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Meanders of interpretation: Interpreting the ‘meandering lines’

Introduction

Rock art research is a specific domain of archaeology, which many scholars treat with reservation. This attitude is related to a fact that rock art researchers are often in a tenuous position when attempting to explore the cognitive realms of the distant past as it applies to interpreting rock art. Rock art often deprived of an archaeological context, difficult to date and not infrequently fragmentary in its preservation, is not easily interpreted and the narratives about rock art, due to the aforementioned difficulties, are usually subject to critical statements. The main barrier for interpretation is the imagery itself and its often abstract character. Single figures, even if recognizable as animals or humans, were certainly invested with diversified meanings. Giving meaning to these figures constitutes a major problem, if it is actually possible at all. That is why different approaches to rock art are represented among scholars. A substantial part of them prefer to be content with a description and identification of figures or structures; the other part try to attain the meanings from the past (Bahn 2002: 91; Le Quellec 2006, 166). In cases where one has ethnographic and ethnohistorical contexts available some insights into the veiled world of meanings are more possible. This is rarely the case for images from the eastern Sahara. Rock drawings in Egypt and Sudan, particularly the prehistoric and ancient, but also medieval ones, belong to traditions which no longer exist, hence all the knowledge about the societies who produced them comes mainly from the fields of archaeology and history.

Those two disciplines provide sources inspiring rock art interpretations. Rock art interpretation however, is not easy, but rather it is a winding path along the meanders of a river of ideas.

This article has two purposes. The first is to present selected rock art findings in the Dakhleh Oasis, that belong to the category called 'meandering lines'. This motif, so characteristic for Egyptian and Nubian rock art, has rarely been chosen as a subject of inquiry. However, an overview of publications dealing with that type of imagery highlighting the diverse interpretational ideas of other scholars forms a background on which I present my own interpretation, which agrees somewhat with the most widely accepted one. This interpretation then becomes a basis for reflections on issues of a broader character. The second aim of this paper is to discuss the difficulties behind every interpretation, not only of meandering lines, but of rock art in general. This includes discussing some of the theoretical aspects of eastern Saharan rock art research.

Surveying the Central Dakhleh Oasis

Rock art in the Dakhleh Oasis is recognized mostly on its eastern fringes, where it was discovered by Herbert Winlock (1936), Harding King (1925) and especially Hans Winkler (1939) and more recently by the Dakhleh Oasis Project members Lech Krzyżaniak (1987; 1990; 1991; 1993; 1994; 1999; 2001; 2004), Olaf Kaper (2009), Olaf Kaper and H. Willems (2002), Michał Kobusiewicz and Ewa Kuciewicz (Polkowski *et al.* 2013) among the others. Krzyżaniak began a rock art survey in the Central Oasis, roughly between Ismant el-Kharab and Balat (Fig. 1). After he passed away, Kobusiewicz continued this reconnaissance. The Petroglyph Unit conducted research in the area called the Painted Wadi, which runs from south to north in the eastern fringe of the ca. 10 km long and 4 km wide sandstone area located in the central part of the Oasis (Kuciewicz *et al.* 2007; 2008; 2010; Kuciewicz and Kobusiewicz 2011; 2012). Rock art found in the Painted Wadi proved to be chronologically similar to the petroglyphs known from the Eastern Oasis because both cover a very long time span from the Neolithic to modern times.

I have joined the Petroglyph Unit in 2011 and since 2012 developed a sub-project named: *In the space of palimpsest. Rock art in the archaeological landscapes of Dakhleh Oasis*. Several objectives of this project include the continuation of the survey, landscape analyzes of rock art distribution and interpretive efforts towards petroglyphs from all the possible periods, particularly the post-prehistoric. The main goal of the studies is the application of certain theoretical concepts such as the 'biography of things', 'palimpsest' metaphor and the postprocessual notion

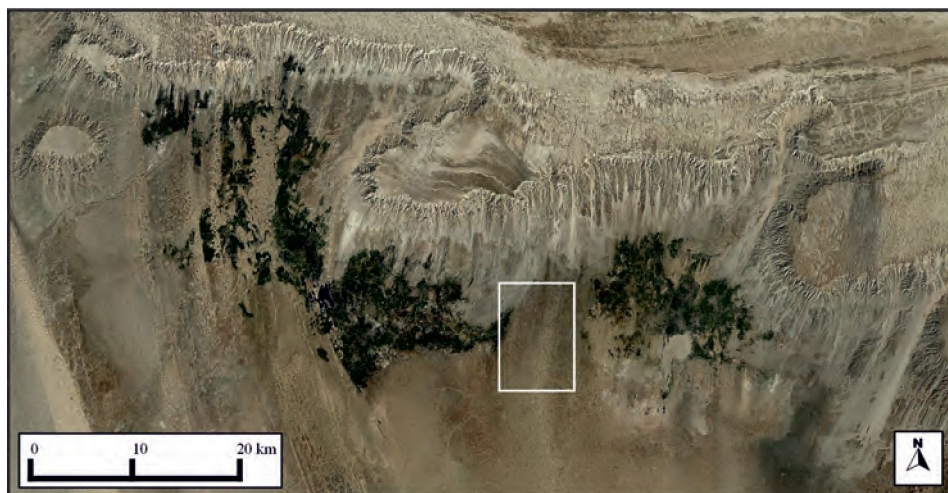


Fig. 1. On the map the area of the sandstone hills occurrence is indicated. It separates two huge areas of cultivation

of landscape and eventually creating narratives comprising the petroglyphs and landscapes, to Dakhleh rock art research. These topics are discussed elsewhere (Polkowski in press a; in press b).

During three¹ seasons of fieldwork 52 of 60 known sites in the Painted Wadi were visited and an additional 121 rock art sites² to the west of it³ were discovered or re-found. Figure 2 does not show sites, but individual rock art panels⁴. Rock art sites consist of one or more panels and a panel may comprise dozens of images, but even one single isolated figure can be classified as a site. To this date at least 711 petroglyph panels have been registered and a substantial part of the whole Central Oasis area has been surveyed (Fig. 2). There are several rock

¹ Last two seasons of fieldwork were conducted in frames of the project *In the space of palimpsest. Rock art in the archaeological landscapes of Dakhleh Oasis*, financed by the National Science Centre in Poland, decision no. DEC-2011/01/N/HS3/05994. Fieldwork in 2011 was possible due to financial help of the Polish Centre of Mediterranean Archaeology of Warsaw University and Poznań Archaeological Museum.

² Such a big number of sites is related to the fact, that on many of them only one or several pictures and/or inscriptions is located. Sites comprising dozens or hundreds of images are relatively rare.

³ In 2007 a cursory survey northwest of the Painted Wadi was conducted, although, except few findings, (Kuciewicz *et al.* 2010) the rest remain unpublished. In 2009 the Petroglyph Unit surveyed an area located in the western fringe of the sandstone area, where 6 new sites was discovered (Kuciewicz & Kobusiewicz 2012). I revisited 4 of 6 officially registered sites in that area discovered in 2009 by the Petroglyph Unit.

⁴ In some instances however also groups of panels and/or loose stones are marked as rock art panels. There is no strict criteria for deciding, which rock art panels belong to the same site. In most cases however a single hill with one or several panels is termed as a site.

art categories, which can be distinguished from a huge mass of the images. They comprise certain zoomorphic images like giraffes and oryx antelopes of likely Neolithic origin; sandal and foot depictions most likely from the Dynastic and Roman periods; pubic triangles dated similar to sandals; and crosses of different shapes related to the Roman and Byzantine periods. Yet another petroglyph class is formed by the images discussed in this paper: the meandering (or wavy) lines. They are registered on 6 sites discovered by the Petroglyph Unit between 2005 and 2009 and on 18 sites discovered between 2011 and 2013. The meanders are found on 43 rock art panels (Fig. 3) and comprise at least 89⁵ full or partial depictions representing the meandering line motif (Table 1). This number could be even higher, although the state of preservation of some of the images makes their identification as meanders very difficult. It is probable that they are of the Neolithic origin. Yet, one cannot dismiss a possibility that some of them were produced earlier, i.e. in the Epipalaeolithic⁶.

Description of the motif

All representations categorized as meandering lines, except one, were executed using one technique of pecking. They are not outlined figures, but rather the whole meander surface was worked in toto. These surfaces are not even and smooth (except one Type II example) as often happens in case of images, which were produced by an abrasion technique resembling a sunken relief type (some zoo- and anthropomorphic depictions were produced in that technique in the Oasis). The indented surfaces of meandering lines are rather irregular. Three characteristic shapes may be distinguished among the wavy line petroglyphs (Table 1, Fig. 4). The first one relates to a regular, rather symmetrical meandering line, whose bends are curved and more or less of the same size (TYPE I). Those figures resemble symmetrical sinuous lines. The second gender, rarely encountered, is probably a derivative of the Type I, most possibly its stylistic variation (TYPE II). This motif is characterized by a strong regularity, but its bends are somewhat angular. The third type of the wavy line may be described as having an asymmetrical and individualized trail (TYPE III). The line is still a meandering one, nevertheless it has bends of irregular size and in parts can be even straight. It may even roll up so that it forms sort of a spiral-like design. It could be reasonable to distinguish yet another type of image, which actually does not meander, but is just an abstract

⁵ Assuming that my identifications are correct.

⁶ Dirk Huyge suggested (Huyge 2009: 117; pers. comm. 2014) that geometric rock art from the Western Desert oases may belong to the Epipalaeolithic cultural horizon.

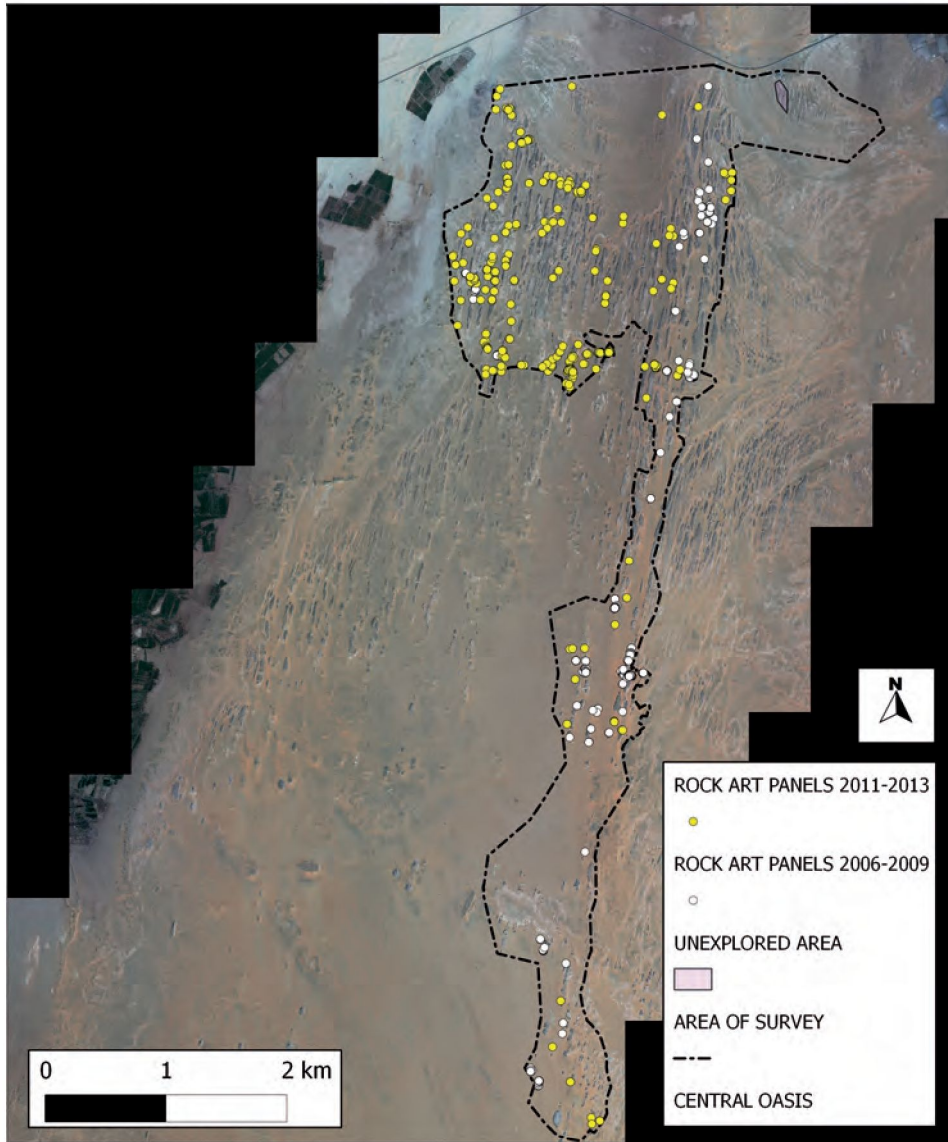


Fig. 2. Distribution of rock art panels in the Central Oasis

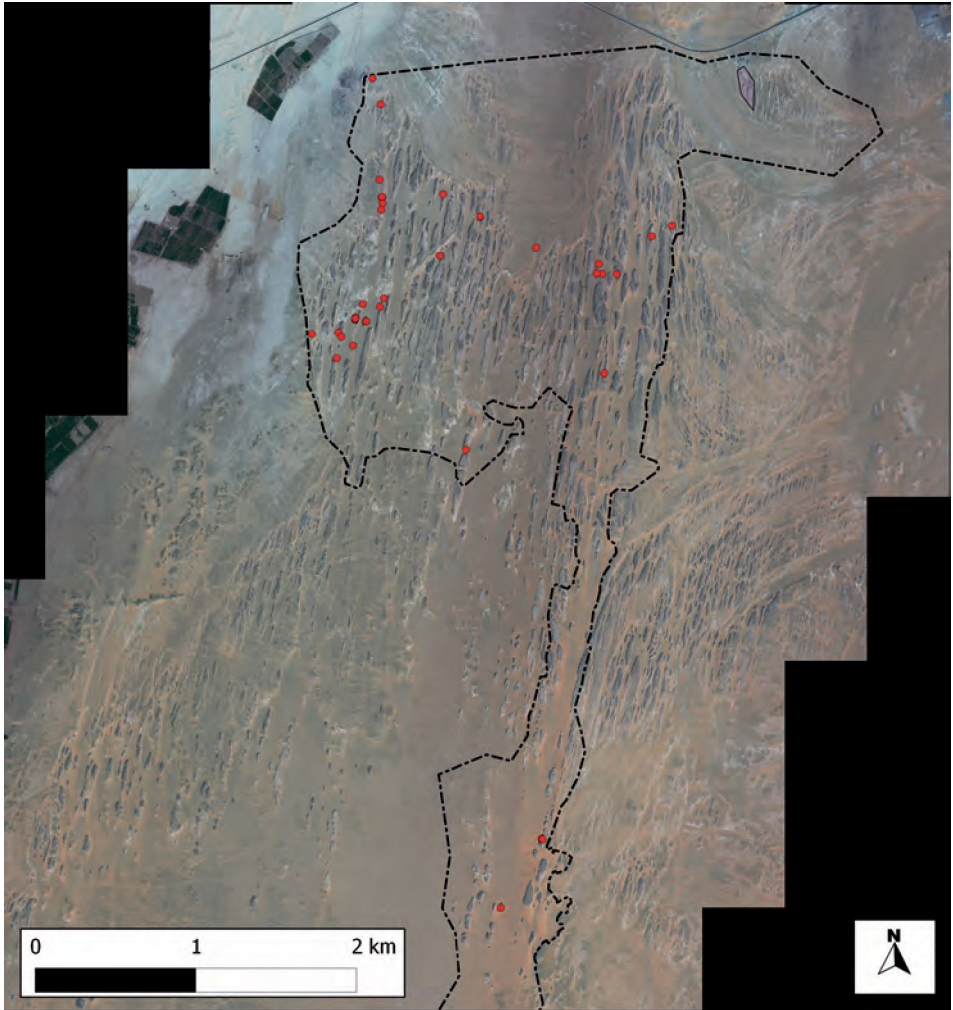


Fig. 3. Distribution of the panels containing the meandering line motif

Table 1. Rock art sites containing panels with the meandering line motif found between 2006 and 2013

No.	SITE no.	PANEL no.	TYPE	QUANTITY*	LOCATION	ACCESS (VISIBILITY)**	ASSOCIATIONS/REMARKS	FIG no.
1.	CO16	1	1. REGULAR	1	E SLOPE,	MODERATELY EASY (NOT VISIBLE)	ENGRAVED LINE	
					OVERHANG,			
					OBLIQUE SURFACE			
2.	CO17	1	1. REGULAR	1	E WALL,	EASY (EXPOSED)	-	
					ROCK FACE,			
					VERTICAL SURFACE			
3.	CO18	1	1. REGULAR	2?	E WALL,	EASY (EXPOSED)	-	Fig. 3
					BOULDER,			
					VERTICAL SURFACE			
4.	CO18	2	3. ASYMMETRICAL	1?	HILLTOP,	EASY (NOT VISIBLE)	-	
					CENTRAL PART,			
					HORIZONTAL SURFACE			
5.	CO31	2	3. ASYMMETRICAL	1	W WALL,	EASY (MODERATELY VISIBLE)	-	
					ROCK FACE,			
					VERTICAL SURFACE			
6.	CO35	1	3. ASYMMETRICAL	1	OUTCROP,	EASY (MODERATELY VISIBLE)	-	
					N EDGE,			
					HORIZONTAL SURFACE			

No.	SITE no.	PANEL no.	TYPE	QUANTITY*	LOCATION	ACCESS (VISIBILITY)**	ASSOCIATIONS/REMARKS	FIG no.
7.	CO40	2	1. REGULAR	1	HILLTOP,	FROM E:	SMALL PECKED CIRCULAR FIGURE	
					E EDGE,	DIFFICULT,		
					HORIZONTAL SURFACE	FROM W:		
						EASY (NOT VISIBLE)		
8.	CO40	3b	3. ASYMMETRICAL	1	HILLTOP,	FROM E:	ORYX	
					E EDGE,	DIFFICULT,		
					HORIZONTAL SURFACE	FROM W:		
						EASY ((NOT VISIBLE))		
9.	CO40	4	1. REGULAR (1)	2	HILLTOP,	FROM E:	-	
			3. ASYMMETRICAL (1)		E EDGE,	DIFFICULT,		
					HORIZONTAL	FROM W:		
						EASY (NOT VISIBLE)		
10.	CO40	5	1. REGULAR (5)	6?	HILLTOP,	FROM E:	-	
			3. ASYMMETRICAL? (1)		E EDGE,	DIFFICULT,		
					HORIZONTAL SURFACE	FROM W:		
						EASY (NOT VISIBLE)		

No.	SITE no.	PANEL no.	TYPE	QUANTITY*	LOCATION	ACCESS (VISIBILITY)**	ASSOCIATIONS/REMARKS	FIG no.
11.	CO40	6	1. REGULAR	3?	HILLTOP,	FROM E:	JOINED FRAGMENTS OF 3 DIFFERENT LINES?	
					CLOSE TO E EDGE,	DIFFICULT,		
					HORIZONTAL SURFACE	FROM W:		
						EASY (NOT VISIBLE)		
12.	CO40	7	1. REGULAR	3?	HILLTOP,	FROM E:	-	
					E EDGE,	DIFFICULT,		
					HORIZONTAL SURFACE	FROM W:		
						EASY (NOT VISIBLE)		
13.	CO47	1	1. REGULAR	1	W WALL,	EASY (EXPOSED)	-	Fig. 9
					ROCK FACE,			
					VERTICAL SURFACE			
14.	CO52	2	1. REGULAR	1	W SLOPE,	EASY (MODERATELY VISIBLE)	-	
					HORIZONTAL SURFACE			
15.	CO52	3	3. ASYMMETRICAL	1	W SLOPE,	EASY (MODERATELY VISIBLE)	TWO PECKED FIGURES:	
					OBLIQUE SURFACE		1) UNDETERMINED	
							2) ORYX	

No.	SITE no.	PANEL no.	TYPE	QUANTITY*	LOCATION	ACCESS (VISIBILITY)**	ASSOCIATIONS/REMARKS	FIG no.
16.	CO59	1a	1. REGULAR (2?)	4?	ROCKY TERRACE,	EASY (MODERATELY VISIBLE)	VERY WEATHERED OVERLAPPING FIGURES	Fig. 5
			3. ASYMMETRICAL (2?)		W SLOPE,			
					HORIZONTAL SURFACE			
17.	CO59	1b	3. ASYMMETRICAL	4	ROCKY TERRACE,	EASY (MODERATELY VISIBLE)	-	Fig. 7
					W SLOPE,			
					HORIZONTAL SURFACE			
18.	CO59	1c	1. REGULAR	1	ROCKY TERRACE,	EASY (MODERATELY VISIBLE)	ORYX	
					W SLOPE,			
					HORIZONTAL SURFACE			
19.	CO59	2	3. ASYMMETRICAL	2	ROCKY TERRACE,	EASY (MODERATELY VISIBLE)	-	
					W SLOPE,			
					HORIZONTAL SURFACE			
20.	CO59	3	3. ASYMMETRICAL	2?	ROCKY TERRACE,	EASY (MODERATELY VISIBLE)	ORYX	
					W SLOPE,			
					HORIZONTAL SURFACE			
21.	CO59	4	3. ASYMMETRICAL	2	ROCKY TERRACE,	EASY (MODERATELY VISIBLE)	-	
					W SLOPE,			
					HORIZONTAL			

No.	SITE no.	PANEL no.	TYPE	QUANTITY*	LOCATION	ACCESS (VISIBILITY)**	ASSOCIATIONS/REMARKS	FIG no.
22.	CO59	5	1. REGULAR (1)	6?	ROCKY TERRACE,	EASY (MODERATELY VISIBLE)	DEEP ENGRAVED PARALLEL LINES	
			3. ASYMMETRICAL (4?)		W SLOPE,			
					HORIZONTAL SURFACE			
23.	CO60	2	1. REGULAR	1?	E WALL, VERTICAL SURFACE	EASY (EXPOSED)	ORYX AND OTHER UNDETERMINED ZOOMORPHIC IMAGES	
24.	CO62	1	3. ASYMMETRICAL	4?	NE WALL, OVERHANG, OBLIQUE SURFACE	EASY (MODERATELY VISIBLE)	-	
25.	CO62	2	1. REGULAR	1	E SIDE, LOOSE BOULDER, HORIZONTAL SURFACE	EASY (MODERATELY VISIBLE)	ENGRAVED GROUPS OF PARALLEL LINES	
26.	CO63	2	1. REGULAR	1	HILLTOP, E EDGE, HORIZONTAL SURFACE	MODERATELY EASY (NOT VISIBLE)	-	Fig. 8
27.	CO63	3a	3. ASYMMETRICAL	2?	HILLTOP, E EDGE, HORIZONTAL SURFACE	MODERATELY EASY (NOT VISIBLE)	UNDETERMINED PECKED FIGURE	

No.	SITE no.	PANEL no.	TYPE	QUANTITY*	LOCATION	ACCESS (VISIBILITY)**	ASSOCIATIONS/REMARKS	FIG no.
28.	CO63	3b	3. ASYMMETRICAL	1	HILLTOP,	MODERATELY EASY (NOT VISIBLE)		
					E EDGE,			
					HORIZONTAL SURFACE			
29.	CO65	1	1. REGULAR	1	NW SIDE,	EASY (MODERATELY VISIBLE)	GAZELLE?	
					BOULDER,			
					HORIZONTAL SURFACE			
30.	CO69	2	3. ASYMMETRICAL	3	BOULDER,	EASY (MODERATELY VISIBLE)	UNDETERMINED PECKED FIGURES	
					HORIZONTAL SURFACE			
31.	CO80	1	3. ASYMMETRICAL	4	ROCKY RIDGE,	EASY (MODERATELY VISIBLE)	UNDETERMINED PECKED FIGURES, INCLUDING POSSIBLE FISH REPRESENTATIONS	
					HORIZONTAL SURFACE			
32.	CO86	1b	3. ASYMMETRICAL	1	ROCKY TERRACE,	EASY (MODERATELY VISIBLE)	PECKING MARKS, CUP-MARKS? AND SANDALS	
					W SLOPE,			
					HORIZONTAL SURFACE			
33.	CO86	4	1. REGULAR	1	S SLOPE,	EASY (NOT VISIBLE)	-	
					HORIZONTAL SURFACE			

No.	SITE no.	PANEL no.	TYPE	QUANTITY*	LOCATION	ACCESS (VISIBILITY)**	ASSOCIATIONS/REMARKS	FIG no.
34.	CO94	1	1. REGULAR	1	HILLTOP,	EASY (NOT VISIBLE)	OVAL PETROGLYPH	
					E EDGE,			
					HORIZONTAL SURFACE			
35.	CO105	8	2. ANGULAR	1	N WALL,	EASY (MODERATELY VISIBLE)	MANY FIGURES:	Fig. 6
					ROCK FACE,		1) ORYX ANTELOPES	
					VERTICAL SURFACE		2) QUADRUPEDS – ANTELOPES? GAZELLES?	
							3) OSTRICH?	
36.	14-cze	4	1. REGULAR (4)	8	HILLTOP,	MODERATELY EASY (NOT VISIBLE)	PAIR OF SANDALS	
			3. ASYMMETRICAL (4)		S EDGE,			
					HORIZONTAL SURFACE			
37.	07-mar	1	3. ASYMMETRICAL	1	HILLTOP,	MODERATELY EASY (NOT VISIBLE)	UNDETERMINED PECKED FIGURE	
					W EDGE,			
					HORIZONTAL SURFACE			
38.	07-lis	4	1. REGULAR	1	HILLTOP,	MODERATELY EASY (NOT VISIBLE)	SANDALS, UNDETERMINED RECTANGULAR FIGURE	Fig. 10
					E EDGE,			
					BOULDER,			
					HORIZONTAL SURFACE			

No.	SITE no.	PANEL no.	TYPE	QUANTITY*	LOCATION	ACCESS (VISIBILITY)**	ASSOCIATIONS/REMARKS	FIG no.
39.	14-lip	1	1. REGULAR	2	HILLTOP,	MODERATELY EASY (NOT VISIBLE)	-	Fig. 2
					CENTRE,			
					VERTICAL SURFACE			
40.	08-lis	2	1. REGULAR	1	HILLTOP,	MODERATELY EASY (NOT VISIBLE)	UNDETERMINED ZOOM-PRPHIC IMAGE	
					W EDGE,			
					HORIZONTAL SURFACE			
41.	08-lis	3	1. REGULAR	3	HILLTOP,	MODERATELY EASY (NOT VISIBLE)	GAZELLE?	Fig. 4
					W EDGE,			
					HORIZONTAL SURFACE			
42.	08-lis	4	3. ASYMMETRICAL	2	HILLTOP,	MODERATELY EASY (NOT VISIBLE)	-	
					E EDGE,			
					HORIZONTAL SURFACE			
43.	09-maj	1	2. ANGULAR (1)	2	E WALL,	EASY (EXPOSED)	MANY FIGURES:	
			3. ASYMMETRICAL (1)		ROCK FACE,		1) ANTHROPOMORPHS	
					VERTICAL SURFACE		2) LIZARDS	
							3) ORYX ANTELOPES	
							4) OSTRICHES	
							5) SPIRAL	

* In some cases number of meandering lines is uncertain and/or the identification is questionable.

** Access to rock art may be easy/moderately easy/difficult/impossible. The petroglyphs can be not visible/moderately visible (visible from close-up)/exposed (well visible from a distance). Both access and visibility are defined from a perspective of a modern spectator walking at the bottom level of the wadi. Hence, the petroglyphs located at hilltops are termed here as 'not visible'.



Fig. 4. A typology of the meandering line motif variations known from the Central Oasis

curved line. The sparse examples of this style of petroglyph may be a result of poor preservation and simply be only fragmentary pieces of once larger typical wavy lines. I estimate that 40 images may be recognized as belonging to Type I. Type II figures comprise only two examples and the rest of the figures may be taken as representing Type III.

The length of the meandering lines differs, but excluding fragmentary examples, most exceed at least 50 cm. Some representations are 1,5-2 m long. In this situation a finding from CO65 site seems to be an exception, because it measures only 7 cm. Almost all the petroglyphs are heavily weathered. In some cases heavy repatination causes the pecking to blend with the surrounding rock making them difficult to identify. Surfaces chosen for depicting wavy lines are usually of dark blue or dark grey colour (Fig. 5). It is possible that prehistoric authors intentionally chose those dark rocks to make their freshly executed petroglyphs contrast from the host rock.



Fig. 5. Two wavy lines executed on the nearly vertical surface at the 14/07 site. One of the meander's ends resembles snake's head

In case of 8 panels out of 43, meanders were executed on vertical surfaces and 3 on oblique ones. Ca. 75% of the images were produced on horizontal surfaces (Table 1). 18 panels are situated on the hilltops and the rest may be found on the slopes, cliff-like walls and on loose boulders scattered around the hills. Many panels seem to be easily accessible and also visible (Fig. 6), especially assuming their colouristic contrast with dark rocks when originally executed. Those images however, which are located on the hilltops have less 'public' character. They are not visible to anyone crossing this area, unless one knows about their existence or climbs the hillocks and accidentally encounters them. In the places, which I have labelled 'not visible'⁷, the number of Type I wavy lines is more than twice as high as the petroglyphs representing Type III. However, because there are more places easily accessible and visible, one probably should consider the public/private dis-

⁷ By the term 'restricted' I understand the rock art places difficult to access and/or not visible, when one is on the bottom of the valley. Most of them are accessible, although often 'hidden' at the hilltops. The term 'public' refers to those findings, which are visible, when one is approaching a site. It may be stated that the latter rock art demand from the observer less effort and knowledge to be noticed.

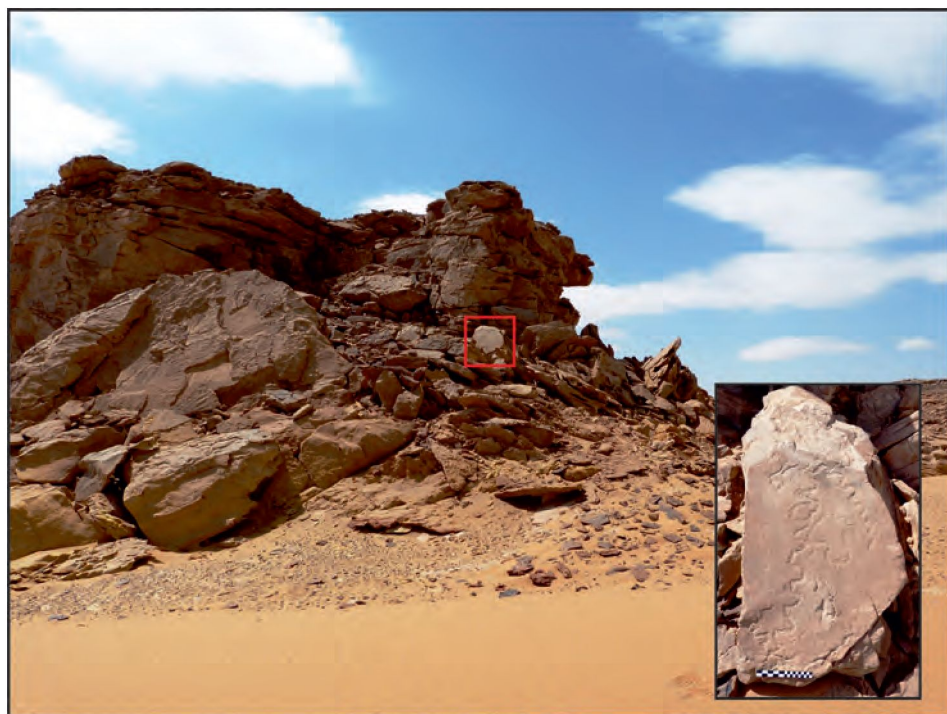


Fig. 6. Rock art site CO18 seen from NE and the boulder with the wavy lines

tion a formality which does not reflect any functional or semantic differences. At this time functions and semantic differences remain questionable as does a question regarding the distribution of sites containing the meandering lines in the Central Oasis area. As it is indicated on Fig. 2 those places are located mostly along the western and northern boundaries of the Nubian sandstone occurrence area and singular examples were found in the Painted Wadi, closer to the eastern fringe. The centre of the area, where the hill network is densest, is almost devoid of the wavy line petroglyphs. However, until the survey is finished all the statements about any rock art distribution in this area remain inconclusive.

Table 1 shows drawings that are associated with the meandering lines including only those petroglyphs, which exist in direct vicinity of the wavy lines occupying the same panel or related panels. However, it cannot be ruled out that in the prehistoric people perceptions those images were meaningfully related to petroglyphs and/or groups of figures situated much farther away. Considering only the drawings closely juxtaposed with the meandering lines, one may conclude that the most frequent images associated with them are other wavy lines. This type

of image relationship occurs on 20 panels. In at least 10 instances meanders are accompanied by figures, whose forms are difficult to identify. They are executed in the same technique and the state of patination and weathering is identical to wavy lines. I believe they were probably produced by the very same authors. At two other sites (CO59 and CO62) some parallel engraved lines were executed next to meanders. The most interesting category of the associated figures consist of the figurative depictions. In the case of several quadruped representations it is extremely difficult to identify the species (Fig. 7). Two other cases show possible gazelle images. The most recognizable are the representations of oryx antelopes found on 7 rock art panels (Fig. 8). They were produced by the pecking technique, probably in frames of the same cultural horizon as the meandering lines. In other words, their mutual associations seem to be intentional and meaningfully constituted. These zoomorphic images are clearly smaller than the wavy lines, usually no longer than ca. 15 cm. Most of the associated petroglyphs are just singular images placed near the meandering lines. In only three cases do the panels with the wavy lines have more than a few figures associated with them. These are the sites 05/09, CO60 and CO105 (Fig. 9), where animals juxtaposed with the meanders represent different species, including oryx and other antelopes, gazelles and ostriches. It is interesting to note that the only two images of the Type II meandering line, the angular ones, are located at two of those sites. The concomitance of the meanders and anthropomorphic figures was observed only on site 05/09. Human representations are of two kinds: so-called 'pregnant women' (Winkler 1939; Polkowski *et al.* 2013: 106-111; see also James 2012) and characteristic elongated figures, possibly depicting men (Kuciewicz and Kobusiewicz 2012, 267-271). On the same panel giraffe images were produced and what appears to be two figures depicting lizards/crocodiles (?) as well as spiral. Although one cannot state with certainty that this complex scene was executed as a onetime event, it is likely that most of the figures belonged to the same period. This would mean that the meandering lines constituted one of the elements in the rock art motifs repertoire of the Middle and/or Late Neolithic, if not Epipalaeolithic, groups inhabiting the area of the Dakhleh Oasis.

Snakes, spirits or maps? Meandering lines in the literature

The meandering line motif is found at many sites in the Sahara, including examples from the Tassili-n-Ajjer, Fezzan, Atlas mountains (Huard *et al.* 1980: 306-322), in the area between Tassili and Tibesti (*e.g.* Hallier 1990: pl. 47, 48, 51, 124, 131, 139, 147), and even outside Sahara, *e.g.* in Saudi Arabia (Červiček



Fig. 7. Three meandering lines and one undetermined animal depiction associated with them. The panel is placed at the 11/08 site



Fig. 8. A horizontal panel with two images: an oryx antelope and irregular line beneath it. It is one of the panels containing meandering line motif found at the CO59 site

1976: 189, Fig. 279). The standard context for the Dakhleh Oasis findings however, comprise the images discovered in other parts of Egypt and Sudan⁸, not only in the Nile Valley (Egypt: e.g. Winkler 1938, 1939; Červiček 1986; Storemyr 2008, 2009; Sudan: e.g. Myers 1958, 1960; Hellström and Langballe 1970; Huard *at al.* 1980; Červiček 1986; Váhala and Červiček 1999), but also in the Eastern (e.g. Rohl 2000; Morrow *et al.* 2010) and Western (e.g. Winkler 1939; Červiček 1986; Jesse 2005; Ikram 2009a; 2009b) deserts. On the basis of the selected publications presented below I would like to focus on varied aspects of interpretation of the meandering lines. Several different hypotheses have previously been proposed explaining what could be represented by this motif, some of them having a substantial influence in the literature.

Seemingly the 'safest' option is to give the petroglyph a general name or descriptive term. In order to work with a motif first it must be described and classified, and its name refers usually to its formal features. Therefore, we encounter the title type of imagery named as the wavy (e.g. Winkler 1938; 1939; Davis 1984; Červiček 1986) or *meandering lines* (e.g. Storemyr 2009; this paper). Such a name seemingly does not impose an equivocal interpretation, although its neutrality may be questioned. It may, because a name is resulting from someone's choice based on their observations. The name 'wavy' refers to only one feature shared with other images (although the most specific one), chosen from many others. It cannot be said that the 'meandering' notion is neutral also because it connotes a number of meanings, which can generate another ones, etc. A word 'meander' is involved in countless relationships in syntactic and paradigmatic orders. Therefore, when one is thinking about the 'meandering line' the language may suggest other associations, such as a meandering river for instance. This in turn may influence further perception of that motif and lead to relating it with the notion of water. It is however impossible to reflect on a thing, if it remains unnamed. What is important is the fact that a formal description is only seemingly neutral but it may in reality be a field full of interpretational traps.

If the wavy or meandering line names are only superficially neutral, then the next examples of these motif interpretations seem to be not neutral at all. The most common name (and interpretation at the same time) of the wavy line is a 'snake', 'snake-like' or 'serpentine form'. The two latter ones strongly suggesting

⁸ The relations between the prehistoric 'geometric' rock art from the Upper Nile region and the Central Sahara were studied by Ulrich Hallier (1997). The 'serpentiform' drawings are amongst the petroglyphs, which were recorded in all the regions considered by Hallier in his research, i.e. in Nubia, Tibesti, Djado, Tassili and Hoggar. The pecked geometric motifs are linked by him with the spread of the 'wavy line' pottery.



Fig. 9. A complex panel located in N part of the site CO105. Except the Type II way line some quadrupeds and ostriches are visible. At the top of the panel also a hand and other animals were produced

that the petroglyphs represent an animal trait are terms, that may be taken with some interpretational 'freedom' by researchers. They describe the shape of the depictions as similar to snake's shape, but the images do not necessarily represent serpents. A power of suggestion however is strong enough to turn the rock art interpretation from 'snake-like' to 'snake' easily. Oliver Myers, discoverer of very important petroglyph sites in the area of the 2nd Cataract on the Nile in Sudan, described some of the figures as python-like designs (Myers 1958: 132, pl. XXXIII, Fig. 2, 3). When he described however their stratigraphic positions in the excavation trenches, he wrote that the *drawings of pythons were buried under the debris of Level 4 and 5* (Myers 1960: 177). I believe that there is a substantial semantic difference between the notions 'similar to snake' and 'snake'. The meandering lines as snakes seem to be the most frequently proposed interpretation and one may encounter it, for instance, in a publication prepared by the Scandinavian Joint Expedition to Sudanese Nubia (SJE) from 1970. SJE conducted research in the

area of Wadi Halfa in the Lower Nubia. A total of 10 depictions of wavy lines were registered and published in the corpus of rock drawings as a category 'S. Snakes'. Hence, the interpretation as animals is unambiguous. In this publication one may find also additional detailed identifications, where depictions S1, S2, S3 and S4 are described as possible representations of a cobra (*Naja haje* sp.?), which *fore part is raised vertically with a round head on the top* (Hellström and Langballe 1970: 154). The possibility that the wavy line represents a snake was considered also by Friederike Jesse (2005: 31) and explicitly identified as such by David Rohl (2000: 19, site JCB-1 in Kanais), Morrow *et al.* (2010: 39, site HAJ-6 in Wadi Umm Hajalu; pp. 57-58, site SAL-11 in Wadi Umm Salam) as well as Frantisek Váhala and Pavel Červiček (1999: pl. 85, 335) among others.

Some scholars did not content themselves with identification of the petroglyphs as zoomorphic images, but suggested a deeper symbolism related to them. Červiček considered a wavy line motif as a main motif characterizing the oldest temporal horizon of Egyptian and Nubian rock art (1986: 77-78, A-Horizon). According to the assumption that rock art *was primarily religious in character* (Červiček 1986: 71), recognizing in the meandering lines the snake form, he proposed that the lines had represented the numinous powers. He was inspired by analogies taken from Pharaonic times and directly related to Ancient Egyptian mythology. The essential role of snake entities, such as gods Akeru and Atum, as well as numerous demons, was provided as an argument in deliberations on the motif at least one millennium older. This creates a significant dilemma regarding how far researchers may go to extrapolate the meanings from one cultural context to the other. And does this exercise extend to the assumptions of the isochronological method, the one chosen by Červiček (1986: 73) as a tool in rock art research? A similar interpretational suggestion was made by Salima Ikram. The findings of the wavy lines in Kharga Oasis in places like 'Aa's Rock' and 'Snake Wadi' according to her could depict the *chthonic powers* (Ikram 2009a: 283). She considered a possibility that the snake images could have had both good and evil connotations and discussed them on the basis of the status of serpents in Ancient Egyptian culture (e.g. a juxtaposition of the sun god Re with his archenemy, Apophis).

Interpretations of much different character than those described above were proposed as well. Hans Winkler regarded the wavy lines and spirals, particularly those being associated with zoomorphic figures, as representing animals' entrails and considered them as related to the *spirit of the game* (Winkler 1938: 32; 1939: 32). German scholar believed that most images created by the Earliest Hunters have had a magical character implied on the basis of closely undefined ethnographic parallels.

What for many has appeared as snake representations, for Winkler seemed to be something completely different. Whitney Davis (1984: 87) wrote that these were not serpents but also considered those meandering lines, which seemed to be associated with animal figures. Davis did not interpret them as entrails, but rather as kind of illustrations of *hunting techniques or game capture*⁹. Contrary to Winkler's idea he was not writing about alleged magical character of drawings.

In case of the meandering lines, of the Type III in particular, another hypothesis was proposed. It was suggested that they were ancient maps (Cherry 2000). Peter Cherry considered possibility that the so-called multi-branched lines could reflect a complex character of regional wadi networks, whereas the single wavy lines could represent snakes indeed (Cherry 2000: 166). He presented three such potential maps, two of which were based on Winkler's pictures. He argued that one should not expect too much precision in these maps, as they had been produced in times, when no modern cartographical tools had been available. This lead was followed by Salima Ikram, who interpreted one of the rock art panels in Kharga Oasis in a similar way (Ikram 2009b: 79, Fig. 17). On this panel some asymmetrical meandering lines were executed, as well as a human figure with a possible penis and finally an oryx antelope. Ikram proposed to read this panel as a map, which could be understood as follows: a certain *person may find (or found) an oryx in a place indicated on the map*. Interpretational proposals of both Cherry and Ikram seem to be only careful suggestions. They have shown however that the discussion about wavy lines is still open and far from reaching any conclusion.

One final observation is related to the title motif indirectly, as the interpretation concerns a motif of a zigzag line found mostly in the area SW of Dakhleh Oasis, on Djedefre Water Mountain (DWM) and Biar Jaqub sites in particular. They were discovered by Carlo Bergmann (2011) and among countless petroglyphs a very characteristic motif was registered, resembling an Egyptian hieroglyph *dw*¹⁰ filled with zigzag lines interpreted as water representation. Avoiding the discussion on chronological aspects and origin of this motif, as well as its potential ontology as protohieroglyph, I would like to look at its similarity with the meandering lines. Most of the Bergmann's examples of zigzag lines is described differently from wavy lines. Most of them are also smaller and are surrounded by a shape similar to the *dw* hieroglyph. Nevertheless, Bergmann also

⁹ Davis, writing about the depictions of hunting techniques, thought not only about the meandering lines, but also about other curved lines, including those tethered to animals' legs and necks, e.g. giraffes'. That he considered also the wavy lines is indicated however by the following sentence: I doubt that any of these examples represents a serpent, as is sometimes claimed (Davis 1984, 87).

¹⁰ The *dw* hieroglyph is listed as N26 (Gardiner 1957 [2007], 489).

presented some petroglyphs, which are not inscribed within any framework and they do not have typical zigzag shape. Part of them were named *crenellated lines* (Bergmann 2011: 95, Fig. 40) and resemble Type II meanders; others, like the one (although painted) from Gebel Uweinat (Bergmann 2012: 80-82, Fig. 14) are similar to the wavy lines of Type I. As he wrote: [these findings] attest to the seemingly age old convention amongst the Neolithic desert populations of using horizontal zigzag or rounded lines to mark locations where water was available (Bergmann 2012: 81, authors' emphasis).

Although other cases of images examined by Bergmann differ in shape and size from the subject figures of this paper, their similarity appears close enough to allow us to consider them when interpreting the meanders. This means that it should not be too controversial to state that an understanding of the wavy lines may be related also with marking the existence of water in the past or with other aspects of water. What makes water emblems somehow related to the meandering lines in the area of my investigations is also the fact that they were discovered relatively close, few dozen kilometres SW from Dakhleh. They seem to be chronologically linked, as Bergmann dated them, to the late 6th or early 5th millennium BC, which is a very old on the temporal horizon.

An early chronological attribution of meanders is a common feature of most of the hypotheses presented above. Winkler assigned them to his Earliest Hunters, whose he identified as hunter societies of the Amratian phase of the Naqada period (\approx Naqada I) and earlier times (Winkler 1939: 35). Per Storemyr, analyzing Winkler's site 53 in detail, came into conclusion that the oldest figures on the panel, namely the *meandering lines with "whips"* may be assigned to a time period before the Naqada I phase and the rest of the wavy lines come probably from the beginning of the Predynastic period (Storemyr 2009: 123). Myers, who discovered meanders in archaeological layers, was able to receive several C14 dates, according to which *pythons* had been created before the 4th millennium BC, most likely between 5000 and 4000 BC (Myers 1960: 177). Davis on the basis of Myers' research concludes too that the meandering line motif must have been in use before 4000 BC, perhaps long before (Davis 1984: 89). A date around 4000 BC exist also in Červiček's chronological tables, in which it forms a temporal dividing line between A- and B-Horizon (Červiček 1986). Therefore, as far as the chronology of meandering lines is concerned an agreement to some degree exists among different scholars. It seems then that this motif was in use in Epipalaeolithic and/or Neolithic contexts as long as the early Predynastic period. A dating of *water emblems* proposed by Bergmann fits this classification quite well.



Fig. 10. Another example of the meandering line. This one seems to be rolled and very much resembles a snake (CO59 site)

Back to the Oasis

The findings from Dakhleh Oasis include some of the most weathered and patinated petroglyphs, that seem to confirm an affiliation to the Neolithic or earlier horizon of rock art production. What may be said about them, especially in the face of aforementioned interpretations? Shapes of many meanders indeed resemble snakes and in some of them one may actually notice details underlying their animal character. Examples from 14/07 (Fig. 5), CO59 (Fig. 10) and CO63 (Fig. 11) sites seem to be quite naturalistic snake representations.

What influences the imagination are not only their shapes, resembling zigzag-shaped and moving (Fig. 11) or rolled and sun-warming specimens (Fig. 10), but also details like appropriately shaped heads (Fig. 5). Most of the potential heads are between the snakes. There are no examples of the elements, which could be interpreted as horns typical for the horned viper (*Cerastes cerastes*), but there are examples, which perhaps could be interpreted as depicting the Egyptian cobra (*Naja haje*). This is seen in at least two cases, where one side of the meander ends with an oval-shaped feature, depicting probably a cobra hood (Figs 7, 12).

This typical cobra feature is perhaps the best argument for the meandering line as snake and it was previously seen in other parts of the eastern Sahara (see above). Another argument supporting the snake hypothesis may be also a fact that the majority of images were situated on horizontal surfaces. It enhances the impression that one deals with the zoomorphic images depicting snakes in their natural positions. It seems that both movement and physical body of the animals was represented. Size of the wavy lines may be another naturalistic feature of those petroglyphs. In many cases they resemble the real size of snakes and are among the several exceptions already mentioned in the example from the CO65 site. Can one therefore conclude that all the meandering lines from Dakhleh represent snakes?

Some arguments against may be provided. Firstly, many of the meandering lines have no clearly distinguishable head. This may be a result of the state of preservation where many petroglyphs are damaged at their ends. Some images, mostly those belonging to Type III, form shapes which are difficult to identify with a snakes' movement or resting positions. Some images are located on vertical surfaces (Fig. 12). This by no means contradicts the identification of the meanders as snakes, but perhaps it weakens the naturalistic convention of figures hypothesis. Another difficulty for interpreting the meanders refers to the sizes of the wavy lines. The question becomes, why they would be depicted in sizes close to natural, if most of the prehistoric zoomorphic figures were shown in decidedly diminished scale. It is difficult to encounter giraffes or antelopes figures bigger than several dozens of centimetres. The quadrupeds being associated with the meandering lines are depicted in a much smaller scale. This is not an argument intended to invalidate the hypothesis of wavy lines' zoomorphic character, but it does raise the question as to the reason for the size difference between small scale quadrupeds and the full (or almost full) scale snake representations.

The question of scale or perspective is a question of a convention accepted in particular cultures. It is highly probable that the contemporary people approached this question in a completely different way than, for instance, modern scholars, raised in the culture having utterly different canons of art. One may find different proportions of figures in the principles ruling the art of the Pharaonic period to give an example. There size differentiation reflected the hierarchy of figures' importance. In case of the Neolithic pictures from Dakhleh such a hierarchization cannot be excluded. Different distinguishable categories of figures such as antelopes, giraffes, anthropomorphs, and meanders, may provide an argument that they usually have rather standardized sizes, with some exceptions among them. One cannot exclude however that behind this relative size uniformity stood not as a hierarchization,

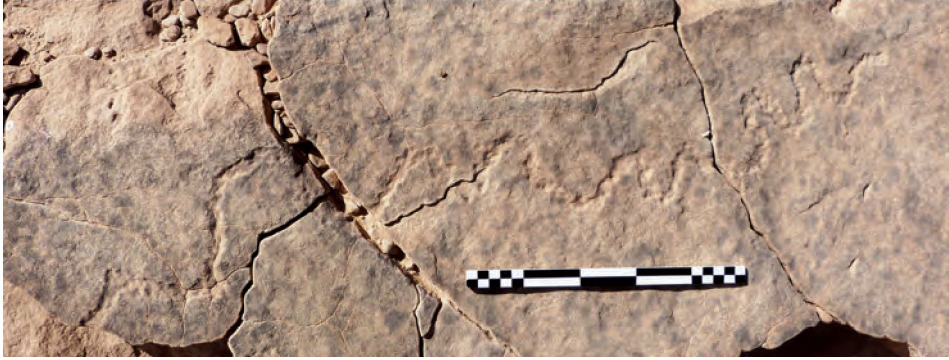


Fig. 11. A regular representation of the meandering line found at the CO63 site



Fig. 12. One of the most interesting wavy line depictions. One may notice an oval shaped end of the line, which can represent a cobra hood. The panel was registered at the CO47 site

but as an 'artistic' manner of that period; sort of an intersubjective way of expressing particular contents. It could be the shape and the meanings it comprised, was important, while size of the figures would remain a secondary feature. If one assumes that zoomorphic motifs such as oryx antelopes, giraffes, ostriches, lizards/crocodiles, anthropomorphs and meanders constituted elements of a syntax of the same sign system, then only the meandering lines, interpreted as snakes, would be represented life-size (or almost). Assuming they represented serpents, could the differences in scale be meaningful for contemporary authors?

Another way to interpret the meandering lines is to think about them not as a physical being, but as a mythological one. This question brings us closer to Červiček's conception (see above), that suggests that the meanders are not normal snakes, but rather supernatural entities depicted on the rock faces. Although, a reconstruction of the Neolithic cultures' mythologies is rather impossible, the very fact of their existence can be perhaps perceptible. As an argument, though quite weak, may serve the aforementioned question of images' scale. Assuming that the size of a figure is directly proportional to its position in a hierarchy, then the meanders could indeed represent some very important supernatural beings. However, it remains a supposition only, all the more that the wavy lines could have depicted something else other than snakes (in terms of shape). Then, the reasoning about their importance on the basis of proportions in regard to other figures becomes even more questionable. If we assume that they do not represent snakes and we put aside their potential mythological character, then what else could they depict?

The idea that they formed kind of prehistoric maps seems to me unlikely. Especially the depictions of Type I and II seem to be too symmetrical and regular to be taken as topographic representations. More possible would be that the complex compositions of irregular lines could be interpreted as maps. One cannot forget however that such a map could have depicted not the local topography, but instead the imagined, mythological one. An equally unlikely possible interpretation seems to be the one of animals entrails depictions. Considering that in only in few cases does the wavy line touch an animal figure, it seems to be an argument against the entrails hypothesis. Furthermore, there are not many meander-animal¹¹ associations in general. Yet another idea, the one of hunting techniques, is refuted due to the same reasons, at least in case of Dakhleh. The most regular meanders, the sinuous ones, perhaps could have been taken as graphic representations of water with the lines representing the shape of the

¹¹ We cannot be actually sure, whether the zoomorphic images depicted animals. They could denote very different contents, for instance, could represent families, tribes, events or mythological beings.

wavy water. The problem is that many of the meandering lines are not regular enough to represent waves in movement (see Fig. 5, 12).

The question of interpretation remains a problem in rock art research as various ideas are championed by researchers who expound on and defend their own theories. Attempts to explain the significance or purpose of the meandering lines were undertaken several times and produced diverse explanations. The plurality of ideas and interpretational issues is what I would like to consider in the last part of this paper.

Meanders of interpretation

As Christopher Chippindale wrote (2001: 254): "in many or most bodies of rock art, there are motifs we believe we can recognize as pictures of distinctive things, and others harder to discern. A moment's thought tells one that – since the image is often a different size and a different *color* – the essential clue by which we grasp what it images is its similarity in shape. Equally, the motifs we find ambiguous or opaque are those in which we see no decisive similarity in shape with a real-world object".

Those motifs, which we cannot identify in any way as known to us in reality, so we are not able to recognize them as objects we are familiar with, we usually call 'abstract' (Chippindale 2001: 256). The meandering lines are seemingly one of them. This is why often 'meandering' and 'wavy lines' names are being given. Although they underline their common particular formal feature, they primarily show that their identification is difficult and ambiguous. Additionally, when writing about them as abstract or giving them seemingly neutral names, one is treating them as objective notions. Some scholars would like to learn a hidden semantic content residing in a form of a petroglyph, defeat its 'abstractness' and identify it. Those were named by Bahn (2002: 91) as *idealists*, who interpret, hence try to read rock art. On the other hand there are *realists*, being conscious of all the constraints and who, in his opinion, do not interpret, but *focus on more tangible and attainable aspects such as location, technique, content, chronology, and change through time*. Robert Bednarik accompanies him stating that an archaeologist has no access to meanings given to rock art by their authors in the past (Bednarik 2003: 3). If one perceives the meandering lines from the perspective of the aforementioned dichotomy, he would conclude that the attempt to read the meanings of this motif (*e.g.* chthonic powers, animal entrails, *etc.*) is equal to idealistic approach, and focusing on formal description means joining the realistic camp. The never-ending battle between subjectivism and objectivism. But, is it not an illusive battle?

If the congruous assumptions are accepted with the philosophy practised by such phenomenologists like Martin Heidegger (1962) and Hans-Georg Gadamer (1975), we all, as human beings, are involved in the so-called hermeneutic circle or spiral. Whatever we say about an encountered phenomenon would not be objective, because our interpretation of it does not begin in any starting point, but is rather rooted in our experience. In other words, for whatever we experience, even for the first time, we already know something about it; we are equipped with sort of pre-understanding. Hence the circle metaphor, because there is no beginning nor the end of interpretation. Instead there is only continuous movement back and forth between the parts and the totality and working upon what is to be interpreted. Michael Shanks and Christopher Tilley (1987: 106), applied these assumptions in the field of archaeology and called the interpretation, after Gadamer, as *fusion of horizons*, in which past and present, as well as object and subject are interconnected. According to such a philosophy the analysing of petroglyphs, as well as all other phenomena, are dependent on the observer as the interpreter.

(...) in the hermeneutic circle the interpreter approaches a set of materials in the fullness of their contextuality, and presuppositions permit an initial understanding of the meanings of these materials. In a sense they anticipate their form and nature (Shanks and Tilley 1987: 106).

In the very moment a meandering line is perceived for the first time, the experience gives birth to an interpretation, its initial stage. This is why the viewer can immediately say something about it. If knowing that most prehistoric petroglyphs depict animals; being aware that snakes exist in the area of the research; knowing how they look like and also being conscious, what may be their behaviours, the investigator identifies, almost instinctively, the meanders as zoomorphic figures. Being involved in the hermeneutic circle the person perpetually works upon the subject of interpretation, referring to their own experience, which is gained simultaneously. Other knowledge is intentionally gained through reading the ideas of other scholars. However not all influences are known or perceptible. The process of interpreting may also be perceived as a dialectic relationship between the person and the petroglyph. As Ian Hodder and Scott Hutson wrote (2003: 196):

This involves a playing back and forth between the social and theoretical context of the interpreter, and the historical or cultural context of the object of interpretation. Both the interpreter and the object of interpretation contribute to understanding, always generating a new, hybridised meaning. In this sense, whether we like it or not, we think ourselves into the past. We need to be aware that we are doing this and we need to do it critically.

What results is always a hybrid of meanings, their transformation. They are not reconstructed, but rather adapted to the cultural context in which a person exists. This socio-cultural context is essential, because it provides some paradigms, which influence the interpreter. The cultural context of archaeological theories in 30's of 20th century was not without an influence upon the ideas proposed by Winkler. At that time a common belief, that the sympathetic magic was the motivation to produce rock art affected the German scholar, who interpreted the meandering lines as being related to the magic (see above). Červiček, who eventually saw in the wavy lines some primary spiritual powers in the form of serpents, was probably stimulated by his Egyptological background. It influenced his perception and understanding of this motif and it was possibly more natural for him to refer to the Pharaonic sources than to the other ones. In other words all our judgements about a particular phenomenon are always rooted in our experience and though we perpetually work upon the understanding of this phenomenon, due to the hermeneutic circle we are not able to separate ourselves, interpreters, from objects being interpreted. This theoretical reflection does not lead to a conclusion that we are absolutely free to impose meanings on phenomena from the past. On the contrary rather, this reflection makes us aware of the mechanisms of interpretation. It suggests we should be self-criticizing, thus implies a scientific rigour. Therefore, one is trying to understand the meanings from the past; is attempting to decode rock art, being however conscious that it is not a simple act of reconstruction.

All this leads to one more question. Rock art motifs certainly have been re-interpreted in different times and accordingly their meanings must have been transformed. The question appears, whether the only question we should ask is what those motifs meant to their authors? The primary context? Maybe an equally important question is one of how they could have been perceived by other spectators throughout the ages. The scholars are obviously not the first ones interested in the meandering lines, and what may be indicated by such phenomena as juxtapositions and superimpositions with younger images (Fig. 13). In three cases the wavy lines were juxtaposed with much younger depictions of sandals. Such situations mean that the meanders were at least seen and as a consequence interpreted in a particular way. It would be rather difficult to assume that the authors of sandals (most likely living in the Graeco-Roman period or earlier) conceptualized rock art in accordance with its primary semantics. When they experienced those petroglyphs, they invested them with some meanings in their pre-understanding and the effect of such reconceptualizations could manifest itself in the juxtapositions observed today. In fact, meanders are signs, whose *signifié* perpetually un-

dergo semantic transformations. One can say that the modern interpretations of scholars are just another expressions of those transformations – subsequent life stages in their biographies.

Although, many researchers would like to reach the level of understanding the primary meanings of rock art, rejecting the belief that an interpreter influences interpretation, and in the same time many scholars deny the possibility of accessing any past semantics and limit their investigations to a formal description of phenomena, treating it as unbiased and objective, one can distinguish yet another attitude towards the research. The interpreter and the subject of inquiry are the poles between which the interpretation is being born. The whole semantic past is dwelling in the rock art, which the interpreter, unable to separate himself from his own experience and expectations, attempts to understand. In this context Paul Bahn's words concerning the prehistoric rock art may provide an optimistic accent:

These are messages from other cultures, other worlds, and we know nothing of the artists' original intentions or the transformations in meanings that the art has undergone, so *there is no single correct interpretation*. However, since it is better to light a candle than to curse the darkness, what one can certainly do is to put forward observations, interpretations, and hypotheses about the images, which can be evaluated and eventually discarded when something better comes along (Bahn 2002: 92, authors' emphasis).

The inconclusive conclusion

At the very end it would be appropriate to take a stance and say something in favour of a particular interpretation. If one is to be inspired with many ethnographic and historical examples (provided, for instance, in: Tilley 1994; Bradley 2000), then it is very possible that the meandering lines constituted at one time the elements of landscapes, in which the mythical world manifested itself in varied ways, including rock art. How the places where we find them, were weaved into the mythical topography is difficult to answer. They could commemorate some events both real and mythical; they could form ceremonial localities or could just be related with the supernatural entities dwelling in them. In the forms of those petroglyphs, at least in part of them, I perceive representations of snakes. It is possible that these lines were perceived as supernatural beings as Červiček and Ikram suggested, and/or their execution could be just a manifestation of the authors' piety. Maybe the places, where one finds the wavy lines were localities, where real snakes were spotted frequently in the past and such observations could have been linked with mythical events, even theophany (?).



Fig. 13. This panel is located at the hilltop at the 11/07 site. Except the meandering line two sandals and other unidentified petroglyphs were produced. Although the motifs were executed in different times their possible mutual relations may form a very interesting subject to study

However, even if I assume that the images depicted snakes (no matter if mythical or 'real' ones), I am still far from grasping the particular meanings conferred in them. The *realists* would probably easily deny my suppositions about the mythological character of the meanders, whereas some of the *idealists* could accept them uncritically. My narrative about this motif emerges now, in the context of my current knowledge and experience. It is a proposal, never a reconstruction. At the same time I endeavour to provide the most probable vision of the past, which may lead to a better understanding of rock art. What I underline is that the interpretation is not free of judgements and valuation. On the one hand I acquiesce in seeing snakes in the meandering lines, on the other hand I rather reject the map interpretation. It shows that the 'life' of the interpretation is dependent on other people; it is subjected to negotiation and evaluation. Its 'probability' is discursive.

Post scriptum

I would like to refer once more to a biographical character of rock art (Polkowski in press a; in press b), that is directly linked to aforementioned reflection. It is not only a question of the primary status of petroglyphs, but also their lives until the present, which may be a subject of inquiry. In such a perspective rock art images gain a sort of agency – a power – and like living beings they enter relationships with another actors. That is why the meandering lines, the topic of this paper, are not only polisemantic, but living entities as well. The theoretical aspects of this paper are not new and seem to be well established in the archaeological literature. The interpretations of the wavy lines I provided are also strongly grounded in publications on the subject matter, but sometimes are not theorized in a sufficient way. The only ‘new’ element I presented here is the rock art sites discovered in Dakhleh Oasis in the course of the previous research. My intention was to use the rock art from these sites as the vehicle, upon which a theoretical and critical discussion may be instigated.

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