. Hamdeen.

of Aswan (Storemyr 2009) and el-Hosh (Huyge 2009). They are considered to be a product of Epi-Palaeolithic hunter-gatherers, and if we consider the state of preservation of Gorgod specimens, such a chronology cannot be ruled out.

Hunting dogs

Allard-Huard published a large number of scenes showing dogs chasing various animals, which she had found in Gorgod area (Allard-Huard 1993: 106-130). They constitute a very homogenous repertory, regarding both subject-matter and stylistic traits. Dogs are usually depicted with slender bodies, long snouts, and erect ears. They are shown as running or even leaping at prey animals. In most cases they attack in packs, a lone hunt is seldom depicted and it is rare for a human figure to accompany them. They jump at victims from all directions, most often from behind. The majority of the published dog images were carved in outline and are heavily, if not completely varnished.

In the area surveyed in 2016 four such scenes were found (two of them published before, see Allard-

Huard 1993: 108, 121, figs. 23.5, 29.5). In three cases dogs are chasing a gazelle (fig. 13), the fourth animal being a giraffe. The scene containing the latter is different also because all figures except one were pecked. However, it cannot be excluded that they had been first engraved and only subsequently re-pecked. The remaining compositions consist of carved petroglyphs, and they are all almost completely varnished (fig. 14).

It is hard to tell to which chronological horizon these figures could belong. For the motif of a chasing dog had been utilised in the Nile Valley for several millennia (see Predynastic examples in Hendrickx 2006; Hendrickx et al. 2009; or Meroitic depictions in Kleinitz 2012: 41, pl. 10.4; Pavel Červíček [1986: chart] dates this motif from 4000-2100 BC). Similar scenes in Nubia were recorded for instance by the Spanish expedition (Almagro Basch & Almagro Gorbea 1968: 41, 78, 84, 141, figs. 8, 42, 47, 131), and linked to the Naqada Period. The degree of varnishing of the Gorgod examples fits such a dating, but in light of our reservations regarding "patina" it remains uncertain.



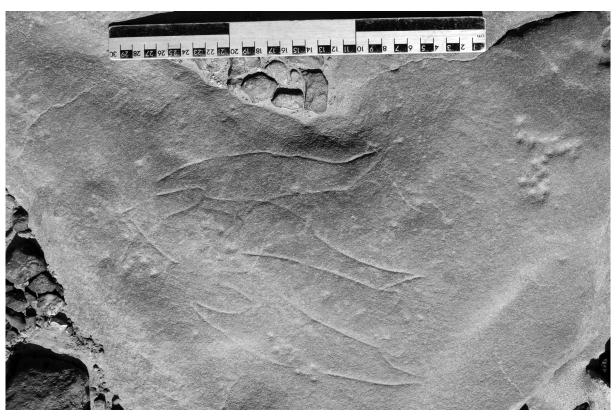


Fig. 13: Three dogs chasing a gazelle/antelope(?). The hounds are shown in very dynamic attitude as if jumping at their prey. Site 4. Photo: H.M. Hamdeen.

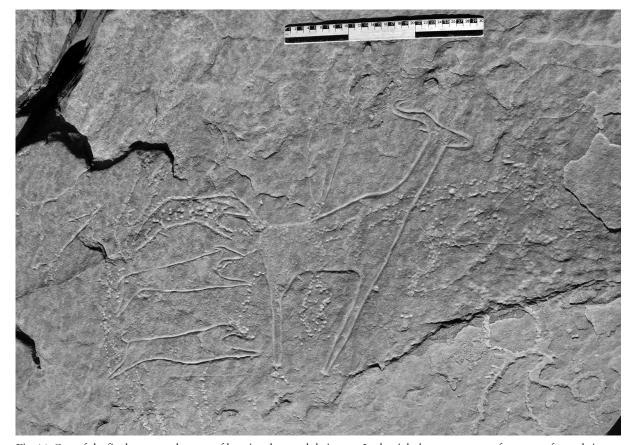


Fig. 14: One of the finely executed scenes of hunting dogs and their prey. In the right bottom corner a fragment of a cattle image with a large pendant is visible. Site 9. Photo: H.M. Hamdeen.



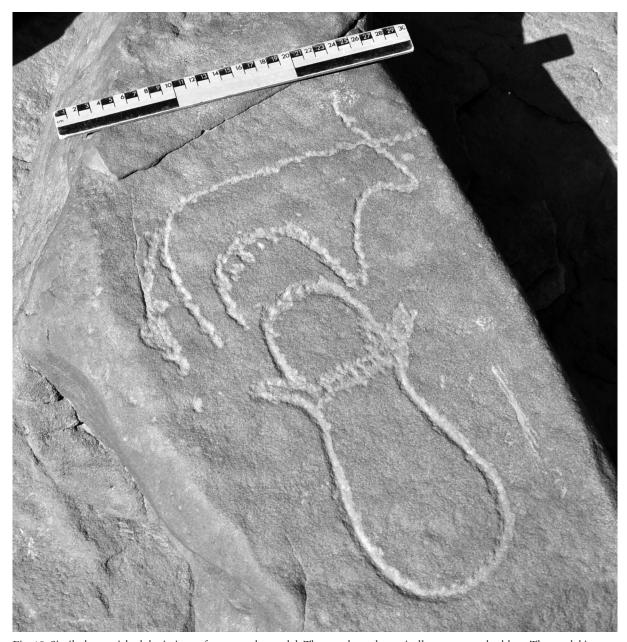


Fig. 15: Similarly varnished depictions of a cow and a sandal. The cow has schematically represented udders. The sandal is two-partite and has two side straps pointed backwards. Site 6. Photo: H.M. Hamdeen.

Cattle

No doubt, cattle can be considered as the main rock art motif in Nubia, and in terms of numbers it also dominates the described collection. In particular, one category of cattle depictions, the already mentioned "older" type, prevails with possible 115 attestations (among 148 cattle images in total). As indicated by Cornelia Kleinitz (2008: 90-1), the stylistic traits characteristic especially for the 3rd and 2nd millennia BC cattle images, probably remained in use for a long time. She recognizes them, for instance, in Meroitic petroglyphs. That perhaps answers the question of varied degree of varnish observed in the Gorgod

assemblage: from fairly (n=31), heavily (n=58), to completely (n=26) varnished figures.

Similarly to other Nubian rock art complexes, the Gorgod cattle images, even though they belong to the same "family", differ from each other at a number of points. They display various forms of horns, which is typical for such assemblages known from other Nile cataracts. The prevailing type concerns the standard U-shaped horns, although their size can be strongly diversified. This form constitutes almost 1/3 of all specimens. The lyre-shaped (n=16), straight (n=12), and oval (n=10) horns follow, and they are complemented by at least 14 other variants – each represented by only a couple of figures (e.g. incurved,



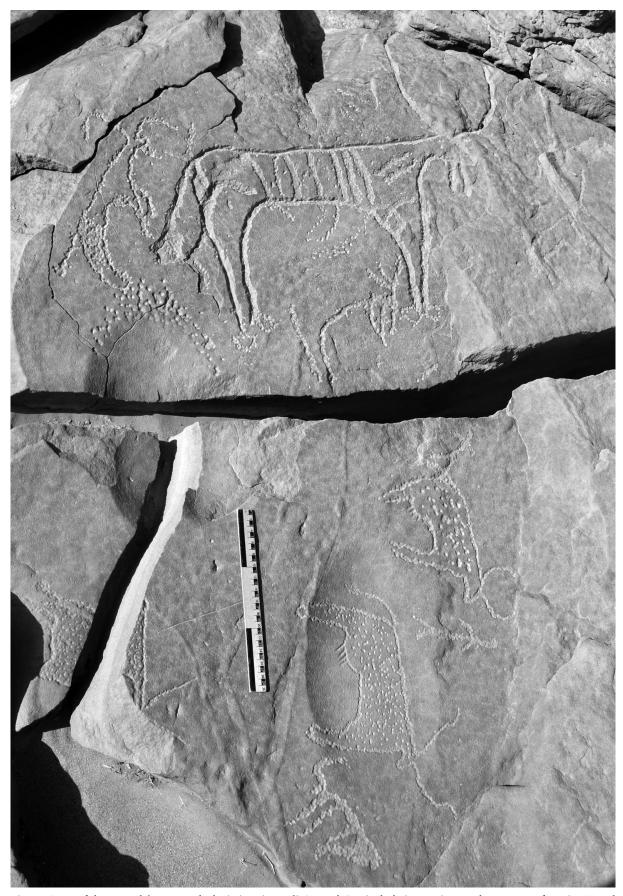


Fig. 16: Some of the most elaborate cattle depictions in Wadi Gorgod. Particularly interesting are the patterns of coating(?) and a double pendant hanging down from the neck of the largest animal. Site 9. Photo: H.M. Hamdeen.



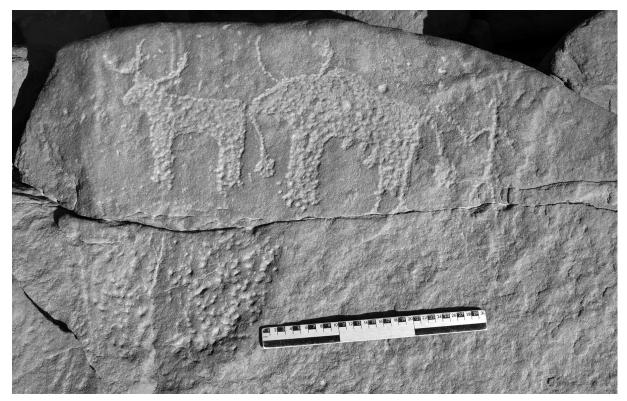


Fig. 17: A scene showing two cattle images with long tails having big oval endings. A stick-like anthropomorph follows them closely. Site 6. Photo: H.M. Hamdeen.

or pointed-forward horns). A single image with three horns was observed in the entire assemblage.

The cattle images differ also in terms of body rendering. 87 bovids are depicted in outline, but the remaining 28 are filled in with various patterns. Usually they are just fully pecked (n=12) (fig. 17), but stippling (n=9), parallel stripes (n=2), net pattern (n=1), or zigzag (n=1) occur as well (fig. 16). Partial filling and smoothing of surface were also attested.

A number of other details can be further distinguished. At least 13 zoomorphs have the so-called pendants hanging from their necks (including three specimens with two pendants each). We can also determine the sex of ten cattle figures, because seven animals have udders, and in the case of three others a penis was drawn. 15 specimens have their tails ended with an oval tuft – a feature observed also in certain pendants. Finally, two cattle images were depicted with hooves.

Considering the large quantity of cattle petroglyphs published by Allard-Huard (2000), the described material constitutes just a sample, even if fairly representative. The future research should, however, touch upon the question of associations, and not only the formal analyses. As juxtapositions with other motifs are fairly frequent (fig. 15), this may prove helpful in enriching our understanding of semantics and chronology of cattle figures.

Sandals

The seven documented rock art clusters provided also a relatively large number of sandal depictions (n=58). Allard-Huard (1993: 144-8) suggested that "sandalprints" could represent traps, as they cooccur with or even superimpose some animal figures. We find it, however, unlikely. Most of the collected sandal petroglyphs have traits reflecting real footwear, such as straps (fig. 15, 18). Some have a fairly naturalistic shape of outline and/or a clearly indicated heel. Straps can be pointed backwards or forward, and in some cases they are perpendicular to the sole's axis. There are 32 specimens having various kinds of straps, and 26 other executed in a simple outline, sometimes with a small hole in the upper part of a shoe⁸. Verner (1973: 40-3) dated most of the Nubian feet and sandal figures to the Graeco-Roman Period, just as similar petroglyphs known from Qasr Ibrim region were dated (Wilson 1996). What is, however, puzzling, is the state of preservation of the specimens registered in 2016, for 44 out of 58 petroglyphs are either completely, or heavily varnished. The remaining figures show a

⁸ According to Miroslav Verner's typology, the following types have been recorded on Wadi Gorgod sites: II/1, II/4, III/6, III/7, III/8, III/12, III/13 (Verner 1973: 28-31).



lighter degree of film colour. Although one cannot be sure that in Wadi Gorgod the heavy "patination" equals a relatively old age, many of the sandals indeed seem to be more or less contemporary to other older petroglyphs, such as cattle. If that is the case, then perhaps one can carefully link these figures with a tradition known from the Egyptian Nile Valley and the deserts, where dynastic foot/sandal petroglyphs were found in various contexts (Polkowski 2018; see also Tahir 2015).

Armed anthropomorphs

The last category of petroglyphs which we would like to briefly describe concerns anthropomorphic images. It is a particular type of human figures specifically equipped (fig. 19, 20). There is no doubt that we can speak about a certain defined "tradi-

tion" of petroglyphs in the context of the Gorgod area, as even though depictions of this kind had been published by Allard-Huard (2011: 68, fig. 32), the Sudanese expedition was able to find three more panels containing such figures.

These three surfaces bear at least eight armed anthropomorphs, in addition to two or three camel(?) riders similarly equipped. The apparent warriors wield javelins or spears with huge triangular points. The most characteristic feature is a shield which they hold. In some cases it is larger than the anthropomorph who bears it. The shield has a "bipartite" form, in the shape of two triangles. The humans themselves are depicted in a rather simple and schematic manner. All such petroglyphs are fully pecked and fairly or even lightly varnished. No doubt, we are dealing here with a more recent petroglyphic tradition than most of the already described pictures.



Fig. 18: A panel covered with sandal images varnished to a various degree. Site 7. Photo: H.M. Hamdeen.



Two more anthropomorphs wielding shields and weapons were found in the area, although they do not seem to belong to the same tradition. One of them is a pecked stick-like figure with a long extremely narrow torso. It has a penis dangling between the legs. In his hands he wields an oval item, probably a shield, and another elongated object, which may be a weapon. The petroglyph is heavily varnished and therefore rather not related to anthropomorphs with "bipartite" shields, unlike the second warrior who resembles them in terms of body posture. The difference lies mostly in the shape of the shield (oval) and the weapon (sword?), although at least one of the camel riders is also equipped with a sword. Another disparity lies in the petroglyph's condition, as it is slightly more varnished than the rest of the warrior depictions.

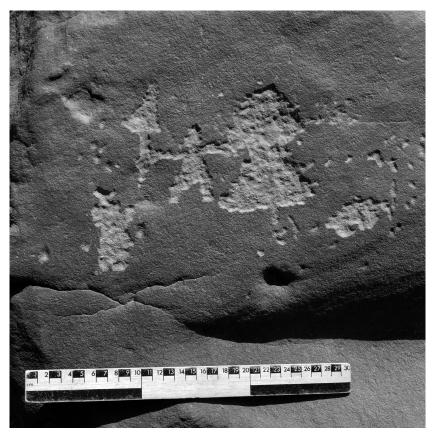


Fig. 19: A characteristic type of an anthropomorph holding a shield and a javelin(?) – both highly exaggerated in size. Site 4. Photo: H.M. Hamdeen.

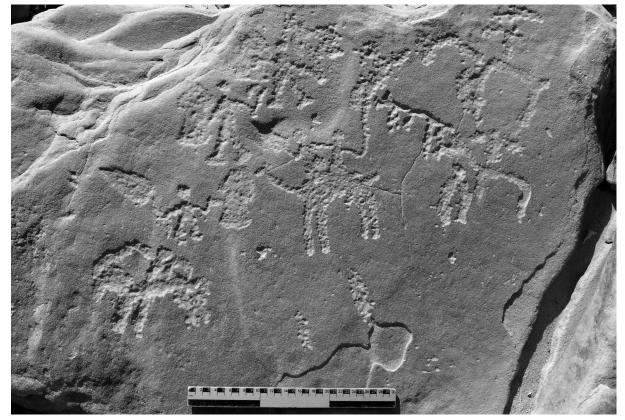


Fig. 20: The scene contains both armed warriors and camel riders. Most of them are equipped with javelins with large points. Site 6. Photo: H.M. Hamdeen.



Conclusion

The purpose of this report was to provide a brief information on the survey conducted by the Sudanese Expedition to the area of Wadi Gorgod. The aim of the mission was to evaluate the archaeological potential for any future research, and as such it has proved to be very successful. The amount of rock art makes Wadi Gorgod, and possibly its wider environs, one of the largest complexes in the Third

Cataract region. Because one can find there substantial numbers of petroglyphs from almost all eras of Nubian history, the area may become particularly relevant to a broad study project. It is all the more important to document as much rock art as possible, as the "gold fever" in this area directly endangers sites flanking the wadi. In the light of a wealth of petroglyphs already lost due to different dam projects, saving and researching the Third Cataract rock art appears not as an option but a necessity.

	SITE 2	SITE 4	SITE 5	SITE 6	SITE 7	SITE 8	SITE 9	TOTAL
Anthropomorph	3	10	3	14	3	-	20	53
Sandal	2	6	18	7	20	1	4	58
Boat	-	3	-	-	-	-	-	3
Oryx	-	1	1	-	-	-	-	2
Other antelope	-	-	-	2	-	-	2	4
Gazelle	-	1	1	-	5	-	1	8
Giraffe	-	4	6	2	4	-	8	24
Elephant	-	-	-	2	-	-	1	3
Hippopotamus	-	-	-	-	-	-	1	1
Ibex	-	-	1	-	-	-	-	1
Lizard/crocodile	-	-	2	-	-	-	1	3
Ostrich	-	1	1	2	-	-	2	6
Cattle	18	26	35	10	14	1	44	148
Donkey	-	-	1	-	-	-	-	1
Horse (incl.	_	_	1	6	_	_	5	12
horse w/ rider)								
Camel (incl.	1	6	5	12	_	_	_	24
camel w/ rider)								
Canid	1	9	4	1	-	-	7	22
Und. quadruped	9	24	19	20	10	2	10	94
Spiral/concentric	_	1	3	4	_	_	_	8
circles								
Concentric arch	-	3	-	-	-	-	-	3
Meandering line	-	1	-	-	2?	-	-	3
Oval	-	7	-	-	-	-	-	7
Other motifs	8	3	7	-	1	-	5	25

Table 1: Dominating motifs as identified on sites (note that none of the following motifs can be treated as a chronological marker).



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Zusammenfassung

Im Jahr 2016 führte die Joint Sudanese Expedition (JSE) in der Region westlich des Dritten Kataraktes einen kurze Survey in der Region Wadi Gorgod durch. Diese Region ist reich an archäologischen Resten, aber es gibt eine vorherrschende Art von Kulturerbe - Felskunst. Die Expedition registrierte sieben Petroglyphenstellen, die große Streuung von Paneelen enthielten. Einige der Petroglyphen sind bereits durch die Forschungen von Léone Allard-Huard in den frühen 80er Jahren bekannt geworden, aber auch neue Felszeichnungen wurden registriert. In diesem Bericht möchten wir die Felskunst von jedem Fundort getrennt beschreiben und dabei bestimmte Typen und Kategorien der Petroglyphen hervorheben. Wir listen daher verschiedene in den Assemblagen erkannte Motive auf und geben kurze Beschreibungen und Informationen zu deren Anzahl. Da wir uns bewusst sind, dass das gesammelte Material nur einen kleinen Teil des gesamten Wadi Gorgod Felskunstkomplexes ausmacht, formulieren wir im letzten Teil des Artikels nur einige allgemeine vorsichtige Bemerkungen zu ausgewählten Motivkategorien. Wir schließen mit einer Reflexion über die Notwendigkeit der Erforschung von Wadi Gorgod Petroglyphen, die durch die illegalen Goldminenaktivitäten gefährdet sind.