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## vol. 58: 2020

**Special theme:**  
**PREHISTORY OF NORTH-EAST AFRICA**  
**Volume dedicated to Prof. Michał Kobusiewicz**  
**on his 80th birthday**

# Archaeologia Polona

Volume 58 : 2020

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## Editorial

The current, 58th volume of *Archaeologia Polona* with the special theme – *The Prehistory of North-East Africa* is devoted to Professor Michał Kobusiewicz on the occasion of the 80th anniversary of his birth. Being aware of Michał's many significant research achievements, we would like through this collection of contributions to especially honour the African chapter of his scientific life. Although he has been engaged in activities in several African countries, over most of this period, his main areas of research were Egypt and Sudan. The Polish contribution to research on the prehistory of NE Africa has a long tradition. This goes back at least to the launch and initial projects of the Combined Prehistoric Expedition (CPE) in Egyptian and Sudanese Nubia in the early 1960s (Wendorf 1965). Michał Kobusiewicz was part of the first wave of Polish prehistorians contributing to the work of the CPE, joining the expedition in 1967. Since then, he has taken part in several dozen African missions resulting in abundant publications greatly increasing knowledge about the past of NE Africa. We may for example mention the articles in *Science* (Wendorf *et al.*, 1976; 1984) or the monograph *The Production, Use and Importance of Flint Tools in the Archaic Period and the Old Kingdom of Egypt* (Kobusiewicz 2015). A detailed account of the African activities and publications of Michał Kobusiewicz are given in the initial chapters of this volume, the first by Romuald Schild – *The African Chapter in the Scientific Life of Professor Michał Kobusiewicz* and the second, compiled by Przemysław Bobrowski – *African Research of Michał Kobusiewicz: Calendar and Bibliography*. Judging by this presentation of the geographical and chronological scope of interests and scientific results, it would perhaps not be an exaggeration to suggest that Michał Kobusiewicz, may justifiably be considered as one of the few individuals that could be considered as a colossus of African archaeology. Fred Wendorf, in his *Desert Days*, describing a field school for Egyptian inspectors writes that Michał was: “regarded as a great teacher and knew more about lithic typology than anyone in the camp, except possibly Schild” (Wendorf 2008: 272).

The papers in this volume honouring Michał Kobusiewicz have been written by his friends, colleagues, acquaintances and also by former students and present collaborators. All consider the archaeology of NE Africa with the same broad chronological and thematic scope as the interests of Professor Kobusiewicz.

The first four papers consider the oldest episodes of hominin presence in NE Africa. Mirosław Masojć and colleagues in their paper *Acheulean Bifaces from Khor Shambat, Omdurman (Sudan), Comparative Studies in the Nubian Context* discuss a recently discovered Palaeolithic assemblage from Omdurman and its statistical comparison with

several other Acheulean sites. The second paper, *The Middle Palaeolithic Assemblage with Bahari Technique from Site 21b in Deir el-Bahari (Western Thebes), Upper Egypt* by Barbara Drobniwicz and Bolesław Ginter presents interesting knapping technique observed in the Egyptian Palaeolithic assemblage from Deir el-Bahari. Marta Osypińska and colleagues focus on the *The PalaeoAffad Project and the Prehistory of the Middle Nile*. The last article in this group, by Donatella Usai, *The Qadan, the Jebel Sahaba Cemetery and the Lithic Collection*, reassesses the chronology and affiliation of the world-famous Sudanese cemetery with the oldest evidence of warfare.

The second group of contributions consider Mesolithic and Neolithic societies both from Egypt and Sudan in the form of a site reports, geophysical surveys and a synthetic papers. Lenka Varadinová and Ladislav Varadin report on *The First Notes on the Second Khartoum Mesolithic Cemetery at Jebel Sabaloka (Sudan)*. Another Mesolithic and Neolithic cemetery from Omdurman, Sudan is presented by Maciej Jórdeczka and colleagues in the next paper, *Neolithic Inhabitants of Khor Shambat I, Sudan*. The third paper in this group, *Comparison of Different Gouge Collections from Central Sudan* by Katarína Kapustka and Małgorzata Winiarska-Kabacińska, involves technological and functional analysis of Neolithic gouges from Sudanese collections. An important Neolithic sites in the Egyptian Desert is discussed by Jacek Kabaciński and a group of co-authors and by Przemysław Bobrowski and colleagues in the next two papers, *Towards Understanding the Late Neolithic of the Egyptian Western Desert: Gebel Ramlah, Site E-16-02* and *The Early Holocene Archaeological Evidence (Site E-05-1) in Bargat El-Shab (Western Desert Egypt)*. It must be said that geophysical surveys have been very rarely undertaken on prehistoric NE African sites, but one is reported by Fabian Welc and Przemysław Bobrowski from the area of Bargat El-Shab in the paper titled: *Results of Geophysical Survey in Bargat El-Shab in Southern Egypt. Insight into the Early Holocene Settlement Pattern of the El Nabta / Al Jerar Interphase*. The last paper in this group, *Recent Research on Neolithic and Predynastic Development in the Egyptian Nile Valley* by Agnieszka Mączyńska, is an important review of the recent results of studies concerning the origins of the Neolithic in Northeastern Africa.

The next group, of two papers, considers the later prehistory of the area. The first of them, *A few Remarks about Cosmetic Palettes from Tell el-Farkha* by Krzysztof Ciałowicz discusses an aspect of this important site in the Nile delta. The second paper, *Flints from the Road: on the Significance of two Enigmatic Stone Tools Found along the Darb el-Tawil* written by Heiko Riemer and Karin Kindermann, discusses the phenomenon of the interpretation of surface lithic finds and the issue of knapped stone artefacts being produced and used in the period after the Stone Age in Africa.

Rock art, one of the beloved subjects of Michał Kobusiewicz's research, is the theme of the fourth and last group of papers in this volume. Friederike Jesse presents her observations from the Sudanese site Zolat el Hammad in the paper titled: *Rock Art and Archaeology – a Short Visit to Zolat el Hammad, Northern Sudan* and Paweł Lech

Polkowski discusses rock art from Egyptian Dakhleh Oasis: *Animal Hill – a Large Prehistoric Rock Art Site COI78 in the Central Dakhleh Oasis, Egypt*.

We believe that the above listed contributions, in many cases based on or discussing the results of Michał Kobusiewicz's research, represent the range of his scientific involvement with Africa, and thus form a tribute to his work. These fifteen papers have been reviewed and improved by a group of international reviewers to whom we owe our gratitude. In alphabetical order the following reviewers were so kind to contribute to improving this volume: Mirosław Furmanek (Wrocław), Elena Garcea (Cassino), Maria Gatto (Leicester), Bolesław Ginter (Cracow), Tomasz Herbich (Warsaw), Karla Kroeper (Berlin), Alice Leplongeon (Leuven), Maria Kaczmarek (Poznan), Andrea Manzo (Naples), Arkadiusz Marciniak (Poznan), Henryk Paner (Gdansk), Tomasz Płonka (Wrocław), Włodzimierz Rączkowski (Poznan), Andrzej Rozwadowski (Poznan), Jiří Svoboda (Brno), Philip Van Peer (Leuven), András Zboray (Budapest).

Finally, the editors would like to express our wish that this volume will reach a broad audience. It was a pleasure to edit and work on the volume to honour the Professor whom we not only respect as a scientist but also admire a lot as a person. On behalf of all the contributors to this volume, the authors and the reviewers, we would like to wish Michał many more successes and achievements in his ongoing work in Africa!

*Przemysław Bobrowski  
Mirosław Masojć*

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# CONTENTS

Editorial .....	1
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SPECIAL THEME:  
**PREHISTORY OF NORTH-EAST AFRICA**  
**VOLUME DEDICATED TO PROF. MICHAŁ KOBUSIEWICZ**  
**ON HIS 80th BIRTHDAY**

The African Chapter in the Scientific Life of Professor Michał Kobusiewicz <i>Romuald Schild</i> .....	9
African Research of Michał Kobusiewicz: Calendar and Bibliography <i>Przemysław Bobrowski</i> .....	17
Acheulean Bifaces from Khor Shambat, Omdurman (Sudan), Comparative Studies in the Nubian Context <i>Mirosław Masojć, Amel Hassan Gismallah, Grzegorz Michalec, Andrzej Gałaś</i> <i>and Maciej Jórdeczka</i> .....	39
The Middle Palaeolithic Assemblage with Bahari Technique from the Site 21b in Deir el-Bahari (Western Thebes), Upper Egypt <i>Barbara Drobniwicz and Bolesław Ginter</i> .....	63
The PalaeoAffad Project and the Prehistory of the Middle Nile <i>Marta Osypińska, Piotr Osypiński, Marek Chłodnicki, Michał Kuc, Paweł Wiktorowicz</i> <i>and Robert Ryndziejewicz</i> .....	79
The Qadan, the Jebel Sahaba Cemetery and the Lithic Collection <i>Donatella Usai</i> .....	99
The First Notes on the Second Khartoum Mesolithic Cemetery at Jebel Sabaloka (Sudan) <i>Lenka Varadinová and Ladislav Varadin</i> .....	121
Neolithic Inhabitants of Khor Shambat 1, Sudan <i>Maciej Jórdeczka, Łukasz Maurycy Stanaszek, Przemysław Bobrowski, Marek Chłodnicki</i> <i>and Iwona Sobkowiak-Tabaka</i> .....	135

Comparison of Different Gouge Collections from Central Sudan <i>Katarína Kapustka and Małgorzata Winiarska-Kabacińska</i> .....	165
Towards Understanding the Late Neolithic of the Egyptian Western Desert: Gebel Ramlah, Site E-16-02 <i>Jacek Kabaciński, Agnieszka Czekaj-Zastawny, Hebatallah A. A. Ibrahim and Jakub Mugaj</i> ....	179
The Early Holocene Archaeological Evidence (Site E-05-1) in Bargat El-Shab (Western Desert Egypt) <i>Przemysław Bobrowski, Maria Lityńska-Zajac, Marta Osypińska and Maciej Jórdeczka</i> .....	195
Results of Geophysical Survey in Bargat El-Shab in Southern Egypt. Insight into the Early Holocene Settlement Pattern of the El Nabta / Al Jerar Interphase <i>Fabian Welc and Przemysław Bobrowski</i> .....	221
Recent Research on Neolithic and Predynastic Development in the Egyptian Nile Valley <i>Agnieszka Mączyńska</i> .....	235
A few Remarks about Cosmetic Palettes from Tell el-Farkha <i>Krzysztof M. Ciałowicz</i> .....	245
Flints from the Road: on the Significance of two Enigmatic Stone Tools Found along the Darb el-Tawil <i>Heiko Riemer and Karin Kindermann</i> .....	257
Rock Art and Archaeology – a Short Visit to Zolat el Hammad, Northern Sudan <i>Friederike Jesse</i> .....	275
Animal Hill – a Large Prehistoric Rock Art Site CO178 in the Central Dakhleh Oasis, Egypt <i>Paweł Lech Polkowski</i> .....	289

#### DISCUSSIONS AND CRITICISM

Green Saharas, Grey Markets: Commercial Exploitation of North African Prehistory, an Overview <i>Paul M. Barford</i> .....	311
---	-----

#### BOOK REVIEWS

Iwona Sobkowiak-Tabaka, <i>Rozwój społeczności Federmesser na Nizinie Środkowoeuropejskiej</i> [The Development of Federmesser Communities on the Central European Plain], Warszawa 2017 ( <i>Andrzej Wiśniewski</i> ) .....	337
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*Photo: M. Jórdeczka*

Professor Michał Kobusiewicz at Meroe (Sudan, 2012)



# **Animal Hill – a Large Prehistoric Rock Art Site CO178 in the Central Dakhleh Oasis, Egypt**

**Paweł Lech Polkowski<sup>a</sup>**

This article introduces one of the largest rock art sites found in the central Dakhleh Oasis. Firstly, an overview of all the panels with petroglyphs is provided and the images briefly described. The panels' description contains basic information on their location and visibility, motifs and their compositional aspects, and chronology. This is followed by a brief summary of the presented data and a discussion situating the site in the broader context of Dakhleh and the surrounding Western Desert. Particular motifs and their arrangements, like a herd of giraffes, are further briefly discussed, and parallels from the Dakhleh region and the Nile valley cited in order to compare the CO178 rock art.

KEY-WORDS: Rock art, Petroglyphs, Giraffe, Oryx, Dakhleh Oasis

## INTRODUCTION

The aim of this paper is to present finds of rock art from site CO178 in the central Dakhleh Oasis, Egypt and provide short descriptions of them, as well as some comments and observations. It is intended here to distinguish and characterize especially those features that find parallels both in the oasis and a broader context of the Western Desert. This report will present, however, neither an in-depth study of possible cultural connections between various rock art regions, nor will it venture into considerations on possible meanings of particular groups of petroglyphs. Nevertheless, it is hoped that this article has potential to act as a trigger for conducting further comparative work on rock art between the Western Desert and the rest of Egypt. This is one of the reasons site CO178 has been chosen, as, despite certain features that make it exceptional, it also displays many traits that can be considered typical for the Dakhleh Oasis rock art.

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## ANIMAL HILL: THE CONTEXT

The site was discovered in the central Dakhleh Oasis about 6 km south of the tarmac road that links the region of Balat with Mut. It was registered as CO178 and nicknamed Animal Hill, taking its name from abundant zoomorphic depictions crowding its walls. Although provisionally documented during a survey (Polkowski 2016: 167–173), CO178 was meant to be thoroughly recorded in subsequent seasons. However, since 2014, due to security reasons, the Petroglyph Unit of the Dakhleh Oasis Project (PUDOP) still has not been able to resume fieldwork, making a return to the site an impossible task (Polkowski 2018a).

Animal Hill is one of over 250 rock art sites discovered in the central oasis area (Polkowski 2019). Although a substantial number of these contain prehistoric imagery, historical rock art is equally abundant (Polkowski *et al.*, 2013). In fact, CO178 is surrounded by localities with large numbers of dynastic and post-dynastic petroglyphs, away from the nearest significant prehistoric sites with comparable imagery by *c.* 1.5 km north-east (04/08; Polkowski 2018b) and some 1–1.2 km south-east (a cluster of sites including 02/06, 04/06, 08/06, 09/06; Kuciewicz *et al.*, 2008). Within a radius of *c.* 1 km there is thus a scarcity of prehistoric rock art, with only a handful of isolated panels scattered around and often eclipsed by historical petroglyphs (e.g., CO189). Moreover, the above mentioned larger sites cannot be compared to Animal Hill when it comes to number of depictions.

The hill itself is relatively large being *c.* 60 m long and *c.* 35 m wide. All rock art panels were found in its southern portion, particularly on the eastern and south-eastern slopes. Eighteen panels in total were registered, of which the majority ( $n = 12$ ) have been



**Fig. 1.** Animal Hill (site CO178). Panels indicated in white are most probably not prehistoric. View from SE. Photo: P. L. Polkowski.

tentatively recognised as bearing prehistoric petroglyphs (Fig. 1). The remainder are either later additions, or remain unidentified as to both their content and chronology. All the panels considered prehistoric are preserved in situ and cover vertical rock walls; unlike the remaining ones, found mostly on loose slabs and hence of uncertain origin. It cannot be, however, ruled out that more rock art, including prehistoric petroglyphs, lie buried beneath countless boulders, rubble and sand overlying the steep slopes.

Although no unique rock art motif has been recognised on the site so far, Animal Hill remains an extraordinary place in the central oasis area. The reason for that is a combination of several factors, the most compelling ones being an unusually large amount of figures and the strong visual impact of some of the panels. In order to discuss observations on the site's nature, first a short survey of the panels is provided. Following this, an attempt is made at contextualising the Animal Hill type-site by setting it into the wider Western Desert background.

## OVERVIEW OF ROCK ART PANELS

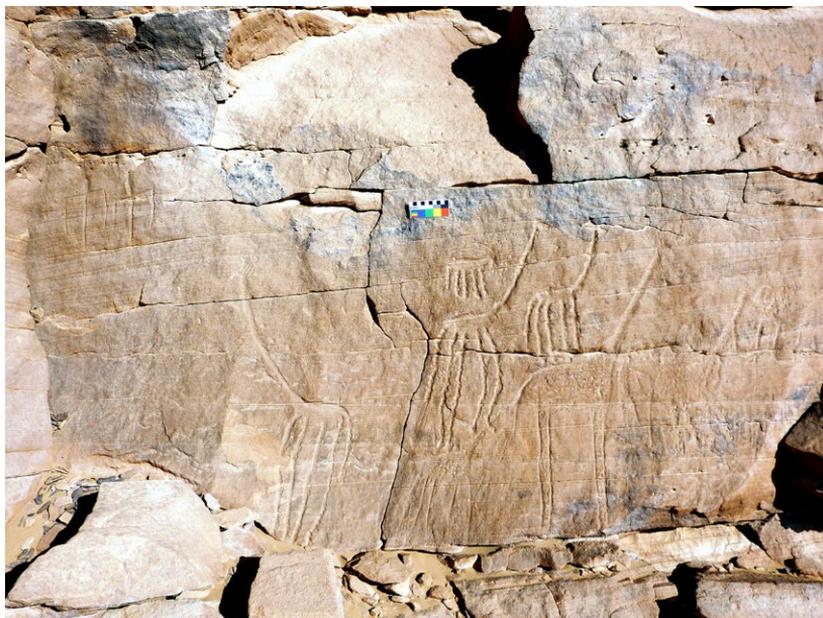
### *Panel 1* (Fig. 2)

**Location and visibility:** The panel is located high above the slope, a few metres below the hilltop. Despite its vertical placement it is rather difficult to see from distance and, due to its location, reaching it requires a considerable effort. The panel is oriented to the south/south-east. It is the middle one of the three panels forming a sort of “triptych”, apparently produced within a short time-range.

**Motifs and composition:** The panel bears a well preserved composition. The right-hand side of the rock surface has been heavily eroded, making some of the figures less visible. Zoomorphic depictions prevail and, among them, giraffes ( $n = 6$ ) outnumber other species (oryx;  $n = 1$ ). An anthropomorphic figure is inserted between the two giraffes, but the nature of this spatial relationship is unclear. In addition, two other (anthropomorphic?) images are placed in the upper part of the panel (left-hand side). Their isolated placement and the fact that they are engraved, not pecked, may suggest a different chronology.

All the giraffes except one are facing right (as is the oryx). They represent two “stylistic” variants with both formal and technical differences. Three specimens are pecked and smoothed, their bodies are oval and elongated, whereas legs and necks are very long and slightly “shaky”. The second group, also consisting of three figures, differs in the execution of the body (which is more rectangular and filled with dense pecking), as well as in a more naturalistic overall shape of the animal, and in the way the legs are rendered, that is as straight lines and/or additionally filled with peck-marks. The oryx figure shares stylistic similarities to the former group.

**Chronology:** Prehistoric.



**Fig. 2.** Panel 1 containing six giraffes, one oryx, one anthropomorph and two undetermined figures.  
Photo: P. L. Polkowski.



**Fig. 3.** Panel 3 with giraffes of the A-type. Photo: P. L. Polkowski.

*Panel 2*

**Location and visibility:** This is on an adjacent surface to the one with panel 1. Panel 2 is oriented to the south and is clearly visible only when directly approached.

**Motifs and composition:** The panel contains only one identifiable petroglyph, which is a giraffe pecked into the surface in a manner similar to the three other “rectangular” animals on panel 1. It has straight and thin legs, a massive neck and a very long linear tail with no obvious termination. There is a possible remnant of another figure just behind the giraffe, which is perhaps a similar zoomorph.

**Chronology:** Prehistoric.

*Panel 3 (Fig. 3)*

**Location and visibility:** The third part of the “trptych” is located below the hilltop. Although facing east, the panel is not clearly visible from the foot of the hill. It is almost vertical and for the most part of the day it remains shaded.

**Motifs and composition:** The composition comprises four figures, all directed towards the right-hand side. These are three giraffes and one oryx. Giraffes have unnaturally long legs, necks and tails. Their bodies are oval and entirely pecked. The neck of the specimen to the far right is exceptionally long and deformed, as it is winding, thus making the image highly unrealistic. The middle giraffe shares most of these features, but it differs in the way the head is shown. This concerns the ossicones that look more like horns, being fairly long and bent forward. Nevertheless, this image can be identified as a giraffe, considering the very long legs and neck, as well as the overall similarity to other giraffes. The third giraffe resembles the first one, except for straighter lines forming its body and limbs. The oryx is simple and the structure of its body is very much like that of the other figures. It is recognisable owing to its very long, thin and curved sable-like horns.

**Chronology:** Prehistoric.

*Panel 4*

**Location and visibility:** One of the loose slabs covering the south-eastern slope.

**Motifs and composition:** The surface of the stone is covered with a number of petroglyphs, of which only two (or three) foot images can be definitely identified (Polkowski 2018c).

**Chronology:** A most probable time-range from the Dynastic until the Late Antique Period.

*Panel 5*

**Location and visibility:** A loose slab on the south-eastern slope.

**Motifs and composition:** Another two (or three) foot depictions. Unlike the panel 2 specimens, these are rectangular. They seem to be enclosed in an angular frame.

**Chronology:** A most probable time-range from the Dynastic until the Late Antique Period.

*Panel 6 (Fig. 4a)*

**Location and visibility:** Panel 6 is another panel located high on a vertical wall, about half up the distance towards the top of the hill. It is fairly easy to see and oriented to the east.

**Motifs and composition:** It contains at least three zoomorphic depictions, all being solely engraved, which is a rare feature to be observed on the site. This, in addition to the relatively good state of preservation and a “fresher” appearance, may suggest more recent dating, either late prehistoric, or Dynastic Period(?). It is actually possible that these figures are later imitations inspired by older petroglyphs found in other spots scattered around. Although all three images are considered here as depicting giraffes, the middle specimen may be in fact another species. Its conspicuous short neck and a long muzzle make it look similar to a horse. This would, of course, mean that the picture is not prehistoric. However, because it seems that the four elements protruding from the top of the head probably indicate ears and ossicones (although the mane cannot be ruled out), it is possibly another giraffe. The short neck may be thus a result of the artist’s struggle with limited space, as the rock surface ends just above the animal.

**Chronology:** Probably prehistoric, but more recent dating cannot be ruled out.

*Panel 7 (Fig. 4b)*

**Location and visibility:** A smooth surface with just one petroglyph. The rock wall here is slightly inclined and the panel oriented to the north-east.

**Motifs and composition:** The figure depicts an oryx. It has, however, straight horns, which make this identification somewhat uncertain. The petroglyph is fully engraved and the overall rendering of the animal differs significantly from nearly all other oryx depictions on the site. Particularly unique is the shape of the body, which is tapering towards the animal’s rump. This feature resembles more a canine than an antelope. Nevertheless, the neck, horns and a relatively long tail suggest that it is most likely to be the latter.

**Chronology:** Uncertain, but probably late prehistoric or later.



**Fig. 4.** Petroglyphs from: a – panel 6; b – panel 7; c – panel 17; d – panel 18. Photo: P. L. Polkowski.

### *Panel 8* (Figs. 5–6)

**Location and visibility:** The largest panel on the site. It covers a great part of the vertical rock wall that faces east and north-east. The highest situated petroglyphs are *c.* 2.40 m above the ground. Due to a large number of figures, their dimensions, and the panel's exposed location, it is a clearly visible feature; a prominent landmark. The figures are relatively well preserved, apart from the lower portion. However, some petroglyphs have been thoroughly eroded and/or superimposed.

**Motifs and composition:** The panel can be noticed from afar, but once it is approached it reveals its “palimpsest” nature. It has several layers of petroglyphs and a high occurrence of superimpositions. All of this makes reading panel 8 a difficult task. However, apart from portions of the panel that are densely populated and vague, one can distinguish several sets of figures and their arrangements that are easier to recognise.

The major sub-composition involves a “herd” of giraffes occupying a very exposed part of the rock wall (Fig. 6a). The animals, which are six in total, are pecked deep into the surface, each displaying a similar set of formal features. The largest exceeds



Fig. 5. Panel 8 and 11 (in the background). View from E. Photo: P. L. Polkowski.



Fig. 6. Detail of panel 8: a – a herd of giraffes; b – oryxes; c – a possible b-shaped anthropomorph, a zoomorph and a crenelated line. Photo: P. L. Polkowski.

0.5 m, the smallest being *c.* 45 cm high. Their bodies, angular in shape, are fully pecked and ground, so, particularly in the raking light, they are outstandingly perceivable. The giraffes closely follow each other, being directed towards the right-hand side of the panel. Above them, more zoomorphs have been executed. One can observe at least seven giraffes (if not more) and some eight other quadrupeds, most probably antelopes. Although the oryx remains the most plausible identification, at least one individual image seems to depict a different species that might be a hartebeest (*Alcelaphus buse-laphus*). Bones of the hartebeest are known from the Sheikh Muftah sites at Dakhleh (see Churcher *et al.*, 2008: 16).

Directly to the right of the above-mentioned zoomorphs, there is a fragment of the panel containing a slightly different group of petroglyphs (Fig. 6b). They include three figures which may, or may not, be mutually linked. One is an engraved meandering line composed of lines bending at a right angle (cf. with crenellated lines in Kuhlmann 2005: 270–278; Bergmann 2011: 88, Figs. 25–26). It is, in turn, overlaid by a fully pecked bovid-like zoomorph. The front of the animal is better preserved and displays forward-pointed horns. Together with a pronounced head and muzzle, they may indicate cattle. The third element is most questionable. It may be tentatively identified as an anthropomorphic figure belonging to a group of depictions often referred to as “female figures”, but of the highly schematic type. The discussed picture would be of the b-shape type, which has been attested at several spots in and around Dakhleh (Winkler 1939: pl. XLVIII, 16–17; Bergmann 2011: 79, Fig. 10; Kuper 2014–2015: 295, Abb. 22).

The remaining parts of the panel comprise mostly antelope figures (Fig. 6c). Oryxes prevail and occupy the left-hand side of the panel in particular, including the least reachable corner. There is a considerable diversity of oryx renderings, which refers to the way the horns are shown, but also differences in the form of legs, body and head. Unlike most of the giraffes on the site, antelopes are generally smoothed with engraved additions, being only rarely pecked (Polkowski 2018d: 19–22).

#### *Panel 9* (Fig. 7a)

**Location and visibility:** A loose slab lying below panel 8.

**Motifs and composition:** Apart from a few strokes, only one definite motif can be recognised. It can be best described as two parallel lines terminating into mushroom-shaped elements at both ends.

**Chronology:** Unknown.

#### *Panel 10*

**Location and visibility:** Panel 10 is situated on a vertical rock wall, facing mostly the south-east direction. The rock surface is significantly damaged and many petroglyphs have already partially disappeared.



Fig. 7. Petroglyphs from: a – panel 9; b – panel 13; c – panel 15. Photo: P. L. Polkowski.

**Motifs and composition:** Panel 10 has only a handful of figures preserved. Zoomorphs prevail but their identification poses some problems. It seems that one or two giraffes might be depicted there, as well as three or four antelopes or gazelles. Apparently, one of the alleged giraffes is associated with a stick-like anthropomorphic figure. As the upper parts of both the animal and the anthropomorph have been eroded away, the nature of the figures' relationship remains unknown.

**Chronology:** Prehistoric.

*Panel 11 (Fig. 8)*

**Location and visibility:** Another vertical rock with a smooth surface. This wall faces north-east.

**Motifs and composition:** Six petroglyphs and one straight line can be observed on the panel. Five of them are quadrupeds whose species cannot be easily determined; almost all of them have no head due to erosion and damage. The only stick-like zoomorph, distinctly more recent, seems to have long horns and might depict a bovine. In the highest portion of panel 11, a pair of anthropomorphs and an animal are shown. The quadruped, smoothed and engraved, is barely visible. The same applies to a human figure apparently depicted in profile, which is already very shallow. After closer examination, it reveals features which enable it to be tentatively identified as another example of a "female anthropomorph". It is not of a usual build, as it has prominent buttocks that taper down into straight legs. Such a body-type finds, however, parallels (Winkler 1939: pl. XLVIII, 26–27), reinforcing the proposed identification. Moreover, it seems to be juxtaposed with another anthropomorph; this time an elongated stick-like specimen. Such a composition consisting of two figures of which one is larger (e.g., more obese) and the other thinner is a recurring motif in this part of the Western Desert (Polkowski 2019: 17, Fig. 4).

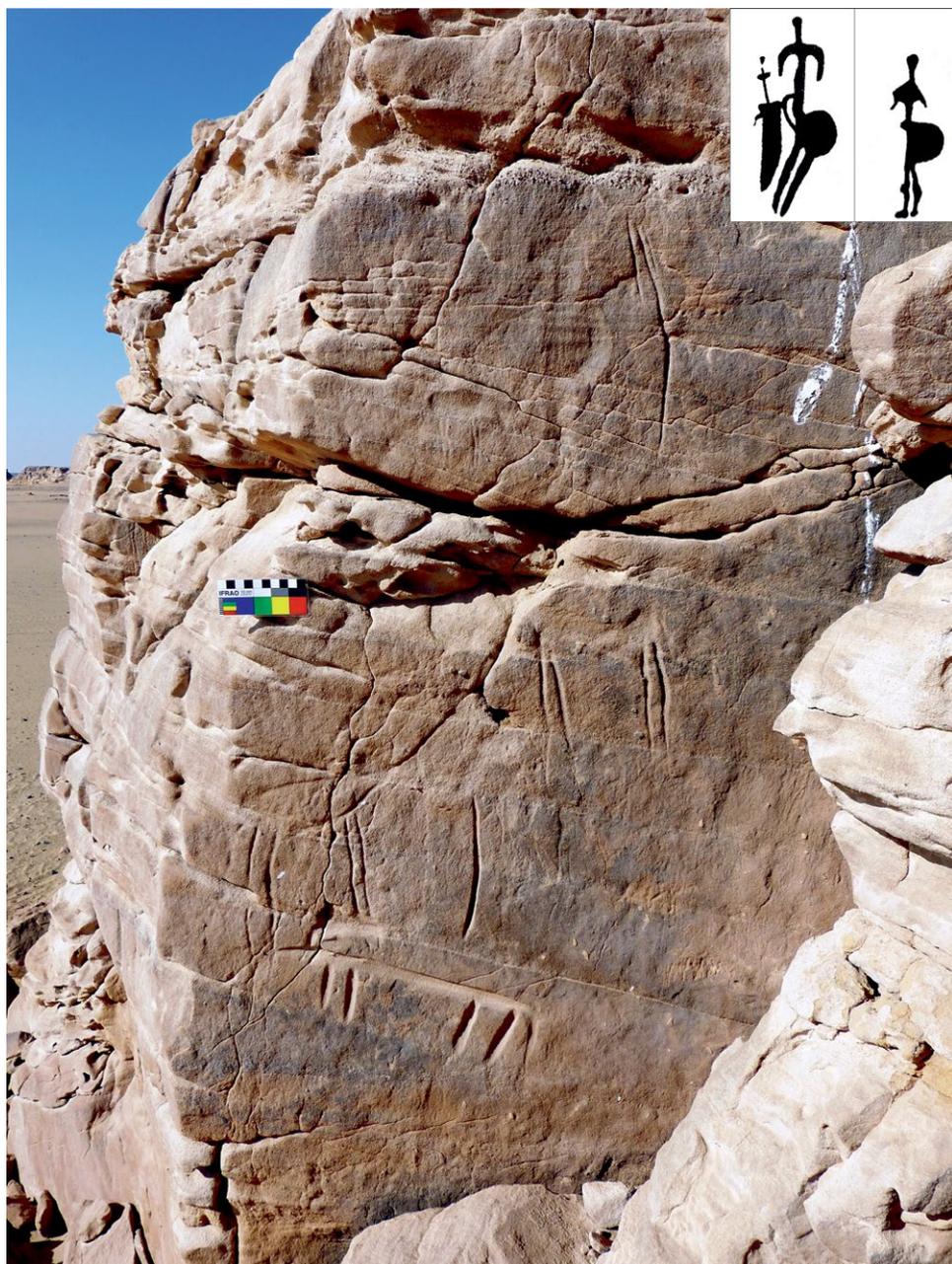
**Chronology:** Prehistoric.

*Panel 12*

**Location and visibility:** Panel 12 is located on another very exposed rock formation. The rock surface is highly eroded, thus most of the petroglyphs have become less visible than on other panels. The panel faces east/south-east.

**Motifs and composition:** Panel 12 contains at least eight zoomorphic figures and several more unidentified petroglyphs. The former group includes, most probably, seven oryxes and one giraffe. The oryxes are all similar to each other in that they are static, have rectangular/linear bodies and fairly naturalistically rendered sable-horns. The giraffe is not well preserved, so some of the details cannot be determined. It seems to be smoothed out, has a long slightly uneven neck, and the front legs are somewhat spread out, as if the animal was depicted running.

**Chronology:** Prehistoric.



**Fig. 8.** Panel 11 and anthropomorphs recorded by Hans Winkler in the eastern oasis (after Winkler 1939: pl. XLVIII.26–27). Photo: P. L. Polkowski.

*Panel 13* (Fig. 7b)

**Location and visibility:** One of the panels located on the southern slope. A loose elongated slab with a very smooth surface.

**Motifs and composition:** The boulder is covered with enigmatic depictions. They include three highly stylized anthropomorphic figures that have elongated outline bodies. The legs form the extension of the torso, similarly to the head that is of the same width as the rest of the body. The head is filled with large dots, drilled rather than pecked, which may schematically mark facial features. The neck is not indicated. The outstretched hands are slight and very short. They terminate into several short lines, most probably, indicating fingers. However, the creators of these petroglyphs focused particularly on the sexual body features. One thus observes breasts marked with two short grooves and a very pronounced pudendum. In all three cases, the latter is shown as a long and very deep groove surrounded by dots (from 6 to 12). There can be no doubt as to the sex of the anthropomorphs and the emphasis put on a sexual nature of the composition. Two additional motifs, one of which is U-shaped with a dot inside, may also share a sexual character. All these petroglyphs bear some general resemblance to the Bedouin rock art known for instance from Bahariya (Fakhry 1950: 70–72, Fig. 52; Colin and Labrique 2001) but also Dakhleh (Kuciewicz and Kobusiewicz 2011: 243, Fig. 12).

**Chronology:** Unknown, but post-Antique dating is most probable.

*Panel 14*

**Location and visibility:** On a vertical surface above panel 13.

**Motifs and composition:** Only an engraved quasi-square figure is clearly visible. It is juxtaposed with a deep oval hole ( $\emptyset = c. 2.5$  cm). Several other faint lines can be discerned, but not much can be said about them.

**Chronology:** Unknown.

*Panel 15* (Fig. 7c)

**Location and visibility:** A loose flat slab located at the southernmost tip of the hill. Easily approached, but not visible from afar.

**Motifs and composition:** The panel contains three motifs. The first is of a T-shape form with three dots above its left arm. The second motif resembles a pubic triangle, but lacks a line that would form a base (cf. Harding King 1925: 327, no. 86). The last motif is n-shaped and has two grooves and one dot inserted between its sides (cf. Harding King 1925: 327, no. 70; Fakhry 1950: 70–72, Fig. 52). The first two symbols are known to have been used in numerous variations as *wusûm* in the whole Near East region (Field 1952).

**Chronology:** Probably post-Antique.

*Panel 16*

**Location and visibility:** One of just three panels found on the south-western side of the yardang. Panel 16 is situated on an extremely flat and smooth surface, in a place which is well shaded when the sun is high. It faces west.

**Motifs and composition:** Although the surface seems to be perfect for making rock art, only part of it contains petroglyphs. Moreover, they have been shallowly engraved and scratched into the surface and now, even in the raking light, are barely visible. Only one figure is clear enough so it can be identified as a boat. It is of simple construction, having a sickle-shaped hull and a mast placed in the centre of the deck. It seems that this pole is topped by a rectangular sail, although this part of the composition is less clear and interferes with other unidentified motifs.

**Chronology:** Dynastic or later.

*Panel 17 (Fig. 4c)*

**Location and visibility:** Just south of panel 16, there is a small rock shelf perpendicular to the wall with rock art images. A small shelter is formed there, open to the north and west, providing plenty of shade and offering a place to rest. Panel 17 is located just above the shelf.

**Motifs and composition:** Only one figure has been identified on the panel. It is an antelope shown in outline, but the contour is “shaky”. Two parallel horns extend backwards and although they are not curved they probably indicate an oryx. The overall “style” of the petroglyph does not correspond well with the rest of zoomorphs found on the site, apart from the specimen on panel 7, which is also outlined and has straight horns. The latter differs, however, in that it has different body proportions and its contour line is straight and solid.

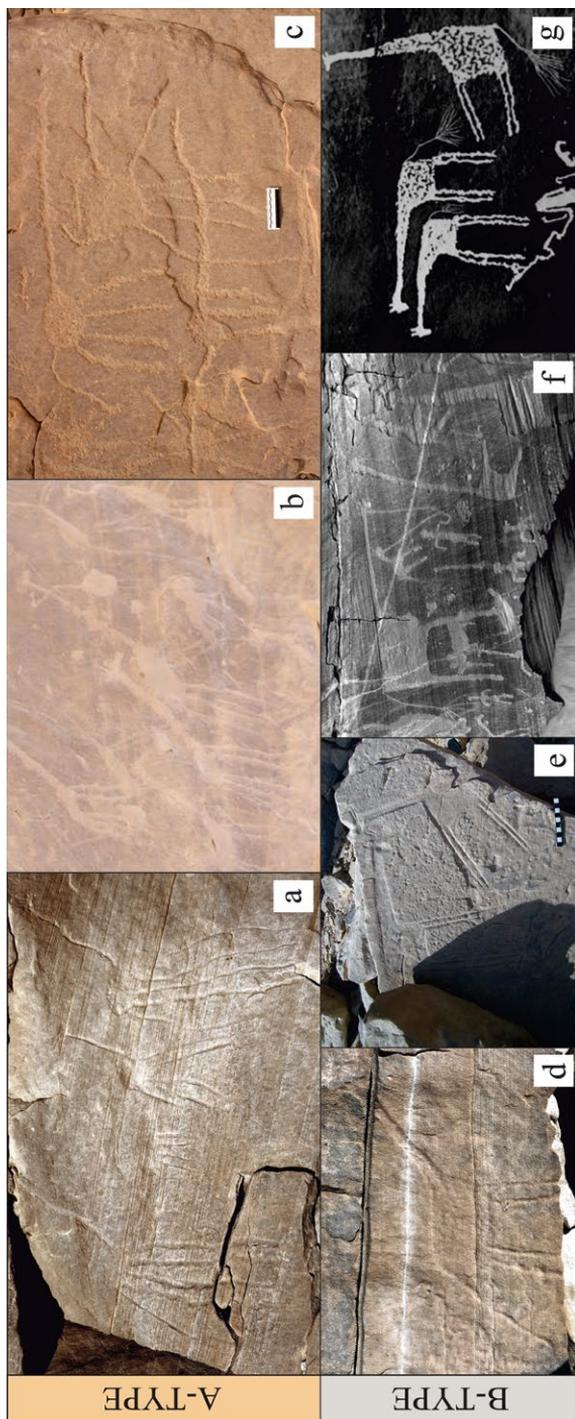
**Chronology:** Uncertain, but probably late prehistoric or later.

*Panel 18 (Fig. 4d)*

**Location and visibility:** A horizontal panel located at the interface of the slope and the flat hilltop.

**Motifs and composition:** The only petroglyph on the panel is probably another depiction of the “female anthropomorph” type. No definite sexual traits are indicated though, so a possibility that it is a male is equally plausible. The figure is eroded, especially in its upper parts. It seems to have a small oval head and outstretched arms. The torso is linear and turns into an elongated rectangular shape at the bottom. This is most likely to represent a skirt decorated with internal parallel lines ( $n = 17$ ) placed horizontally. A similar filling has been noted elsewhere in the oasis (Winkler 1939: pl. XLV.1) and particularly on site CO188 which is located nearby (Polkowski 2016: 146, Ryc. 5.21). The latter petroglyphs share also other stylistic features such as the elongated rectangular body shape and a stick-like upper body.

**Chronology:** Prehistoric.



**Fig. 9.** Two variants of giraffes known from Animal Hill and their analogies: a – Animal Hill, panel 3; b – Split Rock, Kharga (© Salima Ikram, NKOS); c – Gebel Silsila, Upper Egypt (© Maria Nilsson & John Ward, Gebel Silsila Project); d – Animal Hill, panel 2; e – Winkler 67, Dakhleh (Photo: E. Kuciewicz); f – Aa’s Rock, Kharga (after Ikram 2009a: 268, Fig. 2); g – Wadi Sab’ el-Rigal, Upper Egypt (after Winkler 1939: pl. LI.2). Computer graphics: P. L. Polkowski.

## SUMMING UP THE ANIMAL HILL PETROGLYPHS

The total number of 18 panels seem fairly homogenous when it comes to the subject-matter. Zoomorphic figures ( $n = 96$ ) clearly prevail over anthropomorphs ( $n = 8$ , including 5 prehistoric) and other figures ( $n = 22$ ; surely underestimated), although it must be stated that more petroglyphs are expected to be identified (particularly on panel 8) once a more detailed documentation has been compiled. The recognised animal species are distributed in the following numbers: 41 **giraffes** (at least 6 uncertain), 38 **oryxes** (3 uncertain), two **cattle** (uncertain) and one **hartebeest** (uncertain). The list ends with **unidentified quadrupeds** ( $n = 13$ ) which may include further giraffes and oryxes, as well as gazelles or other antelopes. These figures show a clear, if not an overwhelming, dominance of two species, the giraffe and the oryx, which is in concordance with a similar pattern observed both in Dakhleh (Polkowski 2018d: 15, Fig. 2) and the Western Desert (e.g., Ikram 2009a; Riemer 2009). What is, however, unexpected is the total lack of ostrich depictions, otherwise widely attested in this region (Polkowski and Kobusiewicz 2012: 243, Fig. 2).

And so, here, homogenous subject matter meets heterogeneous form. This is particularly noticeable in the case of the giraffe imagery. Although certain traits are shared by nearly all the giraffes on the site, namely a clear exaggeration of body features and a static appearance, they differ in the way selected attributes and details are rendered. Two main groups can be discerned here on the basis of the employed technique(s) of execution, as well as proportions and shape of the animal's body (Fig. 9). The first group (here: A-type) includes specimens with oval, often elongated, trunks and very long legs that can be "shaky", in some cases resembling strings of spaghetti (panel 3). Even their necks, although only occasionally, seem to have been executed in a similar manner. Their bodies are often smoothed and ground, but can be also deeply pecked, while the legs are usually just pecked.<sup>1</sup> The B-type specimens differ mainly with regard to the shape of the trunk which is square, rectangular or at least angular. They also have long necks, while their legs, with some exceptions, seem to be shorter on average. The way the extremities are depicted can also differ, as they may be represented in pairs, showing a considerable space between the hind legs and the front legs (unlike most of the A-type figures in which a similar distance between each of the four legs is kept).<sup>2</sup> Pecking remains the major technique of execution, especially in the case of the trunk. Various body parts can be smoothed or engraved, and there is no apparent rule concerning sinking the trunk into rock surface. Giraffes in both groups often

<sup>1</sup> For similar depictions from Kharga see Ikram 2009b: 75, Fig. 10; entirely pecked giraffes from the Nile valley, see e.g., Nilsson and Ward 2016: 174, Fig. 3.

<sup>2</sup> Similar rendering of giraffes are known e.g., from Aa's Rock in Kharga (Ikram 2009a: 268, Fig. 2) or Shat el-Rigal in the Nile Valley (Winkler 1939: Pl. LI.2).

have bushy tails indicated by several very thin lines. There are also variations between the petroglyphs when it comes to the head. On Animal Hill, many giraffes have well marked ossicones and ears, sometimes all of these attributes simultaneously, so the number of protrusions varies between two and four (note that depictions with no appendages also exist).

No doubt, these two groups allow the pictures to be ordered according to selected formal characteristics and the differences between them are fairly clear. It is, however, impossible to say whether such a division results from any chronological variation, or is more of an intra-cultural differentiation. The latter seems to be a more plausible explanation; petroglyphs created in both ways share the spaces on the same panels and often seem to be mutually interlinked. The great accumulation of depictions in one place (e.g., on the hill), the very restricted range of themes and a similar state of preservation of numerous images, suggest that the majority of the petroglyphs could have been produced and used within one broad cultural tradition in which there was a place for some formal idiosyncrasy and “artistic” freedom. This is why we observe the type-A and B specimens side by side alongside each other, and among giraffes that cannot be ascribed to either group.

The above applies also to the oryxes, even though the differences between them are less systematic. Due to the much smaller size of these petroglyphs, they are usually simpler and devoid of many formal variables. The vast majority of oryxes have smoothed trunks with engraved additions (legs, tail and horns). This feature has been observed in at least 22 cases. The remaining images depict bodies which are either stick-like, or outlined, while some are difficult to describe due to a heavy erosion. This clear, although not rigid, difference in rendering bodies of giraffes and oryxes remains in line with observations on these two groups of images in the broader context (Polkowski 2018d: 37).

The most expressive trait of the oryx are the horns. The typical horn shape, which leaves no doubt when determining the species, is long and curved. There are at least 22 figures of oryxes with scimitar-shaped horns, whereas the rest have horns either only slightly curved, or entirely straight (but always long). Two probable oryx images occur on panel 7 and 17; both outlined and with straight horns. It is, however, difficult to propose a convincing alternative identification.

## SITUATING CO178 IN THE BROADER CONTEXT OF DAKHLEH AND THE WESTERN DESERT

As a site, defined here as a cluster of panels within definite boundaries of just one hill, CO178 does not find many parallels in Dakhleh. In the central oasis area, at least that part surveyed so far, there is not a single site that has a comparable large number of

prehistoric petroglyphs. Sites such as 02/06 (Kuciewicz *et al.*, 2008), 04/06 (Krzyżaniak 2004), 21/08 (Kuciewicz and Kobusiewicz 2011), 05/09 (Kuciewicz and Kobusiewicz 2012), 06/09 (Polkowski and Kobusiewicz 2012), or CO53 (Polkowski *et al.*, 2013: 110, Fig. 11), all feature one or two main panels with similar iconography, but not of the size and density of Animal Hill's panel 8. The above-mentioned sites often contain no other prehistoric compositions (like 04/06 or 05/09), and if they do (like 21/08 or 06/09), these are usually individual figures scattered around. The accumulation of prehistoric images at CO178 is extraordinary, especially if we take into account an almost complete lack<sup>3</sup> of similar petroglyphs in a radius of *c.* 1 km.

In the eastern Dakhleh, sites such as Winkler's 62, 64, or 66 (Winkler 1939; Kuciewicz *et al.*, 2014), offer a better comparison. At these localities, there is a high concentration of prehistoric petroglyphs, which is not so surprising, as in general the eastern oasis is the location of a larger number of prehistoric rock art images than the central part (the same is true for early and mid-Holocene archaeological sites). Nevertheless, even though Winkler 62 (Kuciewicz *et al.*, 2014: 238, Fig. 8) and 64 (Winkler 1939: pl. LIII.1, LVI) contain huge panels, none displays such a dense palimpsestic content as panel 8 on Animal Hill. In terms of frequency and subject-matter, CO178 finds also parallels at site complexes of Winkler 67 (which includes 11 adjacent hills; Kuciewicz *et al.*, 2015: 285) and 61-39/E3 (Krzyżaniak 1987).

Contrary to what may appear from the above overview, most of the prehistoric rock art in Dakhleh cannot be labelled as monumental. The majority of panels, especially in the central oasis, contain no more than several petroglyphs, whereas sites having more than two or three panels are relatively rare. In this context, Animal Hill appears to be almost unique. However, apart from rock art quantity, CO178 shares many similarities with other sites, at least insofar as the subject-matter is concerned. Its repertoire is mostly limited to giraffes, oryxes and anthropomorphs, and in that it finds analogies on multiple sites. It might be worth considering a particular assemblage as an example.

This concerns a row of giraffes on panel 8. Six animals are shown in one register and stand out against the background. This introduces a sense of order that is otherwise difficult to grasp on other panels (at least from our etic point of view). If we compare, for instance, panel 1 and 8, we will see two compositions both involving six giraffes but arranged in two wholly different ways. The latter is a linear group of animals of similar size, facing the same direction, and all formally alike. In turn, panel 1 shows animals oriented in two opposite directions, depicted in two different manners, and scattered. Its idiosyncratic nature makes that panel more difficult to analyse comparatively. This is

<sup>3</sup> With the exception of site CO175 with one giraffe, *c.* 400 m N of CO178; CO184 with a quadruped, *c.* 375 m SW; and a large panel with prehistoric zoomorphs (but extremely eroded) on site CO189, *c.* 200 m SW.

in contrast to the giraffes on panel 8, which were most likely produced during a single event. They display a “syntax” that may be traced also on other sites. In the central oasis, four further similar arrangements are known from sites: CO122 (3 giraffes), CO126 (9?), 06/08 (6) and 21/08 (4); while from the eastern part three more herd compositions can be mentioned: “Hill 168”<sup>4</sup> (3), Winkler 67-1-13 (5) and 67-1-21 (3). Knowing that in Dakhleh there are nearly 150 panels containing at least one giraffe, the low number of only eight “herd scenes” (plus several quasi-linear arrangements) may in fact suggest their unusual character. It would be then a rarely depicted concept, but a highly defined one. The Western Desert produces some more parallels. A very close scene is known from site Meri 06/12, south of Dakhleh (Riemer 2011: 246–53, Fig. 255). There, six giraffes of the B-type (with outline and ground bodies) are depicted, all facing the same direction. They are between 60 and 90 cm tall and all except one have a line attached to their necks. According to their discoverers, “the engravings of panel A were executed on the most extended upright rock face that occurs at the hill” (Riemer 2011: 248). Another herd is reported from Farafra region (Le Quellec *et al.*, 2005: 35, Fig. 27), although the panel is actually located in the Meri area, south of Dakhleh.<sup>5</sup> This time, four fully pecked angular giraffes are oriented to the left and again, they are placed on a vertical rock surface which is easy to spot. Compositions of this type were found also on Djedefre Water Mountain (4 giraffes in a row; Berger 2012: 297, Fig. 21) and the site Chufu 01/09 (4 giraffes; Kuper 2014–2015: 295, Abb. 20); both scenes occurring high on vertical, well visible panels. The motif of a herd is known also from Upper Egypt and Nubia (e.g., Almagro Basch and Almagro Gorbea 1968: 267, Fig. 281; Hellström and Langballe 1970: pl. 16; Červíček 1974: Abb. 92; Curto 1987: Tav. 43; Váhala and Červíček 1999: 94, Taf. 88.349), and the available publications indicate its relative rarity in comparison to other compositional arrangements involving giraffes. We can then tentatively conclude that the “herd scene” type of composition is a relatively rare motif which is in most cases displayed in prominent places, on vertical walls visible from afar.

It is clear that Animal Hill is part of the broader prehistoric rock art tradition of the central Western Desert. This is manifested not only in utilizing the particular motif such as the “herd of giraffes”, but especially on a more basic level of subject-matter selection. Moreover, some formal “stylistic” traits (e.g., giraffes of A- and B-type) can be traced far east and south-east towards the Nile valley. The extent to which this is either a coincidence or due to cultural affiliation needs to be researched further. In light of the “contacts” between the oases and the Nile valley in the mid-Holocene (McDonald 2002) this kind of rock art research may prove to be valuable.

<sup>4</sup> Documentation in the Poznan Archaeological Museum, archives of Lech Krzyżaniak.

<sup>5</sup> I visited the site in 2013.

## IN CONCLUSION: A WORD ON ANTHROPOMORPHS

One more element linking Animal Hill with other Dakhleh and Western Desert sites is the presence of anthropomorphic figures of particular types. As a paper on the Dakhleh Oasis “female anthropomorphs” is in preparation, and the above examples will be treated there in detail, I limit myself here just to providing very general remarks. The specimens found on the site either belong to schematic variants, or are very weathered. They all find formal analogies though, already indicated above. Co-occurrence of anthropomorphs with zoomorphic depictions, giraffes in particular, is well attested in Dakhleh and the neighbouring regions (e.g., Dakhleh, Polkowski *et al.*, 2013: 106–111; Kharga, Ikram 2009b: 75, Fig. 10; desert, Bergmann 2011: 79, Fig. 11), however on Animal Hill these associations are not as strict as in the cited examples. Panel 18 shows a completely isolated “female” figure, whereas on panel 8 and 11 the link between anthropomorphs and giraffes is limited to the fact that they share the same surface. The specimen on panel 8, certainly the most debateable one, seems to be in association with a cattle-looking animal and/or a crenelated line. However, the nature of this composition remains vague. The assemblage on panel 11 seems to be clearer and one observes there a pair of anthropomorphs and a quadruped that may be an oryx. This composition resembles very much another scene known from site 61-39/E3-15 in the eastern oasis (Krzyżaniak 1987: 189, Fig. 5). There too, a pair of slim and obese figures are depicted, while one of them seems to be connected by a line to an antelope. On panel 11 we see no such line but the overall similarity is striking. Perhaps we are dealing here with another compositional motif that in the past could have referred to a particular set of meanings and was to some extent “defined”.

Site CO178 has been selected to be documented in detail with the use of photogrammetry, RTI and other digital photography methods in order to gain a better recognition of its rock art. It is particularly panel 8 that requires a very precise recording, as its state of preservation and a palimpsestic nature of petroglyphs make it difficult to read and comprehend. It is thus hoped that in the near future the Petroglyph Unit will be granted permission to re-start fieldwork in Dakhleh, and Animal Hill, being properly documented, will reveal much more information that allow to verify the presented above interpretations and identifications.

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