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JOURNEYS IN STONE AGE ROCK ART AND ITS RESEARCH HISTORY IN NORTHERNMOST EUROPE

Jan Magne Gjerde

Abstract. This paper is a brief journey through a century or so of rock art research history in northernmost Europe. Researchers in previous times knew the material culture within large geographical areas, which is at present almost impossible due to the greatly expanded archaeological record. The point of departure for this journey is the current status of documentation and material overviews before entering a discussion of dating Fennoscandian rock art. Then, the author discusses the 'boats' represented in rock art and the canvas of the rock art. The end of this journey provides an opportunity for a broader reflection on distance in time and space. These glimpses into the history of rock art research in Fennoscandia give an overview of previous journeys in rock art, thereby providing a sound basis for crossing state boundaries in rock art research. By revisiting rock art sites documented years ago, a fresh set of eyes and modern documentation methods may enable more information crossing space and time to be 'mined' from the rocks. This paper argues for a renewed focus on material publications (preferably digital) in order to approach comprehensive overviews crossing administrative and national boundaries.

Departure

This paper is a brief journey though the rock art of northernmost Europe, summarising some of the harbours created by more than a century of rock art research. The idea and initial inspiration for this journey came from reading Gutorm Gjessing's paper 'Veidekunst i Nord-Norge — litt spreidd småplukk' of 1974 where he discussed and summed up some of the new finds related to then current trends and statements in archaeological research (Gjessing 1974). Central to this journey in rock art is the 'missing' general knowledge or overview of material culture covering large areas or regions pointed out by Hein Bjerck (2002: 166). Most studies are restricted to a few sites, a small area, a region (or regions) and at best within national borders, rarely crossing modern administrative borders.

From the very beginning, the find history (see Fig. 1) has been central to the research focus. When Gustaf Hallström began his life-long quest of studying rock art in 1906, about 20 sites with so-called hunters' rock art was known throughout Fennoscandia. The total number of figures at these sites was uncertain since few sites were documented. Hallström aimed to publish all Stone Age rock art in Fennoscandia in a trilogy called *Monumental art of northern Europe from the Stone Age*. The intensive research aimed at documenting all known rock art in both Scandinavia and north-western Russia and provided a thorough overview encompassing 55 sites in total. Central to what can be called the golden decade of rock art in the 1930s was the then unparalleled material publications presenting and thoroughly discussing all the known sites (Bøe 1932; Engelstad 1934; Gjessing 1932, 1936; Hallström 1938; Ravdonikas 1936, 1938). Simonsen (1958) complemented Gjessing's work *Arktiske helleristninger* (1932) with a second volume describing Arctic rock art. Hallström's (1960) overview of Swedish sites included a general presentation of the north-western Russian rock art. New finds at Vyg river by the White Sea in the 1960s were published by Juri Savvateev (1970). His publication is of the Zalavruga site, which is part of the Vyg complex and an extension of the finds presented by Ravdonikas (1938). The large Kanozero site on Kola-Peninsula was found in 1998 and documented in the early 2000s by Kolpakov and Shumkin (2012; cf. Shumkin 1991). Their publication is a good presentation of the material in keeping with the Russian tradition of descriptive publications. The unparalleled growth in discovered Finnish rock paintings has been well published (Kivikäs 1995, 2009; Lahelma 2008). A good reference to the Finnish material is also available at Ismo Luukkonen's website *http://www.ismoluukkonen.net/kalliotaide/suomi/*. The new finds at Nämforsen in northern Sweden, complementing Hallström's documentation, can be found in Larsson and Engelmark (2005). The Nämforsen material is currently being digitally documented by the Swedish Rock Art Research Archives (SHFA *http://www.shfa.se/*). As part of the documentation connected to the

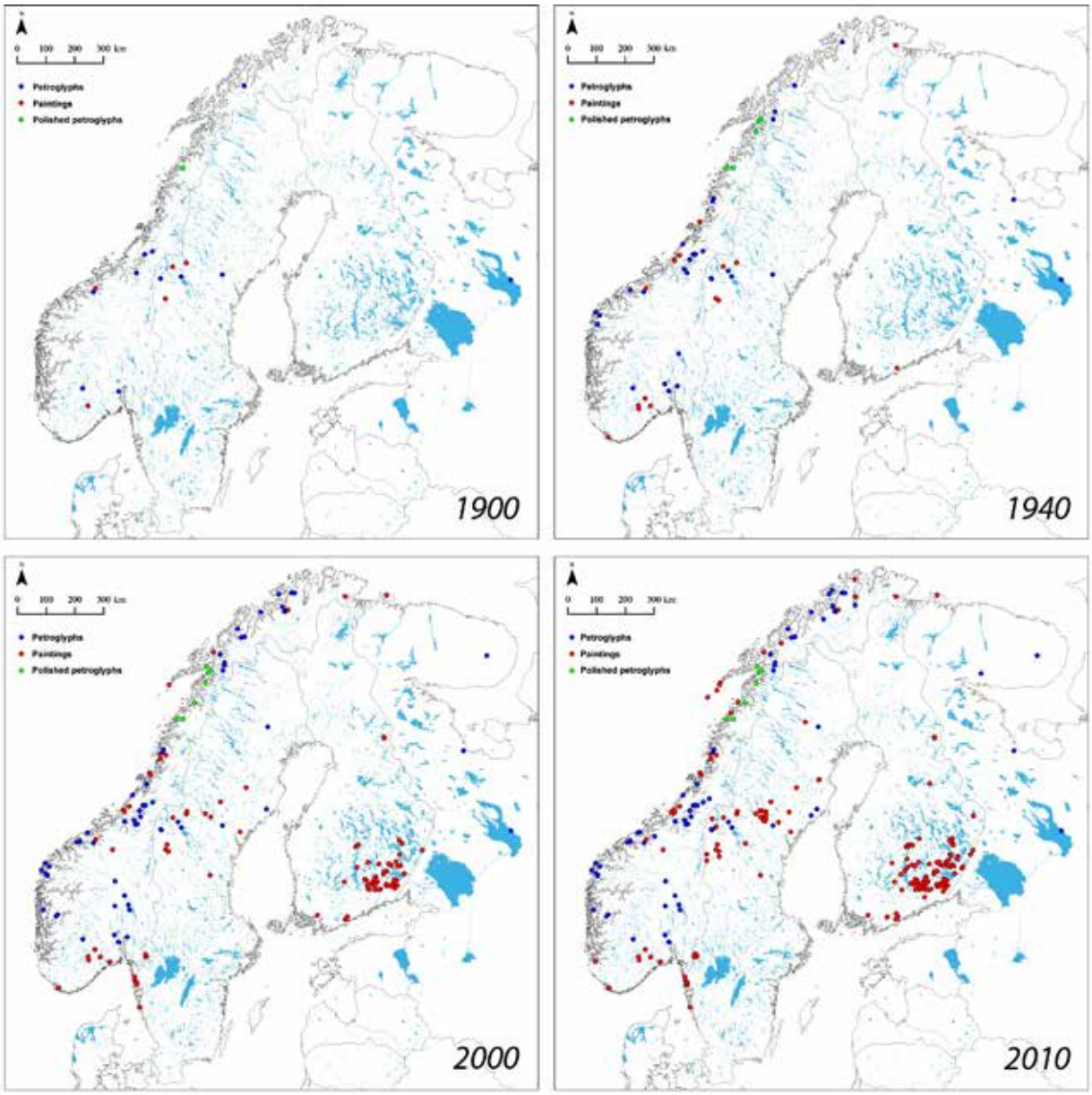

Figure 1. *Rock art dated to the Stone Age throughout Fennoscandia. The map shows the situation in 1900, 1940, 1990 and 2010. Illustration: JMG.*

Norwegian Directorate for Cultural Heritage rock art projects, new finds at the large Vingen site in western Norway, previously presented by Bøe (1932), were published by Lødøen and Mandt (2012). For rock art in central Norway, numerous smaller publications and reports in Norwegian, by Sognnes in particular, present individual sites or groups of sites at the regional level (e.g. Sognnes 1989). Lately, two syntheses from central Norway are rich contributions to the material record in this area (Stebergløkken 2016; Sognnes 2017).

A general overview of the large Alta site in northern Norway can be found in Helskog (2014). The digital documentation of the site presented at Alta Museum's website *http://altarockart.no/* is an admirable example on how rock art material publications should be made available to both the scientific community and the general public. Recently, a catalogue of the northern Norwegian rock art was published (Helberg 2016). Unfortunately, the book does not present the sites and the material as such; it is a summary of 20 years of cultural resource management.

An overview of the c. 275 currently known Stone Age rock art sites in Fennoscandia in 2010 (Gjerde 2010a) shows some interesting results in that there is a clear distribution of sites related to research intensity and find history (see Fig. 1). The national border between Finland and Russia was not there in the Stone Age; whereas there are presently no known sites with rock paintings in north-western Russia, such sites are virtually lined up along the Finnish side of the border. Equally fascinating is the absence of petroglyphs in Finland. Obviously, when looking at the wider distribution of sites, it is probably just a question of time before the first petroglyphs are found in Finland and the first paintings reveal themselves in Russian Karelia.

In addition to the general find history, as men-

tioned by Sognnes (2003a), the frequency of publications also makes it difficult to keep up with the material record when trying to study larger regions. At times, it is therefore important to take a step back and reflect on both find and research history and consider how 'the rock art landscape' would have appeared today if the borders and boundaries between the east and west in Europe were different. Or, if the Alta site in northern Norway and the Kanozero site located on the Kola Peninsula in north-western Russia had been discovered in the early 1900s and were first made public as part of the large material publications by e.g. Gjessing and Hallström in the 1930s. To put the numbers into perspective; with about 7000 registered petroglyphs the Alta material today encompasses more rock art than what, in 1960, was known in all of Fennoscandia.

Figure 2. *Ground/abraded rock art at Sagelva, northern Norway marked with chalk in 1908. Photo: Gustaf Hallströms Research Archive, Umeå, Sweden.*

From the early 1900s rock art in Scandinavia has been divided in hunters' and agrarian rock art (Brøgger 1906, 1909; Hansen 1904), generally termed NT (northern tradition, hunters' rock art) and ST (southern tradition, agrarian rock art). This divide was continued by Gjessing and Hallström (Gjessing 1932, 1936, 1939; Hallström 1938) and later on by e.g. Hagen (1973, 1976) and Simonsen (1958, 1971, 1973), although the latter two briefly discussed the dichotomy in the 1970s (Hagen 1973; Simonsen 1973). Researchers in Finland and north-western Russia do not apply such a dichotomy when describing their material. This strong division between the two types of rock art was criticised already in the 1950s by Moberg (1957). The terms were termed a straightjacket for Scandinavian rock art research by Helskog (1990: 72) as there are several inherent problems with the dichotomy. As rock art was seen to adhere to a northern and southern tradition there is a clear geographic reference as well as a link to subsistence as rock art was termed either hunters' or agrarian (farmers) art. A connected and larger issue is time in relation to motifs and traditions such as 'human' representations and 'boats' placed in the Bronze Age while representations of wild game are dated to the Stone Age. The early finds from Vingen in western Norway (Bing 1912; Bøe 1932) and Bardal in central Norway (Gjessing 1935, 1936; Lossius 1896) could have prompted a debate but failed to do so, with regard to motif range equalling age. The issue of 'motif equals time' has only in recent years become a topic for debate, see e.g. a recent paper on the 'boat' motif in Fennoscandia (Gjerde 2017). Find history has characterised the study of rock art in relation to dating. Most likely, typological-chronological schemes would have been different if, for instance, Alta in northern Norway had been discovered concurrent with Vingen in western Norway or Namforsen site in northern Sweden. Then, maybe, the so-called straightjackets or typological frameworks that guided rock art research in the 20th century would have encompassed other perspectives. However, examples of breaking out of the norm are now enriching current knowledge, e.g. Johan Ling's (2008) work on the maritime rock art ('agrarian' rock art dominated by 'boats' in southern Sweden).

The age of rock art

It is important to reflect on time when studying rock art. Rock art in Fennoscandia relies on relative dating based on traditional methods of rock art dating, building relative chronologies of rock art. There is only one exception to this, where one motif at Besov Nos, at Lake Onega in NW-Russia, was direct-dated by microerosion of the petroglyph surface, giving a date of between E4800–E4000 bp (Bednarik 1992, 1993). The Fennoscandian rock art journey starts with the pioneers settling Fennoscandia about 12 000 years ago. Regarding the earliest known rock art, dated by shoreline dating, I will start off with the words of the geologist John Bernhard Rekstad when he, based on the geological setting of the rock art at Sagelva in northern Norway, concluded that the polished/abraded rock art must be considerably older than the Tapes transgression: 'I do not know whether the archaeologists will assign these rock carvings to such a high age' (Rekstad 1919: 55).

Based on stylistic parameters, rock art was generally divided in an evolutionary *three-period style*

Figure 3. *Map of Stone Age rock art in Fennoscandia with rock art centres or nodes marked in red. The encircled areas all have a 200 km radius which together cover large parts of Fennoscandia. Illustration: JMG.*

chronology with the naturalistic petroglyphs being the oldest moving towards more schematic representations within Scandinavia (Gjessing 1936: 158–169; Hallström 1938: 183; Shetelig 1922: 129–131). (Hallström operates with five styles, but still within the *three-period style chronology*). This also seemed to fit the pattern from the geological dating of rock art. With minor alterations Bakka (1973; 1975: 28–36) and Hagen (1976: 164–166) followed the three-period stylistic chronology, however, adding a fourth stage dated to the Early Bronze Age. Later, Sognnes has related the style chronology to shoreline dating and found that: 'The proposed stylistic sequence seems, in general, still to be acceptable for Trøndelag' (central Norway; Sognnes 1995: 133). Based on the Alta material, Helskog saw no change from a naturalistic to a schematic style (Helskog 1989). Later both Gjerde (2010a: 186f) and Sognnes (2012) questioned the straightforward stylistic argument to separate the abraded rock art from the pounded rock art. Recent studies on style and rock art in central Norway have revealed some interesting results challenging the three-period style chronology in this region (Sognnes 2017; Stebergløkken 2016). Very few studies have looked into the whole of Fennoscandia, with a few exceptions (Hallström 1938, 1960; Lindqvist 1994; Gjerde 2010a). Thereby, most of the studies present results from regions such as central, northern and western Norway. I would argue that it is still extremely difficult to formulate an overview of the whole area. It is likely that future studies will focus on regions and regionality of rock art. However, that is not within the scope of this paper.

Moving to northern Norway, one may refer to rock art antiquity in terms of a long chronology tradition and a short chronology tradition. Povl Simonsen initially argued for a short chronology where 'all' northern tradition rock art could be dated to the Late Stone Age (Simonsen 1978: 32–33). An overview of the chronology for all four countries in northernmost Europe would be beyond the scope of this paper. In northern Norway, where most of the chronological debate on rock art has occurred, the Early Stone Age refers to the period from the initial settling of the area between c. 11 500–6500 years bp. The Late Stone Age refers to the period between 6500–4000 bp, while the Early Metal Period refers to the period between c. 4000–200 bp. Adding

Figure 4. *Shore-zone at Hjemmeluft in Alta. Notice the sea-spray zone free of vegetation where figures would appear very clearly. Photo: JMG.*

to this line of thought, it was generally accepted that abraded rock art was the earliest, followed by percussion petroglyphs and ending with painted rock art. Anders Hesjedal, on the other hand, argues for a long chronology where the earliest rock art goes back to the Early Stone Age. Like the short chronology, Hesjedal's long chronology sequences rock art by technique equalling time; the earliest rock art is abraded (Early Stone Age), followed by percussion figures (Late Stone Age) and ending with paintings (Early Metal Period) (Hesjedal 1990, 1993, 1994). The Alta material, attributed by Knut Helskog to the Late Stone Age until about 2000 years bp, favours the long chronology (Helskog 1983; 1989: 99–101). Simonsen also gradually came to accept the long chronology when dating rock art in Norway (Simonsen 2000).

The dichotomy between the short and long chronology is rarely debated. However, recent research shows that rock art likely is a more than 10 000-year-long tradition in Fennoscandia (Gjerde 2010b). The most notable change in the development of rock art probably occurred between 7500 and 7000 years bp. We may talk of a 'rock art explosion' as the number of sites increased significantly at this point in time. Adding to this, the major concentrations of rock art throughout Fennoscandia were 'all' initiated at more or less the same time. Significant rock art areas such as Vingen in western Norway, Hammer in central Norway, Alta in northern Norway, Nämforsen in northern Sweden, the Astuvansalmi (Saimma) area in southern Finland as well as Onega and Vyg in north-western Russia seem to emerge at almost the same time. These are places where we see rock art being made at the same place for a considerable time; the extreme being Alta in northern Norway where rock art was made for more than 5000 years, from c. 7200 bp until about 2000 bp (Gjerde 2010b; Helskog 2014). When discussing such sites, one may talk about rock art centres as nodes in the communication lines of northern Europe manifested in rock. The large rock art areas have been seen as meeting places by several researchers (e.g. Gjessing 1945: 313; Hallström 1960; Hagen 1976: 127–130; Hood 1988; Tilley 1991: 108–113; Baudou 1993; Forsberg 1993: 242; Stolyar 2000, 2001; Ramqvist 2002: 154–156; Gjerde 2010b; Fuglestvedt 2017). Looking at the central rock art areas of Fennoscandia as centrally placed communication nodes — central in communication between large groups of people in the Stone Age — is supported by placement as shown in Figure 3.

The most commonly applied method of estimating the age of Scandinavian rock art is shoreline-dating. Postglacial land uplift data is combined with archaeological data to relate rock art sites to pre-Historic shorelines, thereby providing a maximum-date for the rock art. Such a maximum-date may, however, be challenged by location (distance to shore) and time of use (lifespan of the petroglyphs). Locational factors are crucial for dating. Several rock art sites were at some point submerged; the marine layer covering the sites now ensures a sound basis for dating based on relating the context of rock art and pre-Historic shorelines. Generally, rock art is likely to have been placed in the shore-zone and in the sea-spray zone, up to 2 m above the shore. As these areas are free of vegetation, the rock art would be clearly visible (see Fig. 4). This functional explanation for the placement of rock art has been suggested by Egil Bakka and Egil Mikkelsen (Bakka 1975; Mikkelsen 1977). Knut Helskog's cosmological argument connecting rock art to the shore strengthens our understanding of such a location of Stone Age rock art in northernmost Europe (Helskog 1999). Relating rock art to Arctic cosmology, which is based on an understanding of the world as three-tiered, rock art may be placed in the middle world (see Fig. 5), concurrently interacting with the upper and lower world. Adding to this concept, the majority (and almost without exception) of inland rock art sites are placed in the shore-zone or just above, e.g. Onega in NW-Russia

Figure 5. *Rock art located in the middle world at Besov Nos, Onega, north-western Russia. Photo: JMG.*

and the numerous sites with paintings in Finland.

The straight-forward approach inherent in shoreline-dating rock art has met with critique after excavations adjacent to rock art at the large Ausevik site and Vingen site in western Norway (Lødøen 2015: 82) since most of the rock art in this area is not directly shore-bound. Shoreline dating is still an applicable relative dating method for Stone Age rock art. I will illustrate the changes in rock art over time using an example from Ofoten, northern Norway (see Fig. 6). Shoreline dating of this site follows the general trend shown in Stone Age rock art of northern Norway; the earliest appears c. 11 250 years bp and continues being made to the end of the Stone Age (Gjerde 2010b).

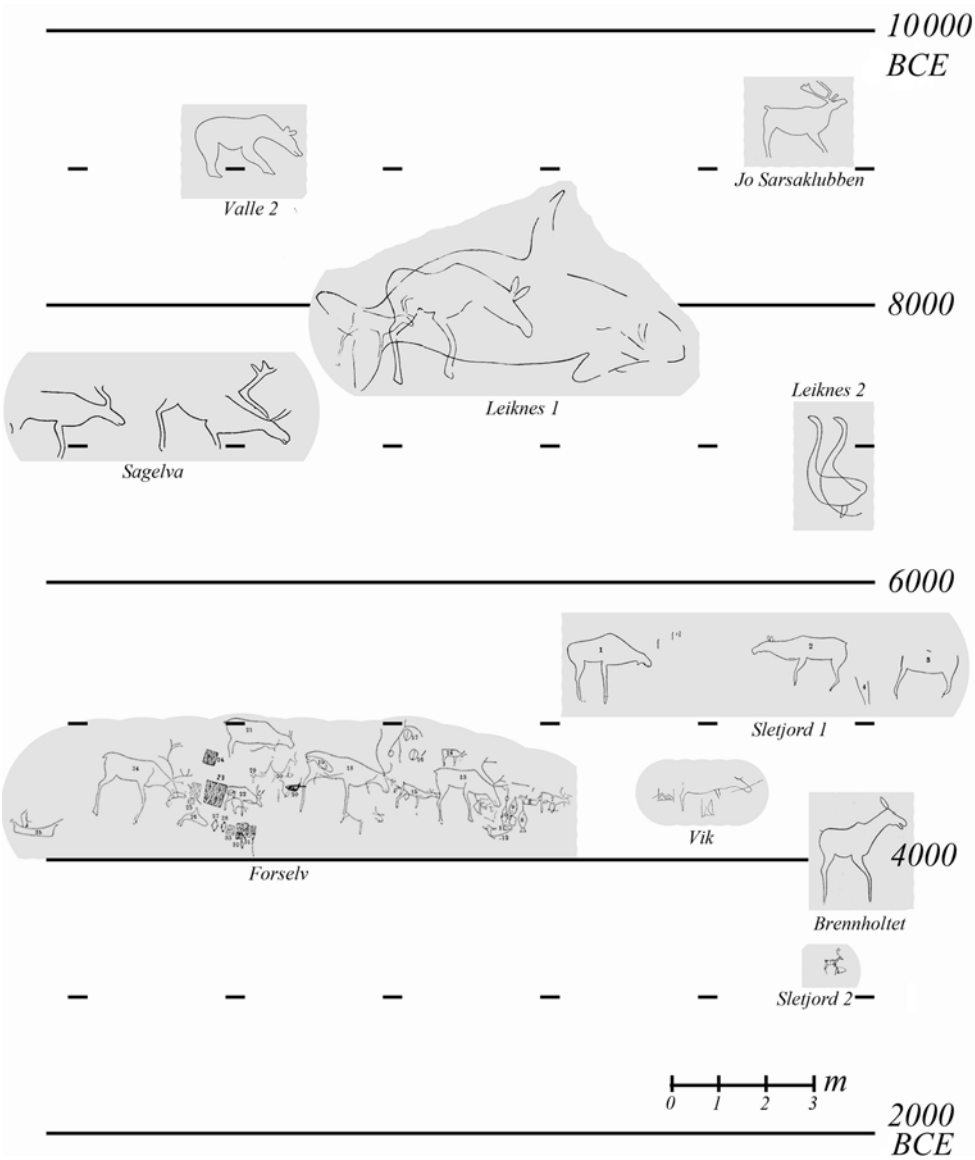

Figure 6. *Chronological overview of rock art in Ofoten, northern Norway. After Gjerde (2010: Fig. 100).*

While most rock art studies in Fennoscandia focus on the Stone Age or/and the Bronze Age, the later panels at the Alta site in northern Norway date to about 2000 bp, and maybe even later. The petroglyphs at Badjelánnda in northern Sweden (Mulk and Bayliss-Smith 2006) and at Reinøya in northern Norway (Fig. 7) actualise the study of the age or time frame of rock art as some of this rock art may only be a few centuries old. In northernmost Europe it is not unlikely that some rock art, such as the Badjelánnda site in northern Sweden, the Reinøya site in northern Norway or the Aldon site in northern Norway are connected to the Sami.

A boat-journey in northernmost Europe

It was common to place boat figures in the Bronze Age since the boat motif per se was central in the south-Scandinavian Bronze Age rock art. That this motif equals an age statement is implicit in most publi-

Figure 7. *Rock art at Reinøya outside Tromsø, northern Norway. Photo: JMG.*

cations prior to the 1980s (Gjerde 2017). Prior to 1970, few rock art 'boat' figures had been found in northernmost Europe. In Norway, the 'boat' figures at Evenhus and Rødøy in central Norway were discussed and dated to the Stone Age (Gjessing 1936). Adding to Evenhus and Rødøy, Forselv in northern Norway (Gjessing 1931, 1932) were the exceptions. The three sites included less than 35 'boat' figures. The rock art 'boats' at the Evenhus site in central Norway were dated to the Stone Age when Brøgger and Shetelig (1950) discussed the ancestry and evolution of the Viking ships. For central Norway the boat figures at northern tradition rock art sites were later generally dated to the late part of the Late Stone Age (e.g. Sognnes 1989, 1995). In northern Sweden Hallström had earlier placed the rock art in the Bronze Age, since the boat as motif was thought to belong to the Bronze Age (Hallström 1907a, 1907b). In Finland, the first boat image was discovered at Valkeisaari in 1966 (Luho 1968). Throughout the next decade, finds especially at the Astuvansalmi site (Sarvas 1969) and the Uittamonsalmi site (Sarvas and Taavitsainen 1976) in the Saimma district in south-eastern Finland and the Saraakallio site in southern Finland (Kivikäs 1990) showed that 'boats' were part of the Finnish rock art tradition. Site context, such as at Astuvansalmi, dated the paintings to the Late Stone Age. In north-western Russia, rock art (including 'boat' depictions) at the Onega and Vyg sites were related to the adjacent Late Stone Age settlements early on (Ravdonikas 1936, 1938). Gjessing's statement '[a]s far as can be seen, there are no really positive reasons for placing the carving to the Bronze Age. The boats can scarcely be any proof in that direction — they are entirely associated with the sphere of ideas of the Stone Age carvings' (Gjessing 1931: 285) was generally ignored by other researchers. Hallström (1960) refined his initial dating of the Nämforsen site (e.g. Hallström 1907b) when he related the rock art to the Late Stone Age and the Bronze Age. Supported by finds at Vyg (Zalavruga) where the rock art occasionally was overlain by cultural layers of the Late Stone Age, Russian archaeologists dated rock art to the Late Stone Age (Ravdonikas 1936, 1938; Savvateev 1970, 1977). However, Russian rock art has generally not been discussed in relation to the Scandinavian rock art, Bakka (1976) being an important exception. This 'divide' is prevailing in Malmer's chonological study where all rock art 'in his eyes' must have had a south-Scandinavian origin (Malmer 1981). This emphasis on a south-Scandinavian origin of boat depictions was further strengthened by an underlying south-to-north train of thought (e.g. Simonsen 1971, 1973, 1991). Most studies rarely crossed the east-west border. One notable exception is the work of Bakka (1976) that should have received more attention, but was unfortunately published in Norwegian only (hence, not available to Russian researchers).

Helskog documented the Alta material found in 1973 and convincingly dated the 'boat' figures to the Late Stone Age (1983, 1985, 1988). The 'early' dates for the Alta rock art did not fit the established evolutionistic typology of the 1930s (Gjessing 1932, 1936; Hallström 1938), which Simonsen used for his interpretations of rock art in northern Norway. When reading between the lines of Simonsen's publications it is clear that he found the 'early' dates for the Alta rock art hard to accept, as they did not fit his short chronology, placing all rock art in northern Norway to the Late Stone Age (Simonsen 1991). Hesjedal's work on north-Norwegian rock art (Hesjedal 1990, 1993, 1994), where it was made clear that the material record argued for a long chronology, made Simonsen reluctantly accept the long chronology, furthermore accepting a Late Stone Age dating for the Alta rock art.

Lindqvist, in studying the Fennoscandian rock art, crossed the east-west border when comparing the material from Scandinavia and north-western Russia (Lindqvist 1983, 1984, 1994). He saw clear parallels between the Russian and Scandinavian material, thus keeping in line with Hallström (1960) who, based on the similarity of 'boat' depictions, argued for cultural contact between Onega and Nämforsen. Contemporaries of Lindqvist (1994), Baudou (1993) and Forsberg (1993), dated the early Nämforsen petroglyphs to an initial phase of c. 6000 bp. Helskog juxtaposed rock art in Scandinavia and in NW-Russia from major sites including Alta, Nämforsen and Vyg, where petroglyphs (and therefore also 'boat' depictions) were dated to the Late Stone Age and initiated about c. 6000 bp (Helskog

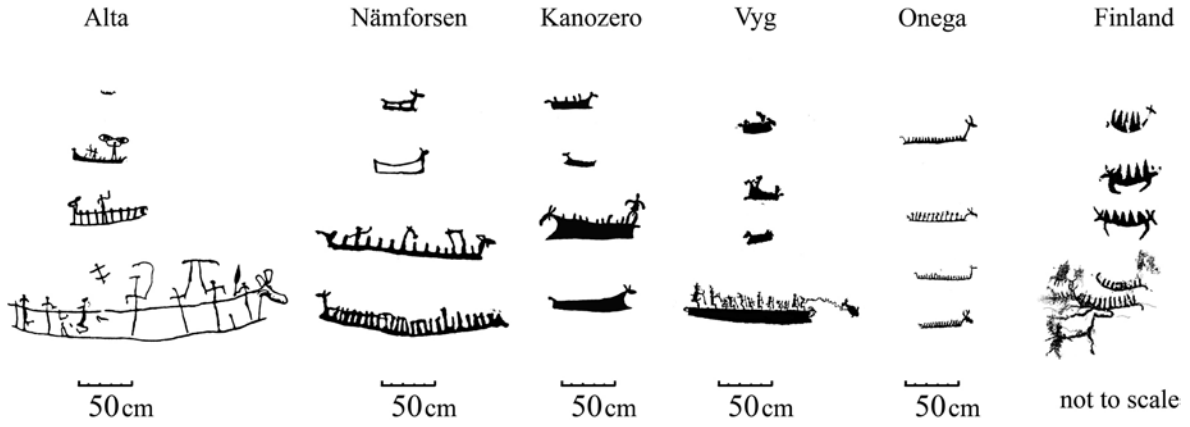

Figure 8. *Overview of 'elk-head boats' from northernmost Europe. Tracings from Alta after Helskog (1989: Fig. 4), tracings from Nämforsen after Hallstrom (1960), tracings from Kanozero after Gjerde (2010), tracings from Vyg after Savvateev (1970), tracings from Onega after Ravdonikas (1936b: Pls 7 and 13) and Hallström (1960: Pl. XXVIII), tracings from Finland by Lahelma (2005b: Fig. 1). Illustration: JMG.*

1989). During the 1990s it became generally accepted that the earliest 'boat' depictions (previously dated to the Bronze Age) were of a Late Stone Age date in Finland, Norway, NW-Russia and Sweden.

Coming back to the process of dating of rock art armed with new geological data for shoreline dating and information from adjacent excavations (including overlaying material) showed that the large rock art corpora in Fennoscandia were initiated c. 7500–7000 bp (Gjerde 2008, 2010b). This is evident for the rock art in Alta, northern Norway, Nämforsen, northern Sweden and Vyg, NW-Russia. Adding to this, the earliest Finnish rock paintings that include boat depictions are dated to about 7000 bp (Lahelma 2006, 2008). The 'boats' found throughout northernmost Europe are strikingly similar in design (see Fig. 8); frequent depictions of an 'elk head' in the stem of the 'boat' arguing for cultural contact over large areas with a similar maritime technology. Recent work on the boat depictions in Fennoscandia argues that the earliest known 'boat' depictions date to c. 7500–7000 bp (Gjerde 2010b, 2017). 'Boats' at the well-dated rock art concentrations in northernmost Europe therefore predate Bronze Age boats by more than 3000 years. A recently found boat depiction at the abraded rock art site Valle in northern Norway is, according to shoreline dating, about 11 000 years old (Gjerde in prep). It is situated at the same site as other naturalistic figures dated by Hesjedal (1994) and Gjerde (2010b) to c. 10 000 years old. Returning to the notion forwarded by the geologist Rekstad (1919), it is anticipated that some archaeologists will find it problematic to accept such an old date for a boat depiction, emulating the manner in which the scepticism to Late Stone Age boat depictions were evident throughout the 20th century.

Why boats? Boats, a proven maritime technology, would have been a prerequisite for the pioneer settlement of northernmost Europe. Settling the fjords and numerous islands along the Norwegian coastal landscape would have been virtually impossible without suitable boats. It is one likely of several reasons for depicting boats in rock art. A number of 'boat' depictions show 'marine hunting' and 'fishing' (Gjerde 2016), such as 'whaling' (e.g. Kanozero, Onega and Vyg in NW-Russia and Alta in northern Norway), 'sealing' (e.g. Vyg in NW-Russia and Alta in north-Norway), 'halibut fishing' (e.g. Alta and Forselv in north-Norway), as well as 'hunting drives of reindeer from boats' (e.g. Alta in north-Norway). The depictions thus hold important information, as Hallström suggested in regard to the 'boats' at Nämforsen, where he linked the small 'boats' to hunting and fishing while the large boats illustrated journeys to and from Nämforsen (Hallström 1945: 33). Exchanging raw materials, artefacts, ideas and ideology, but not least knowledge would have been important among Stone Age hunter-gatherers (Lindgren 2007). The boats refer to marine activities, but boats may also symbolise the idea of journeying and hold connotations signifying contact between people (Gjerde 2010b, 2016). Long-distance journeys have been suggested as a possible contextual background for interpreting the Bronze Age rock art in southern Scandinavia (Kristiansen and Larsson 2005). In my opinion, this was likewise of importance in the Stone Age in northern Fennoscandia. Another aspect related to long journeys are the comprehensive rituals connected to journeying, such as those described in ethnographical sources by Helms (1988). The boat has also been interpreted as a part of shaman paraphernalia (sometimes in miniature), representing a means of transport between real and imaginary landscapes (places) in the three-tiered cosmology of hunter-gatherers (Bäärnhielm and Zachrisson 1994: 163f; Hætta 1994; Mulk and Bayliss-Smith 2006: 86, 95).

Journeys on the rocks

The study of rock art has been centred around the documentation of the actual figures, focusing on accurate documentation of the various motifs. The style-analysis based on typological aims underlined

the necessity of such studies and in some ways made it a prerequisite. In retrospective, it seems that it was more important to count 'crew-lines' than to discuss the meaning and concept of the boat or other motifs. Documentation was and still is important. However, it is a paradox that many rock art studies are based on documentation made more than a century ago when documentation techniques, methods and, not the least, research aims differed significantly from today. In recent years, technological innovations, especially in digital documentation, have brought about all-embracing methodological changes in documentation of rock art. Applying new digital methods shows that figures and details appear more clearly on the rock-face, thereby providing more information on individual figures, on panels and sites, significantly adding to the biography of rock art sites. However, it is important to keep in mind that although digital documentation is a valuable tool when documenting and interpreting rock art, we still need to observe rock art in situ to get a better understanding of the rock art and its relations.

Figure 9. *'Elks' at Landverk, N-Sweden depicted as if they are drinking from the lake. Figures chalked during Hallström's fieldwork in 1907. Photo: Gustaf Hallström's Research Archive, Umeå, Sweden.*

Studies of rock art in northernmost Europe have shown that there is often a clear interaction between natural elements and rock art (Helskog 2004; Helskog and Høgtun 2004; Gjerde 2006, 2009, 2010b). Figures are at times deliberately placed in relation to natural elements in the rock, the rock surface or its surroundings. Natural elements such as colours and colour variation in the rocks, layering, cracks, striation marks and water (running water and small pools) seem decisive for the interplay between figures, scenes and compositions as they interact with the natural elements. Ethnographical sources also evidence the meaningful aspect of cracks and other natural elements for creating an interplay important for the story being told (Lewis Williams and Dowson 1990). In the early 1900s Gustaf Hallström related rock art to place characteristics and natural elements (Hallström 1907a: 222; 1907b: 185; 1908: 55) when documenting the large 'elks' at Landverk in northern Sweden (Fig. 9). According to Hallström the 'elks' were positioned on the rock outcrop as if they were drinking from the lake (Hallström 1907a: 222; 1907b: 188). Later critique by contemporary archaeologists unfortunately made Hallström question his notion of the drinking elks at Landverk. However, this journey through research history shows Hallström interpreting the interplay between rock art and the elements more than a century ago, thus showing his prominence as an archaeologist.

At Leiknes, the abraded rock art is situated on coastal rock slopes. At Leiknes 2 in northern Norway, Hallström (1938) documented one 'swan' figure while Gjessing (1932) found two 'swans' (see Fig. 10). Revisiting Leiknes today, while keeping in mind the notion of the rock-face as a canvas for rock art, a quartz line seems a vital detail. The 'swans' are deliberately placed over this line as there is plenty of available space at the site. Studying the 'swans' shows that the quartz-line is incorporated into the motif, as the part of the 'swan' that is under water when swimming is depicted under the quartz-line; the quartz-line may thus be interpreted as the waterline. Looking more closely at the 'swans', their merging bodies appear as if depicted partly on top of each other. The two 'swans' are depicted as if in movement: one animated 'swan' swimming on the waterline.

The figures at Leiknes, abraded into the rocks more than 9000 years ago, are likely the oldest known depicted animation in Fennoscandia (Gjerde 2006, 2010b). At Lake Onega in north-western Russia the earliest figures may be c. 7000 years old. They are situated next to adjacent settlements from the Late Stone Age and are thought to be closely related to these (Lobanova 1995a, 1995b). One of the storied rocks is located at Peri Nos

Figure 10. *Abraded rock art at Leiknes 2, N-Norway. Tracing to the left after Hallström 1938: Pls V and VI. Tracing to the right after Gjessing 1932: Pl. IX. Photo and illustration JMG.*

Figure 11. *A 'boat journeying down the river' in the rock at Peri Nos, Onega, north-western Russia. Photos and compilations: JMG.*

where the background is a dark (black) belt of rock coiling towards the lake, separated from the otherwise red granite (see Fig. 11). Only one figure, that of a 'boat', is depicted on this darker rock. The stem of the 'boat' points to the lake as if it is on its way to the lake. Looking at the rock-face, the black inlay appears as a miniature river. About 2 km south of Peri Nos the river Chornaya ('Black River') runs black with black soil wash-out. The 'boat' depiction then seems to be deliberately placed in a miniature black river with apparent reference to the Chornaya. The rock and rock art thus interact with and play out a reference to the river and the wider landscape (Gjerde 2006, 2010b).

At lake Kanozero, on the Kola Peninsula in NW-Russia, rock art is situated on several islands. Consequently, dating this rock art is challenging. However, comparison with the petroglyphs at Vyg by the White Sea indicates that the earliest figures are likely to be about 5000 years old (Kolpakov et al. 2009; Gjerde 2010b). Recent excavation by Aleksej Tarasov, Vladimir Shumkin and Eugen Kolpakov of adjacent settlement material supports this date (Шумкин and Колпаков 2014). Excavations such as those at Kanozero, where superimposition reveals several activity phases, may be problematic when using such data for dating rock art. Through observing differences in erosion affecting individual petroglyphs, they appear to have been made over a long timespan. One of the most fascinating scenes at Kanozero is a 'bear hunt' at Kammeniy 7 (see Fig. 12). Here one can follow the four-by-four 'bear tracks' up a rocky outcrop. Adjacent are the 'ski tracks' of a hunter pursuing the bear. Following the bear and ski tracks it is

Figure 12. *'Bear hunting during winter' at Kammeniy 7, Kanozero, NW-Russia. Photo and tracing: JMG.*

apparent how inclinations of the rock is a vital part of the story. Furthermore, the change of pace when the bear notices the hunter is also legible. The hunter follows the bear uphill where the ski poles can be seen alongside the ski-tracks. Then the hunter sets his skis sliding downhill, steering with one of the ski-poles. He stops, leaving his skis before walking a few steps towards the bear and spearing it (Gjerde 2006, 2010b). This animated scene holds information on hunting equipment, skis and ski poles, the landscape, the season and on hunting bears in the Stone Age.

Arriving in the harbour

This journey through the research history of Fennoscandian rock art may be somewhat volatile and scattered; the aim has been to provide the reader with some food for thought, a starting point for further reflection on rock art. Key aspects to keep in mind are the connections between rock art and landscape, and rock art in light of the qualities inherent in past and present documentation approaches. The differing journeys undertaken by various researchers show that rock art must be addressed with new research aims, revisiting both sites and research history. A major concern is that quite a few of the recent and ongoing rock art studies are based on early material publications with obvious shortcomings. When these works were published, about 50 sites were known in Fennoscandia; now the number is around 300. The material record has multiplied and doubled during the last 20 years.

This paper is a journey in time, both with regard to research history and dating rock art. A main concern is dating rock art based on the concept of maximum-date and the application of the shoreline-dating method (Sognnes 2003a). We must be aware of and consider use-phases. Excavations adjacent to rock art sites imply long-term activity linked to the sites (e.g. Savvateyev 1988; Hansson 2006; Goldhahn in prep.). There are also good ethnographic examples supporting a long use-phase at rock art sites (Okladnikov 1970). Our knowledge and understanding of rock art may in fact benefit from some adventurous thinking when reflecting on the use-phases of rock art or rock art in general.

This brief journey through the rock art of northernmost Europe also provides an overview of the available material in light of research across borders. A central and re-occurring problem is the lack of material publications encompassing larger geographical areas, the lacking awareness of relevant material in adjacent areas. The better part of Fennoscandian rock art studies bases their material knowledge on the easily accessible, large material publications from the 1930s (Goldhahn 2006: 71) which may, to some degree, be explained through the lack of new and updated material publications. The research aims and our documentation and practice of documentation guides our interpretation of rock art. This issue has been raised by several scholars from their initial documentation of rock art, and then at a more methodological level. With the focus on rock art being more than the actual figures and also including the natural elements of rock art, the routine of documentation has had renewed focus during recent years (e.g. Helskog and Høgtun 2004; Gjerde 2010b; Helskog 2012;). Nordbladh (1981) raised the question at a more theoretical level and recently Ljunge (2015) has discussed the theoretical aspects of documentation and the relation between documentation and materiality of rock art.

Of greater concern, however, is the research focus. It is much easier to journey to one site, a region or within one country than to cross borders. As a result, the majority of past and current research endeavours never crossed the east-west borders. This is partly due to the language barrier; however, research history shows that researchers compare the Vingen site in western Norway to the Alta site in northern Norway (a distance as the crow flies of about 1200 km) rather than Alta to the Vyg site in NW-Russia (a distance of about 800 km). We see many examples of modern administrative boundaries and borders that influence research, having implications for comparative studies and their results as borders and boundaries become a form of straightjacket. An example of this is provided by Tilley (1991: 13) when he questioned Hallström's arguments for cultural contact between Onega and the Nämforsen site based on similarity in 'elk-head boats'. Tilley argues in favour of south Scandinavian Bronze Age contact and trade with Denmark in line with Malmer's interpretation of Nämforsen (Malmer 1975: 44–45; 1981: 107). Studying the map, the distance between Nämforsen and the tip of Jutland is about 750 km as the crow flies, while the distance between Nämforsen and Onega is about 900 km. However, returning to Hallström's thoughts regarding the similarity of the 'elk-head boat' figures at Nämforsen and Onega: if Tilley had been aware of the similarity in boats depicted at Astuvansalmi (Sarvas 1969) (well-published) and/or Saraakallio (less well-published) (Kivikas 1990), he might have reconsidered his thoughts on Hallström's line of argument supported by the Finnish rock paintings. The distance between Nämforsen and Astuvansalmi is about 580 km and from Astuvansalmi to Onega about 450 km. The distance between Nämforsen and Saarakallio is about 470 km and between Saraakallio and Onega about 525 km. Tilley argued for imaginary rather than real boats based on the problems of crossing the Baltic Sea by boat. The question is then, how were the islands and the coastal archipelago of Fennoscandia settled? This shows the potential pitfalls inherent in current general knowledge. I may also have missed out on relevant literature on rock art in Finland, Norway, Russia and Sweden. There are other guides for journeying 'into the past'. I advocate visiting rock art sites to get an awareness of relations, of distance and other connections that become apparent when journeying in rock art. Sometimes the story told through art was already on the rocks before the figures were added, figures intertwined with the storied rocks.

Interpreting rock art starts with documentation. Documentation is a product of its time, guided by the prevailing aims and methods at any given time. Variation is thus perhaps the best description of Fennoscandian rock art research throughout the last century. I will leave this journey through rock art in the northernmost Europe with the words of Per Fett (Fett 1934: 80): 'Anything is allowed, as long as it gives an impression of the character of the landscape and tells us why the makers made the petroglyphs exactly where they are'[1]

> 'Some of these clues will — as the researcher so often finds — consist of nothing but misread natural structures, veinings, variously coloured strata in the surface of the rock, etc. Many such pictures drawn by Nature herself, have attracted the attention of the Lapps, by whom they have been worshipped as in some way or other connected with their deities or myths' (Hallström 1938: 19).

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Dr Jan Magne Gjerde
High North Department
Norwegian Institute for Cultural Heritage Research (NIKU)
Fram Centre
P.O. Box 6606
9296 Tromsø
Norway
jan.magne.gjerde@niku.no

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1 Author's translation of '*Alt er tillatt, bare det gir et godt inntrykk av landskapets karakter og forteller hvorfor risteren ristet akkurat der*'.

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RAR 36-1278