

Exploring the contemporary context of rock art

This paper presents some results from archaeological excavations and surveys in the immediate surroundings of rock art sites in Western Norway. The results have been provided for a better background and a more nuanced debate concerning both the chronology of the rock art, the production of the rock art, and the fuller understanding of its meaning. Many years with focus only on images has in practice neglected archaeological material present in the immediate vicinity of the sites, representing the contemporary context of the images, thus weakening the rock art's potential regarding knowledge about the past.

Traditionally, within Scandinavian archaeology, and in particular before the 1960s, there was a clear distance between researchers who worked with rock art, and those more concerned with other archaeological remains, such as settlements, graves, etc. After the 1960s, this started to improve with a stronger focus on the relations between rock art on the one hand and graves, votive offerings and settlements on the other. However, an integration of archaeological material often present in the proximity of rock art sites, underneath turf or similar contexts have been less focused. Although this has not been without exceptions, it has prevented a more optimal understanding of the different categories of archaeological material present at rock art sites. Despite the equal legislation for both rock art and associated source

material in its vicinity, the latter has often been ignored and even though the situation is changing toward a greater consciousness, this is still a problem. Conservation of images, the creation of paths, construction of platforms and the draining of water, has all led to the general wear and tear of sediments and subsoil in the surroundings of many sites, seriously affecting archaeological source material. In some cases, however we have been able to secure the sources by rescue excavations in order to protect what is left, at other sites source material has been lost without any awareness. Consequently, the possibilities for research on the chronology, the production and the meaning of the rock art have been reduced. What has evolved is a gradual disparity between the protection of the images and the protection of other archaeological material, which affects research on both chronology and interpretation.

However, in recent years a quest for a more holistic approach to rock art has been explicitly addressed in both management and research, in order both to improve our understanding of why images were left on rock, and to protect potential source material for such a better understanding. Still images at rock art sites gain the most by more detailed documentation, new scanning techniques, photogrammetry and conservation; but there is a growing awareness that underneath adjacent turf or related areas, archaeological material representing the rock

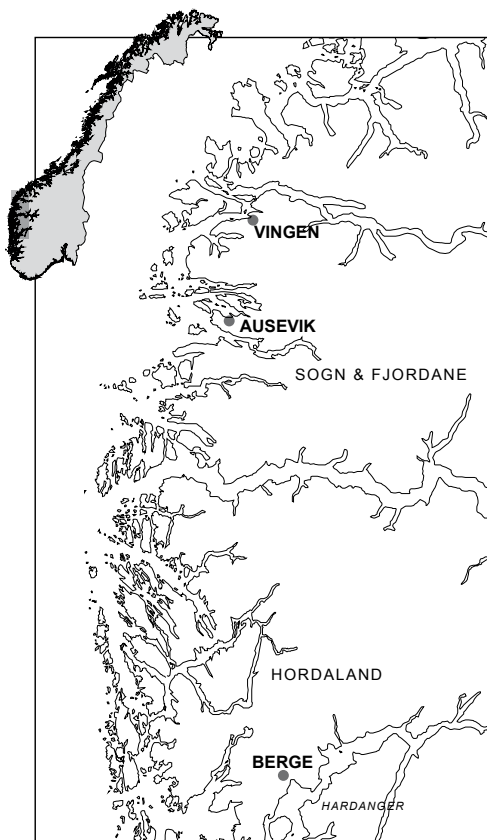


Fig. 1. Map of Western Norway, with sites of particular focus in the paper. Illustration: Arkikon.

art's contemporary context, its production, or its use, can be found.

Another fundamental problem in rock art research is that of chronological uncertainties. Rock art is extremely difficult to date, and no direct dating methods have yet proved to be satisfactory. The result of these uncertainties has been that different researchers have claimed that one and the same site could be linked to periods widely separated in time.

In order to adjust this imbalance, excavations in relation to rock art sites have been undertaken more regularly at many places in Scandinavia as well as in Western Norway in recent years. In Western Norway this has partly been because the scientific source ma-

terial has been at threat, and partly because it is essential to provide new archaeological knowledge. Within the limitations of this paper I will present results from three rock art sites, Vingen in Bremanger, Ausevik in Flora and Berge in Hardanger (Fig. 1), where important results have been attained.

Our test excavations have necessarily been a slow process, filled with agonizing choices, since the desire for more knowledge to some extent will always be in conflict with the full protection of a site, and since it is highly important to leave undisturbed contexts for future generations and future methods. It has therefore been important to analyse material and data at a slow pace, before the next intrusive steps have been taken. In addition it has been important to gain as much information as possible from small restricted excavations at the sites involved, to ensure maximum control of the information stored in the often stratified sediments. Some of these excavations have not resulted in any clear pattern of a regular deposition of archaeological material linked to the different rock art localities, since some investigations led to the discovery of stone artefacts or cultural layers and some did not; hence several scientific investigations and analysis have been carried out to include less visible information.

As extensive results have been provided from these sites, the implications are many, detailed, and varied. The results presented here will be of a more general character and largely in terms of radiocarbon dates. Both Scandinavian rock art traditions are represented, generally termed *hunters'* and *agrarian* rock art. Since the radiocarbon dating results, at least to some extent, challenge the traditional chronology of the images at the sites under discussion, my main purpose with this paper is to put the results on the agenda for a further debate.

Vingen

Vingen is one of the more renowned rock art sites in Norway of the hunters' tradition, located in the northern part of the County



Fig. 2. The Vingen site, with its many panels, boulders and smaller stones, left with rock art. Photo: T. Lødøen.

of Sogn & Fjordane, in the municipality of Bremanger. The rock art area surrounds a small fjord where steep barren mountains rise up to 800 meter above sea level on all sides. The hillsides are scattered with screes and numerous fans of debris, but some level areas, covered with thin layers of soil and vegetation, exist. Large boulders and small piles of stones are spread over the level areas, with spots of conspicuously exposed bedrock (Fig. 2). In this area a constant flow of fresh discoveries has appeared for more than a century, on rock panels, on boulders and on smaller stones. Most of these images have been produced by pecking, which leaves numerous pecking marks. Figures interpreted as red deer are most common, followed by other animals, anthropomorphic figures and motifs that are difficult to interpret, and often termed as abstract geometric (Fig. 3). The figures occur either alone, as single depictions, or in groups, as large concentrations. Most carvings are located on the southern side of the fjord on a terrace between the shoreline and the steep mountains, the main area of focus in this paper (Fig. 4).

The site was first known to the public in 1912 (Bing 1912), followed by extensive documentation in the 1913-1917 (Hallström 1938) and 1920s (Bøe 1932). Documentation continued during the mid 1960s by Egil Bakka, reaching a total number of 1500 images (Bakka 1973). Bakka also started a complicated process of exploring the chronology of the rock art. Based on detailed studies of a vast number of superpositions he developed a relative typological-chronological sequence of four different categories of red deer images. Later this was combined with geological shoreline displacement and the prevailing idea that the rock art was produced at the shore. Eventually this led to a suggested dating of the rock art; from the beginning of the Early Neolithic until the end of the Middle Neolithic, with a possible origin in the Late Mesolithic (Bakka 1973:156pp; 1979:115pp).

At the time when Bakka was working with these questions little archaeological material had been excavated or otherwise collected from the Vingen area, but in the mid 1970s minor test excavations indicated that the

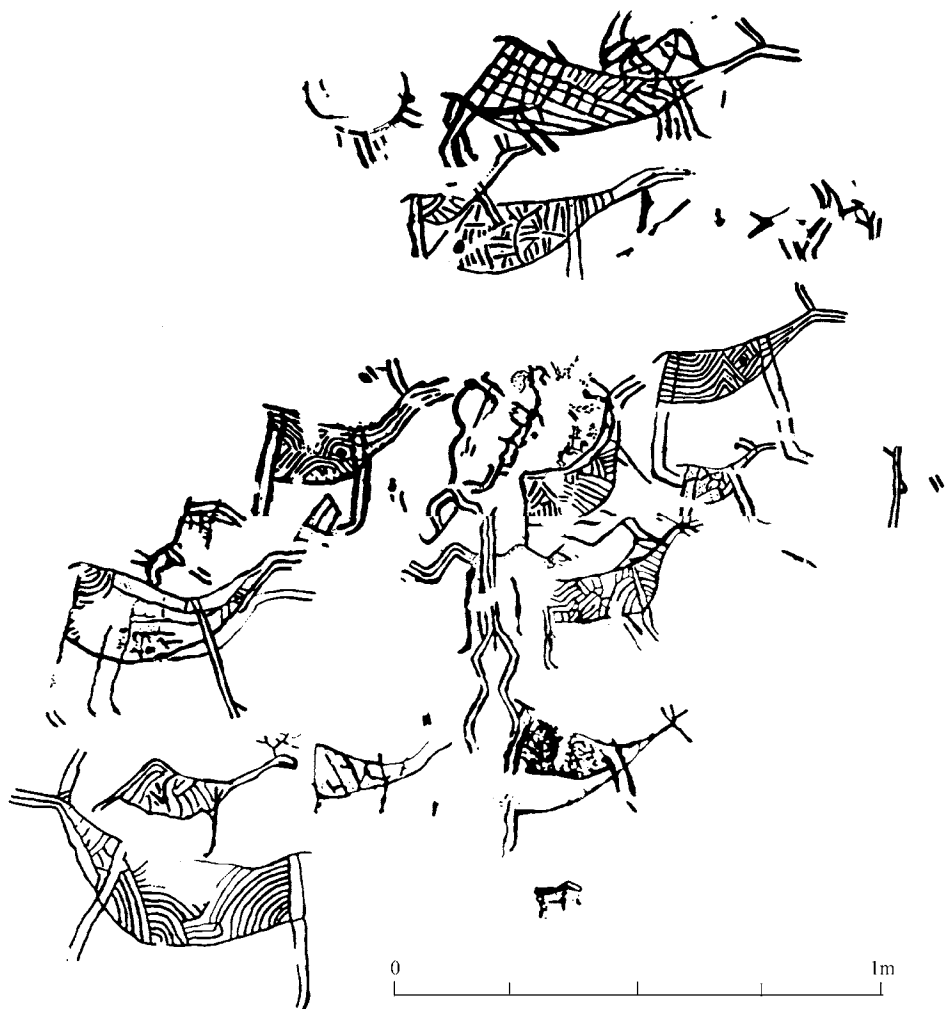


Fig. 3. Tracing of a panel in Vingen, with several images interpreted as red deer, surrounding an anthropomorphic figure.

occupation was somewhat older. During the end of the 1990s and in the new millennium several excavations and surveys have therefore been undertaken combined with continued documentation, increasing the number of figures to more than 2000 (Lødøen & Mandt *In prep*). In this new approach, a detailed survey of the area have been evaluated as important in order to explore the character, the amount and the quality of the hidden remains below the present surface. During the 17th and 18th

century, Vingen was permanently inhabited and the subsoil disturbed by restricted but intensive agriculture in some places. Through our gentle surveys of the area with small test squares, accurately excavated, and controlled by radiocarbon dating, we now have very good picture of the areas affected by this modern activity and other areas left more undisturbed from prehistory onwards. In addition, a number of smaller excavations have been undertaken in several carefully chosen areas at the site.

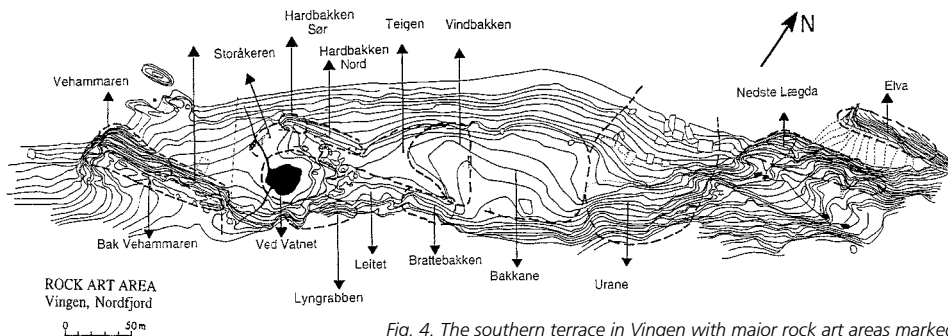


Fig. 4. The southern terrace in Vingen with major rock art areas marked.

Altogether, this work has led to a more updated picture of the archaeological remains in Vingen, apart from images in solid rock. An overwhelming amount of archaeological material typical for the Late Mesolithic (6500 - 4000 BC) has been documented, with a dominance of waste flakes, blades and conical cores, together with microblades struck from conical cores, and the characteristic raw material categories such as quartz, quartzite, rock crystal, mylonite and flint (Lødøen 2001; Lødøen 2003). In addition, tools for the production of rock art have been documented in

the proximity of the carvings (Lødøen 2003). The dating to this period is further supported by results from radiocarbon dating, and a cluster of results to the end of this period (5000 – 4200 BC) (Fig. 5).

Many structures complementing the picture have also been documented, from smaller fireplaces and smaller stone structures, to larger dwelling features. The latter type has only been subject to modest investigations; however, their permanent character, with the presence of rock art on their surround-

Fig. 5. Radiocarbon dates from cultural layers associated with rock art in Vingen.

Areas in Vingen (see chart)	Type	Content	Radiocarbon datings		Laboratory ref
			Calibrated	Uncalibrated	
Bakkane	Midden	Charcoal, waste flakes, firecracked rocks	4930-4780 BC	5960 ± 70 BP	TUa- 2281
Bakkane	Midden	Charcoal, waste flakes, firecracked rocks	5720-5600 BC	6830 ± 70 BP	TUa- 22282
Bakkane	Midden	Charcoal, waste flakes, firecracked rocks	4950-4730 BC	5970 ± 105 BP	T-13979
Bakkane	Midden	Charcoal, waste flakes, firecracked rocks	5260-5050 BC	6220 ± 105 BP	T-13980
Bakkane	Cultural Layer	Charcoal Waste flakes, Hammerstone	4580-4360 BC	5640 ± 105 BP	T-15036
Vindbakken	Dwelling feature	Charcoal, waste flakes	4905-4570 BC	5870 ±125 BP	T-13695
Vindbakken	Dwelling feature	Charcoal, waste flakes	4575-4400 BC	5665 ± 80 BP	T-13697
Vindbakken	Cultural Layer	Charcoal, waste flakes	4680-4530 BC	5745 ± 40 BP	TUa-6105
Teigen	Cultural Layer	Charcoal, waste flakes	4910-4785 BC	5960 ± 50 BP	TUa-5158
Teigen	Cultural Layer	Charcoal, waste flakes	4930-4800 BC	5665 ± 45 BP	TUa-5159
Teigen	Cultural Layer	Charcoal, waste flakes	5205-5010 BC	6155 ± 40 BP	TUa-6100
Teigen	Cultural Layer	Charcoal, waste flakes	4760-4610 BC	5815 ± 40 BP	TUa-6102
Teigen	Cultural Layer	Charcoal, waste flakes	4925-4810 BC	5985 ± 40 BP	TUa-6103
Teigen	Cultural Layer	Charcoal, waste flakes	3980-3945 BC	5145 ± 40 BP	TUa-6104
Hardbakken	Dwelling feature	Charcoal, waste flakes	4455-4335 BC	5530 ± 70 BP	TUa- 2190
Storåkeren	Cultural Layer	Charcoal, waste flakes	4785-4580 BC	5825 ± 75 BP	TUa- 2289

ing stones and their content of typical Late Mesolithic artefacts seems to indicate that most archaeological remains in Vingen are contemporary. Middens associated with some of the dwelling features, containing fat cultural layers and fire cracked rocks have been documented as well. In addition cultural layers have been found in the vicinity of many panels.

Material from both earlier and later periods is strikingly absent and is not supported by radiocarbon dating. It is, therefore, likely that both archaeological artefacts and images have been part of the same process and should be dated to the Late Mesolithic, and probably to the latter half of the period as indicated by the radiocarbon results. The archaeological investigations have gained the necessary support from several scientific disciplines and palynological, pedological and geological analyses have been carried out in order to explore less visible relations between the images and the archaeological material underneath the turf and in the rock art milieu. Archaeological analyses and correlation work are still being carried out at the site and a synthesis of all excavated material and its relation to the images is under preparation.

Ausevik

This rock art site is located a crows flight of about 40 km to the south of Vingen, close to the outer coast, in the municipality of Flora. The site has a sheltered location in the south eastern part of the Høydalsfjord, and is restricted to a small area with sloping rock panels close to the shore (Fig. 6). Here, more than 300 images have been documented, consisting of animals, anthropomorphs, and concentric circles but in fact dominated by more abstract motifs (Viste 2003). Publicity around the discovery of Vingen after 1910 resulted in Ausevik being reported to the museum in 1932. Primary documentation was carried out by Bøe in the mid 1930s, and the site was later re-documented by Anders Hagen in the early 1960s (Hagen 1970). After this latter documentation and the closer examination of the site, Hagen argued that

the Ausevik rock art represented an integration of hunter's and agrarian rock art, where cervids represented the hunter's tradition and the abstract – geometrical figures represented a loan from the agrarian tradition. He dated the site to the Early and Late Bronze Age, with a possible continuation even into the Early Iron Age (Hagen 1970). His conclusion was later disputed by Egil Bakka who argued for the clear similarities between red deer images representing the final phase in Vingen and red deer images documented in Ausevik (Bakka 1973). He claimed that red deer of the latter phase in Vingen had its clear similarities in Ausevik, and that the site should be dated to the Middle Neolithic. After a thorough re-examination of all the motifs in Ausevik, Eva Walderhaug has argued that the site represents the transition from the Middle Neolithic B period to the Late Neolithic (Walderhaug 1998:298p). This has again been disputed by both Morten Ramstad (2001:56pp) and Sigrid Gundersen (2006:108), who have argued for an earlier dating.

Most of the site consists of exposed bedrock today, but in between panels with images and at the fringes of the rock art area, soil deposits are located on top of the bedrock, sealed by thick vegetated turf. During the 1980s and the 1990s actions were taken against the extensive weathering of the rock art and the site has been the target for extensive conservation. Within the frames of this work, turf has been removed and seeping water from the surrounding areas drained away from the most weathered areas to avoid freeze and thaw weathering. In some of these neighbouring areas, layers of charcoal in the sedimented sequences above the bedrock have been both documented and dated to the Iron Age, the Bronze Age and the Late Neolithic (Gundersen & Gjerde 2000). Despite their chronological correspondence to both Hagen and Walderhaug, no direct relation to the rock art has been found, as similar charcoal layers are present in most areas of Western Norway. It should be noted that these remains are without any traces of archaeological artefacts and could, according to palynological investigations, more likely

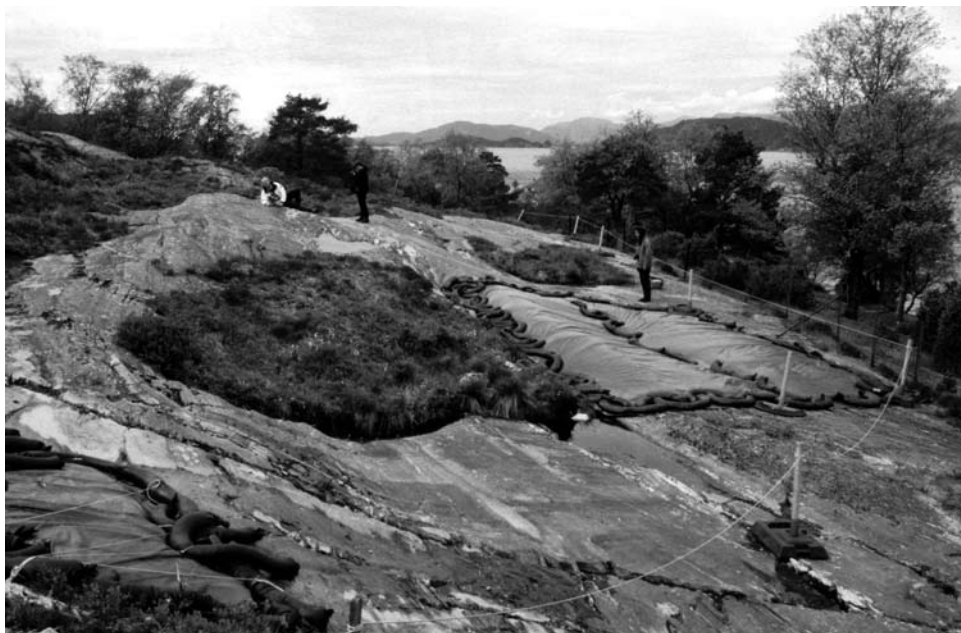


Fig. 6. View of the Ausevik site, with a vegetated area in the centre surrounded by panels with rock art. Some of the rock art panels are temporarily covered to reduce growth of lichen. Photo: T. Lødøen.

be the result of either natural forest fires, or the deforestation of land for pastoral activity in these periods. However, parallel to this work also a number of images have been documented under these sedimented layers. Consequently, it seems likely that the soil, which varies in thickness from a few centimetres to less than half a metre, has built up as postglacial upheaval lifted the land from a naked shore location to a more sheltered position, and gradually led to the sedimentation of the bedrock and the rock art. The layers dated to the Late Neolithic, the Bronze Age and the Iron Age are most likely much younger than the rock art production period since they were documented higher up in the sedimented sequence. We must therefore assume that the rock art was pecked into naturally exposed bedrock, before lichen, moss and sediments started to establish, and probably at locations closer to the contemporary shore. Consequently archaeological material representing the rock art's contemporary context was left at the same level, that is, on the bedrock, and

was later trapped or isolated under organic layers and soil deposits, in the same manner as the rock art was covered. Therefore, these areas are among the last areas where traces of the rock art's contemporary material and its contemporary archaeological context can be located.

A few minor excavations have recently been carried out in these vegetated areas with soil aggregations in the central areas of the site, within 1-2 metres from concentrations of images, in order to secure information in the immediate vicinity of rock art panels (Lødøen & Gundersen *In prep*). (Fig. 7). The localization of areas where archaeological material or charcoal were deposited directly on the bedrock was a particular aim of the project, but whole sequences of soil were of course investigated from the top to the bottom, and all excavated soil was water sieved for an optimal collection of artefacts. This approach followed the same pattern as in Vingen, with test squares accurately excavated and information from stratified



Fig. 7. Excavation area less than a meter from a rock art panel at Ausevik, where the dated sequence (Layer 1-6) has been sampled. Archaeological material have been documented in the lowest layer lying directly on the bedrock. Photo: T. Lødøen.

sediments secured by radiocarbon dating and palynological investigations.

Two interesting areas have so far been located in the proximity of one of the well known panels in the eastern part of the site, where massive layers of charcoal have been left immediately on the bedrock's extension from the panels. As lichen, moss and turf probably started to develop quite early, both the deposition of charcoal, directly on the bedrock, and the production of images can be interpreted as actions from periods when the bedrock was exposed and thus they can be interrelated. In the north the charcoal layer is dated to the Late Mesolithic (BC 4950 – 4840, uncalibrated 6025 ± 55 BP (TUa- 5050)), but this layer contains no traces of archaeological material and is therefore of a more undefined or uncertain character regarding its relation to the rock art. At the western side of the same panel a sequence

of charcoal layers imbedded in organic sand layers, from the turf down to the bedrock, has been documented, and dated to several prehistoric periods (Fig 8). Only the bottom layer contained archaeological material, with a few flakes of flint and also, interestingly, a hammer stone, lying directly on the bedrock. The bottom layer was dated to the Early Neolithic (3945-3790 BC, uncalibrated 5055 ± 40 BP (TUa- 6130)), being the lower level of a sequence (Fig 8).

Since most panels at the site seems to have been exposed long before primary documentation started, we have no accurate knowledge of how much soil that has been removed from the top of the bedrock where most of the images are located, during the last centuries. However, there is reason to believe that soil and turf has been removed or eroded. We are not even left with any knowledge of how much soil that was re-

Layer		Radiocarbon datings		Laboratory ref
		Calibrated	Uncalibrated	
Layer 1	Charcoal	1670-1525 BC	3330 ± 35 BP	Tua - 6126
Layer 2	Charcoal	375 - 205 BC	2185 ± 85 BP	Tua - 6127
Layer 3	Charcoal	395- 245 BC	2285 ± 55 BP	T - 18509
Layer 4	Charcoal	2020 - 1900 BC	3615 ± 35 BP	Tua - 6128
Layer 5	Charcoal	2115 - 1965 BC	3660 ± 35 BP	Tua - 6129
Layer 6	Charcoal, waste flakes, hammer stone	3945 - 3790 BC	5055 ± 40 BP	Tua - 6130

Fig. 8. Radiocarbon dates from one of the charcoal sequences (cultural layers) in Ausevik. Disturbances in the top soil have probably caused the inversed situation between Layer 1 on the one hand and Layer 2 and 3 on the other.

moved under Bøes and Hagens work, since the awareness of contemporary archaeological material at that time was less focused, and consequently neither mentioned in the literature nor documented in the many field reports.

It is however likely that the sequence above layer 6 was built up after the production of images ended. It is therefore tempting to interpret the hammer stone as related to the direct production of the images, but this relation is not as clear as its counterpart in Vingen (Lødøen 2003). Regarding the charcoal, dated to the Late Mesolithic, related problems as for the younger layers are present, since no archaeological artefacts were found in the charcoal, and it could therefore originate from periods prior to the production of the rock art. More radiocarbon dates of charcoal from the different documented layers or their equivalents will be provided in the future, in order to reduce errors and create a better background for comparison of dated charcoal layers and their relation to archaeological material and images in rock. Given the results from the two different periods, both are interesting to compare with the results in Vingen and may in the future indicate whether the rock art in Ausevik should be ascribed to the Early Neolithic or the Late Mesolithic, or even a much longer period, involving both chronological periods. More investigations will be necessary; nevertheless, it is tempting to see both the pecking of rock art and the deposition of artefacts and charcoal on

the bedrock as related processes happening at the same time, before the bedrock was covered by sediments. These issues will be dealt with in more detail in the future, and more correlations between images and other material will be sought.

Berge

Berge in Strandebarm is one among many rock art sites along the north side of the intruding Hardangerfjord in Hordaland. Like most sites in this area, and there are quite a few, the rock art is pecked into a steep cliff associated with arable land (Fig 9). The site was discovered as late as in 1998, and more than 100 figures have been documented; predominately ships but also concentric circles and a few other geometric figures (Fig 10). The rock art is clearly associated with the agrarian tradition, and the immediate understanding is that the art should be dated to the Bronze Age. The rock wall rises 6-7 metres above the surface of the turf, and has a length of more than 15 metres. A concentration of figures is located 1-2 metres above the present ground, dominated by boats with flat or slightly curved keels, and single or double sterns. Most figures have the traditional vertical lines interpreted as crewmembers and this feature is very apparent on the wall. According to relevant chronologies developed by e.g. Gro Mandt (1991) and Einar Østmo (1990) most ships probably represents the latter part of the Bronze Age. This is also supported by a contour lined vessel, classified by Mandt as a C2



Fig. 9. The rock wall at Berge, with the trench under excavation in front of the rock art panel. Photo: T. Lødøen.

type, present among the lower concentration, and believed to belong to the end of the Late Bronze Age (Mandt 1991).

Three figures are however placed more than 3 metres above the others, and clearly above the lower concentrations. Two of them are impossible to reach without a ladder, rope or a scaffold, and these can probably be classified as Mandt's type B1, and dated to the Early Bronze Age (Mandt 1991). These figures probably represent the initial phase of production of rock art on the rock wall. However, the dating of the images is extremely difficult to approach, and for more than a century researchers have been occupied with the chronology of the ships. In addition, difficult matters get worse because of the highly weathered surface of the rock.

In order to try to approach the matter of chronology from another angle, a small trench was excavated perpendicular to the front of the wall (Lødøen 2000, Mandt &

Lødøen 2005) (Fig 11). The excavation did not provide us with any archaeological artefacts, but a few highly interesting layers and structures were documented. Under a top sequence, almost half a meter thick, containing modern remains and debris from weathering, a thick cultural layer best understood as a cultivation layer from a former field was documented. Under this layer, three structures interpreted as small fireplaces imbedded in beach deposits were documented one above the other. The trench was continued down to depths more than 1, 6 meter below the present surface and far back in the quaternary sequences, revealing no further prehistoric remains. Charcoal from the cultivation layer and from the fireplaces provided the following results (see Fig 12).

As shown almost all activity mirrored by the radiocarbon dated structures belong to the Pre Roman Iron Age, with a possible step into the Roman period, represented by the cultivation layer. This activity could of course



Fig. 10. Tracing of images on the rock wall at Berge.

be later than the rock art-producing era, reflected by the images on the rock wall above. However, we should be more open-minded about possible relations between these two categories of prehistoric remains. The documented fireplaces seem to represent a sequence of repeated occupation, or more likely the remains of short visits resulting in the fireplaces, which were covered by beach deposits caused by wave action when the sea level (Romundset 2005; Vasskog 2006) was close to the wall, after each visit. The dating of the structures has a close relation in time and the sequence of fireplaces was sealed off by the cultivation layer at a later stage. The fireplaces could therefore be interpreted as related to the production of rock art and the cultivation layer as representing a later stage when the importance of the rock wall was less focused, or at least less necessary for the production of rock art.

Consequently, the three more or less fragmented ship figures of Mandts type B1 high up on the rock wall could have been produced from a boat when the sea level was higher, which is in accordance with the chronology and the shoreline displacement for the area (Romundset 2005; Vasskog 2006).

A tentative argument for a close relation between the fireplaces and the rock art is supported by a few less focused images on the rock wall. In between the ships, in the lower middle part of the wall two interest-

ing figures can be found. Today one of them is highly fragmented but both have probably consisted of three circles arranged in a triangular form, combined by a central hub (Fig 13). The images probably represent

Fig. 11. Profile from excavated trench, with cultivation layer in the central part, and fireplaces on top of each other in the lower part of the picture. Photo: T. Lødøen.



Layer/structure	Content	Radiocarbon datings		Laboratory ref
		Calibrated	Uncalibrated	
Top Cultivation Layer	Charcoal	45 BC-80 AD	1995 ± 65 BP	T- 14134
Fireplace A (top)	Charcoal	370 - 100 BC	2185 ± 85 BP	T- 14135
Fireplace B (middle)	Charcoal	380 - 165 BC	2210 ± 80 BP	T- 14136
Fireplace C (Lower)	Charcoal	400 - 210 BC	2295 ± 70 BP	T- 14137

Fig. 12. Radiocarbon dates from top cultivation layer and structures interpreted as fireplaces further down.

treskeles, a classical form associated with both the Celtic La Tene period and the Pre Roman Iron Age (Klindt-Jensen 1950:110p; Filip 1956). They are known from a number of rock art sites in Scandinavia and are of course common on many archaeological objects, in particular bronze objects. Although a relation between rock art and dated bronzes from period V of the Bronze Age has been suggested (Mikkelsen 1998), their presence in general is far more common in the Pre Roman Iron Age. I will therefore tentatively argue that the fireplaces, the treskeles and the lower images are the result of the same process,

implying that the rock art can be pushed some centuries up in time. The three fireplaces are only separated by a few decades at the beginning of the Pre Roman Iron Age in the 4th century BC. The distance between the Bronze Age period V and the 4th century BC of the Pre roman Iron Age is not a long time lapse, but these new results adds to a more detailed chronological framework for the rock art. The rock art probably represents a similar sequence as the fireplaces and the chronological coherence might be detected in the way the ships are pecked within these decades, but this is still an unsolved task. More work therefore needs to be done on the chronological attributes of the ship figures and the relation to other archaeological material as well. Whether the dating affects Mandts and Østmos chronology for the Late Bronze Age ships is far from clear. It might

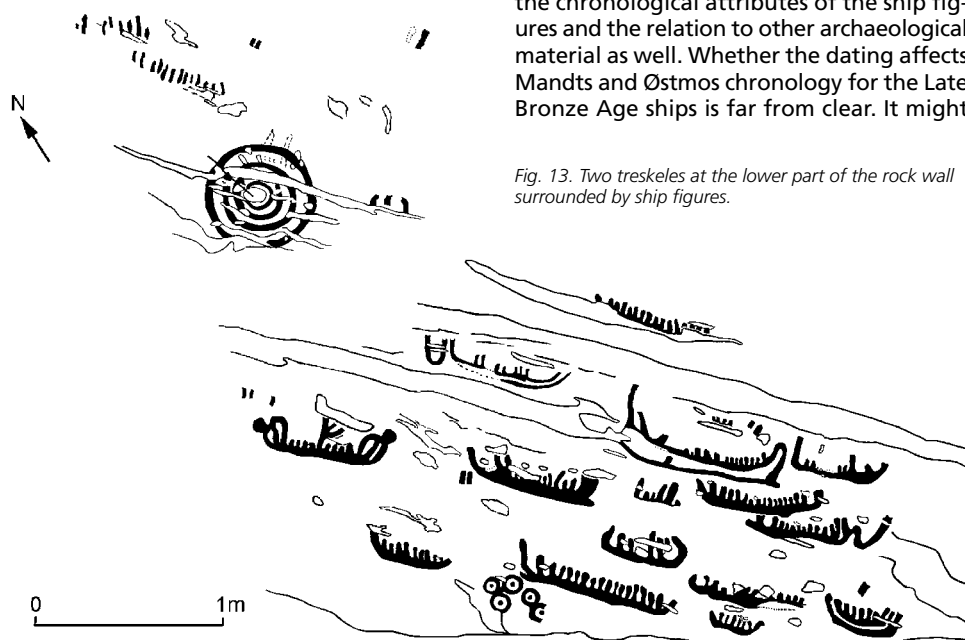


Fig. 13. Two treskeles at the lower part of the rock wall surrounded by ship figures.

just separate the types of vessels found at Berge from more or less similar versions.

Conclusion

The results from all the excavations have provided the most valuable results for a better comparison of archaeological artefacts, dated charcoal layers and their potential relation to panels or locations with rock art. Our investigations have, as a start, pushed the hunters' rock art sites further back in time and at least one of the agrarian rock art sites a few more centuries up in time. The results presented here do not seriously challenge existing chronologies, but provide new evidence and new knowledge for a more nuanced debate regarding at least the chronology of the rock art. Still we are left with a number of uncertainties regarding relations between rock art and other material, but these and other investigations provide a vantage point for improved methods to explore relations between rock art and contemporary material. In order to include rock art in culture historical approaches a more thorough investigation of its dating, its chronology and its relation to possible contemporaneous material in the near proximity of rock art sites should be explored. Much too often, rock art is excluded from culture historical syntheses because of the uncertainties regarding its dating. However, one should be extremely careful in order to protect these sources for the future. At all three sites and other related sites, more work will be carried out in the near future in order to improve our knowledge about the relation between rock art and its potential source material.

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