

Do Rock Carvings Tell Stories?

Aspects of Narrativity in Scandinavian Bronze Age Petroglyphs

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Do rock carvings tell stories?: aspects of narrativity in Scandinavian bronze age petroglyphs

Ranta, Michael (Lund University, Sweden)

ABSTRACT

Rock art constitutes the most expressive, widespread and accumulated corpus of images with a prehistoric date, the oldest ones dating back to at least 40.000 BCE. In Europe, Scandinavia holds the largest concentration of rock art (i.e. petroglyphs), created c. 9000 – 1st century BCE, numerous of them showing figurative representations. Since the beginning of rock art research in the 18t century, these images have given rise to vivid interpretations, related to stories and myths found in Saami ethnography, Old Norse religion, and Indo-European mythology. However, we still do not know in detail their purpose and meaning, not least their potential narrative content.

Are they indeed telling stories, and if so, to which extent? A basic problem concerning these approaches above is the lack of a deeper theoretical discussion concerning what constitutes narrativity in non-verbal, visual media, like petroglyphs in our case. How could we at all know whether they depict events? Despite an increasing interest in narratology within the humanities during the last 50 years, as a research area it is still mostly predominant among literary analysts, linguists, and semioticians.

In this paper, I will discuss possible narratological approaches extended to visual media such as petroglyphs. We might reasonably distinguish between three levels of pictorial narrativity: representations of (i) single events, understood as the transition from one state of affairs to another, usually involving (groups of) agents; (ii) stories, i.e. particular sequences of related events that are situated in the past and retold for e.g. ideological purposes; and (iii) by implication, master-narratives being deeply embedded in a culture, which provide cosmological explanations and a pattern for cultural life and social structure. Some concrete examples of petroglyphs will be presented and analysed from a narratological and iconographical perspective.¹

1. ROCK CARVINGS AND ICONOLOGY

Rock carvings, rock art, or petroglyphs are images created by removing parts of a rock surface by incising, picking, carving, or scratching, normally using lithic flakes or hammerstones as tools. Such petroglyphs, which should be distinguished from petrographs, i.e. images such as cave paintings drawn or painted on rock surfaces, can be found all over the world (except for Antarctica), some of the earliest examples in Australia, as much as 27 ka old. In Europe, the oldest ones were produced since the Upper Paleolithic (40 -10 ka), most of them found in Portugal in the Côa Valley (22 – 10 ka), in Italy in Valcamonica (12 ka) – and not least in Northern Europe, most of them from the Bronze and the earliest Iron Age (1,700 – 200 BCE).

Indeed, the largest concentration of European petroglyphs can be found in Scandinavia, with about 30,000 registered sites, c. 20% of them with figurative images and the rest consisting of non-figurative configurations such as cup marks and cupules.² As to the motifs of the figurative images, we may discern representations of human figures (e.g. warriors, hunters, dancers), footsteps, prey and domestic animals (e.g. wild boars, bulls, deer), wagons, instruments (e.g. lures), weapons and tools (e.g. bows, swords, axes, ploughs), suncrosses/ -symbols and a large amount of ships (though, interestingly, no houses).3 Moreover, the constellations and renderings of these figures are often very vivid and dynamic, suggesting various forms of social (inter-) action, such as fishing or hunting activities, dancing, combat scenes, and also scenes of sexual intercourse between anthropomorphic beings (cf. figure 1).

¹I would like to thank Peter Skoglund, Anna Cabak Rédei, and Tomas Persson for valuable comments and discussions on earlier drafts of this paper.

²Goldhahn & Ling (2013), p. 270.

³Cf. Skoglund, Ling, & Bertilsson (2015); Helskog (2012); Ling (2012); Goldhahn & Ling (2013).

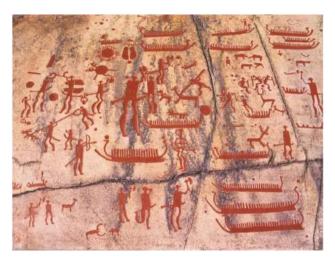


Figure 1. The Fossum panel in Bohuslän. Photo by Gerhard Milstreu, copyright SHFA.

The first attempts to document the various manifestations and sites of rock art began already during the 17th century, with more systematic investigations from the 1790's onwards. While these investigations more or less had an inventory character, frequently concerned with descriptive and dating issues, increased efforts to understand the deeper *meaning* of these pictorial configurations, to provide interpretations of them, started during the 20th century. Here, anthropological and historical sources from Indo-European mythology as well as Old Norse Sagas were taken into account, and petroglyphs were more or less assumed to illustrate or reflect these (for example, religious myths focusing on the rebirth and worship of the sun).

And at a first glance, it certainly does not seem too farfetched to suspect that petroglyphs are intended to tell some kind of stories or - at least - to represent simple event sequences. But how can we know for sure which stories exactly are told, and what kind of evidence for various interpretative hypotheses can be provided? Unquestionably, narrative is a cross-cultural phenomenon as well as occurring basically across all individuals within cultures. Despite any cultural variations as to subject matters, the capacity and practice of storytelling seems to be prevalent even among the most isolated societies. Storytelling is certainly an important means of creating ontological, existential, or social orders as well as reminding us of existent ones (of which we perhaps not always are consciously aware), thereby playing a part in their reproduction. But what exactly is a narrative? A minimal condition for something being a narrative

A considerable problem concerning petroglyphs arises due to the fact that they are not always consistently arranged in a serial or linear manner (which would facilitate narrative interpretations), that the images sometimes overlap or are overlaying, having different dates of origin, and that they are quite evocative, heterogeneous, and ambiguous. And, moreover, for Scandinavian Bronze Age societies, no direct external sources, such as texts, are available which might give possible interpretations further support. Instead, researchers have solely to rely on the pictures themselves, in combination with contextual clues such as mythological beliefs, as those mentioned above, known to have been widespread during this period. Other clues may be provided by knowledge about the socio-geographical background and settings, and comparisons to other contemporary artefacts, such as axes, or e.g. bronze razors, which have ornamental images similar to petroglyphs. 6 Not surprisingly, then, a wide variety of interpretations concerning the meaning of rock carvings have been suggested according to which they are supposed to represent (i) historical events, (ii) magical-religious beliefs and incantations, (iii) social positions and constellations, and (iv) ritual initiations, just to mention a few examples.

So, what would be a reasonable way of approaching these rock carvings? Within traditional art history, the Warburg School and most notably Erwin Panofsky have been of considerable influence by having introduced and elaborated the so-called iconographical or iconological methods. According to Panofsky, a fruitful investigation of works of art should be striving for an analysis of their meaning-aspects (in contradistinction to primarily their formal aspects). Such an analysis or interpretation can (and should) take several meaning levels into consideration. First, we have a pre-iconographic level - the depiction of human beings, animals, natural or artificial objects, etc., the recognition of which is supposed to be as straightforward as possible, without

has, for example, been claimed to be "the representation of at least two real or fictive events or situations in a time sequence, neither of which presupposes or entails the other". Although most accounts have focused upon verbal narratives, this condition as such has no particular requirements concerning the expression side, thus opening up for the possibility of narrative being manifested in media other than language, and even in such media which do not always show any (clear) temporal division, such as static pictorial representations.⁵

⁴Cf. Bertilsson 2015.

⁵As to pictorial narrativity, see Ranta (2011; 2013).

⁶Cf. Kaul 1998.

⁷Cf. Goldhahn & Ling (2013), pp. 272-274.

⁸See e.g. Panofsky (1962).

necessitating advanced or specialized knowledge. The identification of gestures, expressive qualities, and simple actions would also belong to this level. A second interpretative level - the iconographical analysis - consists of identifying the subject matter or the theme of the artwork. An iconographical interpretation would demand an identification of the depicted agents as certain persons (for example, as Virgin Mary or as Heracles) or maybe personifications (e.g. abstract concepts such as justice or prudence) having certain attributes and would, if necessary, contain some reference to relevant myths or tales (i.e. complex action sequences). This level, then, requires acquaintance with relevant literary texts, symbolic dictionaries, and/or certain oral traditions, as well as general knowledge of a history of visual types (i.e. the manner in which themes and concepts have been visualized) as a controlling principle. Finally, a third - iconological - type of interpretation would treat the artwork as symptomatic of a cultural climate or world view, that is, formulate statements suggested by the work in this respect. According to Panofsky, this meaning level is "apprehended by ascertaining those underlying principles which reveal the basic attitude of a nation, a period, a class, a religious or philosophical persuasion - unconsciously qualified by one personality and condensed into one work."9

Now, although this iconological approach towards works of art is well-known and prominent among art historians, it has also been criticized for a number of reasons. Not least, with regard to the iconological level in particular, it may be asked in which way claims regarding the occurrence of any "underlying principles", constituting or revealing a world view manifested in a work of art, are verifiable (or falsifiable). How should we distinguish "deep-interpretations" supported by iconographic or other kinds of evidence from mere speculations, not least due to the fact that a world view is supposed to be "unconsciously qualified by one personality, and condensed into one work"? Panofsky was, not surprisingly, aware of such obstacles, despite the fact that from the period which became his focus of interest - the Renaissance and its antecedents - numerous written sources and further physical evidence supporting interpretative hypotheses have been preserved. However, these are not available from the Scandinavian Bronze Age, as already noted.

2. Mimesis and Conventionality

Accordingly, then, any attempts to identify precise iconographic meaning layers, or specific stories, are

faced with considerable difficulties. However, preiconographic interpretations seem easier to be feasible. Indeed, as to the identification of the depicted objects or subjects as such, one fact concerning petroglyphs is striking and undeniable, namely the obvious intent to create representations of real-world objects by means of visual resemblance (admittedly with varying degrees of accuracy and specificity), and which we also today clearly can recognize and identify as such. During the last few decades, the idea that pictorial representation somehow depends on (natural) resemblance has come under attack, and various scholars in the humanities have suggested that the experienced relationship of similarity between pictorial representations and the represented objects is wholly determined by cultural and historical frameworks and internalized codes, or habits of representation. Indeed, mimetic (or iconic) pictures have been claimed to be conventionalized signs, more or less comparable to linguistic items. Among the most well-known proponents of this position - which might be called *pictorial conventionalism* - are, for instance, Nelson Goodman, Umberto Eco, and Norman Bryson.¹⁰ The common sense view that visual representation presupposes some kind of correspondence between picture and object in terms of (natural) resemblance or similarity is explicitly rejected. I shall not be concerned here with a detailed discussion of the arguments used against this latter view. My point is rather that to a considerable extent these arguments include rather artificially constructed examples, while empirical and Lifeworld evidence from disciplines such as anthropology, sociology or psychology is largely omitted.

Despite our culture-specific limitations we have, apparently, no doubts that some Palaeolithic cave paintings represent horses, bulls, and so on, and that Venus figurines from that period represent women. We have no serious problems in recognizing the represented objects of numerous pictures or sculptures from pre-Columbian, Sumerian or other ancient cultures - despite the fact that we are not acquainted with their codes or conventions of depiction. How do we know that it is horses or bulls which are actually depicted, and not something completely different? Indeed, we could not be sure that these visual configurations are representations at all (and not just formal and purely decorative patterns, which by sheer coincidence resemble pictorial conventions accustomed to us). Pictorial conventionalism in its most radical form leads to the absurd conclusion that we have no rational or well-founded means of comprehending and making comparative investigations of pictures (qua representations) belonging to remote

⁹Ibid., p. 7.

¹⁰ Goodman (1976); Eco (1979); Bryson (1983).

cultures.

There are, in fact, numerous empirical studies which indicate that the radical and rather counter-intuitive claim put forward by pictorial conventionalists is simply wrong. Many pictures, whether they occur as Paleolithic cave paintings, Chinese ink paintings, or Mayan tomb paintings, are highly recognizable, without any previous training, as representations of identifiable types of objects - despite any stylistic variations. This is especially notable, so I believe, when it comes to biological types, such as humans, animals, vegetation, and landscapes, perhaps also architectural motifs and certain tools or weapons. It may be admitted that the comprehension of pictures may depend on the beholder's previous learning and his cultural or historical presuppositions insofar as the interpretation of visual configurations is concerned. Thus some facial or body movements, postures or events, implied metaphysical, religious or political assumptions, to mention some examples, might be interpreted differently by different viewers. But this rather trivial insight does not permit the conclusion that the understanding of pictorial representations is completely contingent upon cultural-historical circumstances.¹¹

3. Typification I: Objects/Subjects

Indeed, also many renderings of objects and simple actions or events in petroglyphs may be recognizable quite easily, without any advanced acquaintance with the contextual circumstances and seem to presuppose just general Lifeworld knowledge and the ability to decipher pictorial representations as such. However, they should hardly be seen as directly "imitative", portraitlike representations of particular objects, subjects, or actions, as some kind of (intended) "mirror-reflections" of an external world. Rather, these are mimetic representations of types, abstractions, or universals (rather than particulars) which may be assumed to correspond to mental representations being shared by a relatively large group of beholders. Historically seen, artists have usually adapted their work to the general cognitive demands and presuppositions of the intended beholders. An important task of artists appears to have been to abstract and visualize those types of subjects which can be recognized and appreciated by a larger public, that is, which provide some kind of common denominators among individual beholders' mental representations. And rock carvings were seemingly intended to be seen by a larger audience, indicated by their placement and ease of accessibility.

Within cognitive psychology, it has frequently been claimed that there is a level of abstraction in category formation which has a special status as being psychologically more salient than others. According to e.g. Eleanor Rosch, there is a basic level of abstraction in categorization at which objects, both biological entities and artifacts, are most "naturally" divided into categories. 12 The term *level of abstraction* is intended to refer to the degree of inclusiveness of a category, that is, "[t]he greater the inclusiveness of a category within a taxonomy, the higher the level of abstraction." ¹³ Each category in a taxonomic hierarchy, except for the highest level category, is entirely included within another category. It has been suggested that we may differentiate between at least three levels of abstraction, namely between a superordinate, a basic, and a subordinate level. So, for example, "furniture" might count as a superordinate category, "chair" as a basic level one, and "kitchen chair" or "living-room chair" respectively as subordinates. The basic level seems to be psychologically different from superordinates and subordinates in several respects. In contradistinction to superordinates, which have relatively few cognitively salient attributes in common (according to experiments where subjects had to list these attributes), basic level objects are regarded as resembling each other to a much greater extent (i.e., more attributes are common to them). Basic level categories seem to differ from other levels of abstraction in numerous other ways, both perceptually and functionally, e.g. in the following ways:¹⁴

- (i) Their members have similarly perceived overall shapes.
- (ii) Their members invoke similar motor actions, that is, the way we usually interact with the objects.
- (iii) They are the first categories named and learned by children (and taught by adults).
- (iv) Their members are most quickly identified by subjects as belonging to a certain category.
- (v) They are identified from averaged shapes of members of the class (i.e. a single pictorial image may be taken as representing the whole class).¹⁵

Now, pictorial presentations in petroglyphs occur mostly, it seems, on a basic or subordinate *typicality* level. It seems that the overall perceived shape frequently functions as a cue for determining category member-

¹¹For fuller discussions, cf. Ranta 2000, pp. 90–101; Sonesson 1989, pp. 220–251.

¹²Cf. Rosch & Mervis (1975), p. 586.

 $^{^{13}}$ Rosch & Lloyd (1978), p. 30. The term taxonomy is defined as "a system by which categories are related to one another by means of class inclusion." Ibid.

¹⁴Cf. Rosch & Lloyd (1978), p. 31 - 35; Rosch & Mervis (1975), p. 586 - 587; Rosch (1994), p. 518 - 519; Lakoff (1987), p. 46 - 47.

¹⁵In experimental studies, averaged shapes were created by taking superimposed shapes of objects, from which an average outline of the overlapped figures was drawn. See Rosch & Lloyd (1978), p. 34.



Figure 2. Man with plough (ard) and two draught animals.



Figure 3. Replica of real plough (ard).

ship. Superordinates do usually not have any specific shape in common; still, we should not exclude the possibility that mimetic representations also exhibit or imply higher-level categories, though at least not immediately detectable for (untrained) contemporary beholders. For example, a picture implying a superordinate category such as "mythological or supernatural space" can contain various objects, such as ships, horses, humans, and so on. ¹⁶ Ships, horses, and humans are probably basic level categories and at spontaneously recognized and categorized as such by modern beholders. Moreover, empirical support may sometimes be provided by, for instance, comparing ploughs (ards) depicted on rock panels with preserved wooden ards found in bogs (see figures 2 & 3).

It seems clear that the people who made the ards in the rock art used their knowledge of existing wooden

Figure 4. Sun-horse



Figure 5. Woman.

ploughs and the petroglyphs in question in order to function as iconic signs, i.e. that the rock art image is intended to visually resemble the wooden object. But in many other cases, actually subordinate category members have been depicted. Thus we cannot only detect boats or humans in general, but e.g. fishing or war ships and hunters, fishermen, or warriors respectively, which are clearly subordinates. This could for example be a depiction of a *chariot* which is indeed a subordinate level among the basic level category of *wagons*. Another example would be a depiction of a horse drawing a sun, which refers to a mythological *sun horse* (a horse drawing the sun across the sky) known from contemporary

¹⁶Cf. Kristiansen (2010).



Figure 6. Combat scene with shield-bearing horsemen (Tegneby, c. 300 BCE).

metalwork, being a subordinate compared to the basic level category of horses (figure 4). Still, the typifying and simplifying character and appearance of petroglyphs is unmistakable, although various degrees of specificity/generality can be discerned. In general, they show a high degree of perspectival clarity (like children's drawings), where e.g. ships and humans are shown in profile, and so on. Indeed, as research within cognitive psychology suggests, (proto-) typical representations may also include the most representational view of objects. A series of experiments support the assumption that there is a privileged or canonical perspective for recognizing and imagining objects. Moreover, type-representations like e.g. warriors are indicated by clear attributes (i.e. weapons such as swords or axes), males with penises, and women with long hair, gathered into a ponytail (and sometimes a cup mark between their thighs, interpreted as the egg of life or female genitalia; figure 5).

Figure 4: ; Figure 5:

4. Typification II: Events

As to the rendering of events (i.e. minimal narratives), we may likewise discern renderings of actions which seem to have a type-character. Thus we can see scenes with humans engaging in combat, hunting and fishing scenes, (funeral) processions, and so on. Now, generally speaking, as cognitive psychologists such as Jerome Bruner and Roger Schank have argued, narratives are crucial and fundamental cognitive instruments or tools. 17 According to Schank, intelligence largely involves the storage and retrieval of scripts, that is,



Figure 7. Combat scene with Skogstorp axes (Fossum).

generalized sets of expectations about what will happen in well-understood situations. On various levels of abstraction, story-based memories arise as the result of our attempts to preserve "the connectivity of events that would otherwise be disassociated over time". Furthermore, as Schank suggests, the identity of a culture is largely based upon shared low- and high-level narrative structures. Such culturally shared stories--or stories in general--occur frequently in highly abbreviated form, as "skeleton stories," proverbs, or as "gists." People often do not remember specific narrations of stories, but rather gists. Thus condensed linguistic utterances can remind us of possible gists, which are then sometimes extended into full-fledged narratives. Now, as I would like to claim, pictorial material often functions in a similar way. Pictures may have a quite explicit or full-fledged narrative appearance, but sometimes even highly condensed or indeterminate pictures may trigger the emergence of narrative interpretations.

Minimal narratives may be regarded as belonging to more general categories, termed action schemas within cognitive psychology. For example, events such as *buying a ticket* or *wearing a dark dress* may belong to categories such as *going to the cinema* or *going to a funeral*, which may be further categorized as instances of an *entertainment event*, or an *occasion for grief*. Sequences of such stereotypical and categorizable actions, commonly also called *frames* or *scripts* in cognitive psychology, incorporate generalized knowledge about event

¹⁷Bruner (1990); Schank (1995).

¹⁸ Schank 1995: 124.

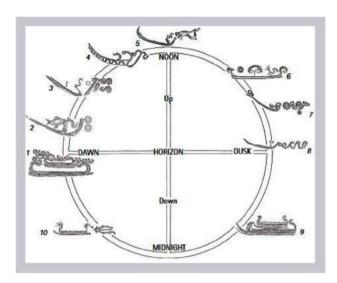


Figure 8. Motifs from Danish razors, Late Bronze Age, 1100–500 BCE, showing different points of the cyclical movement of the sun.

schemas, such as the order in which specific events will take place; causal, enabling, or conventionalized relations between these events; and what kind of events occur at all in certain action sequences. ¹⁹ Moreover, there are also *scene schemas*, which are characterized by spatial rather than temporal relations. For example, we have certain expectations of how the rooms, streets, and buildings appear where particular activities, such as going to a restaurant or going to a funeral, take place. Therefore, we have mentally stored inventory information, that is, what kinds of objects normally appear in such situations, and spatial-relation information concerning the usual spatial layout of a scene. ²⁰

Regarding rock carvings, in many cases we may quite easily discern a manifold of stereotyped event schemas, such as hunting, combat scenes, and even sexual activities (figure 6). Apart from such basic level types, there also occur subordinate events, such as wild boar hunting by spears which do not refer to hunting schemas in general, but to a specific category of hunting where braveness and social status is highlighted (as wild boars are considered to be more dangerous than e.g. deer). And some combat scenes show rather unusual prestigious so-called Skogstorp axes (having a large metal blade with pointed edges and made of thin bronze over a core of clay), which probably were used for ceremonial purposes (figure 7).

²⁰Ibid., pp. 13-17.

5. On the Iconography and Narrativity of Rock Carvings - and Further Prospects

As the examples above show, it appears then in many cases to be possible to identify pictorial representations of certain objects, subjects, and even events or minimal narratives. But what about clear-cut and more elaborate stories, made for the purpose of retelling or reminding beholders of, for example, myths or past historical events? These would then more aptly qualify as iconographical themes in Panofsky's sense. However, for reasons already mentioned, such interpretative approaches would certainly be challenging, with high risks of speculative reasoning.

Still, within established archaeological research, during the last few decades also more outspoken narratological approaches have been employed. A methodological cornerstone in this respect is Flemming Kaul's work on the decorated razors dating to the Late Bronze Age.²¹ By examining the motifs on the razors he was able to demonstrate that individual motifs on different razors were logically linked to each other into a larger narrative revealing the travels of the sun through the sky during the day and beneath the sea at night. At different points on its journey, the sun was helped by various agents such as the sun-horse, a fish and a snake which all held specific functions and should be seen as sub-ordinate categories. The designs on individual artefacts depict particular stages in that cycle, and only when several razors are put together the whole cycle is revealed. It seems as if all the drawings found on decorated metalwork illustrate sections of the same story (figure 8).²²

Kaul's study was followed up by Kristian Kristiansen who carried out an analysis of the sun journey in Bronze Age rock art in south Scandinavia.²³ He argues that this story is based upon a widely shared Indo-European myth about the sun maiden and her twin brothers who in disguise of ships and horses come to her help so that the sun can rise in the morning. Furthermore, Kristiansen was able to identify singular motifs in rock art as well that relate to the overall narrative of the journey of the sun.

Åsa Fredell (2003) has carried out (semiotically and narratologically inspired) impressive studies on rock carvings and their different forms of expression, directions of orientation, scenes, compositions, gestures, and attributes, arguing that much rock art indeed has narrative features. However, one of her studies reveals the risks involved when attempting to attribute clear-

¹⁹See e.g. Mandler (1984).

²¹Kaul (1998).

²²Kaul (2005), p. 138.

²³Kristiansen (2010).

²⁴Fredell (2006),

cut epic structures in these carvings.²⁴ In this case, she tentatively suggests a narrative interpretation of some rock panels in southern Sweden from late Bronze Age inspired by the medieval Irish epic *Táin Bó Cúailnge*, which at least in written form did not exist earlier than about 1000 later than the carvings themselves (although oral versions might have existed earlier). Such an approach is of course quite speculative in nature, even if Fredell herself has made some reservations:

"... I am not arguing for proof that the rock pictures in this scene necessarily depict this narrative...My aim ... has been to show how rock pictures could have worked actively within a society where social memory and cultural/ideological transmission over generations was based on oral tradition. ... [T]he expressions, structures and compositions of rock pictures imply that they did in fact, sometimes and in a direct relation to oral performances, tell stories." ²⁵

Indeed, as Fredell further states, a "search for rock pictures as a perfect illustration of a text is a misleading projection backwards in time."²⁶ However, further research could take the images themselves as a point of departure, by making use of 3D-documentation techniques, in order to provide detailed sequential, chronological analyses of the petroglyphs (which, as mentioned, frequently are overlapping and have different dates of origin. At least simple event sequences could hereby easier be discerned. And more fine-grained analyses of these pictures as iconic signs might facilitate an understanding of their possible relation to the sociocultural contexts in which they emerged. It is certainly conceivable that certain image sequences are referring to specific historic events, such as combats with rival tribes, or the like, but such suspicions can of course not be corroborated.

Basically, we might strive for the identification of pictorial renderings of

- (i) single events, understood as the transition from one state of affairs to another, usually involving (groups of) agents;
- (ii) stories, i.e. particular sequences of related events that are situated in the past and retold for e.g. ideological purposes; and
- (iii) by implication, master-narratives being deeply embedded in a culture, which provide cosmological explanations and a pattern for cultural life and social structure.

Hence, further research on the narrative potential of rock carvings might strive for the following objectives:

I. Empirical field studies, making use of 3D-documen-

tation techniques, in order to provide detailed *sequential*, *chronological analyses* of petroglyphs.

II. A study of the pictorial elements of the petroglyphs, their organization on the panels and their composition as iconic signs (signs based on visual similarity with the objects they stand for) to facilitate an understanding of varying meaning layers and their relation to the sociocultural context in which they emerged.

III. The identification of simple events and possible narratives (i.e. sequences of e.g. causally related events) in rock art using the findings established in (II) by taking approaches from narratology into account.

Certainly, there were well-established, trade-related contacts between the Mediterranean region and Scandinavia. Thus myths to be well-known from the former region (such as the sun-journey myth) might reasonably have spread to the latter and could provide guidance concerning iconographic interpretations of petroglyphs.

Last, however, it should be pointed out that rock carvings possibly had multiple functions, rather than simply being symbolic or pictorial representations of external objects, events, or overarching myths. Thus they might have been part of magic-religious rituals in relation to large game hunting or maritime activities, such as long distance trade and sea combats. They could also have been used within cultic practices, socio-ritual initiations or celebrations of certain humans, genders, seasons, and so on.27 Indeed, the very activity of picking and scratching various motifs into hard and solid rock may have been a ritualized/performative practice in itself, as it undoubtedly was very time-consuming, demanding considerable effort; and sometimes already existing images were worked over again and again. It has also been argued that petroglyphs were made by shamans in altered states of consciousness, perhaps having used hallucinogens.²⁸ To conclude, then, rock carvings should probably be regarded as multimedial phenomena, involving the active, multi-faceted involvement of producers as well as spectators.

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²⁵Ibid, pp. 128-130.

²⁶Ibid, p. 123.

²⁷Cf. Goldhahn & Ling (2013).

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