Updating Rock Art Re-cut rock art images (with a special emphasis on ship carvings)

Abstract

This article discusses the re-cutting of rock art ships. It shows how some boats were remade to update the boat style so that it corresponded with what was current in a period that was later than when it was first cut. The article points out the need for more in-depth studies to understand the creation and use of rock art over an extended period. It is argued that rock art sites are connected to social traditions that made people return to the same place and make changes to already existing images. Key words: Boats, carvings, Bohuslän, Bronze Age

Introduction

Scandinavian Bronze Age rock art represents a unique contribution to prehistoric culture, and tens of thousands of rock art localities are known in Sweden, Norway and Denmark (Glob 1969; Kaul 1998). Cup marks are the most common rock art symbol in the Bronze Age, 1700-500 BC, and Pre-Roman Iron Age, 500-1 BC (Kaul 1998; Ling 2008), while ships rank second in terms of popularity, and were depicted for the full duration of the period (Figure 1). This means that ships were an important symbol, as has been shown by earlier research (e.g. Kaul 1998; Ling 2008; Nimura 2016), and it has been suggested that the prevalence of the image probably indicates a society based on maritime mobility (Ling 2008). This interpretation contrasts with older research, in that rock art was traditionally seen as picturing agricultural religious beliefs and ceremonies (e.g. Almgren 1927; cf. Ling 2008). Depictions of ships comprise over 25% of the Danish rock carvings excluding cup marks (Glob 1969:15), while the corresponding number of ship figures for Sweden and Norway is huge, about 50% and 60% respectively (Glob 1969: 15-16, 3056). Ships are also portrayed on bronze artefacts, such as

razor blades (Kaul 1998). This demonstrates that the ship was of paramount importance and interest, something that separates these areas from contemporaneous rock art areas in the rest of Europe (Glob 1969).

Since the 17th century AD, a variety of methods of documentation and reproduction of rock art images have been undertaken (Milstreu and Prøhl 2009). Tanum Rock Art Museum, Underslös, has over 40 years of experience in the documentation of rock carvings in Scandinavia. In recent years, the museum has benefited from new developments in technology, for example through collaboration with the Swedish Rock Art Research Archives (SHFA). This has led to the digitalization of a large amount of documentation of mainly Swedish rock art. Here, one can clearly see that a huge number of ship carvings have been altered during prehistoric periods (SHFA). They have been fully or partly re-cut or updated, as indicated in the title of this article. An update might mean that the ship motifs were supplied with details and/ or changed in shape. Ships from the Early Bronze Age (EBA 1700-1100 BC) were updated to look like those of the Late Bronze Age style (LBA 1100-500



Figure 1. One of the many thousands of ship images in Scandinavia. Tanum, Sweden. Photo: G. Milstreu.

BC) by changing and/or adding new details. This was probably done to make the ships look fashionable and up-to-date.

The aim of this article is therefore to bring the iconographic changes and recutting into focus. This study should be seen as a call for a more thorough and detailed ongoing examination, where other images, such as weapons, must be included.

Background, chronological research

In 1869 Hildebrand resolved the discussion regarding the age of the south Scandinavian rock art (Goldhahn and Ling 2013: 274). By comparing Bronze Age swords found in graves with similar images on rock art panels in Norrköping, Sweden, he concluded that the carvings dated to the Bronze Age (Hildebrand 1869). Since then, several ship chronologies have been suggested (e.g. Glob 1969; Rostholm 1972; Kaul 1998; Ling 2008).

P. V. Glob (1969) writes about the importance of including the Danish rock art

in order to date the rock art and rock art motifs since many of the examples are from well-dated archaeological contexts, such as megaliths, whereas most of the Norwegian and Swedish carvings are from rocks without other datable material.

> Because the rock carvings cover the entire Bronze Age, from the beginning of the second to the middle of the first millennium BC, where crucial changes have taken place in the culture of the Bronze Age, it is necessary to arrange the Nordic rock carvings in chronological order in order to interpret them correctly (Glob 1969: 4456), my translation).

In 1996-97 a complete survey was undertaken of ships depicted on bronze artefacts in Denmark from the Bronze Age (Kaul 1998). In the book *Ships on Bronzes* Kaul (1998) has published a catalogue of all the ship motifs on bronze objects from Denmark. However, a catalogue of all Bronze



Figure 2. Diagram showing the chronological-typological development of Nordic Bronze Age renderings. Left (from Kaul 1998): datable ships on bronzes. Right: ship depictions measured in relation to shore displacements (after Ling 2008). Reproduced by permission from F. Kaul and J. Ling.

Figure 3. Drawing of the 60,7 cm long curved sword from Rørby, Sjælland, Denmark (ca. 1600 BC) and the 6,7 cm long ship-representation on the sword. This forms a fixed chronological basis for the dating of ships in rock carvings. Photo: The rock carving at Simrislund, Scania, Sweden G. Milstreu and F. Kaul. Graphic: After Aner & Kersten 1976.



Age ship motifs from Denmark will not be complete before the ships on the rock carvings are included. In order to add this material to the main corpus, the Research Centre of Marine Archaeology started the project Bronze Age Ships in Rock in August 2000 (Kaul ed. 2005). In 2001 the Research Centre of Marine Archaeology in Roskilde began the research project Ship Carvings in Rock in cooperation with the National Museum in Copenhagen, The Museum of Bornholm and the Tanum Rock Art Museum, Underslös (Kaul ed. 2005). This project focused its work on Bornholm, the only part of Denmark with carvings on bedrock (Kaul ed. 2005). Moreover, this island has the largest number of exposed rock-carved ship images in Denmark. In other areas in Denmark the images are carved on loose boulders (Kaul ed. 2005).

Kaul (1998) used a generally accepted typological method (Goldhahn and Ling 2013: 274-275), which uses typology for relative dating based on the chronology of the artefacts on which the ships occurred (Kaul 1998). A number of elements could be identified in the ship motifs and these were used to date the ships (Kaul 1998). Elements that were interpreted as having chronological and typological significance were the stems and keel extensions (Kaul 1998). One can therefore speak of styles during particular periods – new impulses and traditions found their way into the image language.

Another approach to dating rock art was presented by Johan Ling (2008) in his thesis. He based the chronology he created on a detailed study of the Bronze Age shoreline, and how the different panels and rock art figures are situated in relation to it. Based on this he created a rock art ship chronology that resembles Kaul's chronology but differs on some points (Ling 2008).

As has been presented above, there are two current approaches for creating a chronology for Bronze Age ship motifs (Figure 2). One is based on typological research (Kaul 1998) (Figure 3) and the second is based on natural science methods such as shore displacements combined with pollen analyses (Ling 2008). Despite the very different approaches to addressing the question of rock art chronology, the results are almost complementary, with minor differences (Figure 2).

Rock Art and the maritime landscape

Europe has experienced economic and political connections over thousands of years (Kristiansen and Larsson 2005). Contacts were established, deals were made and the countless finds are the silent witnesses of a vivid exchange network, not only of goods, but also of ideas and symbols (Kristiansen and Larsson 2005; Rowland and Ling 2013). The Bronze Age was clearly a time of extensive communication. Recently aDNA research indicates that migration, rather than merely the spread of ideas, was an important drive for the cultural changes (Allentoft et al. 2015; Manco 2015). Based upon the evidence available, it would appear that people have migrated and immigrated during all Bronze Age periods, taking culture and traditions with them. which in turn influenced the iconography (Kristiansen and Larsson 2005; Rowland and Ling 2013; Kaul ed. 2005; Kaul 2012; Varberg 2014). For Scandinavia, boats seem to have been an important factor for long distance contacts (Ling 2008).

In 2008 Ling presented a model showing how the Bohuslän rock art and landscape may be understood. Previous rock art research has drawn many of its interpretations from the modern day agrarian landscape, and the perception of the Bronze Age landscape has not been a major guestion in research (see Ling 2008 for further references). Ling (2008) focuses on the process of shore displacement after the ice receded from Scandinavia and its social and cognitive implications for the interpretation of rock art in the prehistoric landscape. During the Bronze Age, around 1700-500 BC, the sea level was between 17m and 11m higher in Bohuslän than it is today. This means that the rock carvings would have been located between 2km and 10km from the modern coastline (Ling 2008). The general location and content of the Bronze Age remains indicates a tendency towards

the maritime realm, which seems to have included both socio-ritual and socioeconomic aspects of production and consumption (Ling 2008). Ling's (2008) work emphasises that Bronze Age groups in Scandinavia were highly active and mobile. The numerous configurations of ship images on the rocks could indicate a general transition or drift towards the maritime realm. Marking or manifesting such transitions in some way may have been important, and it is tempting to perceive the rock art as traces of such transitions or positions in the landscape. There are clear traces of a coastal landscape with fjords and bays, and in the Bronze Age this was a maritime region. Along the coastline, the rock carvings were carved into the smooth rock faces left by the retreating ice. All of this points to a maritime understanding of Bronze Age rock art in Scandinavia (Figure 2; Ling 2014), and places the ship carvings in an active maritime environment.

Updating rock art – some examples of the re-cutting of the ships in Bohuslän

In order to study re-cutting or updating of a rock art motif one must remember that documentation is a technique and that objectivity is seldom reached. Different methods have different flaws (Milstreu and Prøhl 2009, Bertilsson *et al.* this volume), and in addition to our imprecise attempts to document the material, the original motifs on the panels created by Bronze Age humans are now degraded due to weathering.

However, when studying the results of different methods of documentation, such as rubbing and digital documentation, irregular lines and the shape of stems and keel extensions are clearly seen in some cases. A careful study of the documented material along with comparison to the original image on the rock surface makes it possible

Figure 4. Razor: ship with s-shaped prows representing stylised horse heads. Razor from Denmark, dated to Period V, 900-700 BC (redrawn after Sprockhoff 1954). Rubbing: ship image created in Period I, 1700-1400 BC, updated with s-shaped stem during Period V, 900-700 BC, Balken, Sweden. Photo: G. Milstreu.





Figure 5. A bigger part of the panel (Figure 4) showing ships both from Period I and updated with s-shaped stem during Period V as well. Rubbing above and laser scanning below. Tanum Rock Art Museum Underslös, Ellen Meijer. Balken, Sweden.



Figure 6. Ship image created during Period III, 1300-1100 BC, supplemented with sshaped prow during Period V, 900-700 BC, Sotetorp, Sweden. Rubbing: Tanum Rock Art Museum, Underslös.



Figure 7. Ship images from Scandinavian countries supplemented with s-shaped prows. Above left: Skien, Vestfold, Norway. Above right: Bornholm, Denmark. Below left: Hornes, Østfold, Norway. Below right: Tanum, Sweden.



Figure 8. Other types, where the stem and stern are provided with "horse heads" first seem to appear in the course of period III-IV. Sotetorp, Tanum. Left: Laser scanning. Tanum Rock Art Museum Underslös, Ellen Meijer. Right rubbing. Dietrich Evers, SHFA.



to see a difference between various parts of the ship motif, i.e. the width of the stem line on the ship and later additions. In my opinion, in a few cases a different pecking structure is visible and in the author's experience it is quite common that the stem line and the added detail are not connected (Figure 4). What this means is that the original ship motif was made in a different chronological period than the later changes/ additions in the Early Bronze Age or the middle of the Bronze Age (Figure 4 and 5), and it is Scandinavian tradition (Figure 7).

The ship from Sotetorp (Figure 6) shows that the horse head at the keel extension of the stem looks like it separated slightly from the keel extension. Here one can see that the pecking is much shallower, and small parts of the rock seem virtually untouched. A mane-like shape seems to be separated by being made with much shallower pecking (Figure 6). It looks like the ship's keel extension originally ended without the horse's head. This phenomenon can also be obseved on the left stem (see Figure 4 and Figure 8). Thus, in these two cases the heads of the horses are more or less ligated from the rest of the ship. This might indicate that the heads are later, secondary additions. It is not unknown from other rock carvings that old ships have been updated by additions to meet new demands regarding style and to improve the appearance of the carving.

However, in the case of Sotetorp another solution should be considered: another possibility is that we are dealing with one coherent composition made at one time, i.e. the ship and the heads of the horses may have been created at the same time. The slightly separated horse heads may simply indicate that the horse head on the real ritual ships of the Late Bronze Age could be removed and replaced on demand.

Discussion - why update the ships?

A large part of the iconography of the rock images can be more or less directly related

Figure 9. Large animal figures are depicted in contour lines. Such type of rock art may be referred to hunters-gatherers and may be connected to the end of Palaeolithic and to the Epi-palaeolithic period. (10,000? – 5,500 B.C.). Parco Luine, Valcamonica. Photo: G. Milstreu.





Figure 10. Prehistoric Human figures and the Christian cross. Campanine, Valcamonica. Photo: G. Milstreu.

to archaeological artefacts found during different Bronze Age periods, and thus the two can be of mutual benefit in supplying information. The archaeological object helps in decoding the rock image, and the rock art provides information about the function of the object (Kaul 2004). However, interpretation is difficult. The pictures were made in a contemporary context, which is now lost for us, and has thus been coded in the moment of creation as a part of a cultural and social reality. Decoding the pictures is not a simple process (Bertilsson et al. this volume). The Bronze Age world's picture of the past was in no way the same as ours. Despite this limitation, the images are an important source of knowledge about the past. Interpreting the carvings is made more difficult by the Bronze Age practice of updating the ships. What we see are the final changes to the carvings; the original

version might have looked very different (Bertilsson 2016).

Religion in the Bronze Age was not a private matter but a public one, and may have been a means of preserving the social traditions (Lidegaard 2004; Kaul 2004). Anthropological studies have also shown that exercising religion can accentuate and secure power and authority of principalities and societies (Lidegaard 2004). With respect to this aspect in prehistoric times, it should be possible to illuminate the role of rock carvings within the social system. The representations in rock art are our largest source for appreciating and attempting to understand their cosmology (Kaul 1998, 2004). The rock carvings might be seen as the Bronze Age Bible, a visual language revealing the meaning the spiritual world had for the earthly needs of the society (Milstreu and Prøhl eds 2004). In Valcamonica many panels have

continued in use, even into Christian times (Troletti 2010; Solano 2010). I would argue that it is likely that the rock carvings could have kept some of their old sacred values.

The location for the rock art seems to have been of great importance, as were the images and icons, too (Helskog 2000). Therefore, it is argued here that the creation of new symbols, and the addition and/ or changing of older symbols is likely to have been part of the tradition. Or, in other words, it is here argued that the rock carvings reflect a cultural and religious continuity of activity, and the subsequent alterations demonstrate respect for the old carvings and for the place (Figure 9 and 10).

The iconographic changes are relevant for a chronological discussion and in a commercial and social exchange perspective as well, and they raise many questions. Why didn't they add entire new ships? Did the ship itself change meaning – is it possible that the original function of the carvings was lost and that their re-use is a whole other practice? Was the icon switched off (Hauptman Wahlgren 2004) in one period, and in a later period switched on, charged and reloaded with new meaning?

Conclusion

These examples show that rock art was used over an extended period and that in some cases the ships are re-cut. This could mean that these rock art sites are connected to social traditions that inspired people to return to the same place to make changes to already existing images. However, the meaning behind the creation of rock art may have differed over time; the addition to an image was not necessarily connected to the initial aim of making the first image. To detect this phenomenon of the re-use of rock art, and more specifically instances where re-cutting is apparent, there is a need for specific and well-developed documentation methods, and there is also an urgent need for further and deeper studies on this topic.

Gerhard Milstreu

Tanum Rock Art Museum, Underslös rockcaredenmark@mail.tele.dk

References

Allentoft, M. E., Sikora, M., Sjogren, K.-G., Rasmussen, S., Rasmussen, M., Stenderup, J., Damgaard, P. B., Schroeder, H., Ahlstrom, T., Vinner, L., Malaspinas, A.-S., Margaryan, A., Higham, T., Chivall, D., Lynnerup, N., Harvig, L., Baron, J., Casa, P. D., Dabrowski, P., Duffy, P. R., Ebel, A. V., Epimakhov, A., Frei, K., Furmanek, M., Gralak, T., Gromov, A., Gronkiewicz, S., Grupe, G., Hajdu, T., Jarvsz, R., Khartanovich, V., Khokhlov, A., Kiss, V., Kolar, J., Kriiska, A., Lasak, I., Longhi, C., McGlynn, G., Merkevicius, A., Merkyte, I., Metspalu, M., Mkrtchyan, R., Moiseyev, V., Paja, L., Palfi, G., Pokutta, D., Pospieszny, L., Price, T. D., Saag, L., Sablin, M., Shishlina, N., Smrcka, V., Soenov, V. I., Szeverenyi, V., Toth, G., Trifanova, S. V., Varul, L., Vicze, M., Yepiskoposyan, L., Zhitenev, V., Orlando, L., Sicheritz-Ponten, T., Brunak, S., Nielsen, R., Kristiansen, K., and Willerslev, E. 2015. Population genomics of Bronze Age Eurasia. Nature 522(7555): 167-172.

Almgren, O. 1927. Hällristningar och Kultbruk, Kungl. Vitterhets och Antikvitets Akademiens Handlingar del 35. Stockholm, KVAA.

Bertilsson, U. 2016. Tredimensionell dokumentation av hällristningar i Tanums världsarv, Kiviksgraven och Nämforsen. Presentation at Västsvensk arkeologidag 26th of February 2016.

Bertilsson, U., Ling, J., Bertilsson, C., Potter, R. and Horn, C. in this volume. The Kivik tomb - Bredarör enters into the digital arena - documented with OLS, SFM and RTI.

Glob, P. V. 1969. *Helleristninger i Danmark*. Jysk Arkæologisk Selskabs Skrifter Bind VII, Aarhus, Jysk Arkæologisk Selskab.

Goldhahn, J. and Ling, J. 2013. Bronze Age Rock Art in Northern Europe: Context and Interpretation. In H. Fokkens and A. Harding (eds), *The Oxford handbook of The European Bronze Age:* 270-290. Oxford, Oxford University Press.

Helskog, K. 2000. Changing rock carvings – changing societies. *Adoranten* 2000: 5-16

Hauptman Wahlgren, K. 2004. Switching images on and off. In G. Milstreu and H. Prøhl (eds), *Prehistoric Pictures as Archaeological Source*: 149-166. GOTARC series: 50. Gothenburg, Gothenburg University Hildebrand, B. E. 1869. Till hvilken tid och hvilket folk böra de svenska hällristningarna hänföras? Antikvarisk tidskrift för Sverige 2: 417-432.

Kaul, F. 1998. Ships on Bronzes, A Study in Bronze Age Religion and Iconography. Kaul, F. 2004. Bronzealderens religion. Studier af den nordiske bronzealders ikonografi, Nordiske Fortidsminder, Serie B, Bind 22, Det Kongelige Nordiske Oldskriftselskab, Copenhagen.

Kaul, F. ed. 2005. *Helleristninger -Billeder fra Bornholms Bronzealder*. Rønne, Bornholms museum.

Kaul, F. 2012. Fund, helleristninger og landskaber, Nordnorge. In F. Kaul and L. Sørensen (eds), Agrarsamfundenes ekspansion i nord. Symposium på Tanums Hällristningsmuseum, Underslös, Bohuslän, d. 25.-29. maj 2011. Nordlige Verdener: 205-220. Copenhagen, Nationalmuseet.

Kristiansen, K. and Larsson, T. B. 2005. The Rise of Bronze Age Society. Cambridge, Cambridge University Press.

Lidegaard, M. 2004: *Hvad troede de på?* København, Gyldendal.

Ling, J. 2008. Elevated rock art. Towards a maritime understanding of rock art in Northern Bohuslän, Sweden. GOTARC Serie B. Gothenburg Archaeological Thesis 49. Gothenburg, Gothenburg University.

Ling, J. 2014. Rock Art and Metal Trade. *Adoranten* 2014: 38-40.

Manco, J. 2015. Ancestral Journeys. The peopling of Europe from the first venturers to the Vikings. London, Thames and Hudson.

Milstreu, G. and Prøhl, H. (ed.) 2004. *Prehistoric Pictures as Archaeological Source.* GOTARC series: 50. Gothenburg, Gothenburg University.

Milstreu, G. and Prøhl, H. 2009. Documentation and Registration vol.3. Tanumshede. GOTARC series: 61. Gothenburg, Gothenburg University.

Nimura, C. 2016. Prehistoric rock art in Scandinavia: agency and environmental change. Oxford, Oxbow Books.

Rostholm, H. 1972. Danske helleristninger og deresforhold til de øvrige nordiske helleristninger frabronzealderen. *Holstebro Museums Årskrift* 1971/1972: 20–47. Rowland, M. and Ling J. 2013. Boundaries, Flows and Connectivities: Mobility and Stasis in the Bronze Age. In S. Bergerbrant and S. Sabatini (eds), *Counterpoint: Essays in Archaeology and Heritage Studies in Honour of Professor Kristian Kristiansen*: 517-529. British Archaeological Reports International Series. Oxford, Archaeopress.

SHFA, Swedish Rock Art Archives, www.shfa.se [2016.03.05].

Solano, S. 2010. From Prehistory to Christianization of the area. *Adoranten* 2010: 104-109.

Sprockhoff, E. 1954. Nordische Bronzezeit und frühes Griechentum. Jarhbuch des Römisch-Germanischen Zentralmuseums. Mainz, Das Museum.

Troletti, F. 2010.The Continuity between Pagan and Christian cult. *Adoranten* 2010: 90-103.

Tanum Rock Art Museum and Research Centre (Underslös),

www.RockArtScandinavia.com [2016.03.05].

Varberg, J. 2014. Fortidens slagmarker. København, Gyldendahl.