Fourth Nile Cataract petroglyphs in context: the ed-Doma and Dirbi rock-art survey

Cornelia Kleinitz and Roswitha Koenitz

Introduction

In its third year the SARS rock-art project continued documenting numerous rock-art sites across the concession above the Fourth Nile Cataract. Recording efforts during the 2005/2006 season focussed on the eastern part of the concession where sites identified during the 2004/2005 AKSE survey (Welsby 2005) were recorded in detail following the documentation strategy established and refined during the previous two seasons (Kleinitz 2004; Kleinitz and Olsson 2005). While some new sites were identified, no new survey was undertaken. Instead, efforts concentrated on consolidating the rock-art record in those regions of the concession, which had been subjected to intensive archaeological surveys in the previous field seasons.

In the AKSE area of the concession around the hamlet of ed-Doma and on Dirbi Island 41 of the 96 rock-art localities known were recorded; 26 sites were newly identified and documented (see map in Welsby 2005, col. pl. I). On Ishashi and Mis Islands (AKSC) and in the Dar el-Arab region (AKSW) a number of rock-art localities were re-investigated during the 2005/2006 season with the aim of gathering additional information on the characteristics of rock-gong phenomena and on their spatial relationship to rock-art images (see Kleinitz 2004; Kleinitz and Olsson 2005). Excavations at rock-art sites, which were planned for the past season, could not be undertaken due to the destruction of most deposits in front of rock art panels by local people during the preceding few months.

The motif corpus of the AKSE area of the concession

The motif corpus in the eastern part of the SARS concession is consistent with that recorded in other areas of the study region (Kleinitz 2004; Kleinitz and Olsson 2005; Welsby 2003; 2005). It includes large numbers of cattle and camel petroglyphs exhibiting great variability (Figure 1, Colour plate XXI). Among the latter the depiction of a suckling calf is singular (Plate 1). Other quadrupeds, such as giraffes, horses or dogs, as well as birds, anthropomorphs (most often as riders of camels) and what appear to be boats and weapons occur in lesser numbers (Figures 2 and 3). A depiction of a crocodile rendered in profile, which is contemporary with camel images on the same panel, is an exceptional find on Dirbi. Geometric motifs also occur; among them crosses are the most common. Christian period petroglyphs include various Greek inscriptions, depictions of churches and people. Narrative scenes are rare in the rock art of the region.

Cattle and camel depictions are the most frequent motif types. When they occur in superimposition, cattle images are usually older than those of camels, although some types of cattle depictions are contemporary with the camel motifs (see below and Kleinitz 2004). Cattle and camel petroglyphs are often found on different rock surface types, with cattle images preferably being placed high where they are easily visible on larger vertical rock surfaces and camels being placed lower where they are less visible from afar on smaller vertical, sloping and horizontal surfaces (see Kleinitz and Olsson 2005). Both motif types frequently differ in the site types at which they occur and in their landscape situation. In some areas cattle or camel imagery is almost mutually exclusive, indicating that changing perceptions and uses of the landscape over time are mirrored in the topographical distribution of these rock-art motifs (Kleinitz in press).
Figure 1. Cluster of cattle depictions (panel 6, site 4-M-55) (scale 1:15).
backs, curved or more rarely angular lines depicting the lower body and legs as well as a pronounced head (see Figure 1). ‘Pendants’ are sometimes shown in the neck area. Coat markings seem to be indicated in some instances by zoning the bodies using vertical stripes or grid patterns (Figure 4). Great care is taken also in rendering the long and elegantly curved horns, which can be variously shaped, in all likelihood representing artificial horn deformation (see also Kleinitz 2004). Frequently, small groups of two or three cattle are arranged in vertical or horizontal rows. At some sites large concentrations of cattle petroglyphs are found; on some panels even entire herds seem to be depicted (see Figure 1). Stick figure anthropomorphs are frequently depicted in close spatial relation to cattle images, on some panels represented interacting with the cattle. In a number of cases, such as at site 4-H-407 on Dirbi, anthropomorphs appear to hold cattle by a lead, by their tail or their horns (see Plate 2 and Figure 4).

Cattle petroglyphs may face to the right or the left of the panels. Specific orientations are preferred at some panels, which could indicate directions of movement in the otherwise static cattle representations. In a number of instances cattle images are depicted vertically on the rock surfaces, sometimes even upside-down and thus appearing to lie on their backs (see Figure 4). No clear preference for one or another cardinal orientation of cattle panels is apparent and no particular concern with their exposure to the sun or the presence of shade.

Broad similarities in stylistic traits, techniques and in patination indicate that these cattle petroglyphs belong to a single marking tradition, the temporal depth of which seems considerable. Some of the cattle are of great antiquity, judging from superimposition evidence and from their (nearly) full patination. Others with similar stylistic traits are evidently much younger. Superimpositions between petroglyphs in the region and comparisons of states of patination suggest that a number of stylistic traits, such as conventions of
Younger rock art traditions in the area still include cattle depictions, albeit generally in fewer numbers and with marked changes in stylistic traits. Such cattle petroglyphs are occasionally found together on individual panels with camel depictions of similar style, technique of execution and/or patination. Body shapes show great variation, including angular, curved and irregular forms, and also include stick figures. Coat markings or humps are rarely indicated. Heads are often small or even absent. Horns are long or short, and artificial horn deformation seems seldom to be depicted (Plate 3). Horns are either moved into the visual plane and depicted as if seen from the front, or are shown as seen from above – the latter trait forming a marked difference from older conventions of image construction (see also Kleinitz and Olsson 2005).

Judging from the changes in the perception of cattle as mirrored in the characteristics of the rock-art images, their frequency, combination and placement in the landscape, the economic and symbolic roles of cattle in human societies seem to have changed significantly in comparison with the older cattle-dominated marking tradition. The great diversity in stylistic traits of younger cattle depictions remains to be explained. Such stylistic diversity is also found in the graffiti of the Great Enclosure at Musawwarat es-Sufra, which date to the Merotic period and later (Hintze 1979). Some stylistic traits, such as certain body shapes, seem to have been conservative or readily re-utilised, while others changed more quickly and permanently. Chronologically diagnostic stylistic traits for securely assigning cattle depictions to one or another chronological period remain to be established (see also Hintze 1979). The geographical distribution of stylistic traits in cattle motifs can only be ascertained by cross-regional comparisons of rock art (and graffiti) in the Nile Valley and beyond (see Kleinitz in press).

Christian period rock art in the AKSE concession area

Religious activities during the Christian period appear to be expressed at some sites, where Greek inscriptions, mainly comprising full names, cryptograms and monograms of archangels and humans, as well as crosses, were recorded (Figure 5a-d). The inscriptions cluster at sites 4-L-141 and 4-L-152, two sites that are located on the western and southern edges of a small fertile strip on the mainland in close proximity to the Nile (see Welsby 2005, pl. 8). No inscriptions have yet been identified on Dirbi Island. Among the monograms are those appearing to refer to the archangel Michael and to Abraham at site 4-L-152. The name and cryptogram of the archangel Gabriel are found at the same site (Figure 6) (Tsakos in press).

What is believed to be a monogram for Ioannis was documented on the main panels at both site 4-L-152 (panel 4) and at 4-L-141 (panel 1). In both cases what seems to be the name ICOY is found in immediate proximity to the monogram (Figure 7 and Plate 4) (Tsakos in press). While the main panel at 4-L-141 is facing to the south, most panels at 4-L-152 face to the east.

Besides the inscriptions other petroglyphs are present at the sites. They include crosses, cam-
els and stick figure anthropomorphs at both sites, birds at 4-L-152 and younger cattle images at 4-L-141. At the latter site some of the petroglyphs seem to form a scene of camels with riders, an anthropomorph with what appears to be a spear or lance, and what may be a dog (Figure 8). The motifs found at 4-L-141 and 4-L-152 and their states of patination suggest a temporal range of site-use in and around the Christian period only. The symbolic use of this part of the mainland landscape as expressed in rock art thus is relatively recent. It also includes an acoustic component, as in the upper part of the main panel of 4-L-141 diffuse percussion zones were identified, pointing to the beating of this rock surface for reasons other than image making (see Plate 4).
Rock-gong phenomena and rock-art images in the AKSE area of the concession

A precise description of the characteristics and the range of variation in rock-gong phenomena was one of the main concerns during the 2005/2006 field season. The documentation procedure thus included numerous scale drawings of these features and written descriptions of their landscape situation. The process of video taping the experimental playing of the rock-gong phenomena, as successfully tested in the previous seasons, allowed the gathering of additional information on the possible positioning of the player(s) in relation to rock surfaces and percussion zones, and thus on the physical experience of sound making. It was in some instances even possible to reconstruct sequences of notes that appear to have been played in the past by observing patterns of rock gong utilisation as they are visible in the positioning of the percussion zones in relation to each other and in the intensity of their use.

As in the other areas of the SARS concession rock gongs and rock-gong complexes are numerous in the AKSE section: more than 50 of these features were documented during the 2005/2006 season. While rock gongs are found both on the mainland and on Dirbi Island, most of the heavily used specimens were documented on Dirbi (see Welsby 2005, col. pl. III). Site 4-H-428, a newly identified rock art locality in the central part of Dirbi, deserves special mention due to its numerous heavily used rock-gong complexes. The medium-sized hill is located by the crossing of two major pathways traversing the island in an east-west and north-south direction. Traces of sound making at the site include a broad spectrum of features ranging from a few peck marks to polished zones and deep cup marks on more or less resonant rock surfaces. Rock-gong complexes comprising several boulders are located on the northern slope and the summit, where they offer wide views over the island and beyond, in particular in northerly directions. They are also found at the northern foot of the hill adjacent to the east-west pathway. While some of the rock gongs are readily visible from the foot of the hill and others are hidden among the rocks, all offer views of the pathway to the north.

The rock-gong phenomena vary greatly not only in their location, but also in their formal characteristics, in the way they were played and in the range of sounds which emanated from them. The formal variation includes a wide spectrum ranging from large square boulders to thin slabs lying above or wedged in between larger boulders (Plate 5 and Colour plate XXII). The physical aspects of using these instruments thus varied significantly from upright body positions in front of large vertical rock surfaces to squat-
ting on small ledges. The tones produced when the rock surfaces are struck with a hard implement also show a great range from bell-like sounds to hollow thuds. Whether some of these instruments were played synchronically by larger gatherings of people or were used singly by individuals must for now remain an open question.

The heavy use of the rock-gong complexes, which is apparent in the formation of cup marks in the percussion zones, points to the long-term use at least of some of these features. This impression is confirmed by the rock-art images at the site, which show that site 4-H-428 was multi-period (see Colour plate XXII). Fully patinated cattle motifs appear to be the oldest, camels more recent, while relatively recent Arab inscriptions form the youngest traces of interaction with this locality (Colour plate XXIII). Birds, weapons and various geometric forms, among them crosses, are also among the petroglyphs found at the site. Superimpositions are frequent, supplying valuable evidence for the construction of a site chronology. Most rock surfaces at the site show evidence of marking activity. The site is thus exceptional in the study region also because of its great range of motifs occurring in superimposition on numerous densely marked rock surfaces.

The detailed investigation of the relationship between rock gongs and rock-art images formed a special focus of the 2005/2006 season. A general trend observed at site 4-H-428 and at other sites in the AKSE area of the concession sees a close spatial relationship of rock gongs and cattle images, which at a later point were followed by representations of camels and various types of crosses (see also Kleinitz 2004; Kleinitz and Olsson 2005). Superimpositions and differences in patination at site 4-H-428, among other sites, provide ample evidence for this temporal trend, which points to a replacement of one set of imagery linked to sound making by others. The link between rock gongs and depictions of weapons, probably spear-heads, at site 4-H-428 has not been observed before (see Colour plate XXII).

Rock gongs and rock-art images on Ishashi (AKSC) and in the Dar el-Arab region (AKSW)

Large numbers of rock gongs and rock-gong complexes have also been recorded on Ishashi (AKSC) and in the Dar el-Arab region (AKSW) (Kleinitz 2004; Kleinitz and Olsson 2005), where some additional data were collected during the past field season. One of the largest concentrations of rock-gong phenomena was documented at site 3-Q-123, a prominent hill near Dar el-Arab. Five concentrations of rock gongs and rock-gong complexes were recorded on the summit of the site and on relatively level stretches of its narrow eastern and western slopes. Rock-gong complexes involving multiple boulders showing signs of heavy use cluster primarily on the summit of the site, from where a large stretch of land, including the forts of Suweigi, can be seen (Colour plate XXIV). The preferred utilisation of boulders in prominent positions in the landscape that offer wide views confirms a trend observed also at many other rock art localities in the SARS concession. The rock gongs themselves are often not visible from afar and will not readily have been recognised by passers-by.

The thorough recording of even minor percussion zones has revealed a complex pattern of activities involving sound making in the region. At site 3-Q-123 alone all 132 individual boulders with traces of sound making were documented. The largest rock-gong complex at the site comprises 23 individual slabs or boulders. Investigations of such complex features raise the question as to whether these instruments were played by individuals who focus on certain percussion zones that could be reached from one position (‘percussion focus’), or whether they changed their position moving among the rocks to strike the rock surfaces one after the other. Alternatively, several individuals may have been involved in using the rock-gong complexes simultaneously.

Besides extensive evidence of non-visual engagements with this locality, site 3-Q-123 has abundant rock-art images, which may help in dating the use of the rock-gong phenomena. The motif corpus is dominated by camel images, crosses, and what appear to be depictions of weapons (Plates 6 and 7); relatively recent cattle images and depictions of what may be antelopes also occur. The rock-art imagery at the site thus points to its use roughly during the past two millennia (see Kleinitz and Olsson 2005). It is possible that the coarse surface of the rocks at this site made it less attractive for use during earlier rock-art traditions, which often preferred smoother rock surfaces that could be worked with finer-tipped tools (see Kleinitz 2004). This impression is confirmed at other sites in the Dar el-Arab area, such as at site 3-Q-57, where a similar range of motifs is found on relatively rough rock surfaces in close proximity to numerous rock gongs. As stated previously, the heavy use of some rock gongs and rock-gong complexes points to their use over a much longer time span, which may in some cases, such as at site 3-Q-123, not have been accompanied by image making (Kleinitz and Olsson 2005). On Ishashi
Island in the central part of the concession, by contrast, an earlier phase of rock gong use with a strong link to older cattle imagery was noted and confirmed during the past season (see Kleinitz 2004).

**Christian period rock art on Mis Island (AKSC)**

Further work was also undertaken on Mis island in the AKSC area of the concession. The tracing of some panels at site 3-J-56, the only rock-art site identified on Mis, revealed what appears to be a representation of a church (Figure 9). A depiction of a person, probably a member of the clergy, holding a cross-staff in his right hand, is a hitherto singular representation in respect of its formal traits (Figure 10). Various types of crosses and monograms were also recorded (see Kleinitz and Olsson 2005, pl. 3). The rock art of Mis mirrors the importance of the island as a local centre of the Christian faith, which is apparent from the remains of its late Christian church and substantial cemeteries (see Ginns this volume). It is interesting to note that Christian period religious imagery is characteristic of rock art on Mis, while it is virtually absent from the rock-art corpus of the neighbouring island Ishashi, which is dominated by cattle depictions (Kleinitz 2004). Separate symbolic spheres seem apparent in the rock art of these islands.

**Conclusions**

With the 2005/2006 season, work in the Dar el-Arab region (AKSW) and on the islands of Umm Duras (AKSW), Ishashi and Mis (AKSC) was completed. The project is ongoing in the AKSE part of the concession. Recording efforts during the past season contributed to extending the range of motifs recorded in the SARS concession and confirmed trends in the data that were recognised in the previous seasons. The detailed study of rock-gong phenomena has contributed to a better understanding of the complexities of sound making activity in the study region, and of its intricate relation to the rock-art imagery. While the recording of the physical and acoustic properties of rock-gong phenomena was refined during this past season, it would be highly desirable to use professional sound recording equipment in future studies.

**Acknowledgements**

The authors would like to thank the Sudan Archaeological Research Society for generously funding the third season of the SARS rock-art project. The IT Group at the Max-Planck-Institute for the History of Science, Berlin, as well as Claudia Näser (project director, HUNE Island concession) of Humboldt University of Berlin are deeply thanked for kindly providing various pieces of essential technical equipment. The project directors, Derek Welsby (AKSE), Pawel Wolf (AKSW) and Andrew Ginns (AKSC), as well as Rhoda Ata and her extended family (Ishashi Island),
are warmly thanked for their immense efforts in hosting the team members and/or otherwise facilitating the SARS rock-art project. Alexandros Tsakos is thanked for sharing his knowledge on the inscriptional material of the AKSE area and for making accessible his recent article on the inscriptions of the Merowe Dam Archaeological Salvage Project.

**Bibliography**


Colour plate XXI. AKS rock art. Camels and anthropomorphs (panel 8, site 4-L-282).

Colour plate XXII. AKS rock art. Rock-art imagery and rock-gong complex 3 (site 4-H-428).

Colour plate XXIII. AKS rock art. Camel motif with rider overlying deeply patinated cattle petroglyph along with a recent Arab inscription (site 4-H-428).

Colour plate XXIV. AKS rock art. Rock-gong complex on the summit of site 3-Q-123.