

When discussing the relation to the macro-landscape, I have raised the shoreline to the level of the carvings. This is performed by GIS and maps with a 1:5000 detailed scale and for most of them with 1m elevation data. Where only the 5m elevation data was available, the elevation data has been calculated in ArcView based on elevation data and fixed elevation points. The sites are presented according to the dating suggestion in Figure 99, starting with the oldest ones at Nes.

Nes¹⁰⁹

When referring to Nes, this unit includes the four sites Fjellvika, Jo Sarsaklubben, Nes Fort Øst and Nes Fort Vest located at the Nes Peninsula on the northern side of the Ofoten fjord, between the two tributary fjords (the Kanstadjord west of the Peninsula and the sound Tjeldsundet on the eastern side of the Peninsula), see Figure 102. The carvings at Fjellvika and Jo Sarsaklubben are facing the Kanstadjord, while the Nes Fort sites are situated at what would have been the southeastern part of the Nes Peninsula (see Figure 102 and Figure 103). The sites are fairly contemporary, all made between 9370-8630BC based on shoreline dating. Reconstructing the sea level at c. 50m shows that the area has many “natural harbours” and the rock art sites are placed at the entrance or at the points between such small, sometimes secluded bays (see Figure 102, Figure 106 and Figure 109). My main focus at Nes has been the Jo Sarsaklubben site since the Fjellvika site is hard to see and the Nes Fort Øst and Nes Fort Vest site was found after my initial fieldwork.

Jo Sarsaklubben

The carving at Jo Sarsaklubben stands out in white, contrasting the greyish lichen covered rock surface. By its size, its location on a vertical cliff and the contrast in colour from the rock surface it would have been visible from a distance. With a raised shoreline it would have been clearly visible from the sea. The Jo Sarsaklubben site would have been located at the shore at the edge of a point where shoreline turned inwards towards a small bay where the Brenelva runs today and a small pond is located today (see Figure 103). Standing on the hilltop on the southern side of this small bay about 100m from the panel the figure was clearly visible during fieldwork in 2004. Based on the fieldwork in helicopter at the level of the carvings, the figure could be seen from the sea at a distance of about 300m (see Figure 97,

¹⁰⁹ Nes includes four sites, Fjellvika (Askeladden Id-nr. 8828), Jo Sarsklubben (Askeladden ID-nr. 18960), Nes Fort Vest (Askeladden Id-nr. 101282), Nes Fort Øst (Askeladden Id-nr. 101279).

Figure 104 and Figure 105). The life-size reindeer is quite impressive where it stands on the vertical cliff moving towards the area with the river and small pond close by. Even at a slightly lower elevation, at about 50masl, the small bay at Jo Sarsaklubben would have been a favourable place for settlement due to the good landing place for boats.

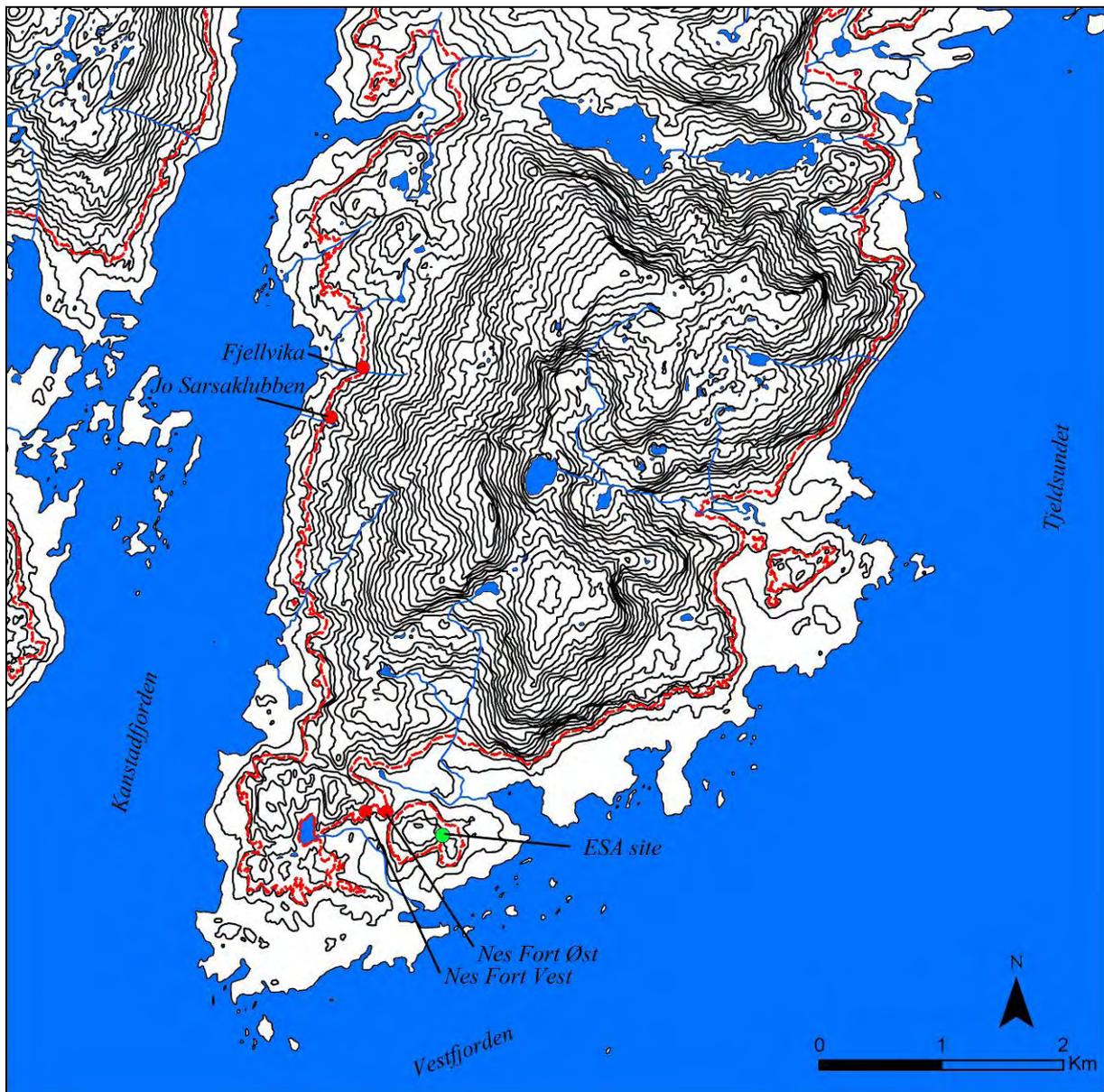


Figure 102 Reconstruction of the landscape at Nes by GIS. The shoreline in dashed red colour is situated at c. 50masl. Notice the ESA site (marked in green), located between the eastern hilltop Neshaugen and the western hilltop Klokkatohaugen situated at c. 55masl on what was a small island just east of the rock art sites. The Nes Fort Øst is situated at c. 50masl and the Nes Fort Vest site is situated at 55masl. Contour lines are 20m. The mountain east of the Jo Sarsaklubben site is the Lødingaksla of 569m. The Jo Sarsaklubben and the Fjellvika site are facing the Kanstadfjord while the Tjeldsundet sound is east of the Nes Peninsula. Illustration: Jan Magne Gjerde.

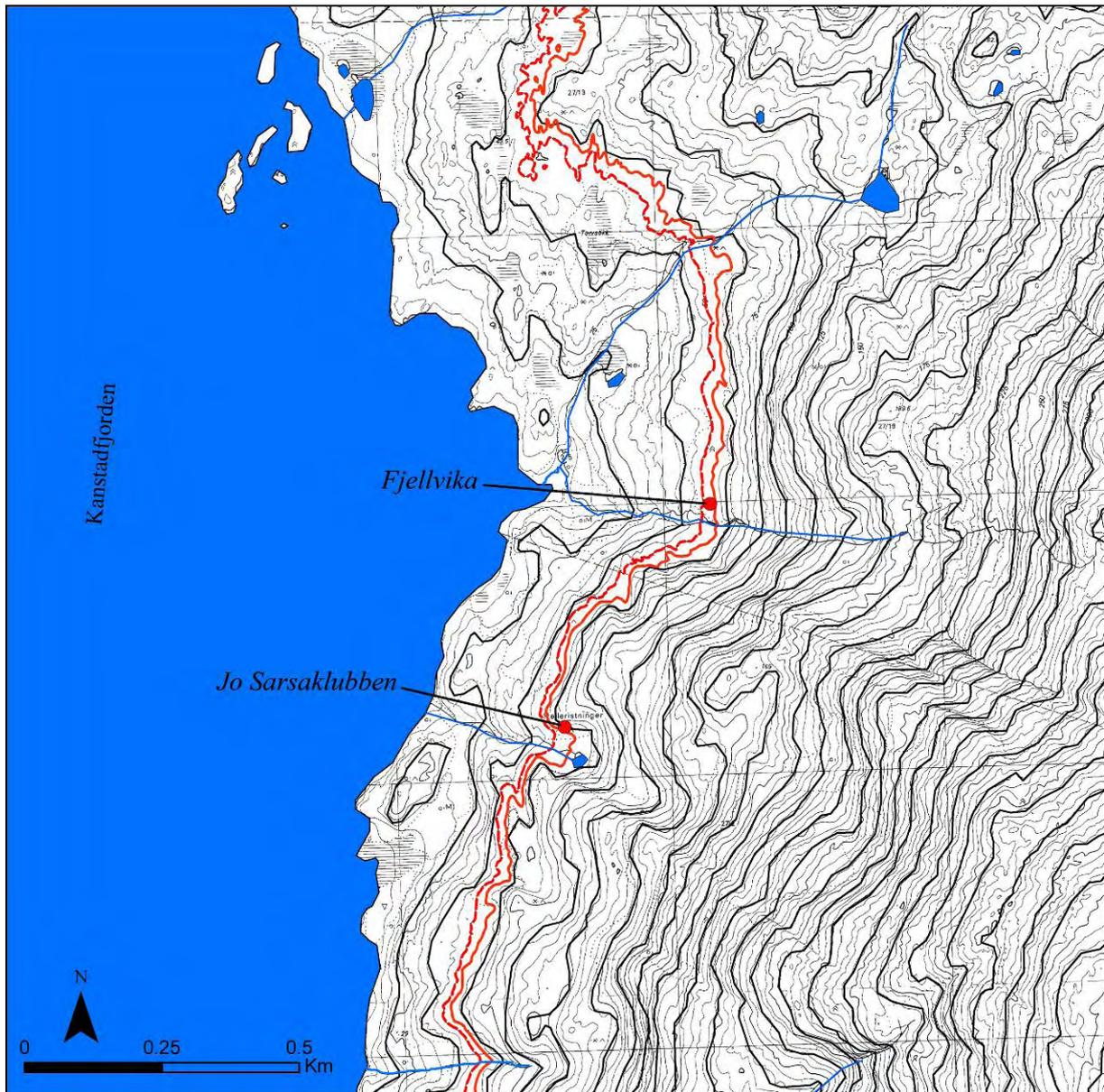


Figure 103 Reconstruction of the landscape at Jo Sarsaklubben and Fjellvika by GIS. The red dashed lines are representing the shorelines at 50masl and 55 masl. Especially at Jo Sarsaklubben one can see the favourable place for settlement in the secluded bay where the present small pond is situated. There is also a sheltered area suitable for settlement just south of the Fjellvika site. North of the Fjellvika site is also a favourable small bay, suitable for settlement. Vegetation in this area makes it hard to find rock art if it was made near that bay too. Contour lines at 20m, background map contour lines 5m. Illustration: Jan Magne Gjerde.

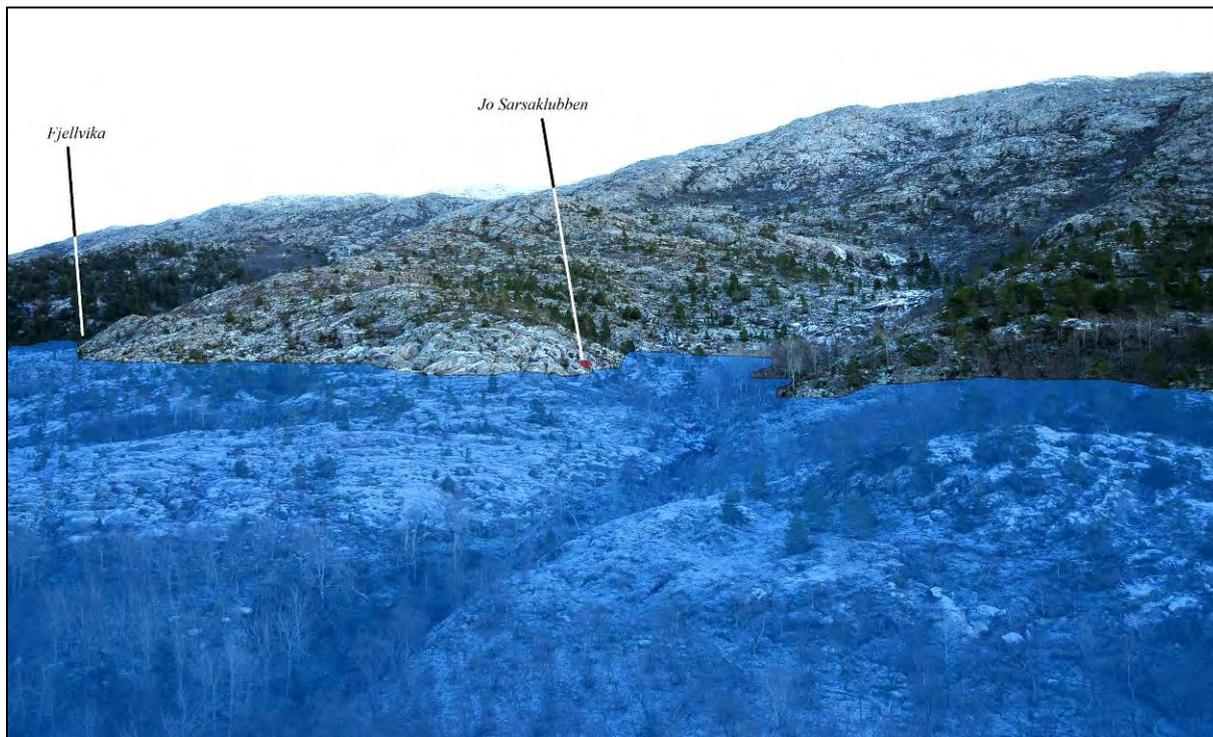


Figure 104 Tentative reconstruction of the Jo Sarsaklubben area based on the reconstruction of the landscape in **Figure 103** and the view towards the site from helicopter at the elevation of the carvings. Illustration: Jan Magne Gjerde.



Figure 105 Tentative reconstruction of the Jo Sarsaklubben area based on the reconstruction of the landscape in **Figure 103** and the view towards the site from helicopter at approximately the same elevation of the carvings. Illustration: Jan Magne Gjerde.

Nes Fort

With a raised shoreline, the sites Nes Fort East and Nes Fort Vest are situated at a point between the Nes Peninsula and a small island east of the sites (see Figure 106). The small island has an Early Stone Age settlement remains located at about 55masl assumed to be contemporary with the polished carvings. West of the two polished carving sites, a small fjord ends in a secluded bay. This bay would be favourable to settlement and should be surveyed. According to the survey report the Nes Fort Vest site can be identified as an elk figure due to the classical elk beard, while at Nes Fort Øst it can only be established that the animal is of a deer (most likely reindeer or elk) (Hauglid 2006).

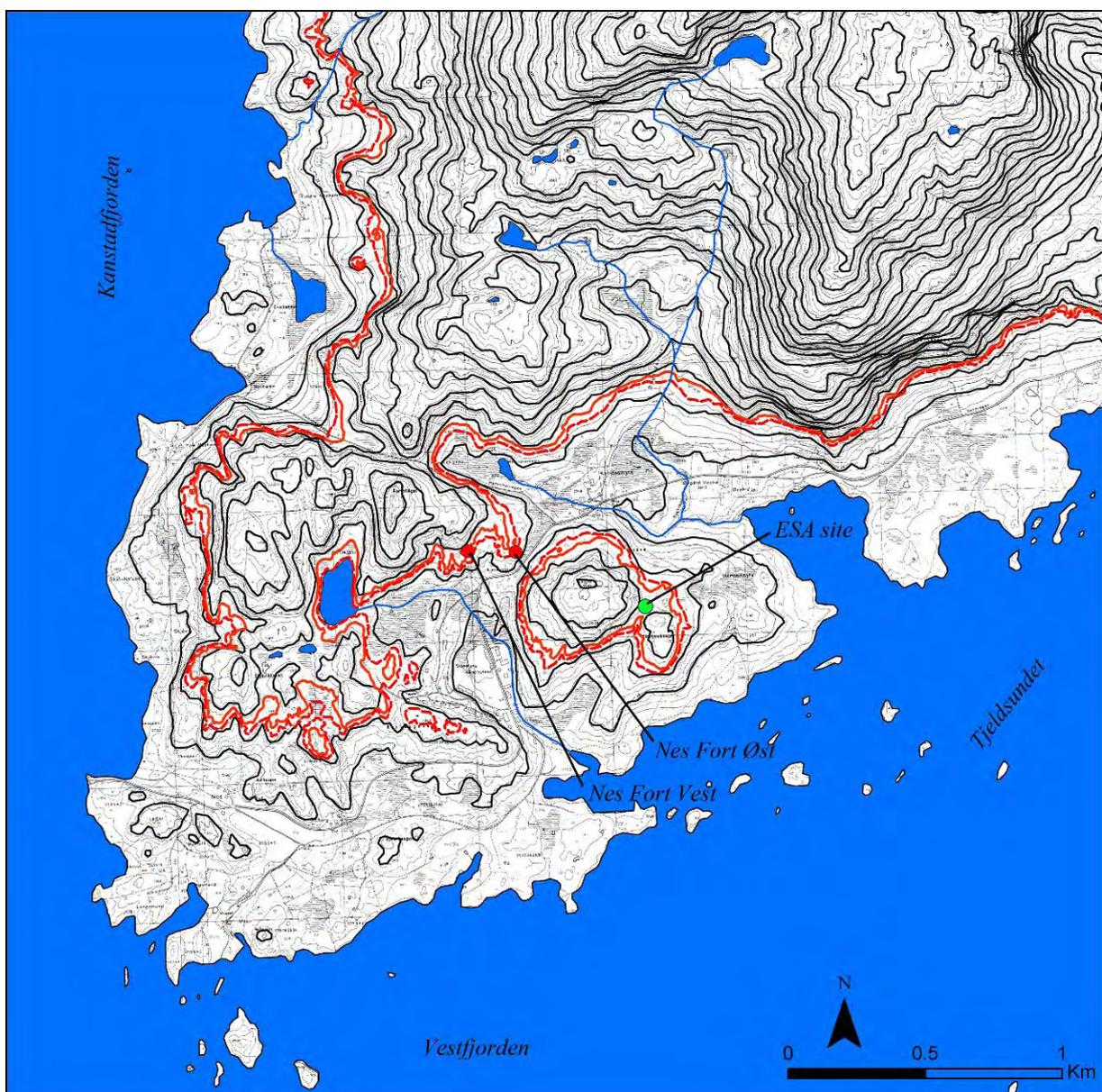


Figure 106 Reconstruction GIS of the landscape at Nes Fort. Notice the ESA site marked with green dot, located between the eastern hilltop Neshaugen and the western hilltop Klokkatoaugen situated at c. 55masl. The Nes Fort Øst is situated at c. 50masl and the Nes Fort Vest site is situated at 55masl. One can see the favourable

places for settlement in the secluded bay where the present Nesvatnet is located following the bay southwest of the two rock art sites. Also the favourable isthmus with two bays north and northwest of the two rock art sites seems to be favourable places for settlement. Contour lines at 20m. Illustration: Jan Magne Gjerde.

*Valle*¹¹⁰

The Valle site is located in the outer parts on the south-western side of the Efjorden fjord. The Efjorden fjord is a tributary fjord running east from the Ofotfjorden fjord. It is located on the eastern side of the Vallebukta bay. To the south of the site, the steep mountain side ends in the tall mountainchain Valletindan with the highest top at Breiskardtinden at 883masl. South of the Valle 1 panel is the hilltop Finnhågen at 191masl. Thereby the name of the site has also been Finnhågen, but now generally named Valle. The sites at Valle are located about 600m from the Moldforvika bay in the eastern end of the Valle bay. Valle 1 is located on a virtually vertical cliff on the northern side of the Molodforvikelva River that runs through the Moldforvika valley. The site is located where the terrain changes character from steep to flat. Valle 2 is located about 150m north of Valle 1 in the flat area south of an area with small hilltops at Gåsjenesheian. Valle 2 is located above a collection of water that may dry up during summer. Both panels at Valle are located at c. 73masl.

Reconstructing the landscape by raising the sea-level at Valle, to about 73masl (see Figure 107), show that both rock art sites would have been located in a bay that today is the Moldforvikdalen valley. The carvings at Valle 1 would have been located where the river runs into the present Valle bay. The local topography suggests that the river beneath the panels would have been filled in by the sea at mean water level or high tide at the time of the making. When standing on the other side of the river one gets a clear view of the polished carvings (see Figure 108). Both Valle 1 and Valle 2 can be seen from a distance. Seeing the carvings from the sea would however be a problem since they are located at ridges facing the south while by boat one would approach the area from the west. Comparing a photo taken by Gjessing in 1931 and a photo taken in 2004, there is almost no change in the setting. Due to the minor vegetation changes in the area (see Figure 49), this site is ideal when trying to reconstruct the landscape. The change that is worth mentioning is the lost shoreline relation. It is therefore surprising that Gjessing is puzzled by the marine animals depicted far from the present shoreline. Even if he suggests a higher shoreline when the figures was made so that they would be closer to the shores, he does not accept the old age of the carvings (Gjessing 1932:63). Simonsen also found it strange that seals and porpoise were depicted so far from the

¹¹⁰ In litterature also known as Finnhågen. Valle 1 (Askeladden ID-nr. 63396), Valle 2 (Askeladden ID-nr. 16940).

carvings contemporary coastline (Simonsen 1970:65; Simonsen 1991:62) One can even today see the Valle bay and the ocean from the site and by accepting the shoreline connection the sites would be located at the shores.

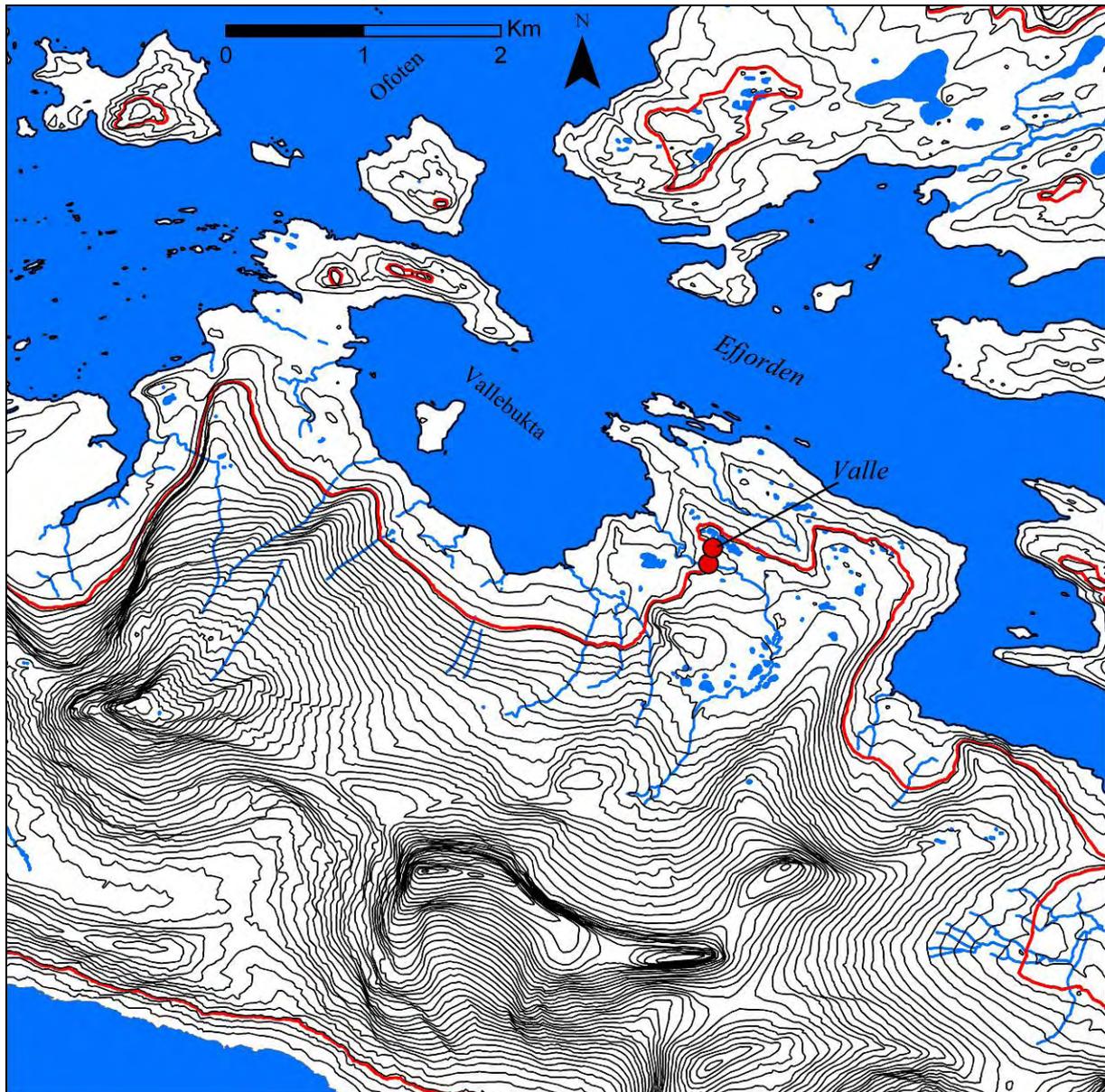


Figure 107 Reconstructed landscape at Valle. Notice the flat area where the Valle carvings are situated. The present secluded Valle Bay becomes part of the fjord, and the "flatter" landstrip along the coast is replaced by steep cliffs and mountains with "few" favourable places. The Valle site is marked with red dots and the coastline at about 73masl is marked with red. The Moldforvika River is the one that runs past Valle 1, the southern site of the two sites at Valle. Contours at 20m. The highest mountain south of the Valle site, the Breiskardtind raises 883masl. The mountain ranges in the area restricts movement, and the coastal location would favour boats as communication in the area. Illustration: Jan Magne Gjerde.



Figure 108 Photo and tracing of the Valle 1 site. Tracing after Gjessing (1932:plate XXVIII). The porpoise in the left of the tracing can be seen beneath the three to the left in the photo. With a shore connection, the sea would have filled in what is now the river. One can also see that no figures are made at the lower part of the panel. Scale under the seal to the right in the tracing is 1m. Photo and illustration: Jan Magne Gjerde.

Leiknes¹¹¹

The Leiknes panels are located above the promontory Leiknes that give the site its name. Leiknes lies between the fjords Tysfjord and Ofotfjorden/Vestfjorden on the Tysnes-peninsula that runs virtually south-north, ending in the Ofotfjord/Vestfjorden. The site is located on the north-eastern side of this peninsula facing east towards the Tysfjord-fjord (see Figure 109). The tallest mountain in the mountain ridge above the site, in the west is Steinfjellet at 408masl. The Leiknes site contains two known panels. They are both located on rock slopes. Leiknes 1 is located between 51masl and 43masl. Leiknes 2 is located at 31masl.

Reconstructing the shoreline at Leiknes 1, shows that the site would have been located along the coastal rock slopes on the western side of a bay where today the Leikneselva runs down the “Leiknes valley” between the hilltops Leikneskollen at 95masl to the north and the Strandåsen at 77masl to the south, then forming a narrow tiny fjord. At the time when the Leiknes 2 carvings were made, the Leikneselva fjord would be on dry land (See Figure 109).

¹¹¹ Leiknes 1 (Askeladden ID-nr. 16929), Laiknes 2 (Askeladden ID-nr. 60099).

The reconstruction also shows that the Leiknes peninsula, a characteristic of the landscape today, would have been submerged at time when the carvings were made. Gjessing visited the Leiknes area in 1937 to search for Early Stone Age settlements to support the Early Stone Age dating suggestion for the polished rock art sites. By looking at the lost relations of the Leiknes area, raising the shoreline, he observed the valley south-southwest of the Leiknes panel (see Figure 109). Gjessing assumed that the settlements would have been along this old fjordvalley and surveyed the area¹¹². South of the fjord valley Gjessing found settlement remains at about 65masl suggesting an Early Stone Age date¹¹³. A minor excavation by Gjessing revealed more artefacts of coarse quartzite backing such a date¹¹⁴. Further investigations should be made in this area, perhaps linking the rock art to early settlements. Raising the sea to about 60masl, connected to the settlement, shows that this area would have been a favourable place for settlement for a long time with ideal places for landing boats sheltered from the elements even before the polished carvings were made.

¹¹² At the time this valley was overgrown and Gjessing found no settlements (read house structures). Gjessing also found settlement remains at the tapes terrace at about 28-30masl with settlement remains most likely dated to the Late Stone Age.

¹¹³ Gjessing estimated the elevation to be about 52masl (Gjessing 1942:312). Later, the site is found to be at about 65masl by Hauglid (1993:129).

¹¹⁴ Tromsø University Museum, Topographical Archive. Report by Gjessing 1937, reference Gnr 76, Leiknes, Tysfjord Kommune, Helleristningsfelt + diverse saker, 57133. The finds are catalogued with number TS 3868.

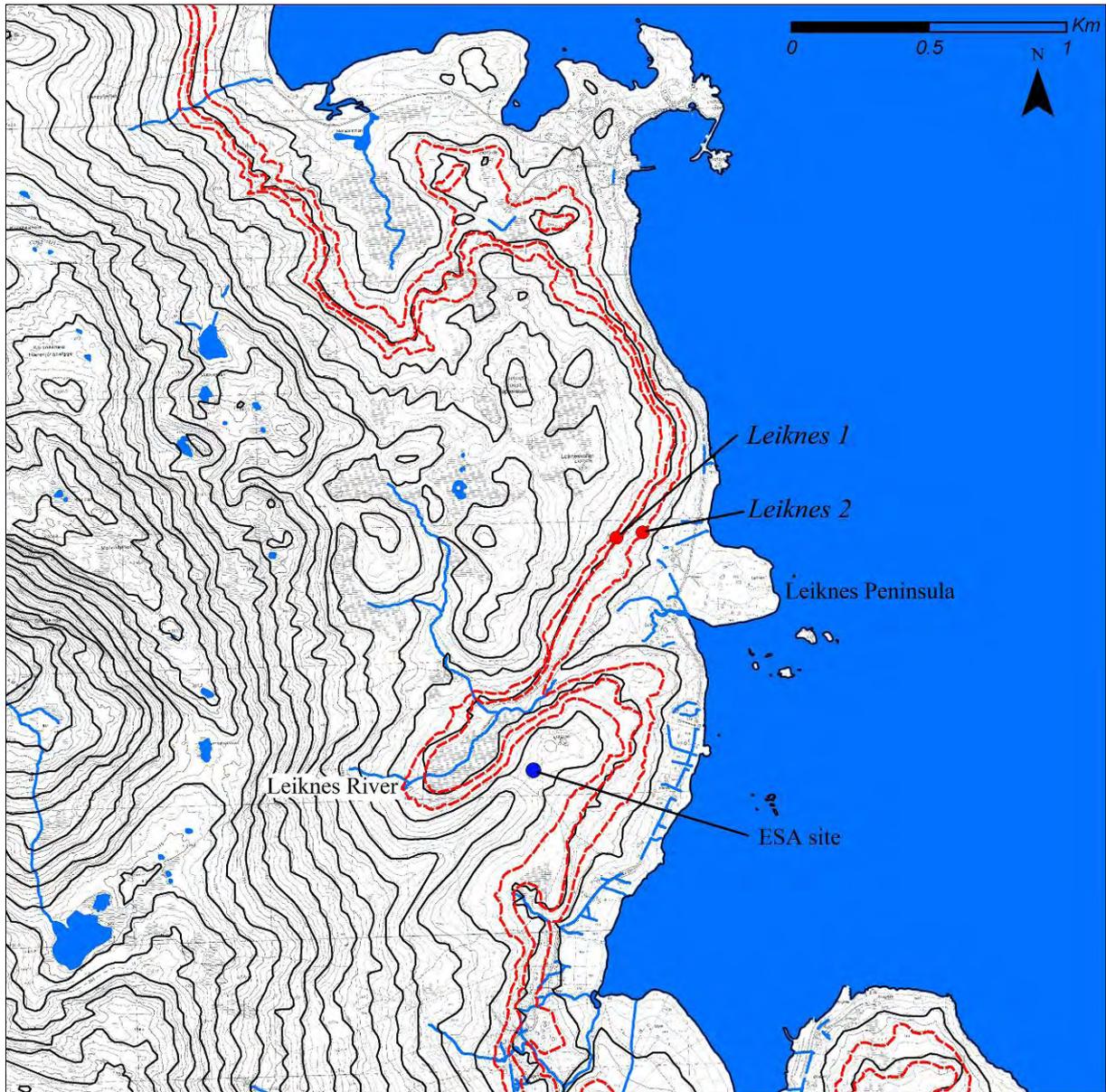


Figure 109 Reconstructing the lost relations at Leiknes with a raised shoreline to 31masl, 43masl and 50masl. The dashed red lines are at 31masl, 43masl and at 50masl. The Early Stone Age site is marked based on Gjessings descriptions (Gjessing 1937). The small peninsula beneath the carvings that today is a landscape characteristic would have been submerged at the time of the carvings. Contours are 20m. Illustration: Jan Magne Gjerde.

One of the interesting aspects of Leiknes 1 is that the figures cover a vast area of the rock surface. The figures are located between 51masl and 43masl. That is c. 8m difference in elevation. The extent of the panel is about 26,5m in length. Combined with the angle of the slope of the rock panel, one cannot see the figures above you since the inclination makes it impossible. The extent of the figures on the panel makes it impossible to stand on one place of the rock and observe all the figures and its narrative. One has to move around the rock, and even then, it is hard to see the figures due to the share size. This makes me suggest that the figures and the panels (read narratives) were meant to be seen from the sea by boat. By

observing the panel and the figures at the altitude they were made in one might get a better idea of how the panel and its figures were observed in prehistory with a raised shoreline.



Figure 110 The Leiknes area from the air. Photo taken from helicopter. One can clearly see the favourable bay with a raised shoreline, compare with **Figure 111**. Photo: Jan Magne Gjerde.

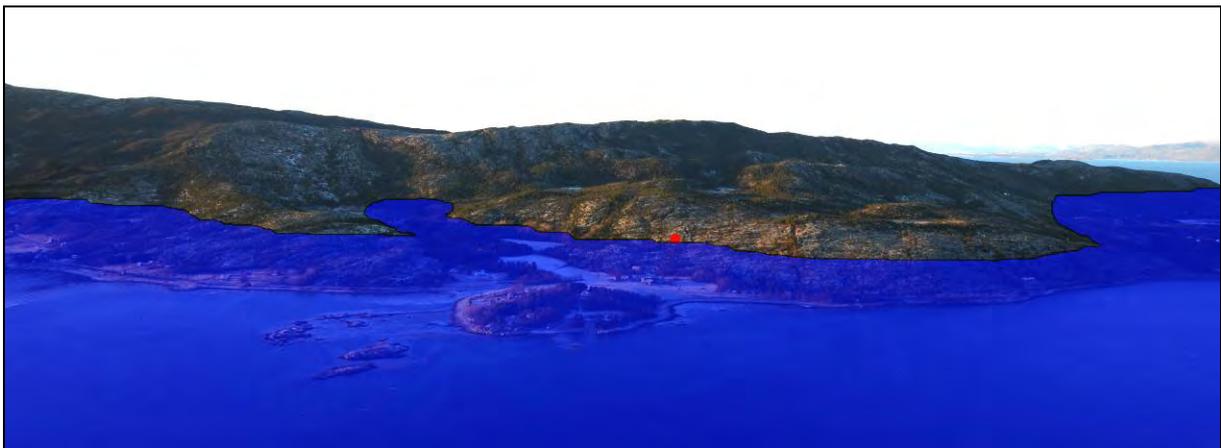


Figure 111 Rough reconstruction after data from **Figure 109**. The Leiknes 1 site is marked with a red dot. The elevated shoreline at 50masl is drawn by free hand after the elevation data as can be seen in **Figure 109**. The settlement would have been at the promontory left of the reconstructed bay. Photo and illustration: Jan Magne Gjerde.

From helicopter, I could observe that landscape at Leiknes and the figures at the same elevated level as the sea would have been when the carvings were made (See Figure 110 to Figure 113). The context of the Leiknes 1 panel, due to the “low” angle of inclination, would be changed more by the land uplift. Figures would loose their shoreline connection, hence perhaps loose their magic, as parts of the liminal world. Then new carvings were made in the shoreline area. Figures and stories had to be reinforced and new stories had to be told in the rocks. The large rock surface at Leiknes would gradually loose its shoreline connection, hence new figures were made further away. This could be the reason why Leiknes 2 was made.

When studying the figures at the panel at Leiknes 1, many of them are superimposed. It also looks like the figures are made in sections at certain elevations (See Figure 96).

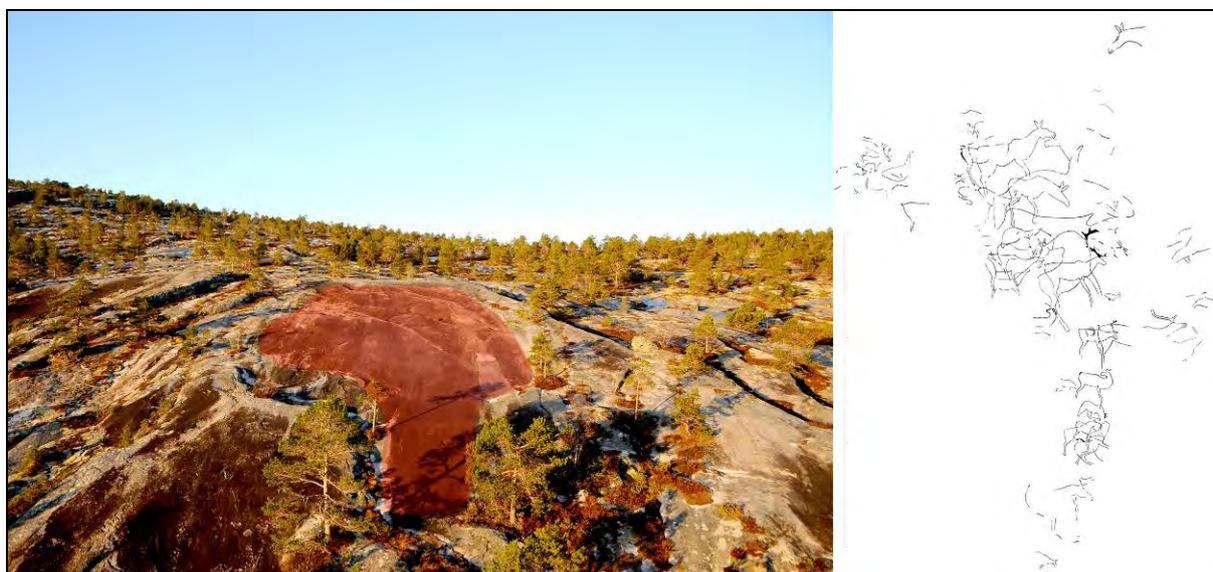


Figure 112 The Leiknes 1 panel as seen from the same elevation as the carvings from helicopter at about 45masl. From a distance of more than 100m one could see the figures even with poor light conditions (little contrast due to sun directed at the panel). The area with figures are marked with red on the photo. The large whale figure is in the middle of the photo (Compare with **Figure 92**). Tracing to the right after Hallström (1938:plateV-VI). Photo and illustration: Jan Magne Gjerde.



Figure 113 The Leiknes 2 site. Photo taken from helicopter at the “same” elevation as the carvings, at about 30masl. The two swans can be seen in the middle of the left photo at the point of the black arrow. An enlargement of the swans is found in the right photo. Compare **Figure 135** taken from the ground by the carvings. The swan figures could be seen at c. 150m distance. When the carvings were made, they were most likely situated in the upper shore-level. The Leiknes 1 marked by the black arrow at the top of the left photo. Photo and illustration: Jan Magne Gjerde

*Sagelva*¹¹⁵

The Sagelva site is located on the western side of the Sagelva river (thereby its name) between the inner parts of the Sagfjorden fjord and Nervatnet lake. The Nervatnet lake is at 45masl to 46masl depending on the fluctuating water level of the lake, while the polished carvings at Sagelva is located at 48masl. The Nervatnet lake is the last lake in a line of lakes that forms a large valley that stretches for about 9km in south-east direction. The steep mountains on the side of this valley evidence a very steep landscape that would have constrained lines of movement. The mountains on either side of the Sagelva site are about 500masl. The ridges of mountains both east and west the valley are higher than 1000m (see Figure 118). With the high altitude of the mountains, one must assume that the area also was close to small glaciers remaining from the last ice age¹¹⁶.

The large figures at Sagelva can easily be observed by standing on the opposite riverbank at the present Sagelva (Figure 115). The panel at Sagelva is approachable due to a small ledge in front of the carvings and the inclination. It is possible to carefully get down to the carvings, although with slight fear when trying to approach the carving furthest to the left of the panel (Figure 114 and Figure 115).



Figure 114 The Sagelva site. The panel with the two reindeer figures located in the middle of the photo are marked with red. Most likely when the carvings were made, the water level would be just below the reindeer figures. Compare with **Figure 115** and **Figure 116**. Photo Gustaf Hallström (photo 88), 1908. Hallström Research Archive, University of Umeå, Sweden. Illustration: Jan Magne Gjerde.

¹¹⁵ In literature also known as Sagelv or Sagfjorden (Askeladden ID-nr. 27030).

¹¹⁶ Jacob Møller, personal communication, 2009.



Figure 115 Photo of the panel with polished carvings at Sagelva by Gustaf Hallström, 1908. Notice the steep mountains in the background. Hallström Research Archive, University of Umeå, Sweden.



Figure 116 Reconstruction of the panel at Sagelva with a raised water-level at the ledge beneath the carvings. The difference between mean water level and high tide is c. 1m. That is that the carvings would have been made in the upper tidal zone, the liminal zone visualized as if the reindeer are running along the water line. Original photo from 1908 from Hallströms Research Archive, University of Umeå, Sweden. Illustration: Jan Magne Gjerde

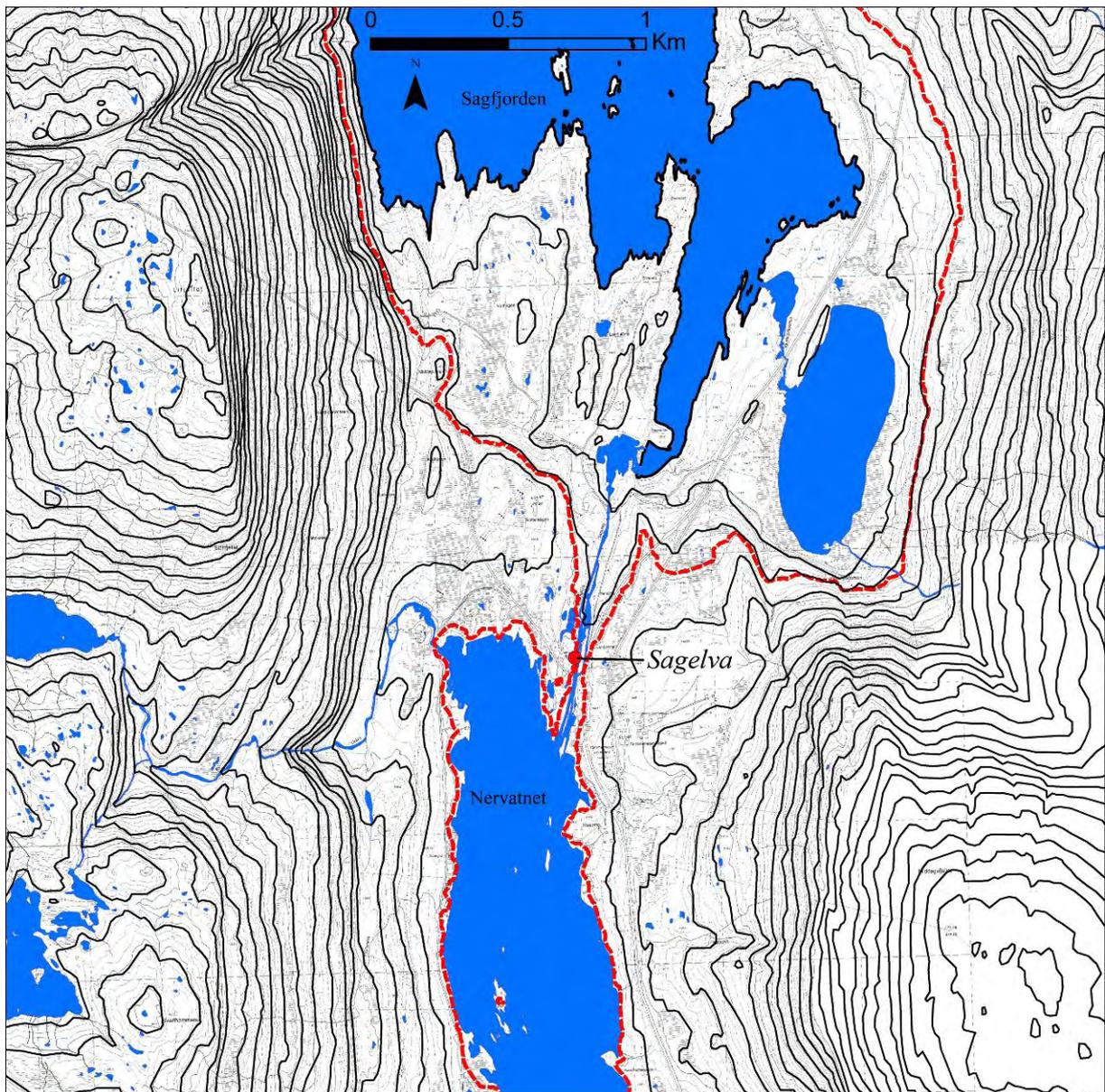


Figure 117 Reconstructing the lost relations at Sagelva with a raised shoreline to 48masl. The dashed red line is situated at 48masl. Notice the narrow strait where the carvings are located and the flat areas on both sides of the strait where the Sagelva carvings are situated. These “flat” areas would be suitable for settlements. Contours at 20m interval. Illustration: Jan Magne Gjerde.

When reconstructing the topography at Sagelva by raising the sea-level (see Figure 116 and Figure 117), the polished carvings are located on the western side of a narrow strait where the Sagelva river is running today. The tidal effect on this narrow area must have been immense and the tidal current past the panel must have been very strong, hence included a distinct loud sound when the tide was changing. This would have enhanced the character of the place as a special place separated from its surroundings by the forceful stream and later “rapids”. Studies of Hallströms photographs from the site is vital because of the road and bridge that is built in the vicinity of the polished figures hinders a clear view of the area today.

When looking at Hallströms photos the link between the landscape and the figures become more evident. In Figure 114 one sees where the polished figures are situated, on the eastern bank of the river. The area on both sides of the Sagelva where the carvings are located (see Figure 114) are generally flat compared to the otherwise steep fjord/mountain landscape. The area west of the carvings would be such a favourable area for settlement and should be further surveyed (See Figure 117).

Reconstructing the sea-level to about 48masl, the height of the lowest part of the carvings the long lake “Nervatnet” would have been a narrow fjord stretching for about 9km inland. The figures on the Sagelva panel is of reindeer. According to Kalstad, the area had three crossing places for reindeer with many connected hunting pits¹¹⁷. These were only marked on a map and no thorough survey has been conducted. The problem of dating reindeer pits are evident since they contain few chronological traces. The long “Nervatnet fjord” has three such crossing places (see Figure 118). The hunting pits for reindeer indicate that the area was good hunting grounds for reindeer. The geographical link to the placing of the reindeer images at the “entrance” to such a favourable hunting area for reindeer and reindeer is striking. They are marking favourable places connecting animals to the landscape. Very rarely do we have such a link in the archaeological record where traditional knowledge of the landscape (here: animal crossing places) can be connected to rock art.

Crossing the hefty tidal stream would not be preferred by reindeer. Further up the present lake there are three such crossing places where prehistoric reindeer hunting pits are located. There is no chronological link between these places, however the migration of reindeer and the spatial relevance makes this a favourable place for hunting reindeer connected to such crossing places (see Figure 118). The reindeer figures would then act as reference points in the landscape, here also connected to forceful streams and rapids. Initially the tidal stream, later due to the land uplift the context of the reindeer figures would change and the forceful rapids at Sagelva would still be such a reference point in the landscape. The reindeer is depicted as if they are running along the waters edge as they would do in this fjordal mountain landscape (see Figure 116 and Figure 118).

¹¹⁷ According to Johan Albert Karlstad, (personal communication 2007), his father, a reindeer herder, had told him why the reindeer were made on the rocks. They were there because the place was a dangerous place for the reindeer due to the current and the waterfall.

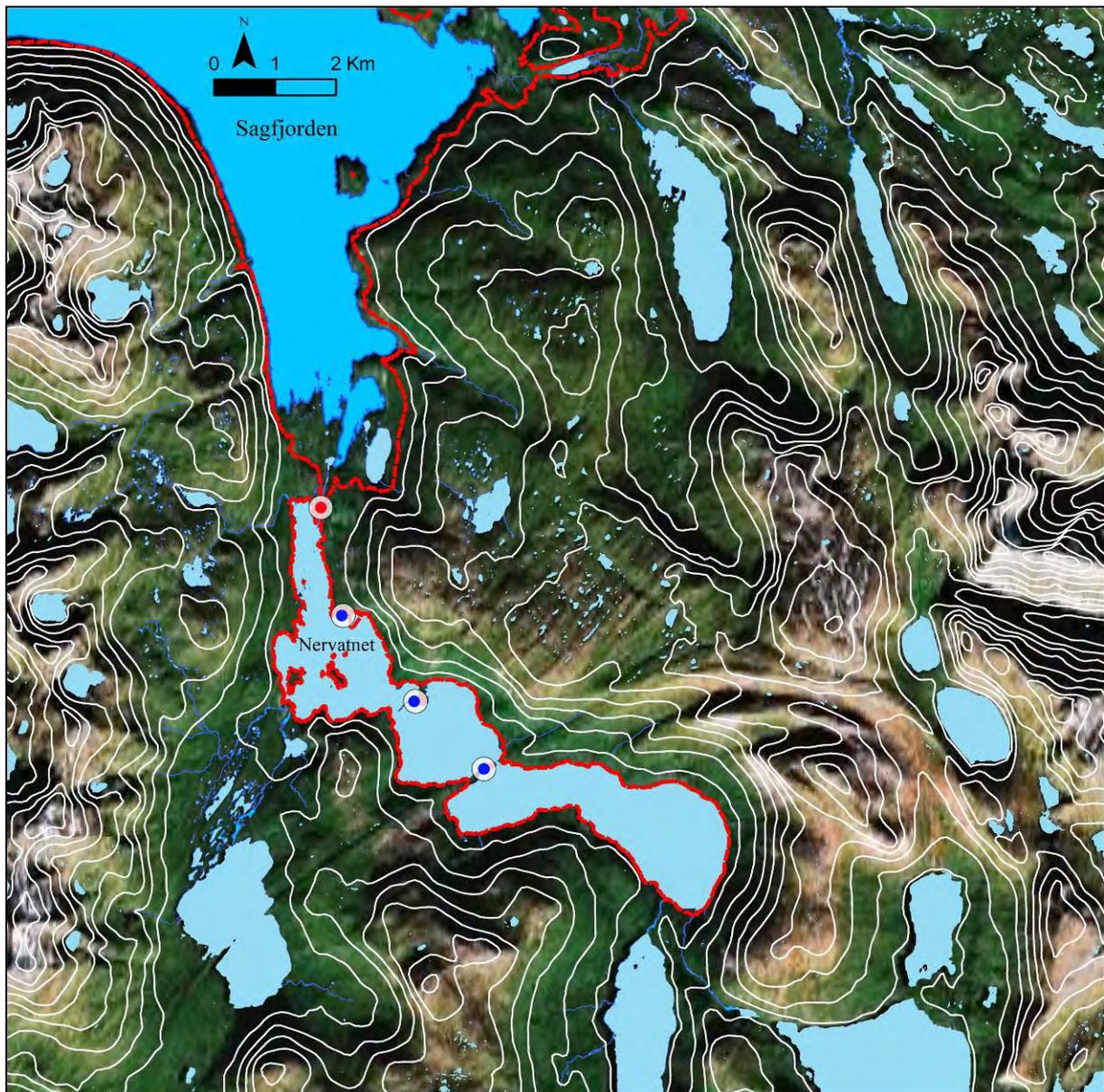


Figure 118 The Sagelva site with the sea level reconstructed at 48masl marked with red line. The Sagelva site is marked in white with red dot in the narrow sound between the Nervatnet lake and the Sagfjorden fjord (compare with **Figure 117**). Notice the long fjord of about 9km where Nervatnet is today. The three crossing places for reindeer with hunting pits are marked in white with blue dots. Background satellite image after Google Earth. White contour lines at 100m interval. Notice how the steep terrain would force movement in the landscape. Illustration: Jan Magne Gjerde.

*Sletjord*¹¹⁸

The Sletjord site is located at the Sletjord farm at Herjangen. Sletjord is located at a flat area at Sletjord on the northern side of the inner parts of the Herjangen-fjord. To the north of Herjangen are steep cliffs with the mountain Ramnfjellaksla straight above at c. 262masl. To the northeast of Herjangen are several mountains, with the highest at Storfjellet at

¹¹⁸ The Sletjord site also is named Herjangen in litterature (Askeladden ID-nr 47016 and 67268).

1037masl. There are three panels with carved rock art at Sletjord¹¹⁹. They are all located on the rocky outcrops that runs east-west where the hilltop Sletjordhaugen is prominent. One can see this ridge with outcrops clearly today due to the fact that the available areas north and south of this ridge are cultivated by agriculture. The end of this ridge is today entering the sea at the small peninsula Herjangsholmen (see Figure 121).

Sletjord 1 originally consisted of two carved rock panels. One of these rocks were blasted during road-works and the rock with rock art moved to Oldsakssamlingen in Oslo in 1905. The figures were of a reindeer and a small whale figure (Hallström 1909:154-155, fig 50; Hallström 1938:43). 20 m WSW of this panel was another figure that a local informant interpreted as a close-by point, Segelnes. Hallström was surprised by the rock art motif of a landscape feature (Hallström 1909:156). Later it was interpreted as a whale figure (Hallström 1938:43). Sletjord 2 includes seven figures where three large elks are dominating the panel. Erosion has hindered defining the figures on the middle of the panel¹²⁰ while the ones on the bottom right has been interpreted as fish-sinkers due to a comparison with the Forselv halibut-fishing scene with a fish-sinker. New finds at Forselv (see Figure 127) suggest that these figures most likely are elk tracks. The Sletjord 3 panel was lately found (2005). However, no clear motif could be made out from the documentation, but it could be parts of an elk figure¹²¹.



Figure 119 Photo of Sletjord 2. Notice the elk-tracks in the lower right of the photo (compare tracing in **Figure 136**) Photo from 1908 from Hallström's research Archive at University of Umeå (photo 68).

¹¹⁹ The naming and numbering at Sletjord can be a bit confusing. While Hallström named them Sletjord after the farm and Gjessing followed the sitename, Gjessing altered the numbering, hence switched site 1 with site 2

¹²⁰ Hallström interpreted these as remains of eroded human figures (Hallström 1938:49).

¹²¹ Bjørn Hebba Helberg, personal communication 2008.



Figure 120 Photo of Sletjord 2 from 2008. The large greyish spot on the rock outcrop is from a plaster mould of the large elk figure (the middle of the photo in **Figure 120**). Photo: Jan Magne Gjerde.

The rock art at Sletjord is made on slightly sloping panels (Hallström 1938:47). Since the Sletjord 1 has been removed from its context, it is not included here. During the latter years, the area at Sletjord has gradually been overgrown by macro-vegetation (see Figure 122). This makes it somewhat hard looking at the landscape setting. Even when Hallström visited the site in 1908, macro-vegetation had covered some of the sites known by local people located in the Sletjord area¹²² (Hallström 1938:41f).

When raising the shoreline to about 36masl one sees that the Sletjord 2 site would have been a coastal rock slope. The carvings, when made would have stood out from the rock surface and due to the inclination of the rock and the size of the figures, they would have been visible from the sea. The photos in Figure 119, Figure 120, Figure 122 and Figure 123 show how the figures are seen from a distance and how much the vegetation has changed in the area even during the last 100 years. The rock at Sletjord 2 has a red varnish. Assuming the rocks had a “reddish” varnish in prehistory, the “white” figures when made would have contrasted with the red rock surface making them visible at some distance. The size, the slope of the cliff and the colour contrast would have made these carvings visible from sea when approaching the place by boat.

Some of the hunters rock art sites are related to the migration routes for animals depicted on the rocks. Sometimes they have been interpreted as located at the places where

¹²² These sites have never really been surveyed for, however, the new find from 2005 would advocate for a more thorough survey of the area.

elks are coming onto land after swimming over water or at favourable hunting places (e.g. Farbregd 1980; Mikkelsen 1986). The two elk tracks in the lower part of the panel fits such an interpretation. The elk come onto land represented by the tracks in the low tidal zone. Thereby the elk are depicted when entering land from the sea. This interpretation shows how the wider landscape interact with the figures in question. There are several examples in rock art from northern Fennoscandia depicting elk or reindeer swimming (e.g. at Kirkely at Tennes and at Bergbukten 3 in Alta, northern Norway).

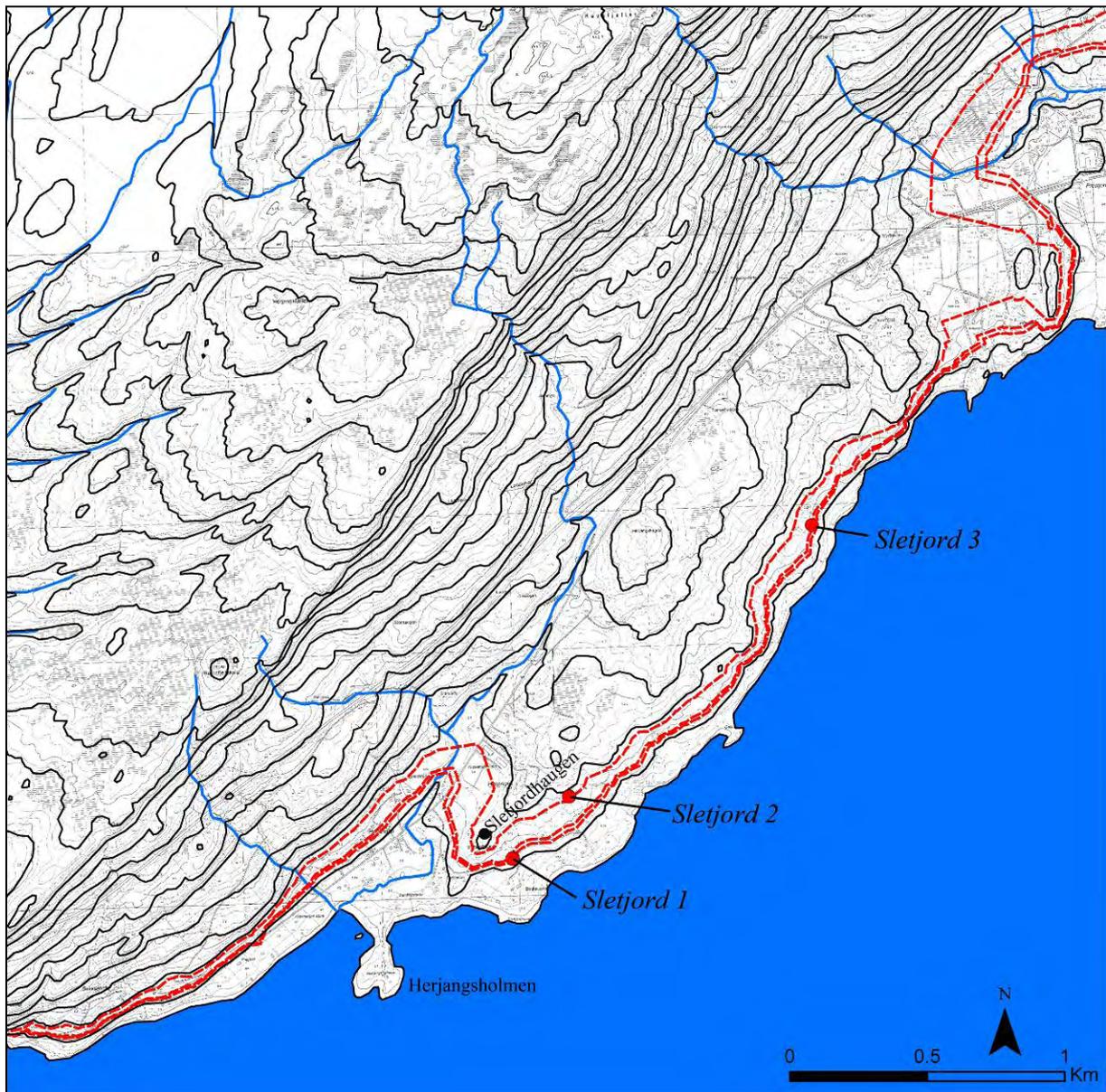


Figure 121 Reconstructed landscape at Sletjord with red dashed lines at 24masl, 26masl and 36masl to show how the sites would have been located with a raised shoreline. The Herjangsholmen would be submerged when the carvings were made, and the Sletjordhaugen hilltop would have been a protruding point with a secluded bay west of the carvings. Contour lines at 20m. Illustration: Jan Magne Gjerde.



Figure 122 Location photo of Sletjord 2. The elk figures can be seen slightly left of the middle of the photo on the rock outcrop. Photo from 1908 from Hallström's research Archive at University of Umeå (photo 74).



Figure 123 Location photo of Sletjord 2. Photo from 2008. One can see the vegetation since Hallström's visit 100 years ago and I could not take the photo from the same angle further back due to the growth of trees. Photo: Jan Magne Gjerde.

*Forselv*¹²³

The site is located on the Forselv farm on the western side of the narrow Skjomen-fjord, a small tributary fjord that cuts away southwards from the Ofot-fjord at the narrow strait Trongskjomen between high, steep mountains. On the eastern side of the fjord, a ridge of high mountains dominate, with Skjomtinden at 1575masl being the highest. On the western side of the Skjomen fjord, the Reintind mountain at 1416masl is located where the glacier Frostisen can be seen. The Frostisen glacier is at its lowest today at 840masl while the top of the glacier is located about 1710masl. Based on the current data, the glacier Frostisen must have been larger and nearer the Skjomen fjord when the carvings were made¹²⁴.

On the western side of the fjord the steep mountains enters straight into the fjord, making it impossible to walk along the fjord on the western side. This can also be said for parts of the eastern side. Now, as in prehistory the most convenient approach to the Forselv area is by boat. The site at Forselv is located about 100m from the sea and the lowest carvings are measured to 32masl. East of the panel, the small river Kulåkerelva is running.

Totally, Gjessing found about 40 figures at Forselv (Gjessing 1931:280; Gjessing 1932:plate X). In 1971, new figures were found when unearthing a section of the panel (Simonsen 1978). During recent conservation work, the panel was unearthed and covered to remove lichen. New figures appeared and were documented as part of my fieldwork in 2005. The site is heavily eroded at places, and one assumes that more figures were once made at Forselv due to all the fragmentary lines and the heavy erosion on parts of the panel. Today the site includes about 100 figures (see Figure 127). The animals depicted include elks, reindeer, halibut, porpoise and bears. Adding to this there is a large human figure and small representations of anglers in a boat. One of the more interesting compositions is the halibut fishing scene. Returning to the site in 2007 during the excavations, frotage (see Figure 75 and Figure 126) and night photography (see figure Figure 93 and Figure 125) was tested, and details and new figures appeared. Therefore, to get a more complete documentation of the Forselv site the whole panel should be redocumented with both night photography and frotage.

¹²³ The Forselv site is also named Skjomen and Sommerbo in literature (Askeladden ID-nr. 56752).

¹²⁴ Jacob Møller, personal communication, 2009.

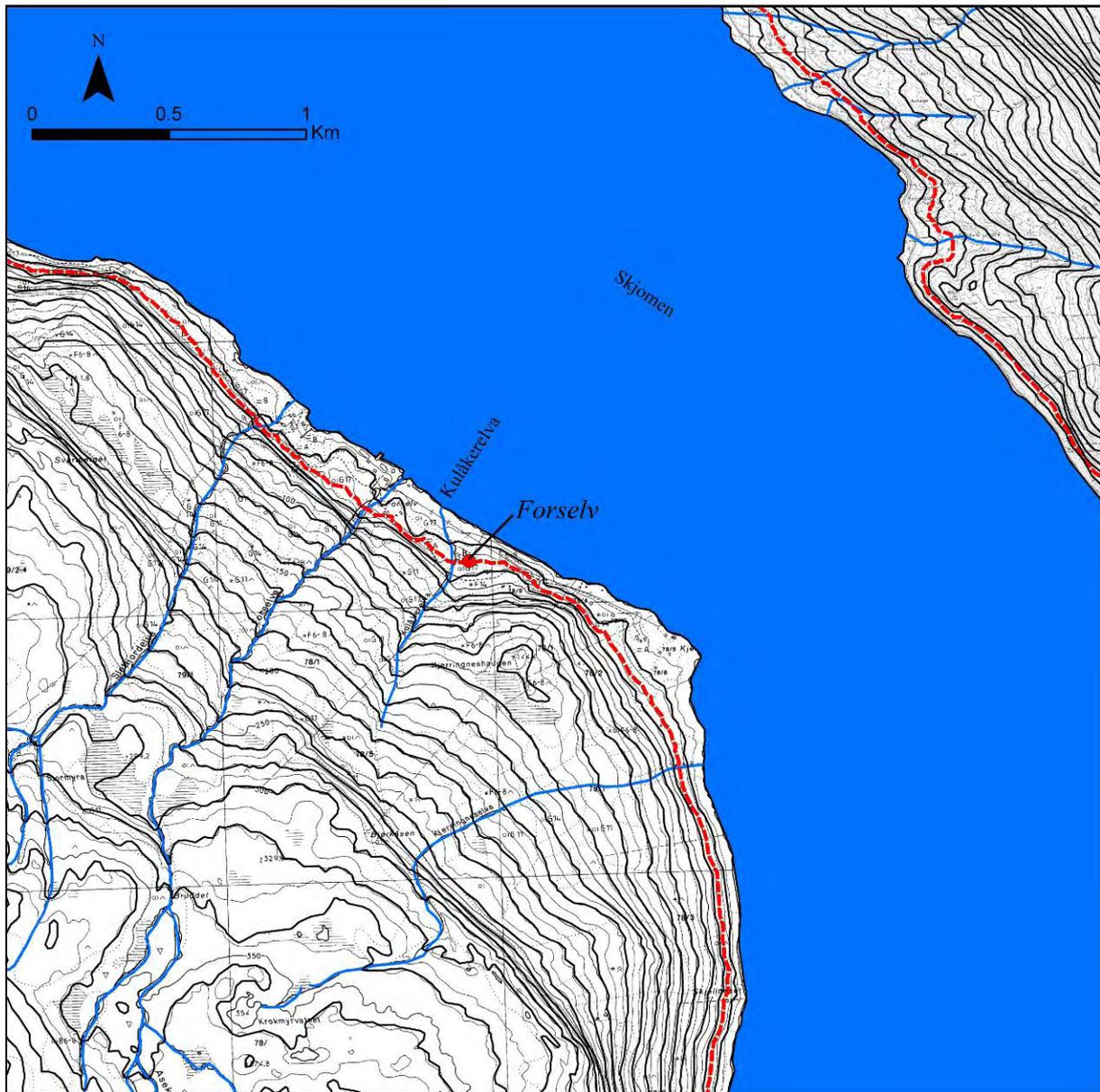


Figure 124 Reconstructing the lost relations at Forselv with a raised shoreline to 32masl. The dashed red line is at 32masl. Background map 20m contour lines. In the background the map has 10m contour lines. Illustration: Jan Magne Gjerde.



Figure 125 Night photo of section of the Forselv site with a large reindeer to the left and halibut fishing to the right (Compare tracing **Figure 127**). Photo: Jan Magne Gjerde.



Figure 126 Reindeer figure at Forselv found in 2005. One can here see that the elaborate antlers were not documented during the tracing (compare with figure in the right end in **Figure 127**). The stripes moving from the upper left to the lower right are striation marks. Both striation marks and erosion complicates the documentation of the Forselv site. Frotage: Jan Magne Gjerde.

With a raised shoreline, one sees that the panel would have been located close to the bay where the river Kulåkerelva enters the bay (see Figure 124). The site would have had a similar context as a bay beneath the panel for a long time when the land uplift had effect on the surroundings. The water from the sea would have been present beneath the ridge on the northern side of the panel where the rock drops more than 5m. This might explain why figures were made over some time at the Forselv site. To observe the figures, one needs to walk along the panel. The halibut fishing scene is located on the rock at its most vertical inclined part, vizualizing the fishing line going into the sea. At several places striation marks has been included as parts of the figure and old lines were used to make out parts of other figures (this was also observed by Gjessing (1932:26)).

When looking at the technique, most likely there are two main techniques with pecked carvings. The large animals are made with broad lines that generally are more eroded than the thinner lines of the fishing scenes and the geometrical grid and frame figures. At the largest geometrical figure, one can observe that the grid-figure superimpose the previously carved large reindeer figure. Rock art was probably made at Forselv for a considerable time at the same panel. The steep edge below the panel facing the fjord, about 5m high, made the rock outcrop keep its shore bound location even after the waves were no longer dashing onto the rocks where the carvings are situated (see Figure 128 and Figure 129). The figures at Forselv therefore most likely were made at different times. The boat type at Forselv shows similar traits with the earliest boats in northern Fennoscandia and the earliest boats in middle Norway. Most likely they belong to the earliest parts of the Late Stone Age (Gjerde 2008).

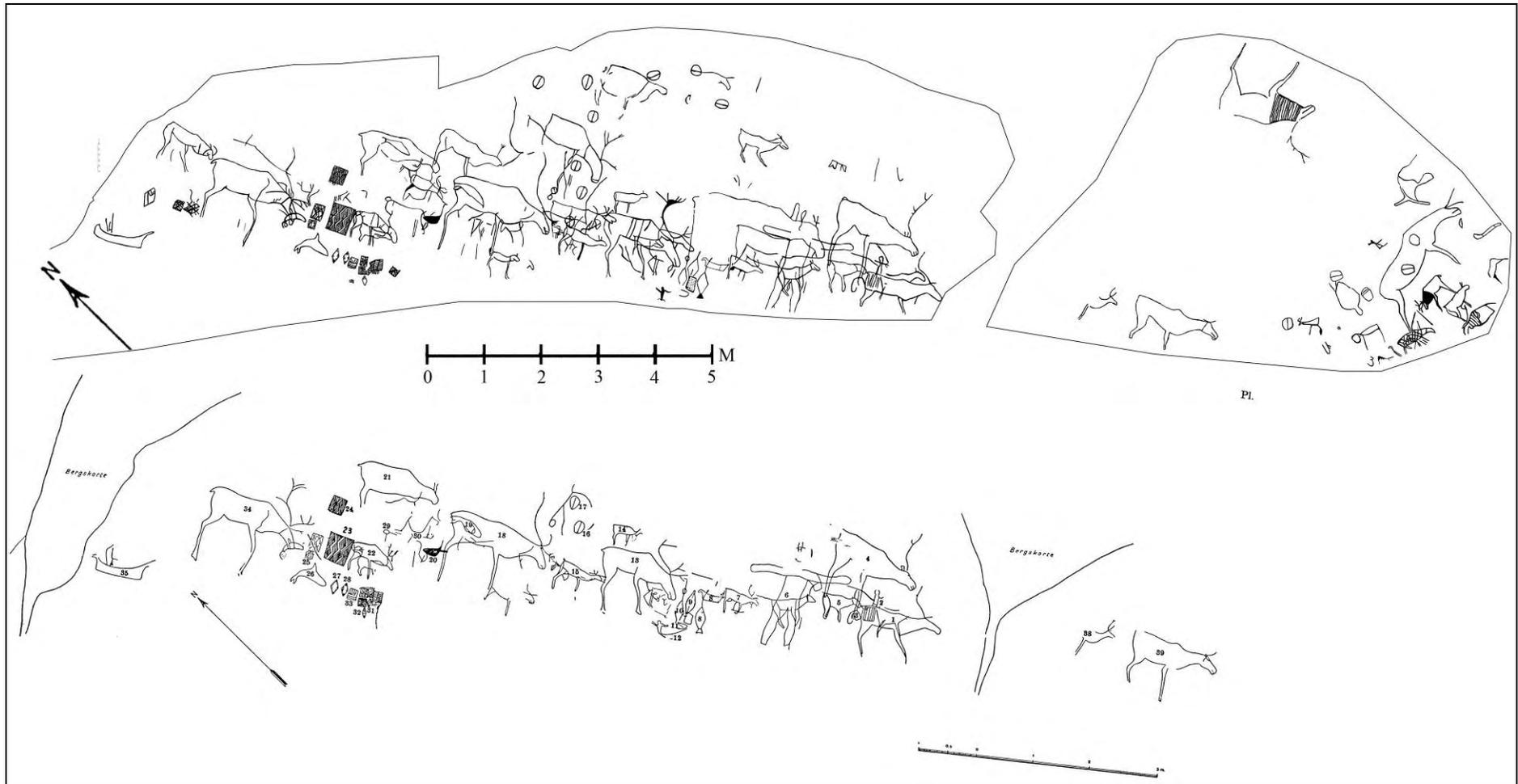


Figure 127 Tracing of the Forselv site. Top tracing, Gjerde after fieldwork 2005. Bottom tracing after Gjessing (1932:plate X). The new documentation more than doubled the amount of figures at Forselv. However, the use of night photography and frotage in 2007 on parts of the panel (see **Figure 93** and **Figure 125**) revealed details that were not perceived during the tracing and a few new figures. Therefore a new documentation should be made at Forselv based on tracing, frotage and night photography. The top of the new figure found during excavation in 2007 (see **Figure 98**) was located between the legs of Gjessings figure 1. Illustration: Jan Magne Gjerde.

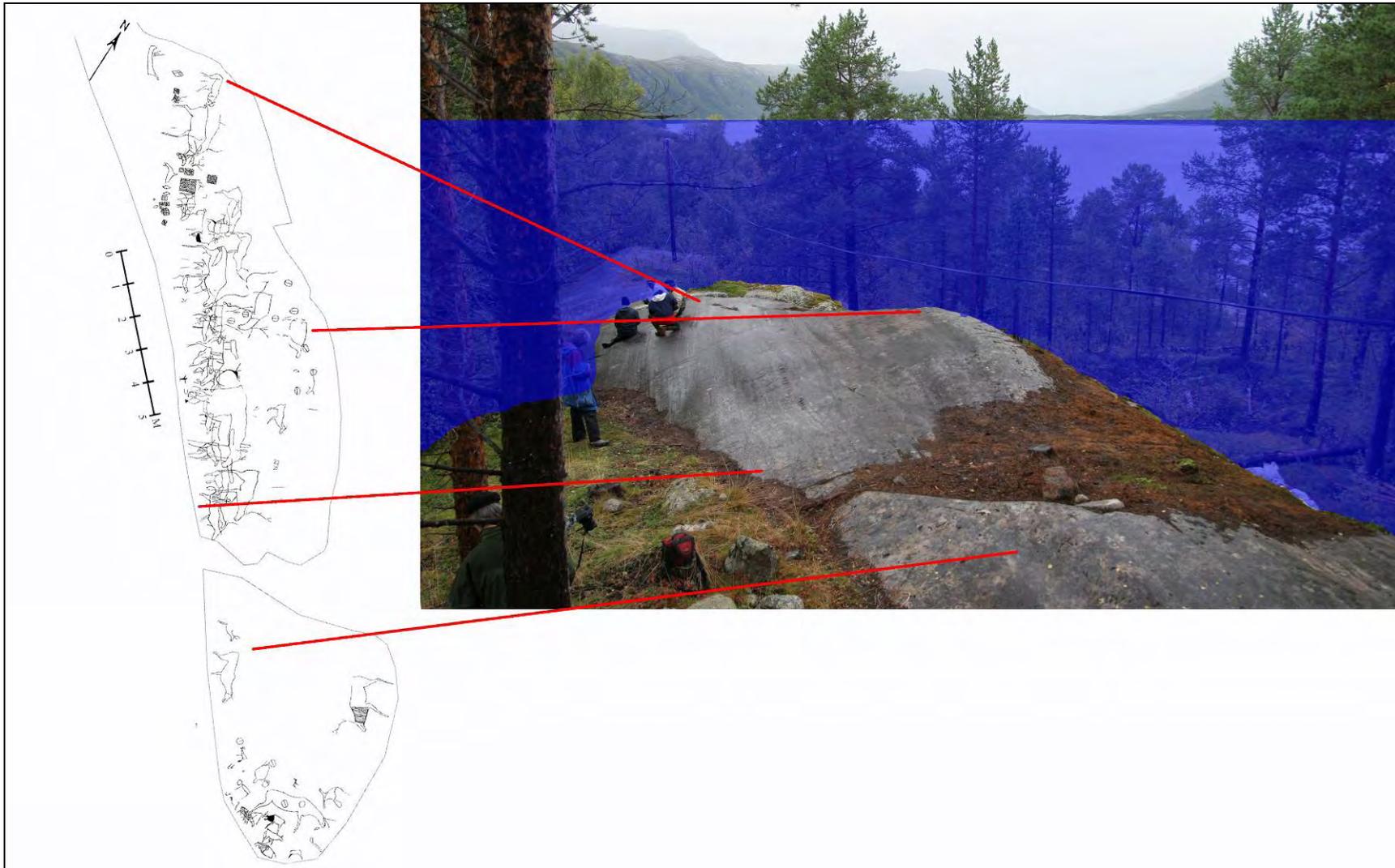


Figure 128 Tentative situation with a reconstructed shoreline at Forselv. The figures are related to the positioning at the rock outcrop. It seems like the elks and the reindeer are coming ashore at Forselv, perhaps after crossing the Skjomen fjord. They are all facing land. Photo is taken from a tree at the end of the site. Notice the steep edge at the right side of the panel, a cliff at most 5m high. Tracing, photo and illustration: Jan Magne Gjerde.



Figure 129 The Forselv site. Notice the cliff at the right side of this panel. This would have been a steep cliff linking the panel to the shore location after the sea retreated from the panel where the carvings are situated. Compare with **Figure 128**. Photo: Jan Magne Gjerde.

Vik

The Vik carvings¹²⁵ are situated on the eastern side of the Island Rolla facing the sound Bygda between the islands Rolla and Andørja. Above the site the large mountain ridge Drangen with the highest top, Stortinden at 1022masl. The figures at Vik 1 is situated on a vertical cliff c. 21masl. There are 6 figures on the Vik 1 panel (see Figure 130). Two grid-patterns, two deer-animals (most likely elk by the morphology), a line that looks like an acute angle and several lines classified as one figure by Simonsen (Simonsen 1958:15f). The identified figures represents elks and grid patterns¹²⁶.

When reconstructing the landscape by raising the shoreline, one observes that the Vik 1 site is located virtually at the entrance of a bay. There would have been a passage beneath the figures at mean water level or at low tide¹²⁷. Observing the terrain during fieldwork shows that this area is a good place to pass through the area since this forms a natural ledge when

¹²⁵ Initially two panels with rock art was found at Vik, however I agree with Simonsen when he rejects Vik 2 as natural cracks in the rock (Simonsen 1958:14,16).

¹²⁶ At my visits to the site, water was running over the panel and lichen and moss growth made it hard to see all the figures.

¹²⁷ A local inhabitant, Henry Johansen, who grew up close to the Vik site informed me that when the elks returned to the area, their "natural" path was just in front of the panel.

walking in the north-south direction. It is therefore a natural line of movement, in an area where the higher elevated hilly grounds are fairly steep (see Figure 131).



Figure 130 Photo of the figures at the Vik 1 site. Photo by Povl Simonsen. The erosion makes it hard to detect the complete figures. However, by looking carefully at the photo one can see that there are part of the carvings that were not chalked by Simonsen. Part of the grid pattern to the left in the photo has not been documented. However, the zig-zag line can be seen on the photo. Top.ark. Tromsø Museum.

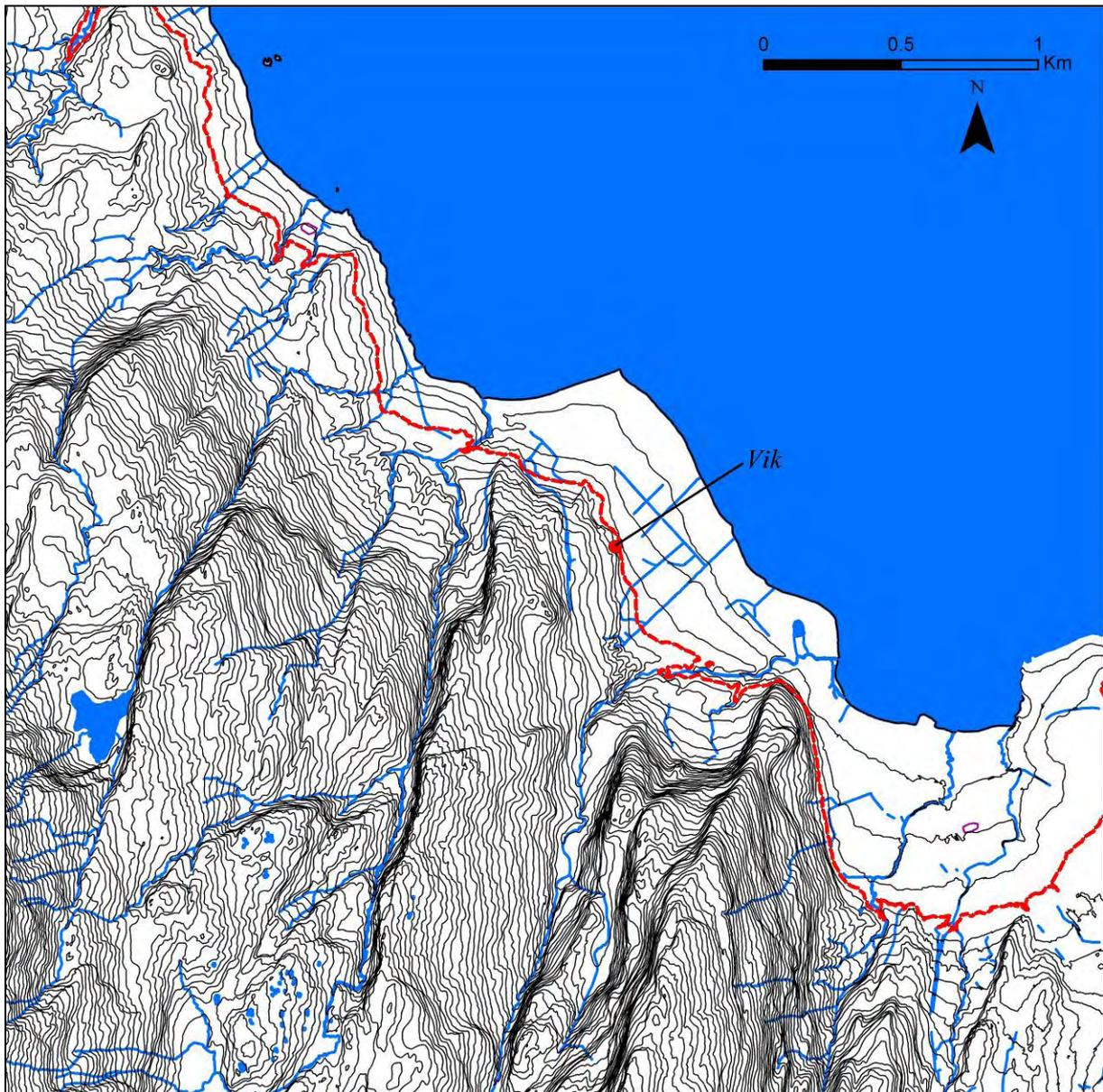


Figure 131 Reconstruction of the landscape at Vik 1. The red dotted line is at 20masl. Illustration: Jan Magne Gjerde.

Brennholtet¹²⁸

Brennholtet includes only one large elk figure (see Figure 132). The peninsula where the city Narvik is situated runs virtually east-west with Narvik situated in the eastern end of the peninsula where the peninsula ends into the Herjangen fjord (see Figure 133). The peninsula is located on the southern side of the Herjangen fjord between two tributary fjords, the Rombaken fjord to the north and the Beisfjorden fjord to the south. A chain of mountains is central on the peninsula and the mountains rise high from the fjord, the most prominent of these is the Beisfjordtøtta mountain at 1448masl. The Brennholtet site is located south of the

¹²⁸ Also known as Gundershaugen (Askeladden ID-nr. 56314).

Vassvika bay at 27,5masl. It is located on a vertical cliff facing north on a rocky hill sloping northwards. This hill is named Brennholtet, thereby the name of the site. From the Brennholtet site, one has a clear view of the Sletjord area across the Herjangen fjord (inner part of the Ofoten fjord). The Brennholtet site and the Sletjord 3 site are fairly contemporary (see Figure 99).

Reconstructing the shoreline shows that the site is placed on a small promontory. Along the panel one could enter the area from sea. Placed on the vertical rock, the elk would have been visible at a distance (according to the experience at Jo Sarsaklubben as much as about 300m) when approaching the area by boat from the sea. The elk could then act as a landscape marker. Based on the topographical setting this may be a crossing place for animals after crossing the fjord where the elk is marking the place / area. The elk figure is also depicted as if it is coming ashore (see Figure 137).



Figure 132 The large elk depiction at Brennholtet. The elk figure is 2,15m tall and 1,85m long. The carving is pecked into the rock with the pecking technique. Photo: Jan Magne Gjerde.

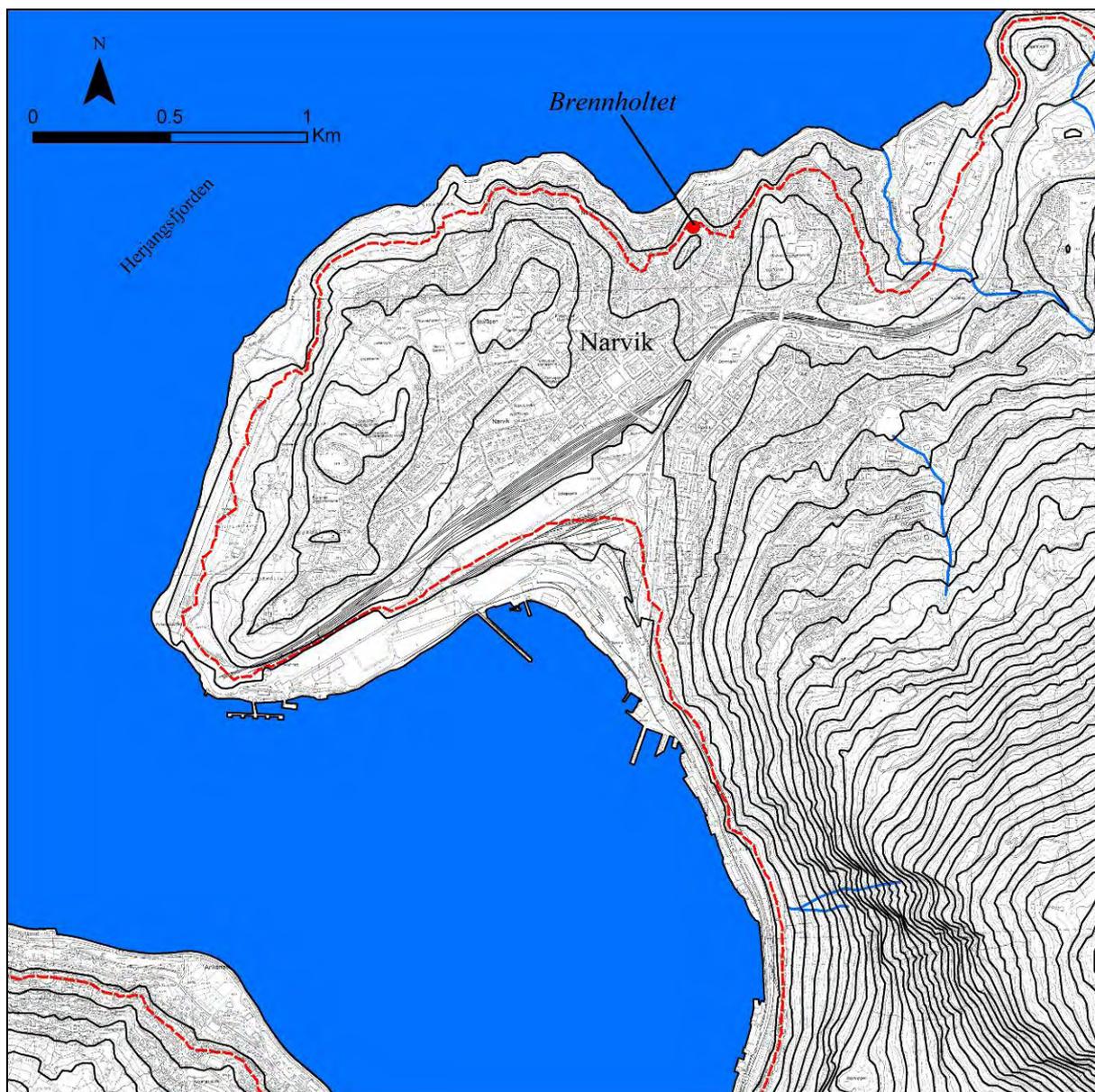


Figure 133 Reconstructing the lost relations at Brennholtet in Narvik with a raised shoreline with a dashed red line at 27masl. 20m contour lines. Illustration: Jan Magne Gjerde

Microlandscape in Ofoten rock art

When it comes to the microlandscape in relation to the rock art in the Ofoten area, I have chosen to focus on some of the sites where this is best observed. Most sites are located as if they could have been seen from the sea with a raised shoreline. The best example is at Jo Sarsaklubben and Leiknes. However, also Brennholtet and Sletjord 2, Vik would be seen from the sea. The size of the figures and that they would appear visible in contrast to the surrounding rock, would make it possible to see these “landmarks” at distances of several hundred metres when located on “vertical” cliffs in the shoreline (see Figure 96) and the modern carving contrast to the rock (see Figure 287).

At the tiniest level, one can see at Jo Sarsaklubben that the only crack on the rock surface is most likely representing the mouth of the reindeer (see Figure 134). It could be that the reindeer was present in the rock outcrop in the mind of the hunter-fisher-gatherer represented by the “mouth” and the rest of the figure only needed to be added to the outcrop. Attributes of animals have been applied as reference points in the landscape by the Saami (Hætta 2008). At Leiknes 2 the swans¹²⁹ are placed on a quartz line. I do not think this is accidental. When observing the two swans, I interpret the swans as one of the first animations in the rock art of Northern Fennoscandia. The part of the swan that will be under water when swimming is under the quartzline while the part of the swan over the waterline is over the quartzline (see Figure 135). The two swans also overlap as in an animation making this a scene that most likely represents a swan swimming on water. The quartzline then represents the waterline. Looking at the rock surface around the swan there is plenty of space so that the placing of the swan is deliberate on the quartzline.

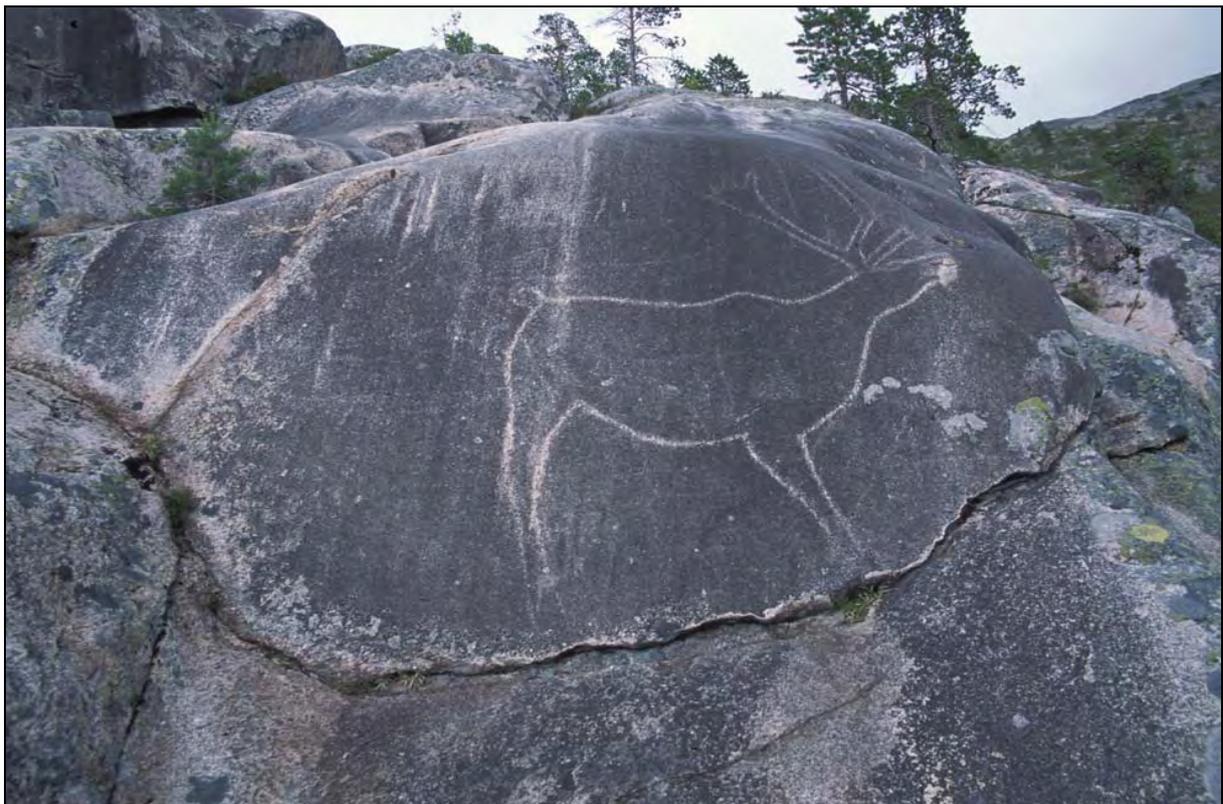


Figure 134 Photo of the reindeer at JoSarsaklubben. The reindeer is c. 1.80m long. Standing in front of the panel, the only thing one observes is the rock art and the rock surface due to the high inclination of the rock. Compare with **Figure 97** to see the wider context of the rock art site. Notice the only crack at the rock outcrop that represents the mouth of the reindeer. Photo: Jan Magne Gjerde.

¹²⁹ The swans have also been interpreted as gees, however I will refer to them as swans since it is most likely when comparing the morphology of the figures to the birds.



Figure 135 Photo of the swan figures at Leiknes 2. Notice the quartz line crossing the figures on the lower part of the swan. Photo: Jan Magne Gjerde.

At Forselv, the halibut fishing scene shows clearly that the inclination and the direction of the fishing scene is related to the rock surface. The line is hanging down in relation to the place where the rock surface is virtually vertical. The elk tracks are also placed as if they are walking upwards following the rock. It seems as if the elk is coming from below, maybe after crossing the fjord, coming onto the rock surface at Forselv (see Figure 128). The knowledge of such crossing places makes this most likely a reference point to the actual place in the landscape (see chapter 4). Interpreting these figures as elks footprints makes me move to the Sletjord panel where such a figure is carved at the lower right end of the panel (See Figure 136). This is at present a known crossing place for elks and elks are also depicted on the rock surface¹³⁰. One cannot be sure that the elks crossed here in prehistory, however cervidae shows a long-term pattern when it comes to such places. This motif could then represent such a place where the elks came ashore after crossing the fjord. The steep fjordal landscape in the Ofoten area forces cervidae to cross the fjords on its migrations. The elk foot prints could then be a place where the elks come onto land acting as a reference point in the landscape related to the elks at the panel (see Figure 136). The elk figure at Brennholtet

¹³⁰ Not far from the Sletjord 2 panel local hunters gather for the annual elk-hunt.

when related to the landscape with a raised shoreline also seems to be located at a place visible from the sea perhaps showing such a crossing place for elks (see Figure 137). The landscape at Sagelva would also force the reindeer to move along the natural lines of movement.

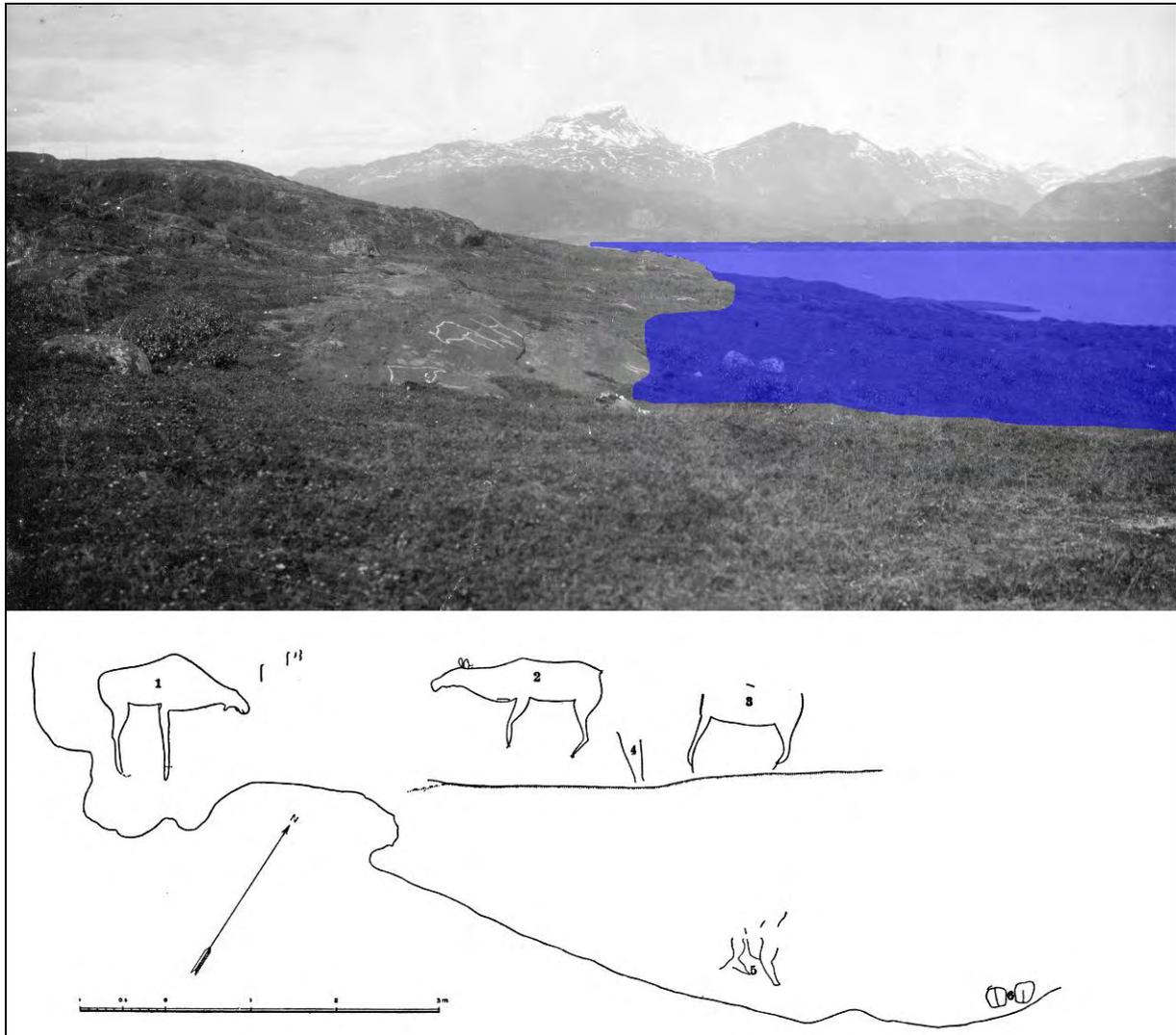


Figure 136 Tentative reconstruction of the lost relations at Sletjord 2 in relation to the figures. The elk tracks are located at the waters edge. The two elk-tracks are most likely referring to the two elks further up the panel. Notice that the elevation difference between the lowest and the highest figures are less than 2m. Background photo after Hallström archive, Umeå. Tracing after Gjessing (Gjessing 1932:plate 17). Illustration Jan Magne Gjerde.



Figure 137 The Brennholttet site with the large elk figure. The elk is depicted as if it is moving along the cliff coming onto land, perhaps after crossing the Herjangsfjord. For a tracing of the figure, see **Figure 100**. Photo: Jan Magne Gjerde.

Summary of the Ofoten fjord rock art

Based on the geological dating presuming the rock art was made in the shoreline, rock art of Ofoten covers about 8000 years with the initial polished rock art as early as 9250BC, and the last known carvings at Sletjord to about 3530BC. That means that rock art was made in the area from the first pioneers visited the area throughout the Stone Age. The time span that the carvings kept their meanings is however uncertain. The visibility of the figures at e.g. Jo Sarsaklubben, Leiknes or Valle shows that they are prominent even today.

The landscape changed much due to the rapid land uplift. At the Sagelva site, the rapid land uplift must have transformed the landscape. At 48 masl, the area in front of the panel would have been a strong tidal stream. At about 45masl, the fjord inland of the carvings would become a line of lakes and the rapids at Sagelva would have become stronger, disembarging into the Sagfjorden fjord. Later, at about 40masl, the rapids would be the main characteristic at Sagelva (See Figure 138 and Figure 139). Even if the place would change its character and loose its seashore context, it would still be related to the river / rapids. The Sagelva site could therefore remain a reference point in the landscape (See Figure 139). This can be illustrated by the dating at Sagelva where when the carvings were made, the water

level most likely was at 48masl giving a shoreline dating to c. 8200BP, calibrated with 2sigma to c. 7300BC-7080BC. Then at 45masl, the shoreline dating is c. 8100BP, calibrated with 2sigma to c. 7075BC-7055BC and at 40masl, the shoreline dating is c. 7900BP, calibrated with 2sigma to c. 6755BC-6680BC. That is, the land uplift changed the landscape, transforming the entire area with the long fjord inland of Sagelva to a lake disembarking in powerful rapids would have occurred within about a 500 year time span, maybe as rapid as 300 years changing the whole landscape (see Figure 138). This would make the long fjord a line of lakes and the tidal stream became rapids in a forceful river.

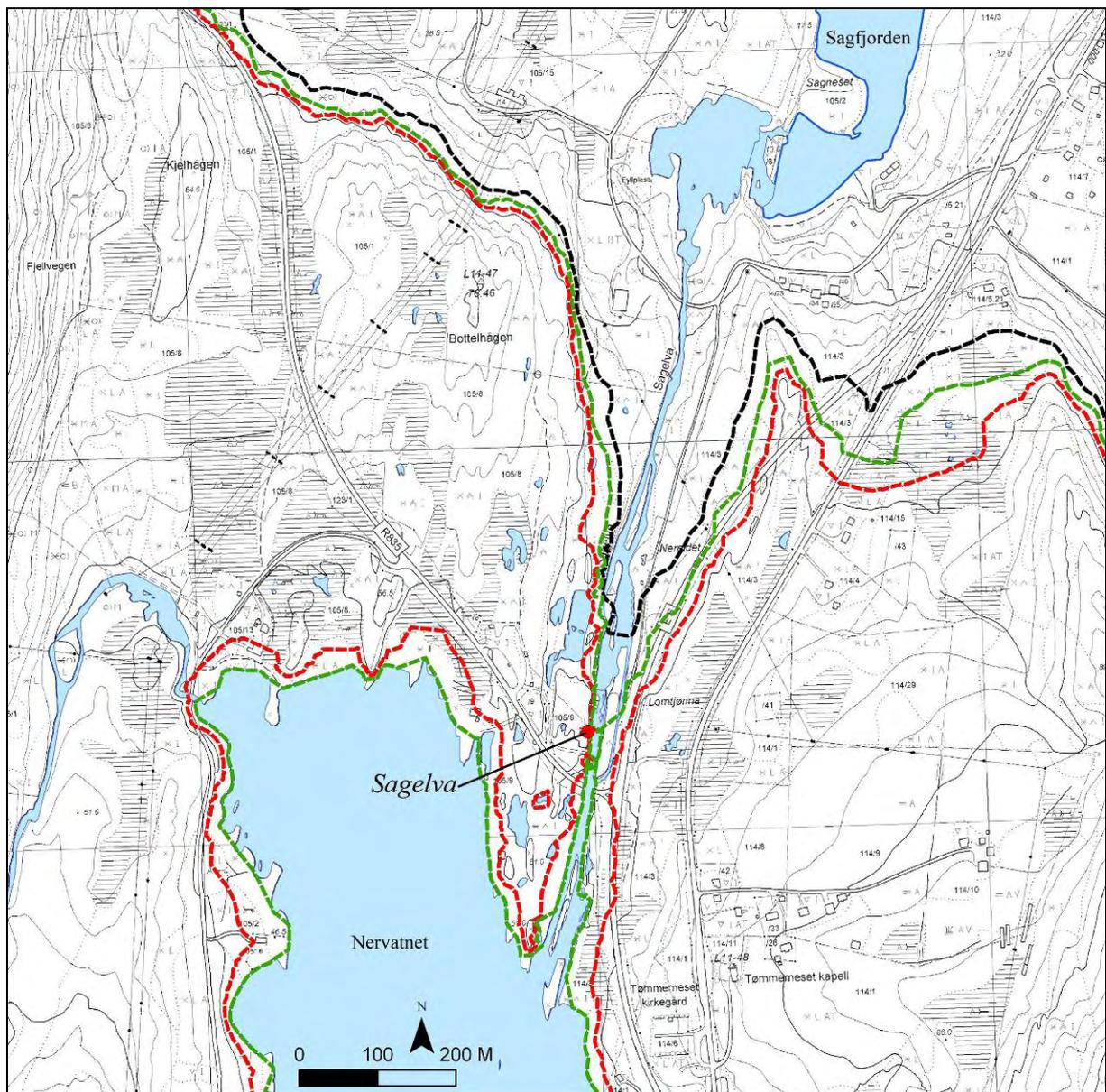


Figure 138 The Sagelva site represented with three shorelines. The red dotted line is at 48masl, the green dotted line is at 45masl while the black dotted line is at 40masl. This is to illustrate the large changes at the Sagelva site that transformed the fjord to a lake and the tidal stream became powerful rapids. Illustration: Jan Magne Gjerde.



Figure 139 The Sagelva site in 1908 before the hydro system was altered. The panel with the carvings are facing the river in the lower half of the photo. The rapids are seen in the middle of the photo. In the background, one can see the Sagfjorden fjord. Photo after Hallström archive, Umeå.

At other places where the land uplift removed the rocks from the shoreline context, new rock art were made in the shoreline, like at Leiknes and Sletjord. By reconstructing the landscape one may find favourable places for settlement in an area virtually empty of settlement sites from the Early Stone Age. The pioneer phase in this area was a time of rapid landscape change. The land uplift and the deglaciation must have been observed by the hunter gatherers entering the new land. The steep mountains entering the fjords and glaciers calving would leave few favourable places in the area. By reconstructing the past shorelines to the elevation of the carvings one see that they are located at points related to favourable places, such as secluded bays or flat areas in an otherwise steep landscape. At Jo Sarsaklubben, Nes, Leiknes and Valle this is very evident. The small secluded bay at the Nes Fort sites (See Figure 106) and at Leiknes (See Figure 109) could have been marked or socialized by the rock art as favourable places. When looking at the landscape today, more than 10000 years since the first polished rock art were made one can see that the landscape of the pioneers in the Ofoten area would have been scarcely vegetated (See e.g. Figure 104, Figure 105, Figure 110, Figure 111). When we also know that this rock art could be seen at a distance of about 300m positioned on virtually vertical cliffs, they become landscape markers.

Reconstruction of the landscape based on the land uplift data applying GIS and modern maps has shown how different the landscape would have been from today. The area

around Valle where one today is overlooking a large bay with the archeipelago would be submerged and the two panels would be located in the small bay where a small river came up beneath Valle 1. Gjessing claimed that the polished carvings were located at wild places where it was impossible to live, while the pecked carvings were located in sheltered, flatter and more convenient places, often close to arable land. According to Gjessing, the polished rock art was located at hunting places while the pecked carvings were located close by settlements (Gjessing 1945:314ff). Looking at the placing of the polished rock art sites it seems that they are located as reference points adjacent to good or favourable places for hunter-fisher-gatherers. I am suggesting that by their appearance in the landscape, being visible from a distance, they could act as reference points in the landscape referring to favourable places (see Figure 103 to Figure 105 and Figure 114 to Figure 118). The inadequate surveying for settlements in the area makes this area very interesting for future surveying, maybe giving the pioneer settlement record in the Ofoten area a fair chance.



Figure 140 The vegetation picture of the Forselv area. The location of the site is marked in red in the centre of the photo. To the right in the photo, the large Forselva river is dominant and in the upper right of the photo, the mountains more than 1700masl where the Frostisen glacier is today. Photo and illustration: Jan Magne Gjerde.

While the early sites have one or few figures (with the exception of Leiknes 1 with about 35 figures), there are no clear-cut rock art centres in the Ofoten fjord at first glance. However, at Sletjord when visited by Hallström he was given information on several sites in Sletjord area, although overgrown already at Hallströms visit in 1908 (Hallström 1938:41f). He only documented two of them. Later a third site was found. The problem at the Sletjord area is that the whole area is today virtually covered by vegetation. The same situation is found at Forselv where the whole area is covered by macro vegetation (see Figure 140). If

there is rock art on the rest of the outcrops at either Sletjord or Forselv only a large scale survey and connected excavation would uncover this. If we look at the research history at the large rock art centres like Alta and Vyg, the sites would only be made up of less than 500 figures without massive removal of soil. At Zalavruga at Vyg, north-western Russia the large scale excavation removed about half a metre of sand covering the carvings. The new finds at Forselv and Sletjord advocates for search of new rock art in the area.

Several places, the natural elements are applied as parts of the figures and acts as part of the rock art narrative, like the crack that makes out the mouth of the reindeer at Jo Sarsaklubben, or the quartz-line that visualize the waterline where the swans are swimming. By its location, the large rock art figures dated to the Early Stone Age act as reference points in the landscape by being seen from as much as 300m distance.

Alta

Rock art in Alta

Initially, the find-history of the rock art sites in the Alta-fjord-region will be presented before the main area at the head of the Alta-fjord will be presented (see Figure 141). The first rock art in the Alta-fjord region was found on a boulder in the 1938 during roadworks at the farm Leirbukt in Kvalsund. It was found at an elevation of 13,5masl from the seaweed edge, that is 14m above mean water level (Gjessing 1938:138). The boulder was water-eroded when found according to Gjessing, which indicates that is previously was located in the shore-zone.

Then the Isnestofthen site was found about 1950¹³¹ and only a few years later, the Gåshopen site was found including two boulders with carvings (Simonsen 1958:48). Then the paintings at Transfarelvdalen 1 was found in 1966 (Simonsen 1969). The Kvalsund carvings were found about 1970 (Helskog 1977:6). The large Alta complex was discovered in 1973 and onwards, and soon revealed its place as the largest rock art concentration from the Stone Age in northern Europe. The four boulders at Slettnes was found in 1991 / 1992 and is important due to its chronological relevance since they were covered by marine sediments most likely from the tapes transgression. At Langnesholmen a boulder with rock carvings were reported in 1998¹³². Then, about 2000, a painted site was discovered at Tollevik (Komsa) and the Transfarelvdalen proved to include five panels with rock carvings in the vicinity of the one found about 40 years earlier. Then in 2008 three new boulders with rock

¹³¹ <http://www.alta.museum.no/sider/tekst.asp?side=71&valgtmenypunkt=64>

¹³² The boulder is today located at Alta Museum.

art was discovered at Langnesholmen¹³³. New rock art is still found at Alta and by no means do I think the last figures to have been discovered.

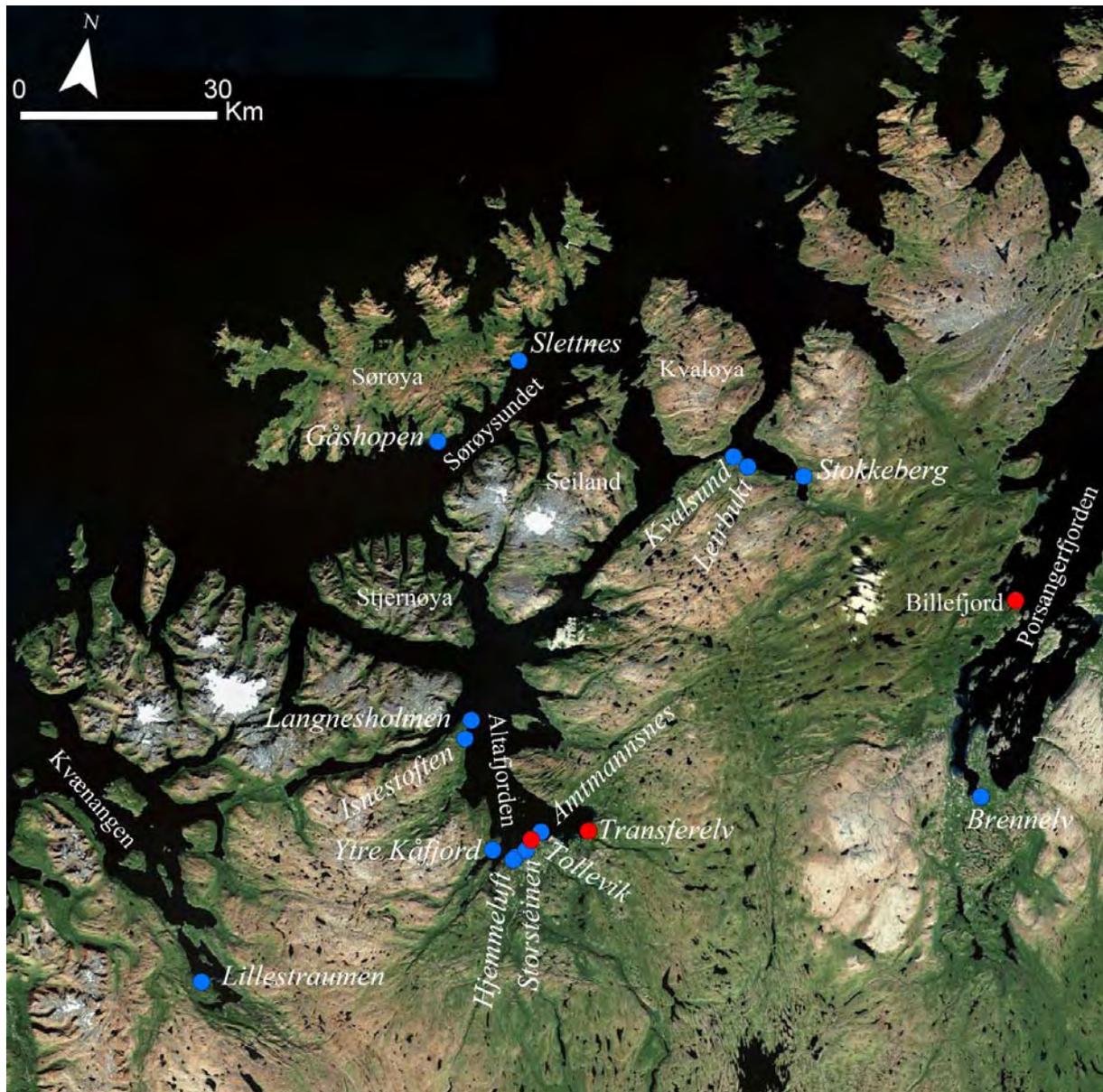


Figure 141 Map of the rock art sites in the Altafjord region¹³⁴. The carvings are marked in blue while the paintings are marked in red. The majority of the carvings are situated at the head of the Altafjord (Altafjorden). Hjemmeluft is the largest concentration. For an overview of the Hjemmeluft sites, see **Figure 169**. The rock art in the Porsangerfjorden fjord (3 painted sites and a carving) and the Kvænangen area with one carving is also marked since they are close to the Altafjord area. Background satellite photo after www.bing.com. Illustration: Jan Magne Gjerde.

¹³³ <http://www.alta.museum.no/sider/tekst.asp?side=71&valgtmenypunkt=64>

¹³⁴ Askeladden Id-nr for the sites in Figure 141: Lillestraumen (18987), Gåshopen (63596), Slettnes (101682), Langnesholmen (128690, 128692, 128693), Isnestoften (68064), Ytre Kåfjord (8163), Hjemmeluft (for the sites in the Hjemmeluft area, see Figure 169), Storsteinen (8633), Tollevik (112590), Amtmannsnes (38000), Transferelv (47688, 101457, 101461, 101462, 101463, 116260), Kvalsund (101687), Leirbukt (101686, 68492), Stokkeberg (68492), Billefjord (101820 (Sátnjaluokta), 101818 Ruksesbákti (på Indre Sandvik/Cuoppogieddi), 101819 Gálggosluokta (Ytre Sandvik)), Brennely (9283).

Looking at the adjacent fjords, known rock art is virtually absent (see Figure 141) in relation to the Alta-fjord. The large fjord east of the Alta-fjord, the Porsanger-fjord has two sites with rock art, Billefjord and Brennelv. The painted sites at Billefjord¹³⁵ was found in 2001 and 2002, while the Brennelv site was discovered in 1991¹³⁶ while the Billefjord site was discovered in 2001 (Schanche 2004:102). West of the Alta fjord is the Kvænangen fjord where one rock art site was discovered in 2000 (Grydeland 2001:84, fig. 51). The Lillestraumen site is a boulder that includes two figures. It is located in between a row of Stone Age house structures. Based on shoreline dating and the connection to the adjacent house structures it is dated to the Late Stone Age (Arntzen 2007). The distribution of sites along the Alta-fjord, and the recent finds, suggest more boulders with rock art is to be found in the area between Alta and Sørøya.

The first rock art in Alta was the painted site Transfarelvdalen 1, discovered in 1966 (Simonsen 1969). Then only a few years later, in 1973, the first rock carvings was found at Storsteinen in Alta when a blaster was called to assess the removal of the large boulder due to its location in the midst of a residence area (Helskog 1976). The discovery initiated the search for more rock art in the area. Carvings were found in the Hjemmeluft area the same year, and the following year's discoveries multiplied the material record. There are 2 sites with paintings, Tollevik with one panel and Transfarelvdalen with six panels. Then there are 10 sites with carvings with more than 6000 figures spread over 100 panels (Tansem & Johansen 2008). Parts of the large Alta material appears in numerous works (e.g. Helskog 1983; Helskog 1984; Helskog 1985b; Helskog 1987; Helskog 1988; Helskog 1989b). However, the material awaits full publication. For the Alta material, I have applied the classification of the sites and panels by Helskog (1988; 2001a; in prep), information from the Askeladden cultural heritage database at the Directorate for Cultural Heritage and VAM (World Heritage Rock Art Centre Alta Museum). Large parts of the Alta rock art was inscribed on the UNESCO World Heritage List in 1985. To make it easier to relate to the large rock art material in Alta, the reference to the different sites and panels in Alta will follow the previous system.

The carvings are located at several sites. For a general overview of the different sites with carvings in Alta, see Figure 166 and Figure 169. The Amtmannsnes site with 3 panels are treated as one area. Storsteinen is the large boulder with rock art. The Ytre Kåfjord site is

¹³⁵ Billefjord now includes three painted sites in the same area.

¹³⁶ Information from Askeladden. Askeladden is the cultural heritage database at the Norwegian Directorate for Cultural Heritage.

located at the eastern side of the Kåfjord fjord. The largest area with rock art in Alta is the Hjemmeluft area which includes 8 sites with numerous panels; Apanes, Mellom Apanes og Bergheim, Bergheim, Ole Pedersen, Bergbukten, Mellom Bergbukten og Deccastasjonen and Apana Gård. All the carved sites in Alta are all located between 8 and 26m above present sea-level (Helskog 1988).

The dominating motifs in Alta are reindeer, elk, human representations, boats and bears. But also other animals occur, such as small whales or salmon (see Figure 142). Human figures are sometimes depicted with artefacts, such as bow and arrow or elk-head sticks (see Figure 187). A large number of figures in Alta (including Hjemmeluft and Ytre Kåfjord) appear in scenes and very complex compositions. The scenes include reindeer corrals with reindeer hunting, elk hunting (Figure 187), bear hunting (Figure 143 and Figure 175), whale hunting (Figure 145) and halibut fishing (Figure 146). There are also a many representations of animal tracks and one can follow bear-tracks several places and at the most for more than 8m (see Figure 178). Human representations are depicted in many different activities, like hunting or dancing? (Figure 144). The majority of the boat figures are depicted with an elk-stem in the front of the boat.



Figure 142 The small whales or salmon diving into a water pool or a maelstrom or rings in the water naturally formed as part of the background bedrock. Previously presented by Tansem and Johansen (2008:80). Photo Jan Magne Gjerde.



Figure 143 Some of the figures at the Bergbukten I, Hjemmeluft, Alta. In the middle of the photo is the bear-hunting scene. To the middle right one see the natural feature (oval in the rock) interpreted as a bear den. The bear-tracks are recently found and thereby not visible (compare **Figure 175**). Notice how the black discolouring shows where the miniature river runs in the valley at the lower part of the photo. Photo: Jan Magne Gjerde.



Figure 144 Some of the figures at the Ytre Kåfjord site, Alta, northern Norway. In the middle of the photo a group of people is holding hands standing in a circle. In the middle of this circle could be a human figure or a bear. Photo: Jan Magne Gjerde.

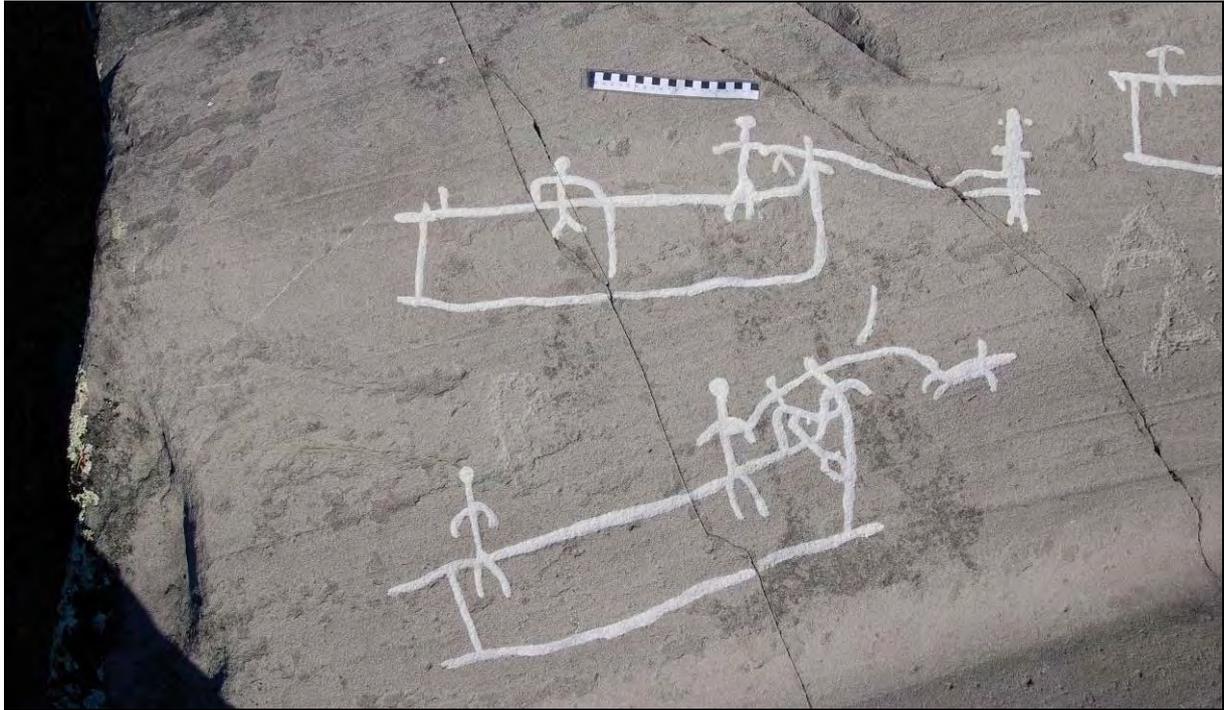


Figure 145 Photo of the whale hunting scene from Ole Pedersen 1, Hjemmeluft, Alta. The figures are filled in with white chalk during documentation. Photo: Karin Tanssem.

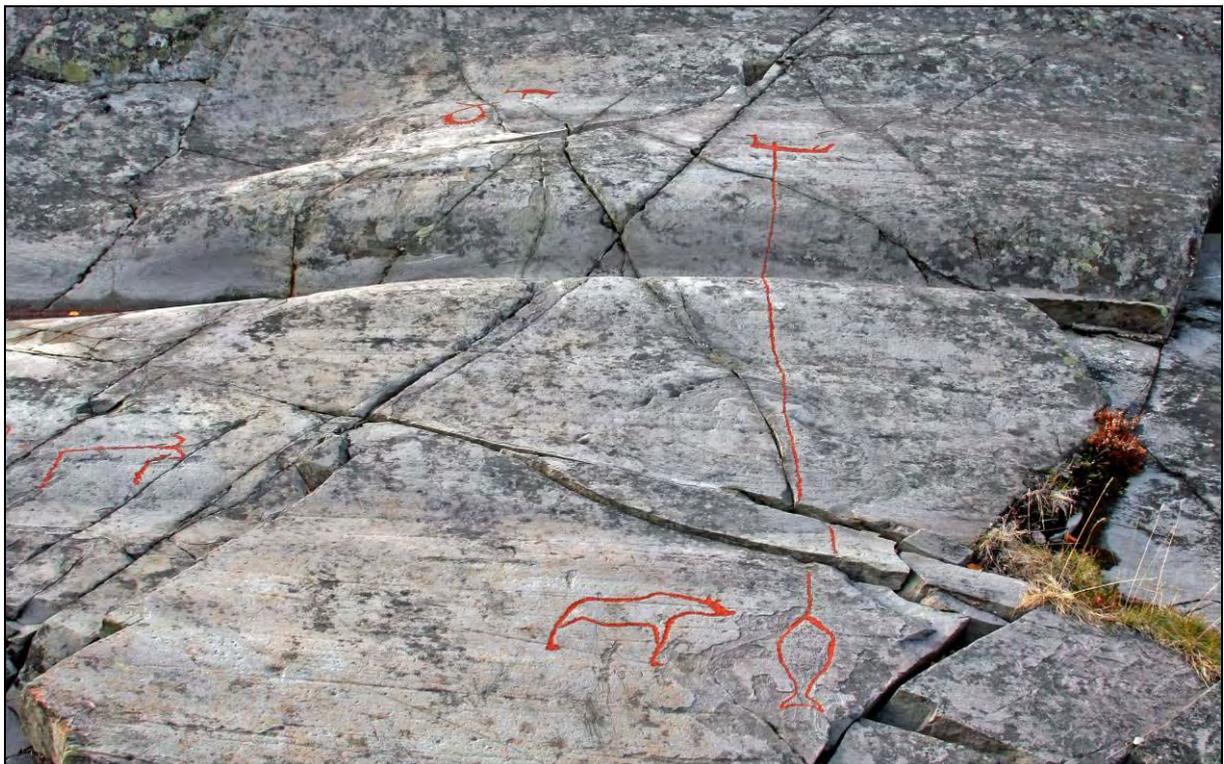


Figure 146 The halibut fishing scene at Bergbukten 4. This seems like a representation of the three worlds, the upper, middle and the lower world where the reindeer and the “necklace” is in the upper world. The people in the boat fishing in the middle world and the halibut and the elk situated in the lower world. It also brings the real aspect in as the halibut fishing is performed at deep water. Looking at all the halibut fishing scenes, this is by far the longest fishing line representing deep-sea fishing. It is also the one which is depicted furthest towards the fjord in relation to the interpretation of Bergbukten 4 in **Figure 181**. This also shows the elk depicted with the halibut in the Lower World. Photo: Jan Magne Gjerde.

Dating the Alta rock art

By statistical analysis, stylistic analysis and mainly by the shore displacement data, Helskog has through a study of the Alta material suggested a dating for the Alta material from about 4200-500BC (Helskog 1983; Helskog 1985b; Helskog 1988; Helskog 1989a). Helskog divided the Alta rock art into 4 phases (Helskog 1983; Helskog 1988:33; Helskog 1989b; Helskog 2000), mainly based on the strong sequential argument of the elevation of the carvings in the Hjemmeluft bay. The carvings at the same level above present shoreline showed a similarity in style. This is best illustrated in the Hjemmeluft area by the bear tracks and the reindeer corals that only occur at certain levels above sea, about 23-25masl (phase 1), while these scenes are not present at a higher or lower altitude (Helskog 2005).

Helskog finds the rock art phases in Alta to be contemporary the chronological phases within Late Stone Age Finnmark developed from the Late Stone Age data in the Varangerfjord-area, Eastern Finnmark (Helskog 1980). This similar dating suggestion between the rock art and the settlement record have been criticized by Olsen (1994:45-47). The “standstill” in the shore displacement curve and the similarity in the figures from Alta (Helskog’s phase 1) with the carvings at Slettnes (Hesjedal 1993a), made Olsen suggest that the carvings from phase 1 in Alta is older than Helskogs suggested dating. Hence, the earliest carvings at Alta should be dated to phase 3 of the Early Stone Age. Olsen meant that by these comparisons, the earliest carvings in Alta could be up to 2000 years older than suggested by Helskog (Olsen 1994:46-47). The carvings at Slettnes is older than the tapes maximum at c. 5000BC, hence the earliest carvings at Alta should be from the same age (Olsen 1994:45-48).

Later, Helskog has revised the dating and the phases (Figure 147), hence, “The five diachronic phases (I-V, previously called I-4B) are based on visual inspection of their geographic and altitudinal location, and statistical analysis of morphologically classified carvings, and shoreline-displacement” (Helskog 2000:7). When comparing the two presentations (Helskog 1988:32; Helskog 2000:6, figure 2), the change from earlier works is the internal dating between the phases. The new data is related to the new shoreline data, although with the same starting phase set to 4200BC in both 1988 and 2000, with a possible start as early as 4500 BC (Helskog 2000:6).

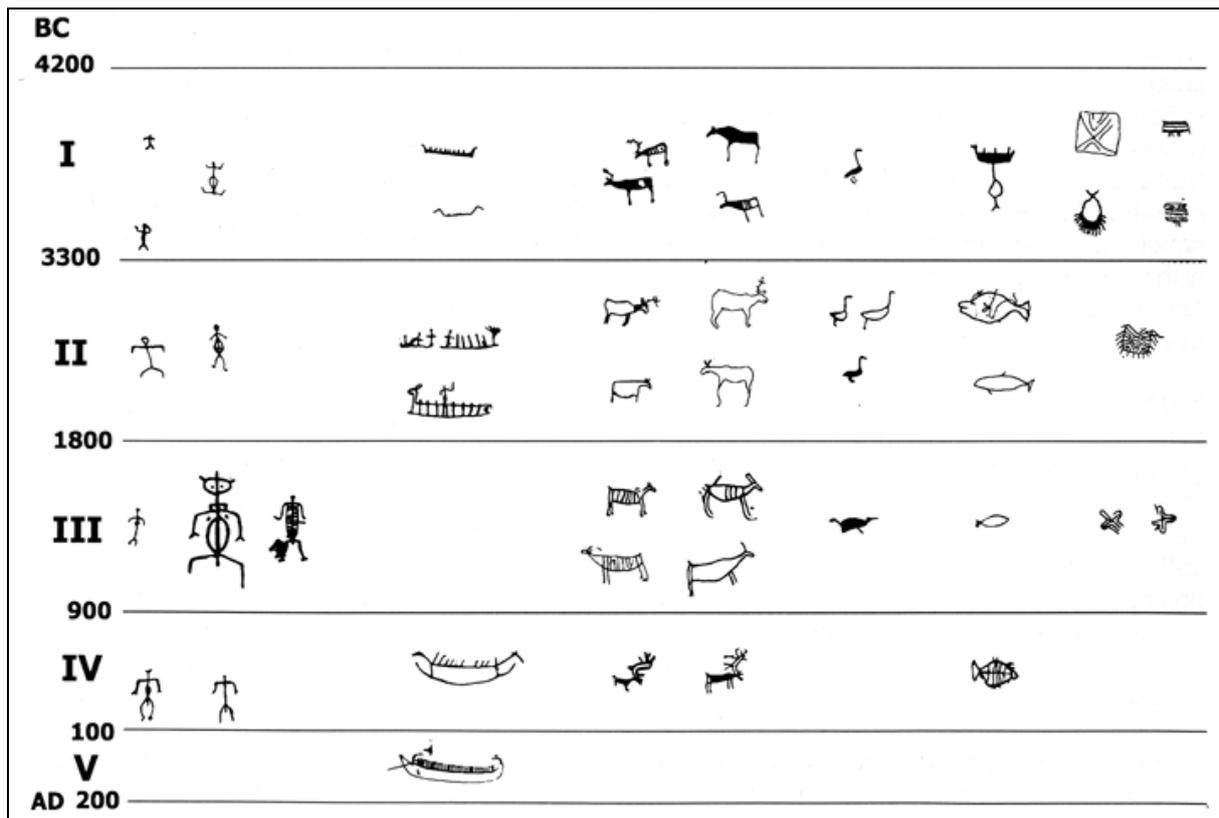


Figure 147 Helskog's chronology for the carvings in Alta as presented in Helskog (2000:figure 2).

At the large excavations at Slettnes in 1991-1992, four boulders with rock art (Slettnes 1-4) was found covered by beach sediments. The unique context makes it important for the dating of rock art in general and for the Alta material. Slettnes is a low promontory at the eastern side of the large Sørøya Island in the same fjord-system as the Alta carvings (see Figure 141). The boulders with rock art at Slettnes was situated between 11.81masl and 12.5masl (Hesjedal et al. 1993:81). The marine sediments covering the boulders have been assigned to the tapes transgression. After the deposition of the gravel by the transgression, late Stone Age dwellings were dug into the sediments (Slettnes IVB). The higher elevated Slettnes IVA area is likely to be partly contemporaneous with the rock art.

Water erosion can clearly be seen at the lower part of the Slettnes 2 boulder (Hesjedal et al. 1996:78-79; Hesjedal et al. 1993:81), see Figure 148. The eroded side of the boulder is facing the sea, which strengthens the evidence for a location at the shore when and after they were made. It has been suggested that this was a sudden transgression by a storm (Helskog 2004b), however then it is more likely that they would have been equally eroded both on the lower and higher part of the boulder. Water erosion on rock carvings seems to be the situation at several places in Hjemmeluft similar to the Slettnes situation, although not as visible (see Figure 149).



Figure 148 The boulder with carvings at Slettnes 2, northern Norway. One can clearly see that the figures on the lower parts of the boulder are more eroded than the higher elevated ones. The leg of the big elk and the bear paw is clearly more eroded than the upper parts of the elk. Photo: Jan Magne Gjerde.



Figure 149 The different erosion of the figures at Ole Pedersen 1, Hjemmeluft, Alta where the reindeer clearly is carved into the surface after the human figure. The erosion of the human figure shows that it must have been water eroded after it was made for some time before the reindeer was carved into the surface. However, the striation marks can be seen clearly as opposed to some of the higher elevated ones (see **Figure 150**). Photo Karin Tansem © VAM.



Figure 150 The polishing of the glacier marks, but not the figures. From Bergbukten 4, Hjemmeluft, Alta. One can see the furrows (remains of striation marks) going virtually horizontal in the photo. The most prevailing is the one that is seen as a line where the reindeer's antlers are. Then virtually in the middle by the big bears head is and beneath the bears in the lower part of the photo. The rock art in this photo shows most likely a reindeer and a bear with two cubs. The bear tracks is coming out of the large crevasse in the left of the photo as if it is appearing from the lower world. Photo: Jan Magne Gjerde.

The shoreline data from the computer program SeaLev (Møller & Holmeslet 1998), has proven to be problematic the further east and the further inland from the data origin one tries to apply it due to the extrapolation of the isobase data¹³⁷. We know from studies of lake sediments from 8 lakes between Kirkenes and Nikel that "... the isobase maps and previous shoreline correlations are inaccurate" (Corner et al. 1999:163). The ¹⁴C-dates from the settlement record of Varanger-fjord region indicated that the extrapolated curves in Møller (1997) were problematic. The settlement record for the Varanger-fjord fitted with the isobase 22 curve, while the extrapolation in Møller (1997) was isobase 28. The curves were extrapolated from the western coast of Northern Norway towards the east; this would mean that the isobase for the Alta-region should be adjusted. This would push the shoreline dating of the Alta-carvings even further back, suggesting an older initial phase. The data from Slettnes and Melkøya (close to Slettnes) do not show the divergence at the same level. This would indicate that the extrapolated isobases are more correct in the outer coastal regions than in the inner fjords.

¹³⁷ Jacob Møller, personal communication 2009.

The data from Melkøya, Hammerfest, northern Norway, suggests that the transgression was as early as 7000BP-6500BP (Hesjedal et al. 2010). Relating the elevation of the boulders at Slettnes with the elevation of the settlements suggest that the carvings at Slettnes 1-4 was made about 6500BP or just after during the initial regression phase. Calibrated 6500BP means c. 5485BC-5470BC¹³⁸. The dating results from the Slettnes rock art adding the excavation results and the tapes maximum date from the excavations at Melkøya and Slettnes must have implications for the dating of the Alta material.

From 2004 to 2006 an excavation was conducted in Tollevika adjacent to the rock carvings in Alta not far from the Komsa-mountain. The central result from these excavations is the Gressbakken house structure at about 16masl that is dated to the latter phase of the Late Stone Age (Helskog 1980; Schanche 1994:95-99). Activity areas were also documented nearby the house structure in Tollevika. Nine ¹⁴C samples were dated from the excavations (Bell 2004; Bell 2005; Bell 2006). Two ¹⁴C dates from Hjemmeluft have also been analysed, hence they are applied in the dating discussion. One of the ¹⁴C dates is from the area of Nummedals excavations, adjacent to the Ole Pedersen carvings (although slightly higher elevated), and the other one is from Apana Gård¹³⁹. These are also marked in Figure 151.

Since the evidence argue for a shoreline location of the rock art, the new data from the excavations combined with new information on the shore displacement and transgressions from Slettnes and Melkøya are applied to date the Alta carvings. The ¹⁴C data from the excavations are important for the dating of the Alta carvings. Even if they are few, they give us information regarding the shore displacement curve. The settlement data of the Gressbakken house and adjacent ¹⁴C dates from the midden of the house structure and activity areas are situated under the shoreline according to Møllers extrapolated isobase 27. I have therefore plotted the ¹⁴C dates from Alta (see Figure 151) and related them to the geological data from Møller and Holmeslet (1998) in Figure 151. The elevation data of the panels with rock art in Alta can be found in Askeladden¹⁴⁰. By evaluating the data presented in Figure 151 it seems like it is isobase 23-24 that would fit better to the ¹⁴C excavations at Tollevik. However, if one includes the transgression data from Slettnes and Melkøya with the Tapes maximum from Marthinussen at about 28masl, when the carvings started to be made, the data fits Møllers isobase 25. This is better in accordance with the ¹⁴C data from the area near Ole

¹³⁸ Calibrated with Ox.Cal ver 3.51 with 2 sigma

¹³⁹ The ¹⁴C date from the Ole Pedersen area was situated at 26,5masl with the date 5107±36BP and the ¹⁴C date from Apana Gard at 12masl was dated to 2138±32BP (Knut Helskog personal communication 2009).

¹⁴⁰ Until 2006 the data could be found in the Rock Art Database by the Directorate for Cultural Heritage, however they are now included in the Askeladden Database of Norwegian Cultural Monuments.

Pedersen in the Hjemmeluft area and the excavations by Nummedal adjacent to the Ole Pedersen 1 site.

Since the majority of the carvings are above the elevation of the excavations, I have showed in Figure 151 that by applying Mølles isobase 27, the activity areas in Tollevika would be submerged. When the house structure is located at 16masl, it is not likely that the mean-water level at the time of the house would be higher than 13masl based on the high tide and the topographical setting of the house structure in Tollevika. I have applied a reading of the rock carving material based on isobase 25 from Figure 151 presented in Figure 152 which presents a new dating suggestion for the carvings in Alta.

The data from the excavation are very interesting in relation to the dating of the Alta carvings. This also shows that we need to perform more excavations and compare the data with the geological data to get a better dating suggestion for the carvings assuming the were shore related. Helskogs divisions of the phases are well accounted for. The new dating does only change the internal dating between the phases. The relative chronology still can be argued for in the line of Helskogs divisions. With the new dating suggestion for the Alta material, the carvings from phase 1-3 can be dated to the Stone Age (see Figure 152) with the initial carvings in the Hjemmeluft area dating to about 5200BC.

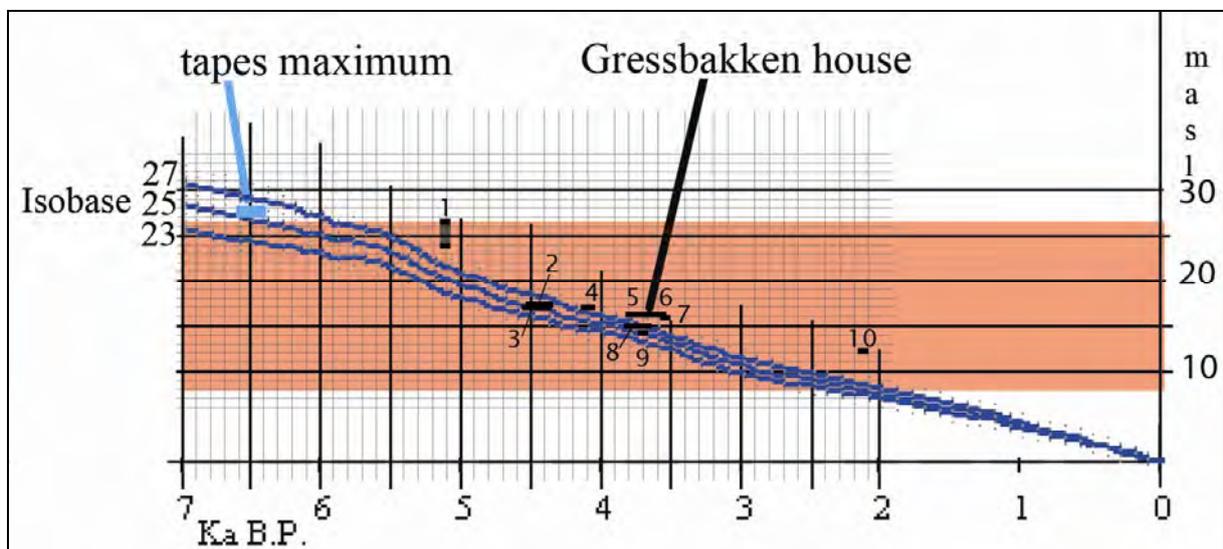


Figure 151 Dating suggestion for the Alta carvings. Shoreline data after Sealev 32 (Møller & Holmeslet 1998), where isobase 23, 25 and 27 are marked. The current isobase 27 and the suggested isobase 25 are applied in the dating discussion for the Alta carvings. Tapes maximum after Tanner and Martinussen marked with blue (Marthinussen 1945; Marthinussen 1960; Tanner 1906:114, plate 4). ¹⁴C data after Bell (2004; 2005; 2006). from the Tollevika area, number 2-9 and Helskog (personal communication 2008), number 1 from Ole Pedersen area in Hjemmeluft and 10 from Apana Gård area in Hjemmeluft, are marked with black lines including the deviation. ¹⁴C data: 1: 5107±36BP, 2: 4455±90, 3: 4463±114, 4: 4120±44, 5: 3747±92, 6: 3638±55, 7: 3546±40, 8: 3744±82, 9: 3700±40, 10: 2138±32. The ¹⁴C samples from the Ole Pedersen area at 26.5masl is part of the same settlement excavated at 24masl, hence the elevation difference is marked for ¹⁴C number 1 in the illustration. The Gressbakken house had four ¹⁴C dates: number 5 and 6 is from the fireplace, number 7 is from

the house floor and number 9 is from the midden. Elevation of the carvings in Alta marked in light red based on Helskogs data (Helskog 1983). Illustration: Jan Magne Gjerde.

Based on the adjustment of the shore displacement curve one can assume that Møllers isobase 24 or 25 will be “right” when dating the Ytre Kåfjord site. The carvings at Ytre Kåfjord is made between 18 and 26masl. Being aware of the pitfalls by applying Møllers isobases, I have applied isobase 24 based on the tendency from Alta. The dating of the figures at Ytre Kåfjord is then based on shore displacement at isobase 24, between 18 and 25masl. Since the highest figures are at 26masl one can assume that they are made when the mean water level was about 25masl. That relates more to the highest section of the Ytre Kåfjord site (see Figure 155). Even if it can be argued that the figures at Ytre Kåfjord is slightly older than the figures in the rest of the Alta material, the difference is minor and with the precariousness of the geological data and the scarce ¹⁴C dates from Alta, I will when discussing the Alta material apply the dating suggestion from (Figure 152).

| Phase | | Masl | Reading isobase 25 from BP | Dating with new data. Calibrated with OxCal | | New dating suggestion BC |
|----------|----------|---------|----------------------------|---|------------------------|--------------------------|
| | Helskog | | | 68,2% BC | 95,4% BC | |
| 1 | I | 22-25.5 | 6200-5400 | 5220-5070 4325-4255 | 5220-5070 4330-4240 | 5200-4200BC |
| 2 | II | 17-21 | 5300-4400 | 4230-4050 3090-2940 | 4230-4040 3090-2920 | 4200-3000BC |
| 3 | III | 14-17 | 4400-3700 | 3090-2940 2135-2040 | 3090-2920 2140-2030 | 3000-2000BC |
| 4 | IV (IVA) | 11-12.5 | 3400-3000 | 1740-1685 1290-1210 | 1745-1680 1305-1210 | 1700-1200BC |
| 5 | V (IVB) | 8.5-10 | 2900-2200 | 1115-1050 360-200 | 1130-1025 360-200 | 1100-200BC |

Figure 152 New dating suggestion for the Alta carvings applying isobase 25. Dating suggestion based on the data from the large Melkøya and Slettnes excavations in relation to the geological data and the elevation of the carvings in Alta. The different phases are based on Helskogs division according to elevation (Helskog 1983).

The reading from Møller adjusted by the data from Alta, Melkøya and Slettnes shows a tendency that the carvings at Ytre Kåfjord was made between 5300-3500BC. Some of the

carvings may have been made later, since this is the maximum dates based on the shoreline data. The Ytre Kåfjord site shows similar traits (bear-tracks and reindeer corrals) with the Hjemmeluft phase 1 and seems to be contemporary with the Hjemmeluft phase 1. The highest figures at Kåfjord is then the oldest carvings in the inner region of the Alta-fjord. The carvings at Ytre Kåfjord could then be related to Helskogs phase 1 and phase 2. Although, when comparing the carvings from Ytre Kåfjord with the rest of the Alta material, some seem to belong to Helskogs phase 3. One of the figures that occur at Storsteinen, in Ytre Kåfjord and at Amtmannsnes is a cross-shaped figure. In Hjemmeluft this figure do not occur in phase 1 or in phase 2. Thereby, as suggested by Helskog, it occurs at Amtmannsnes that is dated to phase 3, this motif belongs to phase 3. At Ytre Kåfjord a superimposition that suggest that this cross-shaped figure was the latter figure in the superimposition (see Figure 154). However, it may also indicate that the cross-shaped figure was made in phase 2 and phase 3. The elevation of the scene with figures most likely from phase 2 at Ytre Kåfjord (see Figure 155), is located at about 22masl.

The Storsteinen boulder has a diameter of c. 7.8m and the top surface is c. 50m². The tilted surface is situated between 21 and 22masl. The sides of the large stone are virtually vertical. It would have a drop on the lower side of the stone (facing the ocean) of c. 4m and on the upper side of c. 1.5m. This suggests that Storsteinen boulder would have been located in the tidal zone between 17masl and 22masl. This could explain why we find figures from phase 1, 2 and 3 superimposed on the boulder. This also suggest that carvings were made on the boulder during 2-3000years. The frequency of superimposition and “layers” of figures has been carved on top of each other distinguishes this panel from the rest of the Alta material.

The carved surfaces at Amtmannsnes are situated between 14masl and 17masl. Hence, Amtmannsnes belong to Helskogs phase 3. The Amtmannsnes panels show a vast amount of superimposition. The superimpositions that occur more frequent at Amtmannsnes, in Kåfjord and not the least at the Storsteinen site suggest that these panels has a long period of use. While new suitable coastal rock slopes appeared in Hjemmeluft, this was perhaps not the case at Kåfjord and surely not in the Storsteinen area (see Figure 163).

Based on the current dating suggestion, the rock carvings in Alta was made between c. 5300BC and 200BC. The status when it comes to dating the sites in Alta is still founded on Helskogs works on the dating of the Alta material. Although the initial phase has been moved backwards due to new information changing the geological dating suggestion. For the Stone Age rock art in Alta material, I will sum up the dating suggestion in Figure 153.

| Site / Area | Masl | Figures belonging to Helskogs phase | Dating suggestion BC |
|--------------|---------------|-------------------------------------|-----------------------------|
| Ytre Kåfjord | 18-25 | 1,2,3 | 5300-3000BC |
| Hjemmeluft | 8-25 | 1,2,4,5 | 5200-3400BC and 1700-2000BC |
| Storsteinen | “17-22” 21-22 | 1,2,3 | 4200-3000BC |
| Amtmannsnes | 14-17 | 3 | 3000-2000BC |

Figure 153 Summary table of the dating suggestion for the Alta material. Since the limit of my PhD is the Stone Age, the panels from phase 4 and phase 5 in Hjemmeluft will not be further discussed. The highest carvings are situated at 26masl, I apply 25masl when dating the oldest. The Storsteinen would have been connected to the shoreline between 17 and 22masl. However, the carvings are made between 21 and 22 on the falt surface at the top of the large stone.

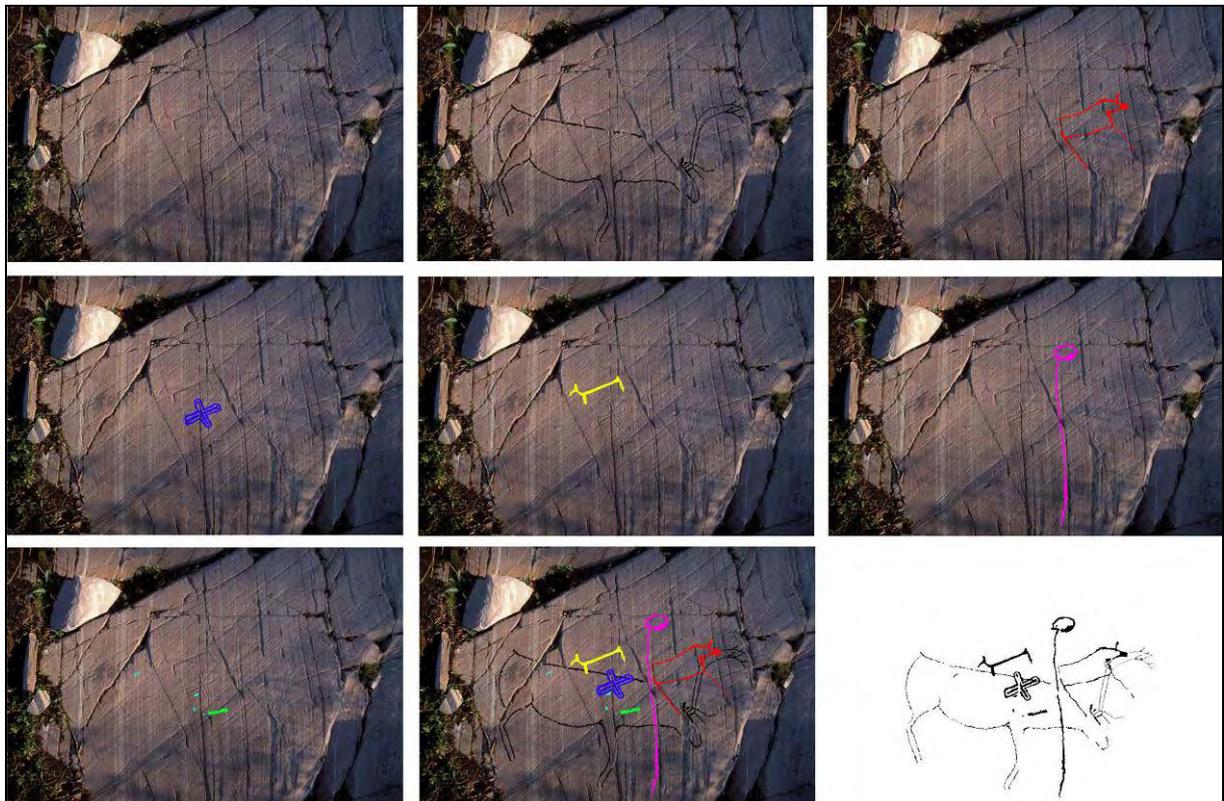


Figure 154 Section of the Ytre Kåfjord panel where superimposition is presented. One can also see how a traditional tracing appears compared to the steps interpreted from *on site* studies of the superimposition. The top left photo shows the rock surface with no markings. The photo is taken early morning to get the right angle of the sunlight to better see the figures. By comparing the tracing from the scanning (see **Figure 155**), it looks like the long line is a fishing line and the figure depicted as a “circle” looks like a boat. Photo and illustration: Jan Magne Gjerde.



Figure 155 Documentation of the Ytre Kåfjord site with elevation marked roughly. One can see how the scenes and compositions roughly fall within 2m in elevation even though they horizontally could run for more than 8m. The scale in the upper left of the illustration measures 1m in total. Illustration Karin Tansem © VAM.

Macrolandscape and microlandscapes of Alta

Macrolandscape

When studying the rock art of Alta in relation to the macrolandscape, the Alta-fjord is central with numerous rock art sites along the fjord (see Figure 141). While the rock art at the head of the Alta-fjord is found on what was once coastal rock slopes, the rock carvings along the Alta-fjord is found on boulders. A recent study of the boulders with rock art in this region showed that the boulders shares similar traits with the rock art in Alta when it comes to motifs and dating (Arntzen 2007). The similarity in motif and style with the Alta material suggest the sites should be discussed in relation to the Alta site. The relative nearness of the sites (within a distance of 75km or less) to the head of the Alta fjord and the dating suggestion to the Late Stone Age (except Gåshopen) strengthens their relation to the large Alta site. Looking at the Altafjord as a major route of communication, they are related. Like the rivers, the fjords and the coast would have been major highways in the Stone Age; the Alta fjord seems to have been one of these Stone Age highways. The distance between the Kvalsund site and the head of the Alta-fjord with the Alta sites is c. 70km as the crow flies and c. 85 km by boat along the coast. The distance between the Slettnes site and the head of the Alta fjord is c. 70km as the crow flies and c. 82km by boat following the coastline. Between the head of the Alta-fjord and the Langnesholmen, the distance is merely 22km in a straight line in the Alta-fjord. Between Slettnes and Kvalsund, the distance is c. 35km as the crow flies and c. 45km by boat. When tilting the land in Google Earth it becomes evident how these sites are related through natural lines of communication and short distances. Comparing the Alta-fjord region in Figure 156 and Figure 157, it becomes evident that both the fjords and the valleys in the inland seems to form a funnel directing movement through the head of the Alta-fjord. The many boat depictions in Alta could describe journeys along the Alta fjord.

The numerous Stone Age settlement sites along the Alta-fjord shows that this was an attractive area during the Stone Age. The recent excavations at Slettnes (Hesjedal et al. 1996) and at Melkøya (Hesjedal et al. 2010) shows that the material record is extremely rich. The large number of carvings at the head of the Alta fjord have led scholars suggest that Alta was a meeting place for people in the Late Stone Age, a place for different kinds of social interaction. Based on ethnographic data, Alta is interpreted as a central place connection inland and coastal groups (Hood 1988). All the rock art sites will not be discussed in detail. Due to the material record, context and related finds, the Slettnes site will be discussed further before moving on to the carvings at the head of the Alta-fjord.



Figure 156 The relations between the sites in the Alta-fjord. The landscape is tilted in Google Earth. Thereby distance relations are distorted. The sites from the Porsanger-fjord and Kvænangen are also shown on the satellite photo. One can here see how the tributary fjords are channelled into Alta and the Alta-fjord. For the distance between the sites, compare with **Figure 141**. Illustration: Jan Magne Gjerde.



Figure 157 The relations between the sites in the Alta-fjord. The landscape is tilted in Google Earth. Thereby distance relations are distorted. The sites from the Porsanger-fjord and Kvænangen are also shown on the satellite photo. One can here see how the tributary fjords are channelled into Alta and the Alta-fjord. Looking at the macrolandscape from the inland, one can also see that the communication lines are funnelled into the Alta fjord. For the distance between the sites, compare with **Figure 141**. Illustration: Jan Magne Gjerde.

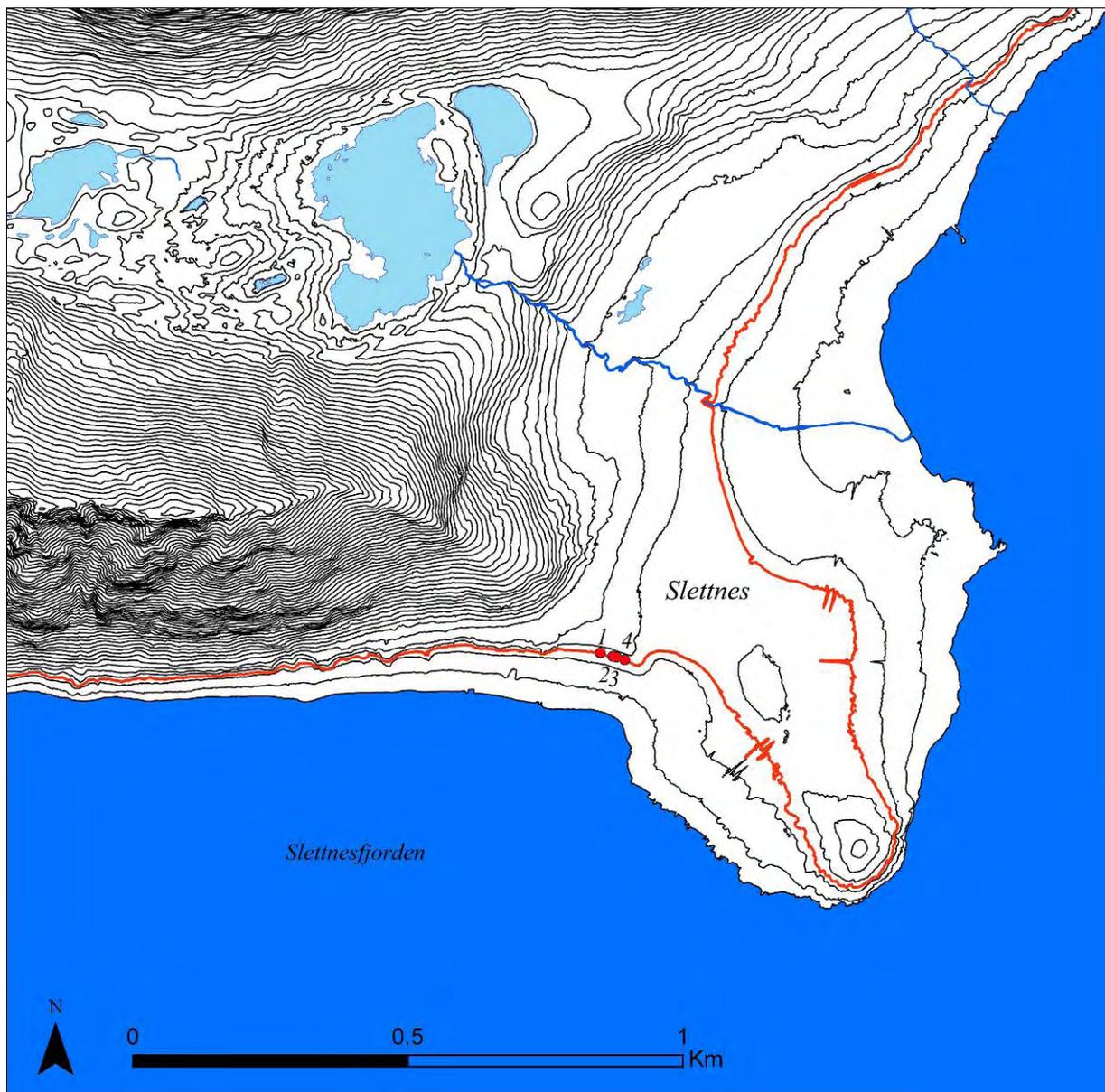


Figure 158 Map of the Slettnes area. The four boulders with rock art is located at the southern side of the Slettnes Peninsula marked with red dots and site numbers. The Slettnes 2 and Slettnes 3 site is only a couple of metres from each other, hence their location becomes virtually the same at this scale (see **Figure 159**). The area where the carvings were located is defined as Slettnes IVB, while the area on the terrace above the boulders are defined as Slettnes IVA. The data suggests that the carvings are associated with the settlements at Slettnes IVA (Hesjedal et al. 1996:65). The red line marks the 12masl line. Contour lines at 5m interval. Illustration: Jan Magne Gjerde.

Slettnes is situated about 70km north from Alta as the crow flies. Following the coastline, the distance by boat from Alta to Slettnes is c. 82km. Slettnes is located on the northern side of the Slettnesfjorden fjord. This is one of the small fjords on the eastern side of the large Sørøya island (see Figure 141 and Figure 158). The Slettnes site consist of four boulders with carvings. The boulders are located between 11.81 and 12.5masl (Hesjedal et al. 1993:81). The Slettnes 1 boulder has 8 figures including two small whales, one reindeer, two

elk representations, a figure that resembles the elk head boats and a V-shaped figure. Slettnes 2 has 25 figures. There are elks, bears, bear-feet, elk-head boats, human representations, a figure that appears to be an elk-head stick, a bird (most likely a cormorant), geometrical and indefinable figures. Slettnes 3 includes two reindeer figures while Slettnes 4 has 22 figures. Amongst them are bears, elks, bear-feet, boats, human representations, a hare and a bird¹⁴¹ (Hesjedal 1993a; Hesjedal et al. 1996:75-82). The boulders were covered by marine sediments most likely connected to the tapes transgression. The settlement record suggests that the area that the boulders were found in (Slettnes IVB) was dug into the area after the transgression. Thereby I find it more likely that the settlements within the Slettnes IVA area should be connected to the boulders with rock art. While the Slettnes IVA area was used throughout the Early Stone Age, the ¹⁴C data indicates settlements in the Slettnes IVA area that is contemporary with the boulders with rock art (Hesjedal et al. 1996:65).

The Slettnes area shows that the settlements and the rock carvings are situated in the same area. This is relevant since most likely the activities at Slettnes were also most likely shore-bound. A similar location for the activities at Slettnes can be found amongst the Inuit (see Figure 48). Even though there is no rock art in the ethnographic example it visualizes how the settlement and activities were shore-related.

Reconstructing how the boulders at Slettnes (see Figure 159) would have appeared in the shoreline has been done at a similar topographical situation in the present day landscape in Tromsø (see Figure 160 and Figure 161). With the difference in sea-level due to the tidal difference one can see how boulders become islands at high tide. The boulders could have represented islands, then possibly acting as geographical references. The boulders would also be situated in the liminal area between the worlds where they would be covered by water at high tide, while during low tide be available.

¹⁴¹ Askeladden ID-nr 101682.



Figure 159 The site Slettnes 2 (white arrow to the left) and Slettnes 3 (white arrow to the right) today. Photo: Jan Magne Gjerde.



Figure 160 The situation at the boulders near Tromsø when the boulders would have been in the upper tidal area. The photo is taken at mean water level. The example is not of boulders with rock art. However, the boulders is located in the shoreline like the boulders at Slettnes most likely would have been situated in the upper tidal zone. Photo: Jan Magne Gjerde.



Figure 161 The situation at the boulders near Tromsø march 2009. The left photo is at low tide, the middle photo is the situation at mean water level and the right photo is at high tide. The example is not of boulders with rock art. However, the boulders are located in the shoreline, as the boulders at Slettnes most likely would have been situated in the upper tidal zone. Photo and illustration: Jan Magne Gjerde.

After the deglaciation, the landscape at the head of the Alta-fjord gradually changed when the sea-level gradually receded freeing new coastal rock slopes in Alta. When the initial carvings was made, the sea-level at the head of the Alta-fjord would have been about 25 metres above present sea level (see Figure 167).

Since the Alta site is situated close to the town Alta, and was discovered fairly recently, the probability of archaeological remains being destroyed is evident (Helskog 1988:26). The Alta settlement has removed some of the relations between the settlement record with house-structures and the rock art. This can be seen in the area between the Komsa mountain and the Amtmannsnes site where the Stone Age house structures are removed due to the planning and construction of modern residential areas (see Figure 165). The Hjemmeluft and Amtmannsnes areas are attractive areas for residential planning, but due to the process that lead to the important decision to enlist large parts of the Alta rock art on the UNESCO World Heritage List in 1985 there has been minor development within the rock art area. It has in fact been crucial when compared to the worst case scenario with archaeological eyes: that the whole area would have been freed and developed for residential purposes. An example of how much the area has changed due to residential activity can be seen in the Storsteinen area (compare Figure 163 with Figure 164). By no doubt the head of the Alta-fjord would have had many settlements. We know this from the finds of house structures near the rock art sites adding to the few excavations performed in the area. Early aerial

photographs also shows that areas that today are “destroyed” contained house structures most likely dating from the Late Stone Age (see Figure 165).

For the Hjemmeluft area, which is the central area of rock art in Alta, there are several places with settlements from the Stone Age. At Saltvikneset, the point to the left of the Hjemmeluft bay, a Stone Age settlement was excavated by Nummedal¹⁴². This was located at 27masl (Nummedal 1929:35f). The elevation of this settlement suggest that it was contemporary with the initial carvings in the Hjemmeluft area in Alta. The material at the Stensvik settlement suggest that it belongs to the latter phase of the Early Stone Age. In Hjemmeluft, there have been excavations close to the panel Ole Pedersen. This is discussed in the dating part of this case study. There are also house structures¹⁴³, beneath the main building at Alta Museum, at about 30masl. Excavations have been conducted at Apana Gård. Since the Apana Gård material is younger than the Stone Age, that material is relevant for the rock art at Apana Gård, but not within the chronological scope of this thesis.

When reconstructing the landscape by raising the shoreline to 25masl at the head of the Alta fjord, the most noticeable change is the long fjord that today is the Alta River. This then becomes the *Alta River fjord*. The area west of the Alta River fjord then becomes a large Peninsula, the *Komsa Peninsula*. The carvings in Ytre Kåfjord and at Hjemmeluft (Bergbukten and Ole Pedersen) was the initial places where carvings were made (see Figure 167). As new rocks appeared, new carvings were made at Ytre Kåfjord, Hjemmeluft, Storsteinen and during the latter phase at Amtmannsnes. At about 2000BC, when the seashore was located about 14masl (see Figure 166), carvings were made in Hjemmeluft and at Amtmannsnes. For a better spatial understanding of the making of rock art in Alta compare the dating suggestion presented in Figure 151 and Figure 152 with the maps in Figure 166 and Figure 167. The large Alta River fjord would have been a main characteristic and a Peninsula with the Komsa mountain located at the point of the “*Komsa Peninsula*” would have and still is a landmark in the Alta area. The Komsa-mountain is also connected to myths and stories and is regarded a “holy mountain” by the Saami. From the Komsa mountain one has a view of the Alta-fjord (Figure 162) and inland the Alta River valley (Figure 168). There are no known rock carvings in the Alta River area. The land next to the *Alta River fjord* would consist of moraine masses, hence; “few” rock slopes in the area to make rock art.

¹⁴² Askeladden Id-number 57409.

¹⁴³ Askeladden Id-number 74198.

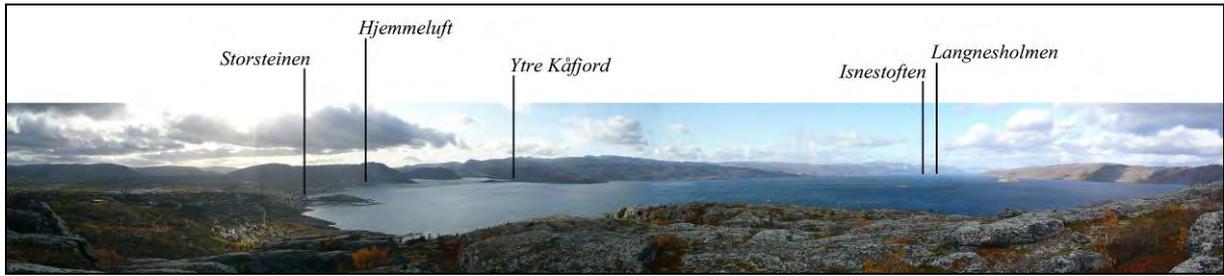


Figure 162 Compiled photos of the view from the Komsa mountain which would have been the point of the Komsa Peninsula with a raised shoreline to c. 25masl. The spatial understanding and geographical knowledge would be easier perceived from mountains like the Komsa-mountain. Photos and illustration: Jan Magne Gjerde.



Figure 163 The Storsteinen area in 1882. The Storsteienn boulder can be seen to the middle left in the photo right of the top of the mast of the boat to the left in the photo. Photo from Alta Museum / Norwegian Directorate for Cultural Heritage.



Figure 164 The Storsteinen area in today (2003). The Storsteinen boulder is located in the centre of the photo beneath a white house marked with red arrow. Photo and illustration: Jan Magne Gjerde.

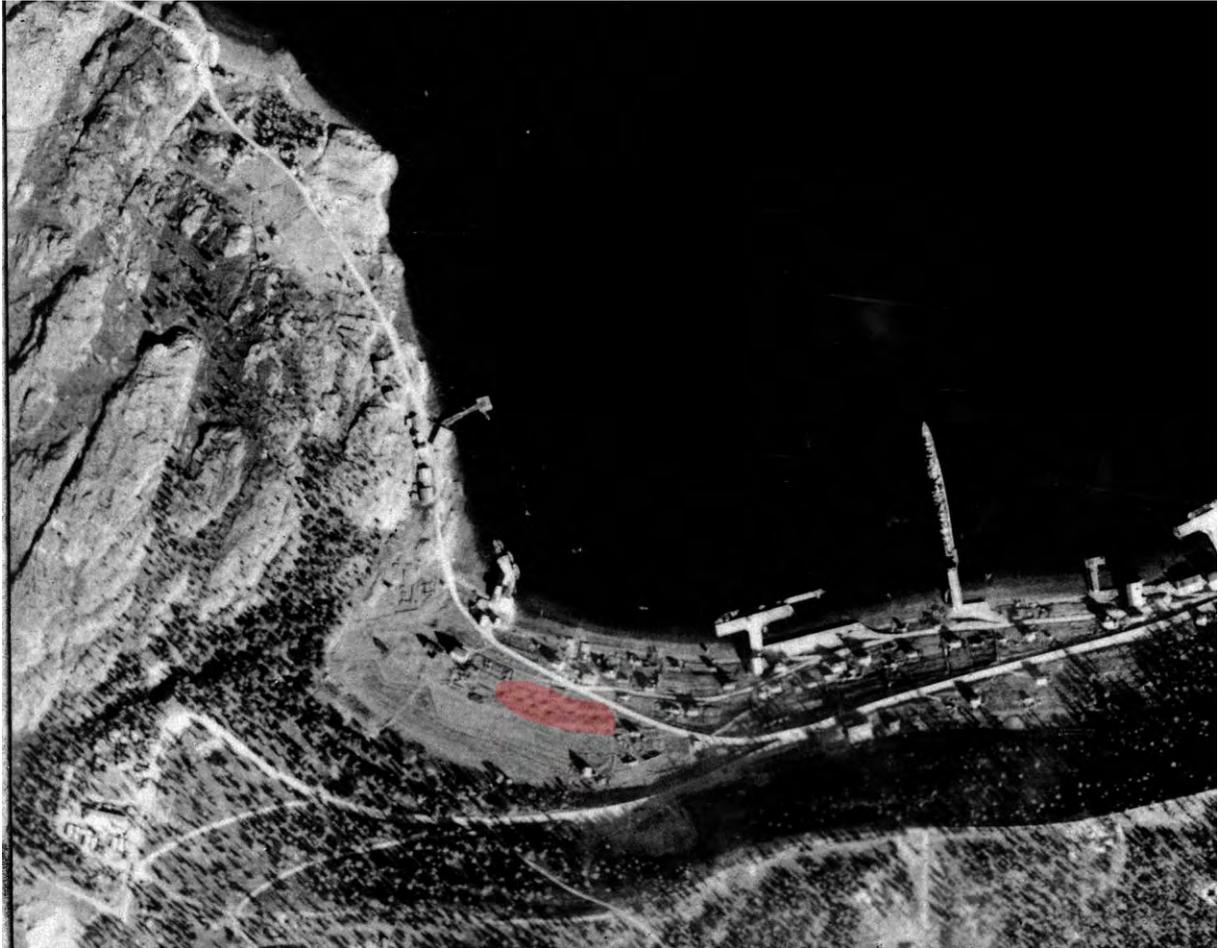


Figure 165 The area Bukta beneath the Komsa mountain near Amtmannsnes at the residential area before the area with archaeological eyes was “destroyed”. One can see the house depressions. The area is now a fully developed residential area. The farmstead in the upper left section of the photo is the Stenseng area with Early Stone Age sites. Photo with kind permission Alta Kommune. Illustration: Jan Magne Gjerde.



Figure 166 Map of the rock art sites at the head of the Alta-fjord. The carvings marked with green dots and the paintings with red dots. The red line is placed at 25masl. This is to illustrate the landscape at the time of the first carvings. Contour lines at 50m. Notice how the Alta river becomes a massive flat riverine landscape, virtually like a tiny fjord stretching more than 10km inland compared to the present landscape. The “Komsa Peninsula stands out in the landscape with the Komsa mountain and is located between the Kåfjord fjord in the west and the Alta River fjord in the east. Notice the small island east of the Ytre Kåfjord site (at present named Auskarnes) The point west of the Hjemmeluft Bay is the Saltvikneset. Illustration: Jan Magne Gjerde.

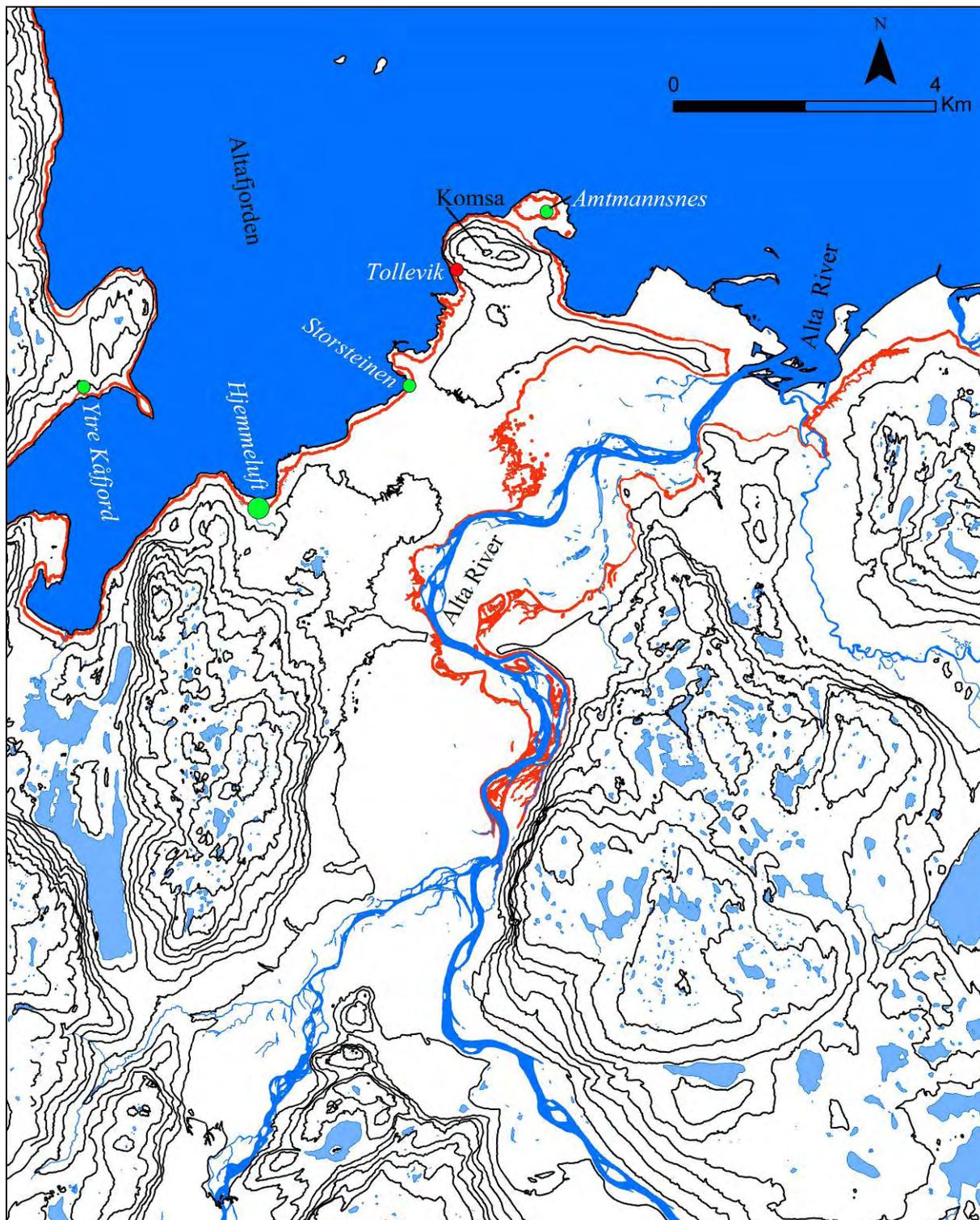


Figure 167 Map of the rock art sites at the head of the Alta-fjord. The carvings marked with green dots and the paintings with red dots. The red line is placed at 14masl. This is to illustrate the landscape at about 2000BC. Contour lines at 50m. Notice how Alta river still is a massive flat riverine landscape, virtually like a tiny fjord stretching about 8km inland compared with the present landscape. The “Komsa Peninsula” now has a flat area in north of the mountain where the island “Amtmannsnes Island” is located where the Amtmannsnes Peninsula is located today. The “Komsa Peninsula” is still situated between the Kåfjord fjord and the “Alta River fjord”. Illustration: Jan Magne Gjerde

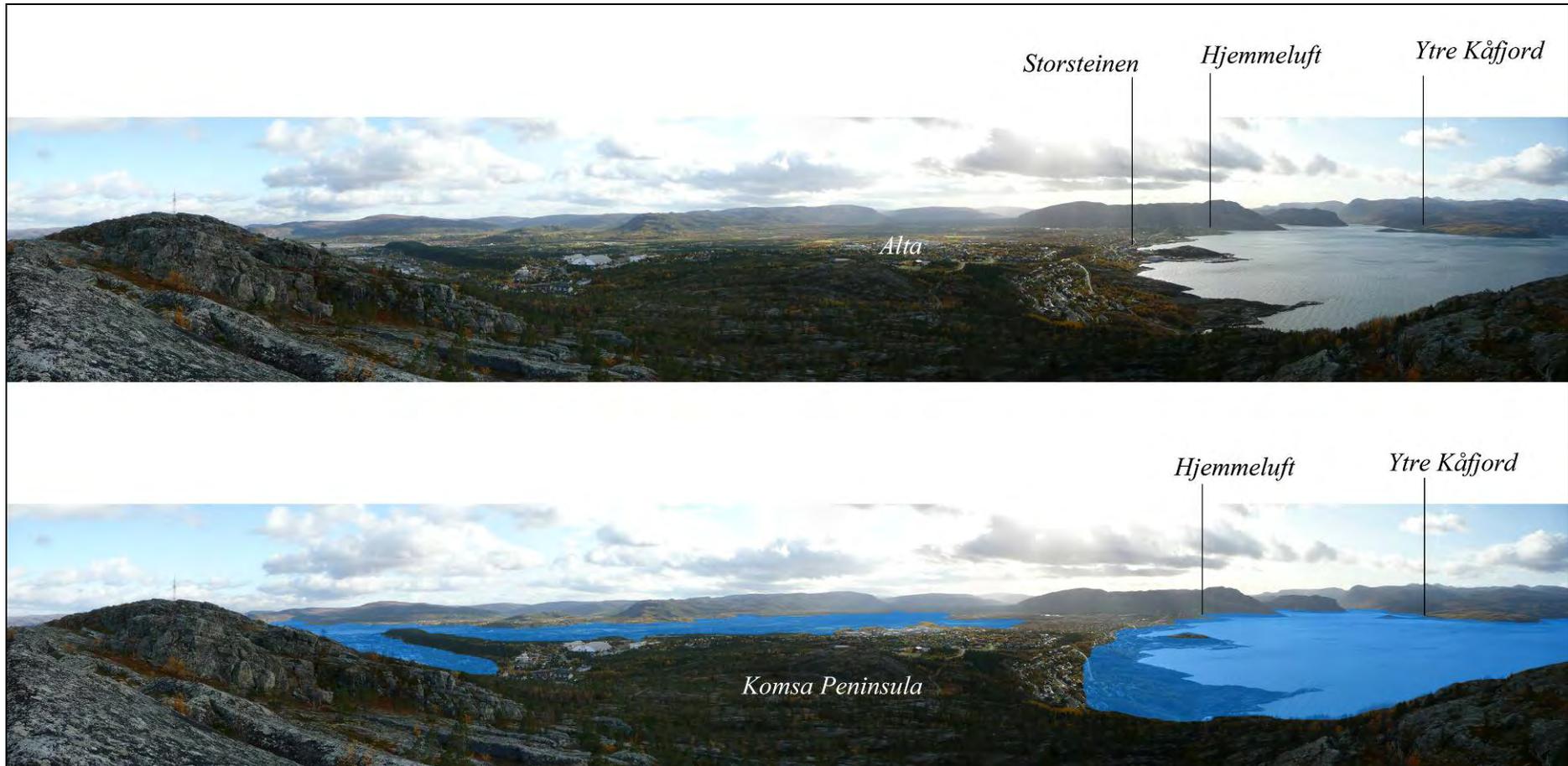


Figure 168 Top photo, compilation of 7 photos from the Komsa mountain. Bottom photo: reconstructed sea-level based on the reconstructed sea-level in **Figure 166** compared to the compiled photo. Bottom photo: Tentative reconstruction of the landscape where the sea is placed like it was at the initial carving phase at 25masl, at about 5200BC. One can then see the Alta River fjord to the left, leaving the *Komsa Peninsula* between the *Alta River-fjord* and the head of the *Alta-fjord*. The two first places where carvings were made in Alta are at Hjemmeluft and at Ytre Kåfjord. At the carvings at Ytre Kåfjord, the fjord today is named Kåfjord as a small tributary to the Alta fjord. Notice the Auskarnes promontory that then was a small island west of the Ytre Kåfjord site. (see **Figure 141** and **Figure 166**).

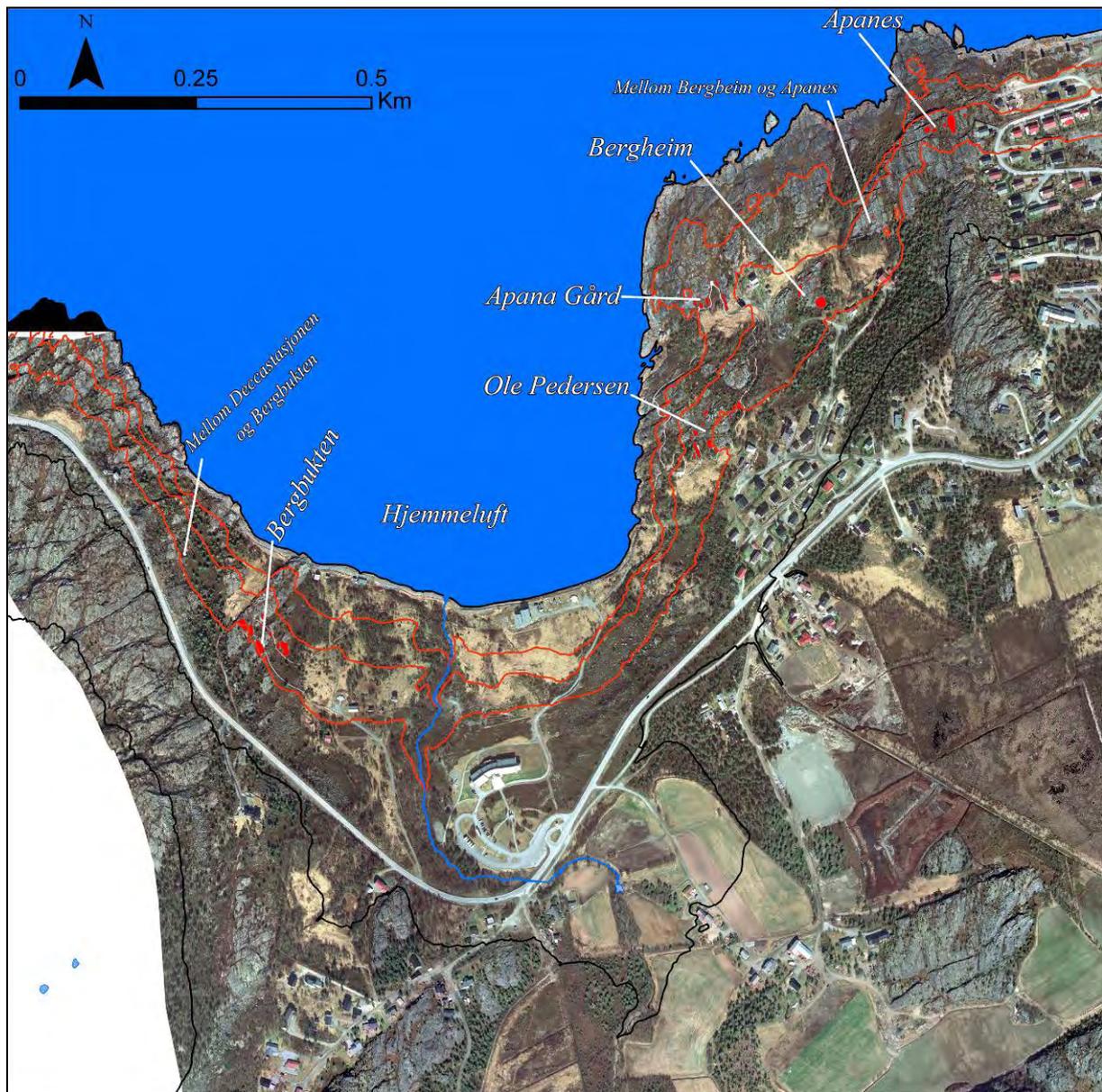


Figure 169 Map of the rock art sites in the Hjømmeluft area¹⁴⁴. The sites are marked in red. The black contour line is at 50masl interval. The red lines are at 25masl 14masl and 8masl. The lowest carvings at the highest panels are located at 25masl, while the carvings dated to about 2000BC is situated at c. 14masl, while the lowest carvings are located at 8masl (confer with **Figure 152**). This is to illustrate the landscape at the time of the first carvings and how the land uplift gradually changed the landscape in the Hjømmeluft area. Adding to the rock art sites there are numerous settlements in the area. The large building complex in the lower middle of the illustration with connected car parks is Alta Museum. Illustration: Jan Magne Gjerde

After the phases from Figure 152, presenting the dating suggestion for the Alta-material, I will show how the landscape changed at the head of the Alta-fjord, related to where the rock art is located (see Figure 169). The shore-level will be reconstructed at 25masl (representing the level at which the first rock art most likely was made in Alta), 22/21 masl

¹⁴⁴ Askeladden Id-nr for the sites in the Hjømmeluft area: Mellom Deccastasjonen og Bergbukten (8631), Bergbukten (18427), Ole Pedersen (28486, 57415), Apana Gard (57750), Bergheim (68067), Mellom Bergheim og Apanes (28484), Apanes (48028).

(the end of the first phase and the beginning of the second phase), 17masl (the transition between phase 2 and 3) and 14masl (the end of phase 3).

Standing at the flat Komsa mountain plateau, one can move around the mountain and see the whole Alta valley and far out the Altafjord. One can see relations in the landscape that would not otherwise be possible, like in a generally “flat” landscape. Thereby by standing at the Komsa mountain at the head of the Komsa Peninsula in the past (see Figure 166 to Figure 168) one could get a better perception on relations in the landscape than e.g. in the flat landscapes of Karelia. By moving in the landscape where mountains could act as reference points one could observe activity in large parts of the inner Alta-fjord and the Alta-fjord valley (see Figure 162).

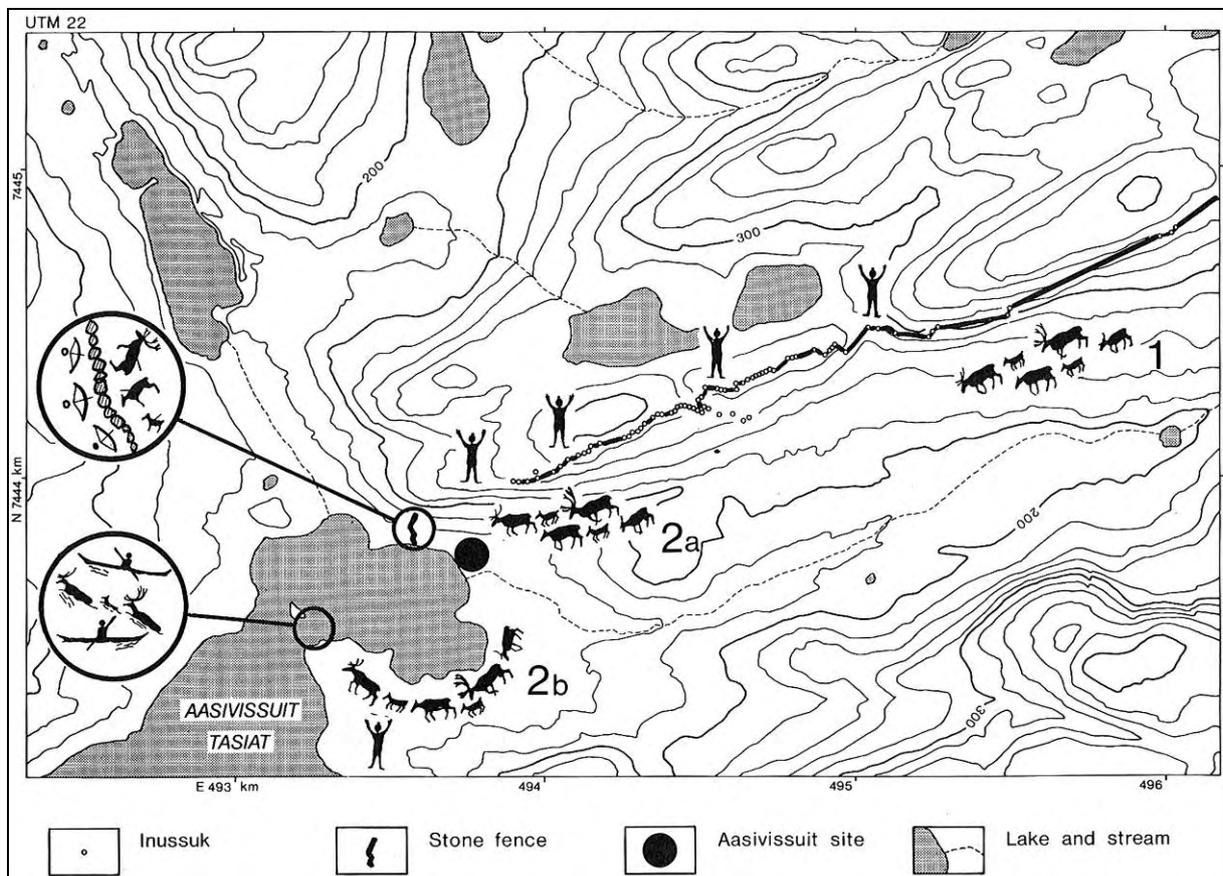


Figure 170 Interpretation of the function of battue structures at Aasivissuit, a caribou-hunting site in West Greenland. After Grønnow et.al. (Grønnow et al. 1983:fig. 45)

Hunting drives for reindeer has proven extremely effective and the technique has been documented in vast parts of the circumpolar area. The schematic representations of such hunting drives (see Figure 170) recorded in the ethnography (Jenness 1922:148ff, fig. 48) and documented archaeologically (Grønnow et al. 1983), show that they are placed at natural crossings and favourable topographical positions in relation to the natural features

constraining movement of the reindeer, like rivers, lakes and hills/mountains (Blehr 1982; Grønnow et al. 1983:fig 45; Popov 1948:plate 6).

Hunting drives for reindeer are one of the large scenes that are repeated in the earliest rock art of Alta. The earliest rock art is located at Hjemmeluft and at Ytre Kåfjord. Could it be that the initial rock art was connected to the favourable areas or crossing places connected with the reindeer corrals inland? The data at present suggest that the reindeer migrate through the Alta area on its seasonal migrations. However, this is the migration of domesticated reindeer. Even if it can be argued that reindeer will follow the topography one cannot know for sure. If one compare the reconstructed map at 25masl for the Alta area (see Figure 166) one can see that the shortest distance crossing the Kåfjord fjord is from the point at Saltvikneset (west of the Hjemmeluft Bay) crossing to the Ausekarnes that then was a small Island, maybe acting as a geographical reference. Could it be that the elaborate depictions of reindeer and reindeer hunting is referring to known geographical places with reference to the Alta area and its wider surroundings? Then this can be seen in the depictions of favourable areas / zones for reindeer, favourable crossing places / hunting places (reindeer corrals). These act as references to known places in their landscape depicted in the rock art. Thereby the rock art becomes a reference to their cosmography as a wide definition of landscape and geographical knowledge.

Microlandscape

The scenes in Alta generally falls within 2m elevation (see e.g. Figure 155). This would be the tidal/upper tidal zone and could explain the manner in which the figures are distributed e.g. at Bergbukten. At the panel Bergbukten 1 in Hjemmeluft, one can see how the rock art is interacting with the microlandscape at several places. That the figures at Bergbukten 1 are related to the micro-topography has previously been argued (Helskog 1999; Helskog 2004a; Helskog & Høgtun 2004). Bergbukten 1 is one of the well documented panels in Alta which is published (see Figure 38). Consisting of several compositions and scenes with a total of about 250 figures, it stands out as one of the more complex rock art panels in Alta. There are elk, reindeer, bear, salmon (small whale), a boat, human figures, human figure in a long line that can be related to reindeer corral as a guiding fence, human figures with bow and arrow, human figures with spears and human figures with elk-head sticks, geometrical or grid-patterns and “necklaces” or tent structures. Adding to this there is a bear hunting scene

connected to a bear-den and a large reindeer corral. The panel is dated by shoreline to phase 1, that is between 5200BC and 4200BC.

At Bergbukten 1, many of the figures are placed according to the micro-topography or microlandscape at the site (see Figure 171 to Figure 177). One can see rivers, lakes, valleys and even a bear-den that interacts with the figures on the rocks (compare Figure 38 with Figure 174). When comparing the tidal zone today, one can see how the microtopography in the tidal zone includes valleys, rivers, lakes etc. (see Figure 176). This has been suggested as an interpretation for rock art in the the Vyg area (Gjerde 2005; Gjerde in press-a), and recently this has been suggested for the Alta area (Tansem & Johansen 2008f, fig. 2).

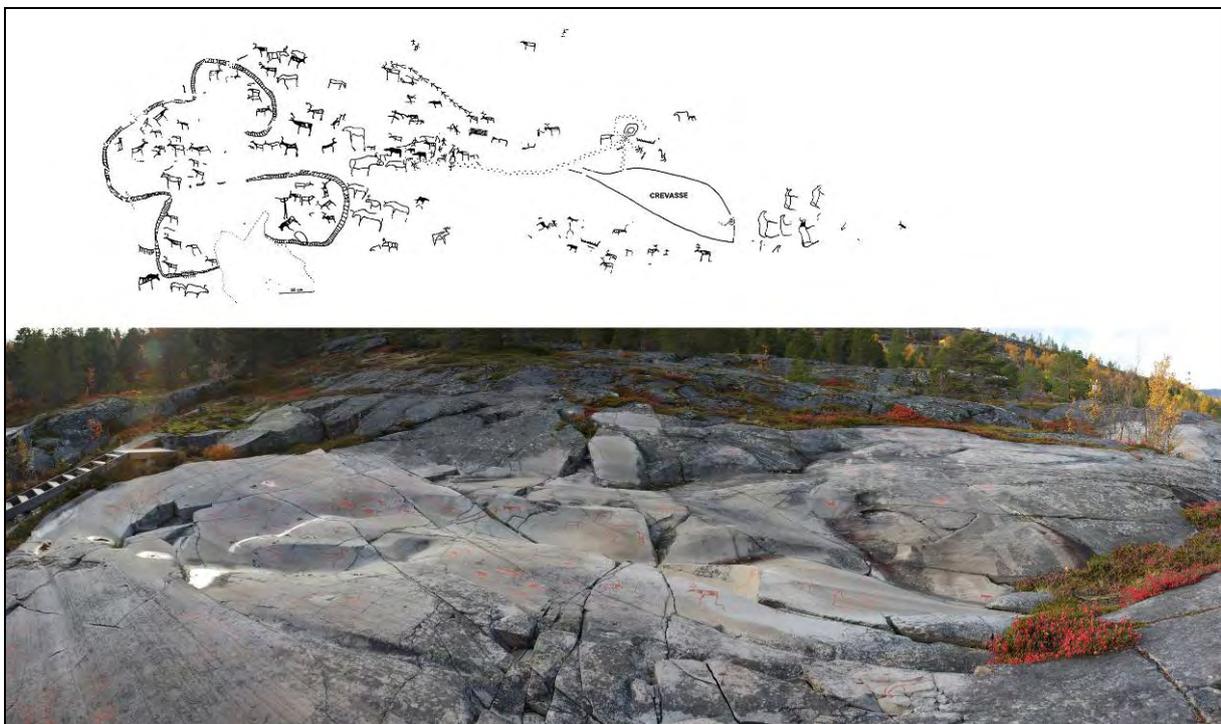


Figure 171 Bergbukten 1. The largest panel at Bergbukten. The tracing above the photo covers about 10m of the large outcrop that is about 20m long, covered in rock art. The size makes the panel difficult to present and the sheer size of the outcrop makes one walk along the panel to see the rock art. Tracing after Helskog (1999:fig. 5). The photo illustration in the lower part is a compilation of 12 photos. The “whitish rock” in the right end of the photo is the Bergbukten 4 site. Photo and illustration: Jan Magne Gjerde.

A documentation by free-hand drawing shows how the figures are placed within the micro-topography of the rocks (Figure 38) (Helskog & Høgtun 2004:fig 6 and 7). At Bergbukten 1, one can see how the figures might be related to the rivers and lakes in the rock surface. In Figure 173, one can see a river with connected lakes where the elks and reindeers are walking next to the river and the lakes. In Figure 174, one see that the little elk representation is standing next to the river in the rocks.

One of the clearest examples of how natural features in the rock surface interacts with the figures have recently been presented by Tansem and Johansen (2008:fig 3). Bear tracks appear from the natural oval formation in the same manner in which it does on the bear-dens depicted at the same surface (see Figure 175).



Figure 172 Bergbukten 1. Here one can see how the valleys, rivers, lakes and hills are interacting with the rock art. Illustration compiled from 3 photos, warped in Photoshop. Photo: Jan Magne Gjerde.



Figure 173 Section of the large Bergbukten 1 composition. One can here see how the valleys, rivers and lakes appear in the microlandscape of the panel. The figures are carefully placed in relation to the micro landscape. It is not unlikely that the upper tide would fill the lower area where the water pool can be seen today. Photo: Jan Magne Gjerde.



Figure 174 The river with the elk standing by the river. The river would have entered the sea virtually where the vegetation is today. Here one can see a small depiction of an elk in the direction as if it is walking up the valley next to the river. Notice the elk track in the lower left part of the section. This can be interpreted as a referring to a crossing place or the place where the elk come ashore after crossing the fjord or a river. It is located in the lower part , in the “shorezone” related to the elks on the panel. Photo: Jan Magne Gjerde.



Figure 175 The natural bear-den at Alta. One can see that the bear tracks (chalked white) are coming out of the den towards the previously discovered bear. A few other figures also appeared Photo: Karin Tansem © VAM.



Figure 176 The tidal zone in Alta and its microtopography with its valleys, lakes, rivers etc. Photo: Jan Magne Gjerde.

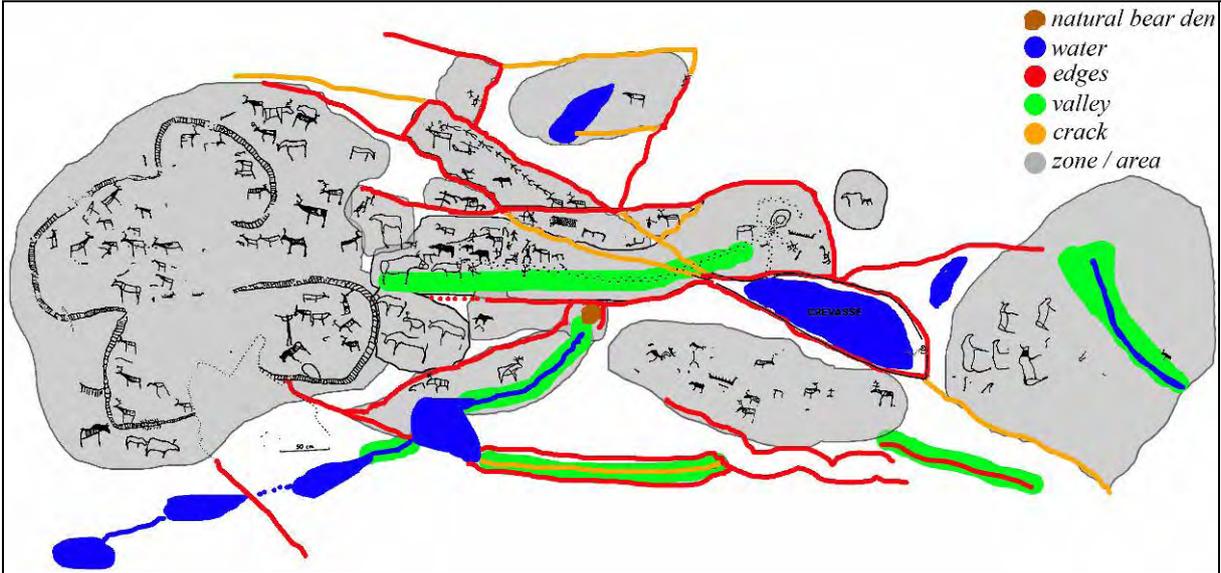


Figure 177 Section of the Bergbukten 1 site, Hjemmeluft, Alta. The natural features and the micro landscape related to the tracing of Bergbukten 1. Compare schematic representation to **Figure 38** and **Figure 175**. The grey areas refer to Collignon’s (Collignon 2006b) Inuit perception of landscape (see **Figure 67**). Background tracing after Helskog (1999:fig 5).

The large Ytre Kåfjord site stands out both in extent and compositions in rock art of northern Fennoscandia. The Ytre Kåfjord site includes about 1500 carvings. At Ytre Kåfjord there are unique compositions and scenes. Several reindeer corrals, bear tracks that run for several metres, groups of people that appear to be dancing. Many of the scenes are narrative, and there are many human figures depicted in various activities: hunting with bow and arrow,

hunting with spears, people with elk-head sticks, humans walking with snow-shoes, people carrying a boat that resembles the Inuit umiak boat. Adding to the identified figures, there are numerous lines and geographical patterns.

An area at Ytre Kåfjord stands out and one can see how they have applied the rock surface and arranged some of the rock art in relation to the micro-topography. This is best observed when following the bear-tracks for more than 8m along the rocks and reindeer tracks near the boulder at the site (see Figure 178 to Figure 180). It appears like the bear-tracks are starting from under the large boulder. Then they are moving upwards to a bear den. After this they move from the bear-den, into the large reindeer-corral, where it enters a new bear den (see Figure 178). This has been interpreted by Helskog as representing the seasons of the year of the bear (Helskog 1999). He has also interpreted the whole composition as a seasonal landscape (Helskog 2004a). If we accept that the bear comes from a den, when it enters the panel from a crack under the boulder, this scene could be representing three years when the bear is moving between dens.

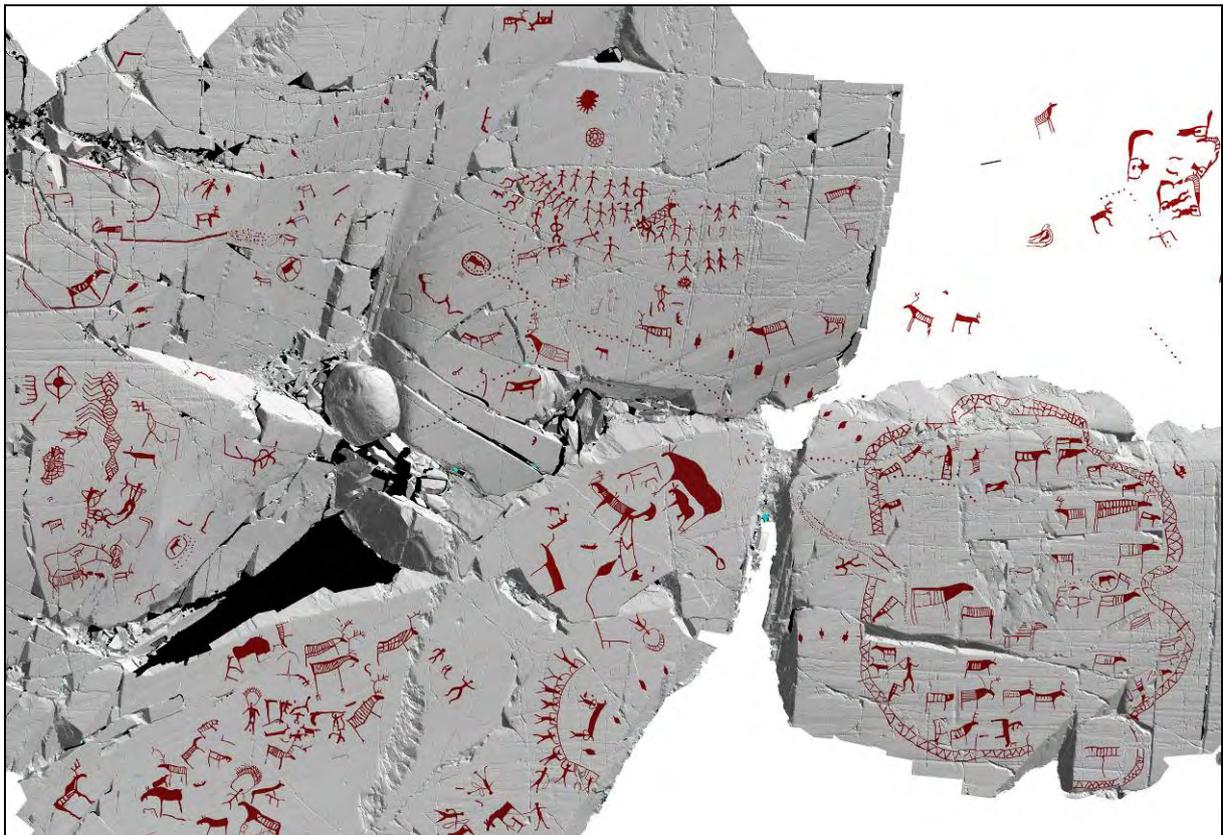


Figure 178 Scanning of a section of the large Ytre Kåfjord panel. Scanning by METIMUR and the figures are traced from the scanning by Karin Tansem, VAM. Top left is the small reindeer corral. To the right is the large reindeer corral. The distance between the entrances of the two reindeer corrals is c. 6.4m. The bear tracks run more than 8m on the panel and the large reindeer corral is c. 3m in diameter. The boulder is situated to the left in the middle. Bottom left of the boulder from a crack can be seen the bear tracks ending in the bear-den, then

continuing to the right into the large reindeer corral. The amount of figures and the size of the composition at Ytre Kåfjord is the most impressive in northern Fennoscandia.

The reindeer tracks coming up to the reindeer corral to the left in Figure 179 indicate the change in the topography when they are walking up the hill separately, then the tracks form a straight line going into the reindeer corral. That the tracks are joining could be the result of the guiding fence that is part of this scene. There is more room to make the figures on the “flat” surfaces, however, they have deliberately chosen to make the figures in relation to the micro-topography. This is best observed for the guiding fences and the reindeer tracks going uphill before they enter the area where they are directed towards the reindeer corral by the guiding fence. Such lines of inuksuks¹⁴⁵ are depicted at reindeer corrals at Ytre Kåfjord (see Figure 178 and Figure 179).

Guiding fences are documented in the ethnography of the reindeer hunters in vast parts of the circumpolar region (Birket-Smith 1929:110f; Grønnow et al. 1983; Popov 1948; Popov 1966:34f; Vorren 1998). The guiding fences could be made up of permanent structures or more temporal arrangements. The inuit apply inuksuk (stone built structures, small cairns, ripraps etc.) that translates to “as a man”, where the stone figures could resemble a hunter from a distance. One would also apply large boulders and sticks between the boulders with feathers or leather-striping attached to them. Such ornaments made noise in the wind to direct the reindeer¹⁴⁶ (Blehr 1982:6f).

Where there is a prominent micro-topography in the rock surface, it appears as if the makers of the rock art have taken advantage of this and applied it in telling their stories on the rocks. The reindeers cross the rivers at the same places along natural migration routes. Such places are defined as slaughtering places by the Nganasan of Siberia where they set up different kinds of “artificial slaughters” on the side of which reindeer are expected to arrive (such as long guiding fences). The length and width of these constructions varied and depended on the location. Usually reindeer come down to the river along the channels of streams and brooks. “The trips to hunt wild reindeer are great holidays for the men. The girls and single women ride with the men, and, according to report, they have a gay time.” (Dolgikh in Popov 1966:38). An observation of a hunt by the Nganasan reveals the outcome and value of such collective hunting at strategic places, when during 24 hours on the 31st of August 250-300 reindeer passed the Tareya River. The reindeer came in groups of between 26 to 42 individuals. The hunted animals from the slaughtering place meant they were still living

¹⁴⁵ An inuksuk is a stone landmark or a cairn built by humans. Some places they are also made from wood.

¹⁴⁶ Not unlike the plastic-stripings applied by the Saami to direct the reindeer today.

on the meat in January the following year (Dolgikh in Popov 1966:38). What becomes evident when studying the ethnographical descriptions of traditional reindeer hunting and reindeer hunting drives, is the importance of a collective strategy and the close relation to unique topographical places that were ideal for hunting or slightly altered to become such favourable hunting grounds (Blehr 1982:3f; Popov 1966:35f, fig 6). Reindeer hunts at these collective hunting places would occur during spring and fall during the seasonal migrations (Popov 1966:35).

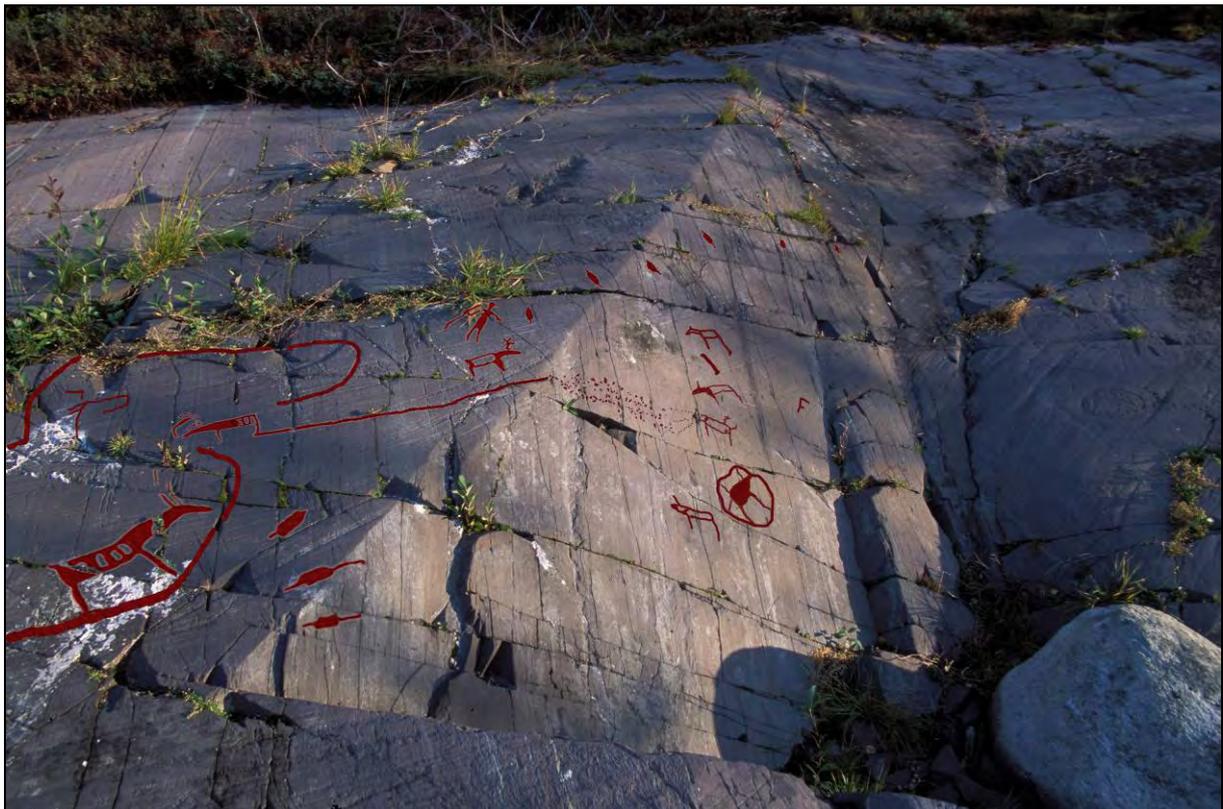


Figure 179 Photo of the area with the boulder and the small reindeer corral at Ytre Kåfjord. The figures of the reindeer corral is fixed on the photo. This means that the size ratio is distorted. The closest figures are larger compared to the ones in the background in relation to real size (Compare with tracing in **Figure 178**). One of the bear dens at Ytre Kåfjord can be seen in the photo above the boulder. Photo and illustration: Jan Magne Gjerde.

In the Alta region this would be the spring and autumn during the large reindeer migrations between the coast and the inland. When looking at the figures, scenes and composition within the area including the two reindeer corrals, the reindeer corrals and the bear den could represent geographic references to known places. The hunters would know where the bear dens were. There are several examples of bear hunting both at Ytre Kåfjord and in Hjemmeluft (see Figure 175). At Ytre Kåfjord, the two reindeer corrals would also act as geographic references. In that manner, they are depicting known places to the people

making the rock art at Ytre Kåfjord. Based on this fact, the reindeer corral to the left in Figure 178 would be located not far from the bear-den or in the same area. The people in the circle above and between the large reindeer corral and the boulder would be inland.



Figure 180 Photo of a section of the Ytre Kåfjord site, centred round the large boulder. The small reindeer corral is situated left of the boulder, the bear den and bear tracks above the boulder and the large reindeer corral is located in the right of the photo (compare with **Figure 178**). Photo: Jan Magne Gjerde.

There are at least eight depicted reindeer corrals in the Alta rock art. They are all found between 24 and 22masl dated to phase 1, and amongst the earliest figures in Alta in Hjemmeluft and at Ytre Kåfjord (Helskog 2005:345). This emphasis on collective hunting is very important. Not only is it a reference to the hunting method itself, but also to the amount of people engaged in the building and maintenance of the reindeer corrals.

Moving back to the Hjemmeluft area, at Bergbukten 4, (see Figure 181 and Figure 182), more than 150 figures are including a vast variety of motifs (elk, reindeer, boats, human figures with bow and arrow, human figures with elk head sticks), scenes (reindeer hunting, elk hunting, halibut fishing) making up the large composition. What strikes me, when studying the positioning of the figures, was that the reindeers to the left of the panel are positioned in a similar manner as reindeer in the other reindeer corrals (e.g. at Bergbukten 1). When relating this to the micro-topography, one can see that the rock ends left of the reindeer figures making

the natural features represent a reindeer corral. The figures in the lower part of this section resembles the “gates” in the reindeer corral at Bergbukten 1. The composition could include geographical references stored in the figures and scenes that relates to fixed geographical places like at Ytre Kåfjord and Bergbukten 1. The natural “reindeer corral” to the left, is an area with few figures. To the right, one sees boats involved in driving and directing the reindeer¹⁴⁷. Then further to the right are a couple halibut fishing scenes representing activities connected to the fjord. Under the boats can also be seen what is interpreted as an elk trap, a possible elk hunting pit. Below, there are also humans with elk-hunting sticks. The reindeer corrals appear to be found inland as observed by Vorren (1998). There are large cracks at the Bergbukten 4 panel (Figure 182). None of these cracks crosses the figures, while other smaller cracks do (compare Figure 182 and Figure 183). This makes me assume that the large cracks were there when the rock art was made, suggesting they represent a river, real or cosmological. If one looks at the whole composition, the scene depicts places from the coastal halibut fishing that indicates deep-water fishing to the inland reindeer corrals and elk hunting. In this respect, the figures might represent places important in their geographical knowledge. This panel could act as a memoryscape that were related to their geographical places that also included travels between these places.



Figure 181 View towards the Alta fjord with the Bergbukten 4 panel in Hjemmeluft, Alta in the foreground. In the middle of the photo one can see a line that divides the rock, interpreted as a miniature river. The figures can be seen and the relation to the sea with a raised shoreline is obvious even with the changed landscape of today. Photo: Jan Magne Gjerde.

¹⁴⁷ A human figure in one of the boats have some implement that can be interpreted as an object to make sound, like the clothing as described in the ethnographic sources.



Figure 182 “Reindeer corral” at Bergbukten 4 to the left, the microtopography aiding the interpretation of the congregation of figures as representing a reindeer corral. At the left half of the photo one can see the large cracks interpreted as rivers, real or cosmological. Compilation of 6 photos. Photos and illustration: Jan Magne Gjerde.

The interpretation of this panel as a physical landscape may seem contradictory to the previous interpretation by Helskog where this panel is seen as a representation of their cosmological world (2004a). The cosmological interpretation of this panel is based on a tretier divided in an upper world, a middle world and a lower world. The cosmological river as presented will run through all worlds. This can be represented by a real river. Returning to the Bergbukten 4 panel one can see that the physical interpretation of the micro landscape interaction with the figures as presented in Figure 183 coincide with the cosmological interpretation as represented in Figure 184. The large Alta River may be the cosmological river represented by the cracks running from the upper world through the middle world into the lower world (see Figure 184). In the upper world, one can see a “flying” shaman overlooking the landscape from the upper world. The reindeers are in the upper part of the panel. The activities connected to hunting, cynegetic activities, seen in the middle world represented by the halibut fishing and driving reindeer onto land and by the “reindeer corral”. In the lower world the elk is dominating and “shamans” (indicated by the head-gear known from ethnographic sources (see chapter 4) is holding elk head sticks connected to elks as if they are conducting an activity interpreted as a “ritual killing of the elk”. One can here see how the physical landscape interact with the cosmological landscape. Moving the interpretation even further, the fjord represented by the micro-landscape and the maritime figures could represent the Alta-fjord while the cosmological river could be the Alta-river or the rivers entering the Alta-fjord. This is strengthened by the placing of the figures where the inland activities / zones according to the theory of Inuit landscape as presented by Collignon

(see Figure 67) is represented by the figures. Here one can see how the macro-landscape is “mirrored” in an interaction between the figures and the micro-landscape that also refers to the cosmological landscape. This is truly a testament to the complex interaction within Stone Age hunter-gatherer perception of landscape, where knowledge of the universe or their cosmography comes together in one panel.

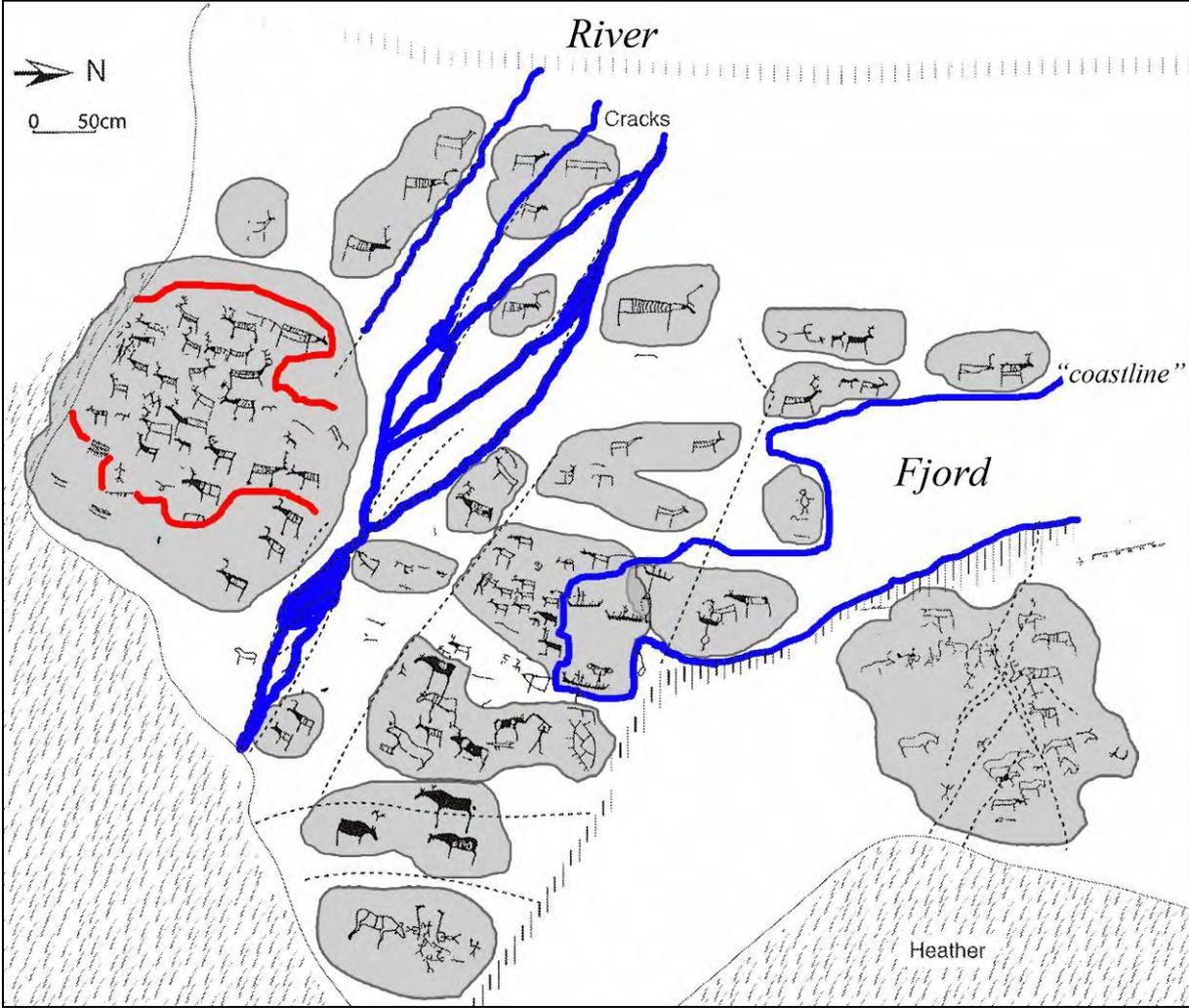


Figure 183 Bergbukten 4, Hjemmeluft Alta. Landscape features interpreted on the basis of the macro and the micro landscape and the figures/scenes in relation to Innu perception of territory. Background tracing after Helskog (2004a:fig 13.4). Illustration: Jan Magne Gjerde.

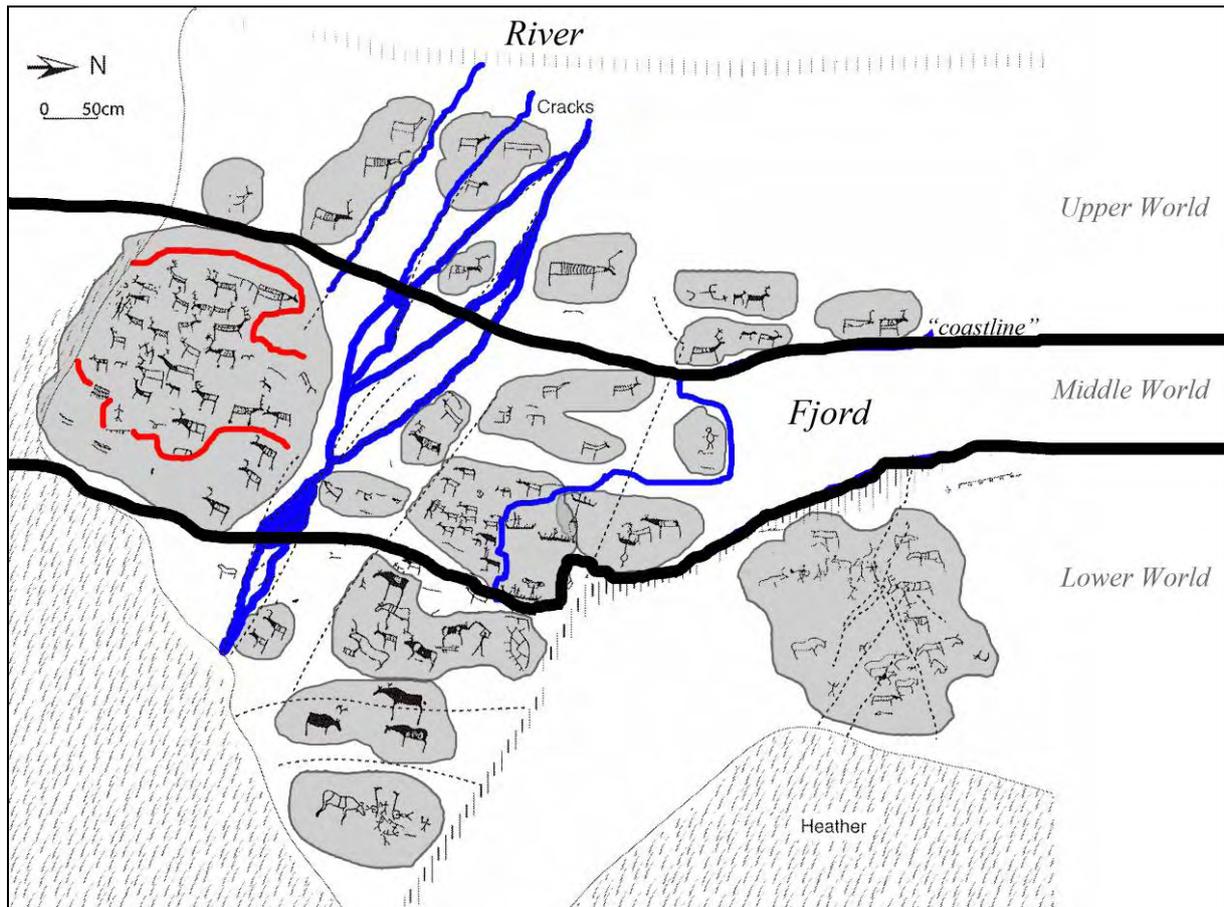


Figure 184 The division of the Bergbukten 4 panel into an Upper World, a Middle World and a Lower World. Background tracing after Helskog (2004a:fig 13.4). Illustration: Jan Magne Gjerde.

Knowledge of crossing places and animal trails are important to hunter-gatherers. They need to know the patterns in which the animals move, that is temporary movements and seasonal migrations. Tracks appear in the rock art of Alta. Most prevailing are the bear tracks, however there are also examples of reindeer and elk tracks. Most often they are depicted as small dots that can be followed for several metres ending up next to the animal (see e.g. Figure 178). The most favourable crossing places like in the ethnography where the fjord meets land (where animals would naturally be more vulnerable). Looking carefully at the panel after the lichen has been removed (compare Figure 185 with Figure 186), more figures appear at the panel (see Figure 187 compared to Figure 188). The placing of the elk-track is exactly between land and water (see Figure 185 and Figure 188). Interpreting the elk-tracks as representing a crossing place, placed where the animals enter from being chased by hunters in boat. It could represent such a crossing place or a place where the animals come ashore after crossing the fjord (see Figure 174 and Figure 185).



Figure 185 Photo of section of the panel Bergbukten 4 with the elk-track that has not previously been documented. The elk-track is situated virtually where the elk would come ashore after crossing. When comparing this scene with the interpretation of the micro landscape and the figures, one can see that this could represent such a crossing place for animals. Notice also that the eroded areas makes part of the figures missing (see especially the stem of the boat in the right of the photo). This is also problematic when figures are applied e.g. in stylistic studies based on tracings and not studies in situ. The main difference on this panel from the tracing is the animal figure above the reindeer in front of the boat figure. The bear tracks ending up in the two cubs located in the middle of the photo and the large elk-track (inside the black circle) interpreted as a place where animals come ashore (a crossing place). Compare with **Figure 188**. Photo: Jan Magne Gjerde.



Figure 186 Photo of section of the panel Bergbukten 4 before removal of lichen in 2003. Compare with **Figure 185**. One can not see the elk-track figure and the lichen covered details in the rock art figures. Photo: Jan Magne Gjerde.



Figure 187 Section of the Bergbukten 4 panel. Compare with **Figure 188**. One can see that when the lichen was removed, more figures appeared and some parts that are missing due to flaking / erosion of the rock surface. At

the lower left is a human (maybe a shaman hunter) with an elk-head stick connected to the elk. The elk appear to be stuck in a hunting pit / trap with its back leg. The figure to the right of this hunting scene might be part of the composition representing a hunting pit / trap from another perspective, seen from above. Photo: Jan Magne Gjerde.

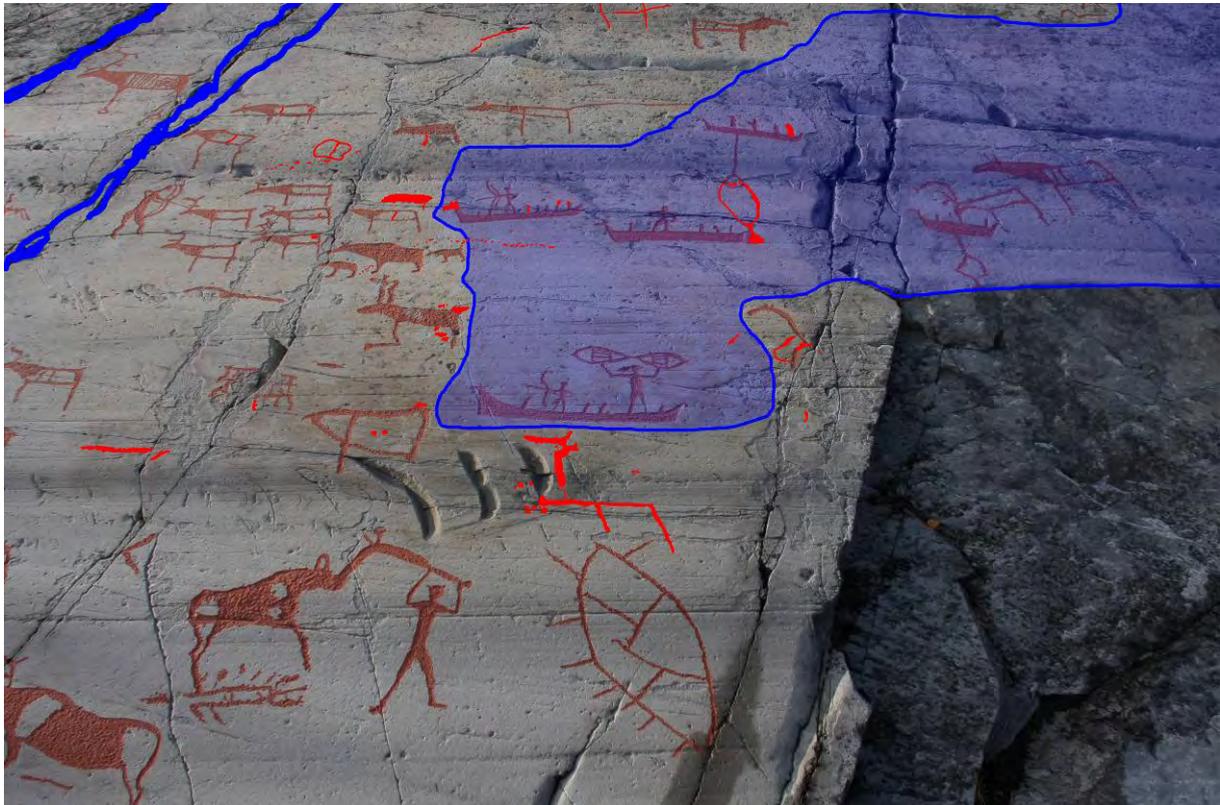


Figure 188 Section of the Bergbukten 4 panel where new figures are added and the interpretation of the relation between the micro landscape and the figures appear to represent the fjord and a place in the landscape where animals come ashore. This is represented by the elk-track. Compare tracing and drawing with **Figure 183** to **Figure 187**. Photo and illustration: Jan Magne Gjerde.

Summary of the Alta rock art

The making of rock art in Alta based on shoreline dating and the relation to the elevation of the settlement finds indicates that the first rock art was made at Ytre Kåfjord around 5300BC and in Hjemmeluft at about 5200BC. This also coincide with the boulders with carvings at Slettnes. The initial carvings were made about 5300BC and the last carvings were made around 200BC. The last carvings include boat figures that show similar traits with the south-Scandinavian Bronze Age boats. That is, rock art was made in Alta for about 5000 years.

Initially around 5300BC, the head of the Alta-fjord was different from today where the present Komsa mountain would have been a large peninsula between the Kåfjord fjord and the Alta River-fjord. The area where the Alta River estuary and about 10km from the shoreline would have been a fjord with a raised shorelevel to about 25masl. The main

characteristics at the head of the Alta-fjord with the protruding Komsa-mountain peninsula would have been a reference point throughout the Stone Age. Even today the Komsa-mountain stands out when entering the Alta-fjord basin.

The head of the Alta-fjord would be central in the communication between coast and inland. Looking at the macro landscape at Alta, the fjords and tributary fjords would act as a funnel directing movement through the head of the Alta fjord. This funnel can also be seen inland where the valleys and rivers route people and animals to the head of the Alta fjord.

The rock art at Alta is many places deliberately placed in relation to natural features in the rocks. Some places it looks like if the natural elements of the rocks interacted with the rock art and the story told in the rocks. Some places these even have references to the wider landscape where the micro landscape or miniature landscape acts like a backdrop to tell stories of their macro topography / macro landscape, interacting with the figures and scenes. One can also see that scenes act as reference point to places in their wider landscape like the halibut fishing, the reindeer corrals and the bear-hunting.

Vyg

Rock art at Vyg

The carvings at Vyg¹⁴⁸ was “discovered” when local people showed the ethnologist Linevskii the Besovy Sledki site by the Shoirukshin rapids near the village Vyg Ostrov in 1926¹⁴⁹. Liinevski documented the figures at Besovy Sledki (Linevskii 1939). In the 1930’s, Ravdonikas documented the rock art in northwestern Russia. He found new carvings at Besovy Sledki (Besovy Sledki South) and two panels with carvings about 400m downstream from Besovy Sledki on the Island Jerpin Pudas. Downstream, about 1km from Jerpin Pudas, at the Island Bolshoi Malinin, more carvings were discovered and the site named Zalavruga. Totally Ravdonikas documented about 600 figures at Vyg (Ravdonikas 1938:7). Later, massive Hydro Power development initiated large archaeological investigations in the lower reaches of Vyg. The surveys and excavations between 1957 and 1970 revealed more than 100 settlement sites from the late Mesolithic to the Medieval Ages as well as more rock art (Savvateyev 1977:67; Savvateyev 1988). At Zalavruga, named New Zalavruga to separate

¹⁴⁸ The site names applied in the text is the english version of the sites. The Russian names are: Vyg = Выг, Besovy Sledki = Весовы Следки, Jerpin Pudas = Ерпин Пудас, Nameless Islands = Везымянных островков or Скопление, Zalavruga = Залавруги (Old Zalavruga = Старой Залавруга., New Zalavruga = Новой Залавруга).

¹⁴⁹ It was then named Olonets after the parish and later renamed Besovy Sledki North.

them from the previous finds of Ravdonikas, 26 new panels with rock art was found covered by gravel and sand sediments and evidence of a cultural layer (mainly ceramics and two fireplaces important for dating the site). Savvateyev also found rock art in the area between Besovy Sledki and Zalavruga on four islands with no name; thereafter named Nameless Islands 1-4, while the largest was found at Jerpín Pudas (Jerpín Pudas 3) in 1968-1969 (Savvateyev 1977:69). New figures were found during my fieldwork in 2003 and 2004. Lately, Lobanova has also found new carvings at Old Zalavruga and a new panel not far from Zalavruga (Lobanova 2006; Lobanova 2007). The newly found figures at Vyg, are within the same range when it comes to elevation and motifs¹⁵⁰. A careful estimate of the Vyg carvings would suggest that there are more than 2300 carvings at Vyg. One of the main motifs at Vyg is that of the Beluga whale¹⁵¹. Whale hunting is frequently depicted, and more than 60 scenes of whale hunting from boat have been found.

A general overview of the relation between the sites at Vyg is presented in Figure 189 and Figure 194. The main themes in the rock art at Vyg is large game and hunting. Next to Alta, this is the place in northern Fennoscandia where the narratives are represented in many hunting scenes; Beluga whale hunting (see Figure 190, Figure 191 and Figure 193), elk hunting (see Figure 215), bear hunting (see Figure 190) and hunting of birds (see Figure 192). Motifs at Vyg also include human figures, human figures with artefacts, boat, elk, bear, swan etc. The selection of animals like for the rest of Stone Age rock art focuses on large game.

¹⁵⁰ Alexander Zhulnikov, personal communication, 2005.

¹⁵¹ The Beluga Whale is also known as the White Whale with the latin name *Delphinapterus leucas* Watson, L., 1981 [1988]. *Sea guide to whales of the world*, London: Hutchinson. The Beluga is still present in the White Sea today Boltunov, A. N. & S. E. Belikov, 2002. Belugas (*Delphinapterus leucas*) of the Barents, Kara and Laptev seas, in *Belugas in the North Atlantic and the Russian Arctic*, eds. M. P. Heide-Jørgensen & Ø. Wiig Tromsø: The North Atlantic Marine Mammal Commission, 149-69.



Figure 189 The four sites included in the study at Vyg. Satellite image from Google Earth. One can see how the dams connected to the Hydro Power construction and the White Sea Canal has changed the macrotopography at Vyg, leaving the sites on “dry land”. The distance between Zalavruga and Besovy Sledki is about 1.4km. Illustration: Jan Magne Gjerde.



Figure 190 The impressive whale hunting scene at New Zalavruga 4 with 12 people in the boat. The whale hunter has just thrown the harpoon and the “rope” is not tightened yet. Beneath it we see a bear hunting scene. Photo: Jan Magne Gjerde.



Figure 191 Two Beluga whale hunting scenes from boat at New Zalavruga 2. In the upper right of the photo a ski track with connected ski pole marks are depicted. Photo: Jan Magne Gjerde.



Figure 192 The hunting of birds at New Zalavruga 6 from boat. Most likely they are hunting geese while they are molting. The hunter is depicted with a bow and one can see the arrows from the hunters in the birds depicted. Photo: Jan Magne Gjerde.

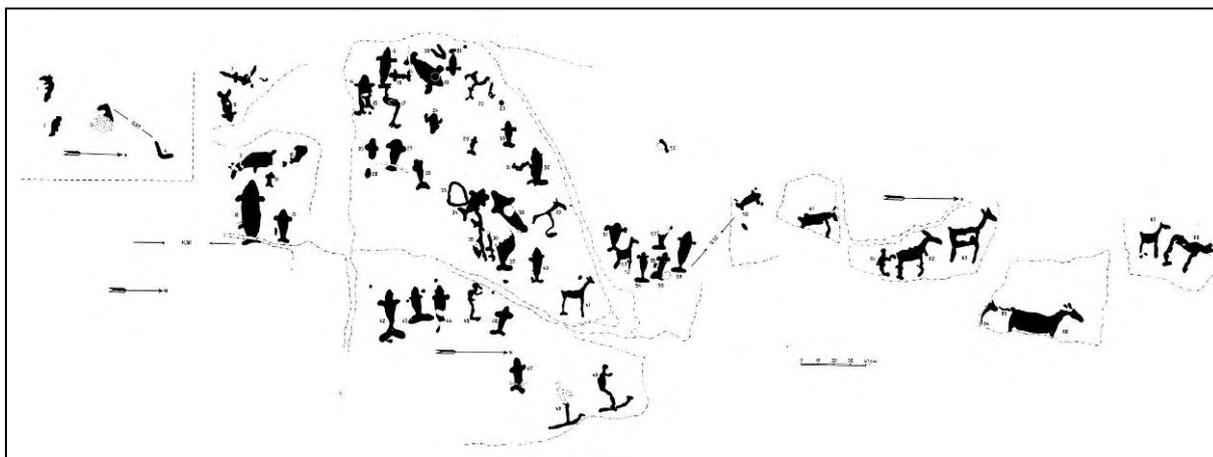


Figure 193 Besovy Sledki South. Notice the congregation of Beluga whales. Tracing after Ravdonikas (1938:plate 32).

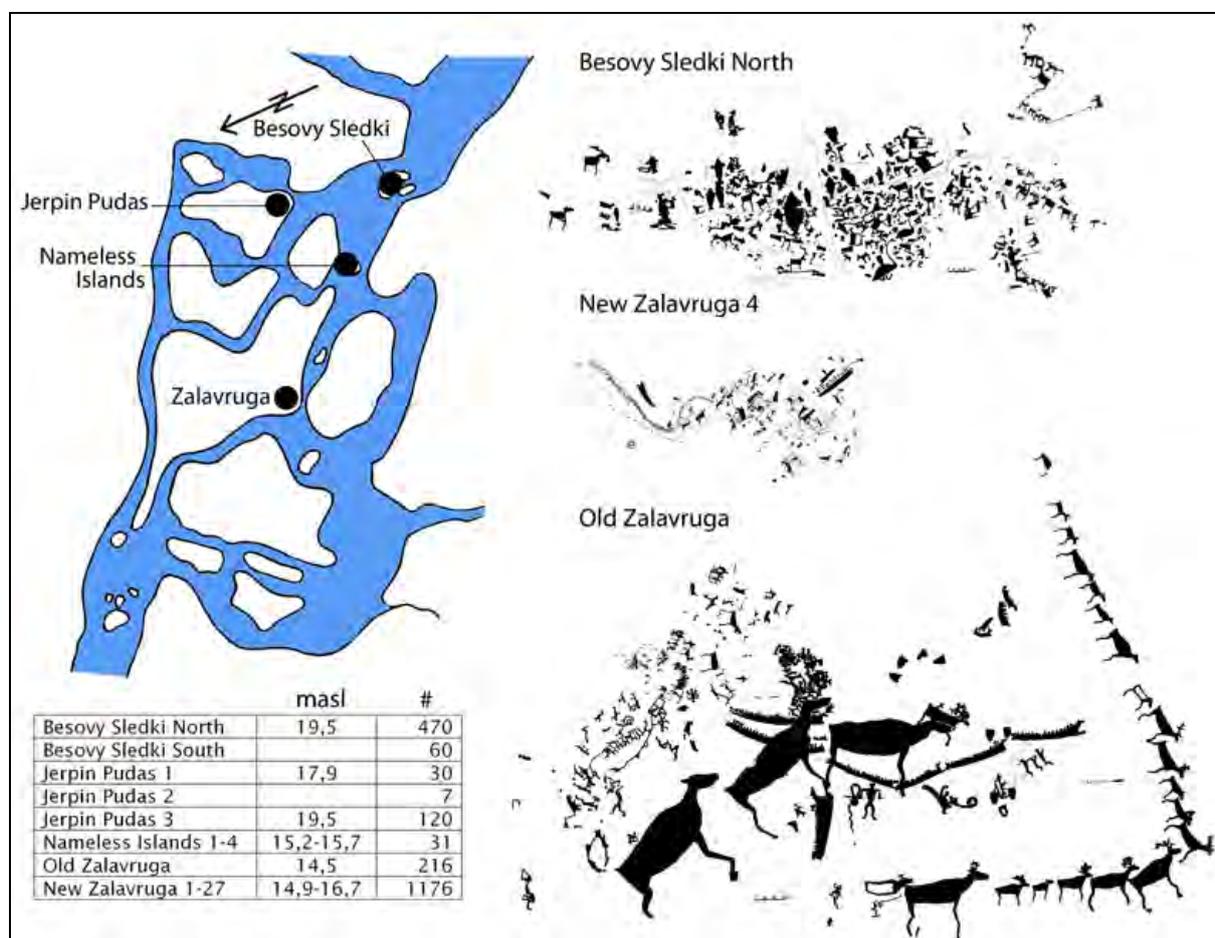


Figure 194 Schematic map of the relation between the different rock art sites at Vyg including elevation information. Images from the 3 main areas are presented in the same scale. The large elk figure in the middle of the Old Zalavruga tracing measures 2.8m. The distance between Besovy Sledki and Zalavruga is about 1.4km. Map reworked from Kosmenko et.al. (1996) *Sawwatejew in Archaeologija Karelii* 1996. Illustration: Jan Magne Gjerde.

Dating the Vyg rock art

The first dating suggestions for the Vyg carvings by Brjussow, Pankrutshev and Ravdonikas viewed them as contemporary and related the carvings at Vyg to the adjacent Late Stone Age (Neolithic) settlements based on the ceramic and the ceramic typology (Ravdonikas 1938:91,101,103). Ravdonikas questioned the stylistic dating of rock art and dated the carvings at Besovy Sledki to be about 4000 years old (Ravdonikas 1938:93-94; Savvateyev 1988:45). While Brjusow and Pankrutshev assigned the rock art to the established typological ceramic chronology of Karelia and the ceramics at the adjacent sites, Linevskii found that the rock art at Besovy Sledki by stylistic comparison was older than the one at Zalavruga found by Ravdonikas (Linevskii 1939).

Rooted in Gjessings (1932; 1936a) typological studies of Norwegian rock art, Stolyar argued that the naturalistic animal figures were first, and that the depictions developed from animalistic to human themes¹⁵² (Stolyar 2000). Savvateev contradicts Stolyar's argument mainly on the basis of the shoreline data as the carvings at Old Zalavruga are figures at the lowest elevations at Vyg¹⁵³. Stolyar and Savvateev represents the two current traditions within dating where Stolyar relates it to typology (size and style), while Savvateev relates the dates to shore displacement.

All the rock art in the Vyg area is located between 21-14.5masl (Savvateev et al. 1978:19, 20). The lowest figures at the highest elevated panels are situated at 19.5masl at Besovy Sledki North and at Jerpin Pudas 3. Savvateev applied shoreline data after Deviatova (1976) to date the Vyg carvings (Savvateev et al. 1978). Based on shoreline data (Savvateev 1977:290, 291; Savvateev et al. 1978:19f) the rock art is dated to between 4700BP-3300BP (Savvateev et al. 1978:19, 20). This is calibrated to between 3520BC and 1530BC. The results of Savvateev is still the current dating suggestion for the Vyg carvings. This is partly supported by both Zhulnikov and Lobanova as they date the initial carvings to be from 6-5 thousand years BP based on the radiocarbon dates, estimating a starting phase at c. 4000-3000BC¹⁵⁴ (Lobanova 2007:134-135; Zhulnikov 2006). Both Zhulnikov and Lobanova relates the carvings at Vyg to the relative shoreline dating previously suggested by Savvateev based on Deviatova's (1976) work.

The lowest figures at the highest elevated panels are situated at 19.5masl, and are by Deviatova dated geologically to between 4700 and 4400BP (Deviatova 1976:plate 1). This is

¹⁵² Abram Stolyar, personal communication 2004.

¹⁵³ Juri Savvateev, personal communication 2005.

¹⁵⁴ Nadezhda Lobanova, personal communication 2007.

not a reasonable suggestion since the ^{14}C -date at the Zalavruga 1 settlement site at 16,3masl gives a ^{14}C date of 4775 ± 70 , thereby suggesting an older date for the panels at 19.5masl. The data presented as small “transgressions” are not sufficient to explain the convergence between these dates. A re-assessment of the settlement record and available ^{14}C -dates in the Vyg region compared to the geological data questions this date for the initial carvings at Vyg. The ^{14}C dates from the Jerpin Pudas settlement, the cultural remains beneath Besovy Sledki North and the Zalavruga 1 settlement proved important in the dating discussion. Not the least since the cultural remains at Jerpin Pudas covered the carvings at Jerpin Pudas 3 and the Zalavruga 1 settlement covered some of the carvings at Zalavruga. When studying the ^{14}C data, the oldest of the ^{14}C -dates, from the Jerpin Pudas settlement that covered some of the carvings at Jerpin Pudas 3 were excluded in the dating discussion in later publications by Savvateev. Savvateev regard these dates to be too old in relation to the current chronology¹⁵⁵, compare (Savvateev et al. 1978:23) with (Savvateev 1977:290, 291). In general all of these “old” dates were not included in the dating of the Vyg river rock art because they were regarded too old and did not correlate with the dating for the diagnostic material (ceramics) found on the adjacent sites. One had more confidence in the established typological chronologies by Brjussow and Pancrutshev for the ceramics¹⁵⁶.

The river deposits beneath the Besovy Sledki North panel were excavated. They were interpreted as remains from activity at the Besovy Sledki carvings and the calibrated dates all fall between 4350BC and 3090BC. The Besovy Sledki sites (Besovy Sledki North and Besovy Sledki South) were not covered by the transgressions that we can observe other places at Vyg. Superimposition at the panel indicates that figures were added at Besovy Sledki North even after the initial rock art was made. This means that we can not be certain of a final date for the production of carvings at Besovy Sledki.

The carvings at Jerpin Pudas 3 are located between 19,5masl and 21masl. The carvings were covered by natural sediments and diagnostic artefacts (ceramic) dating the deposits to the Late Stone age giving a terminus ante quem for the rock art. The settlement site above and partly covering the Jerpin Pudas 3 panel gave six related ^{14}C -dates ranging from 5560BC-4180BC for the settlement occupation. Thereby, the site above the carvings may indicate a starting phase for the rock art as early as c. 5500BC, although maybe as late as 4200BC.

¹⁵⁵ Juri Savvateev, personal communication 2004.

¹⁵⁶ Nadezhda Lobanova, personal communication 2004.

All the carvings at Zalavruga are made between 14.5-16.8masl. The excavated settlement site Zalavruga 1 was located between 15.0masl and 16.7masl. The site was covering part of the area of the rock carvings. Between the cultural layer and the carved rock surfaces, there was a sterile layer mainly of sand. The cultural layer and the Zalavruga 1 site had two fire-places that were ¹⁴C-dated. The date 4775±70 (16.3masl) gives a calibrated date to c. 3650-3380BC and 4010±70 (15.3masl) gives a calibrated date to c. 2840-2450BC. This means that all the carvings at New Zalavruga covered by this sterile layer must have been made before c.2500BC. Recent excavations by Tarasov and Murashkin at the outskirts of the Zalavruga 1 settlement site suggest that the site is made up by two cultural layers. The ceramics from the lower layer was water-rolled and interpreted as contemporary with the rock art. Based on this they dated the carvings to 3000-2000BC (Tarasov & Murashkin 2002:44).

The documentation at Jerpin Pudas 3 was done by rubbings (frotage). They were redrawn indoors without comparing this “objective” documentation with the rock surface afterwards¹⁵⁷. By a thorough study of the panel, applying artificial light and taking night-photographs, one observes two phases of rock art based on the erosion of the rock art. Three of the figures are clearly eroded to such an extent that one can separate them from the others. The figures in question are so eroded that the peck marks are not visible and one can only feel the difference between the carvings and the surrounding rock as a vague edge. The thorough study of the rock surface can reveal information that could be vital for the dating of the rock art. It shows that there most likely is two phases of rock art production at Jerpin Pudas 3 (see Figure 195).

¹⁵⁷ Juri Savvateev, personal communication 2004.

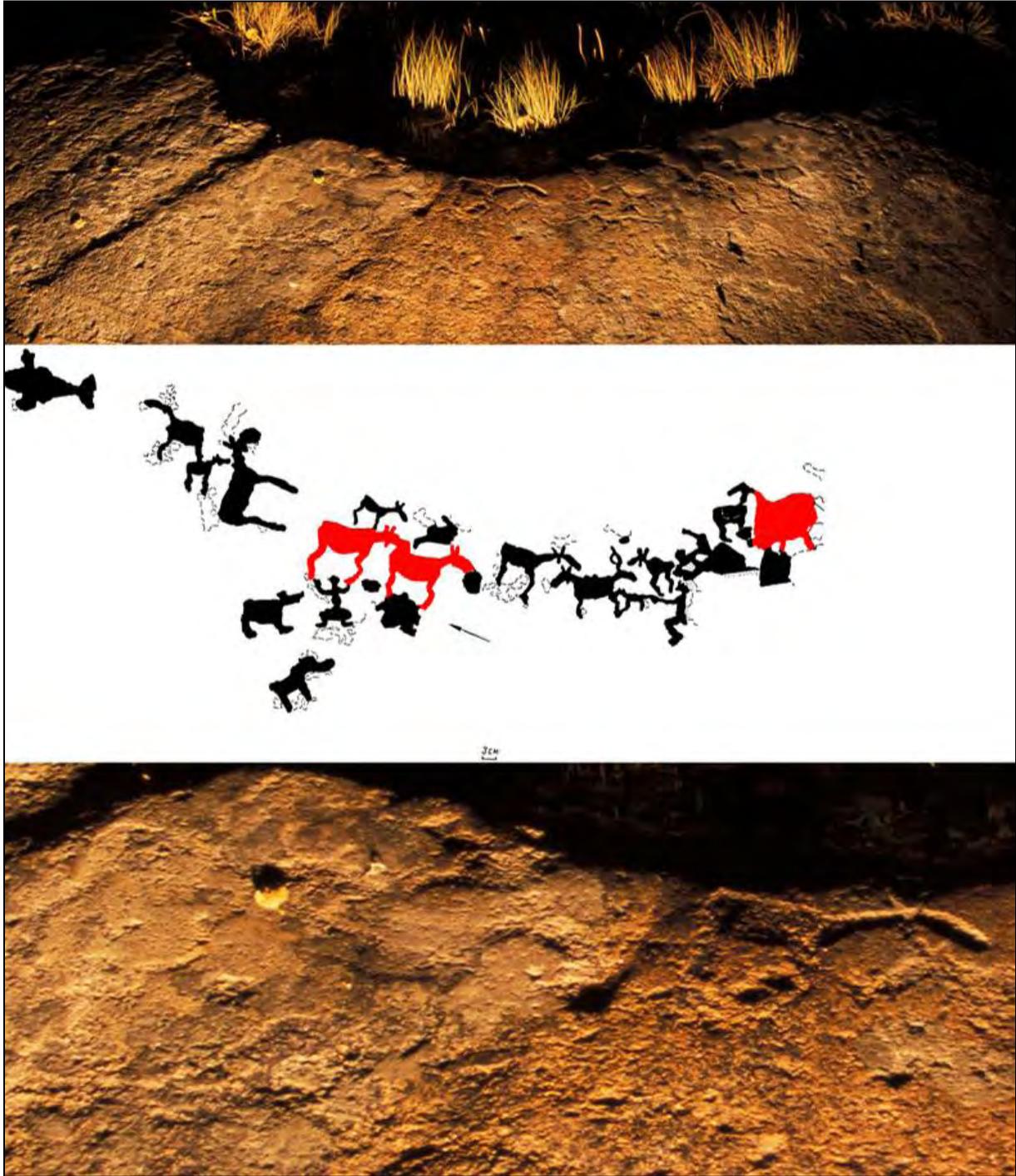


Figure 195 Jerpin Pudas 3 with the 2 phases of rock art witnessed by the erosion of the rock art. 3 of the figures are clearly eroded (marked with red) to such an extent that one clearly can separate them from the others. Tracing after Savvateev (1983:122). Illustration and photo by Jan Magne Gjerde.

The local topography is important for dating at Vyg. The New Zalavruga area has been treated as one unity as opposed to the previously found Old Zalavruga (see Figure 199). If one looks at the horizontal stratigraphy and the local topography in relation to the elevation of the sites one gets another situation (see Figure 196 and Figure 197). Here one can see that the New Zalavruga area can be seen as two entities. This can also be seen when applying the

elevation data to Savvateev's plan of the site with the different sites marked. The topography makes the division as shown in Figure 198. The higher elevated flat part of New Zalavruga was most likely made before the oldest of these ^{14}C dates, 4775 ± 70 (16.3masl) calibrated to c. 3650-3380BC and the lower elevated part of New Zalavruga is older than 4010 ± 70 (15.3masl), which is calibrated to c. 2840-2450BC.



Figure 196 The local topography at Zalavruga shown with photo. Compare with **Figure 197**. The photo is taken from the area between panel nr. XXII and XXVI towards panel nr. IV (see **Figure 198**). This shows that the central area of New Zalavruga is virtually flat. Photo: Jan Magne Gjerde.



Figure 197 The local topography at Zalavruga shown with photo. Compare with **Figure 196**. The photo is taken from the area between panel nr. XXII and XXVI (see **Figure 198**). The Old Zalavruga panel is in the distance behind and to the left of the foremost person slightly left of the middle of the photo. Here you can also see how the central part of Zalavruga is flat. Photo: Jan Magne Gjerde.

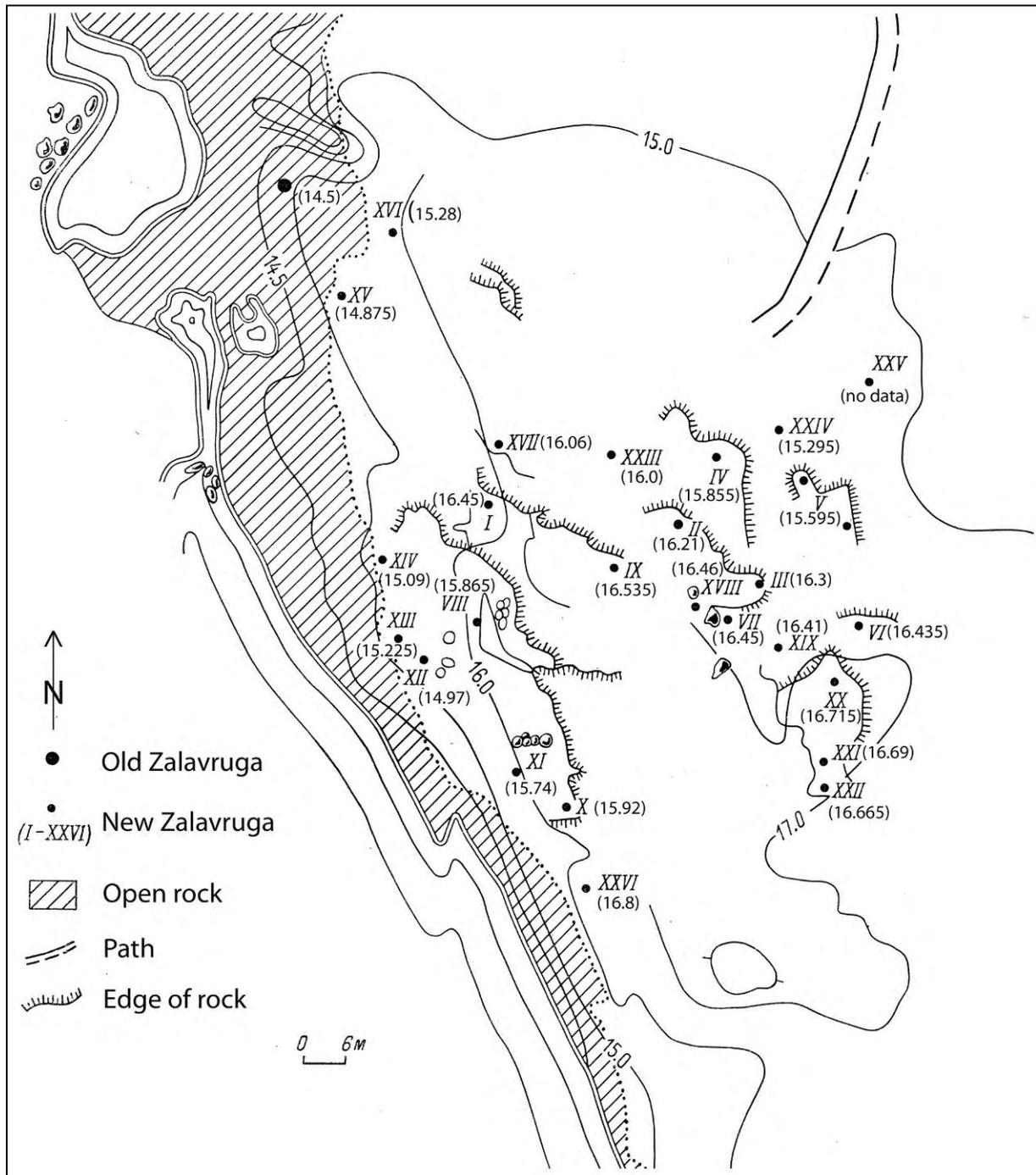


Figure 198 The topography at Zalavruga based on Savvateev's maps show that the whole area would be a small promontory, not a place near the river and that this can be witnessed in the change of the rock art. Map after (Kosmenko et al. 1996:139, plate 29; Savvateev 1970:73, plate 16). In the 1970' publication, the 14.5masl contour line is given as 14.9. This is later corrected. There are also two panels nr. 16. This is corrected to panel nr. 16, and panel nr. 17. The easiest way to see the point with the raised sea-level at Zalavruga ending in the Old Zalavruga area is to follow the 15m contour line.

The sterile layer that was covering New Zalavruga did not cover the Old Zalavruga area. Thereby the carvings at Old Zalavruga are most likely younger than the ones covering the New Zalavruga carvings. The small figures at Old Zalavruga on the northern end are stylistically similar to the rest of the figures at New Zalavruga. The large elks at Old

Zalavruga are clearly over-layering the large boats. Adding to this, a few of the smaller figures are over-layered by the large boats. This clearly shows that the Old Zalavaruga panel is made in at least three stages. A general problem with superimposition is that we cannot establish the time difference between the stages. At Old Zalavruga, the first phase is made up by the smaller figures, the second phase by boats, and finally the massive elk figures were made. By stylistic comparison the two lines of elks meeting in the bottom right of the whole composition is regarded to be more similar to the large elks (see Figure 194).

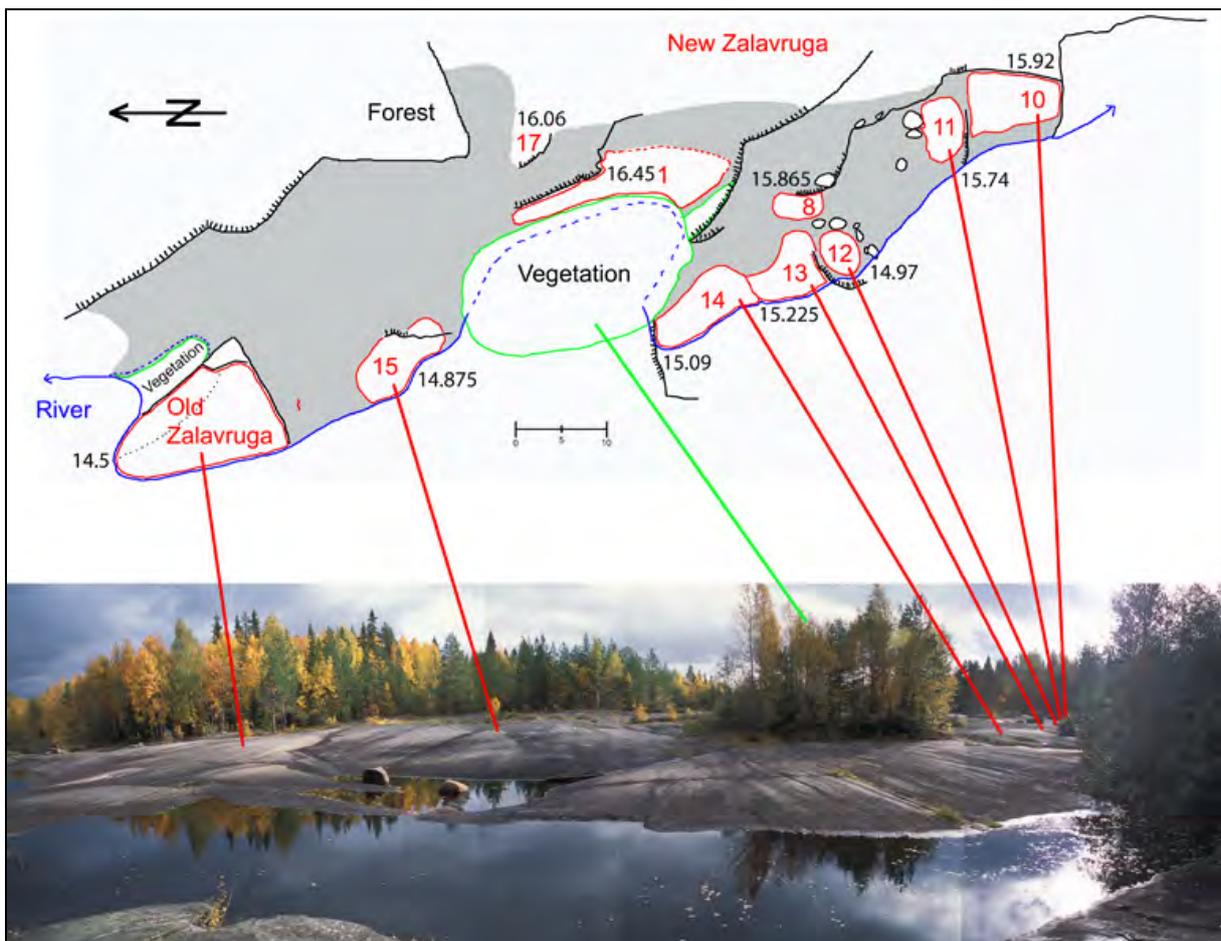


Figure 199 Relation between Old and New Zalavruga. Here you can see the horizontal strategraphy of the northernmost panels at Zalavruga. One can also see that there is a clear difference in elevation and that this western part is situated lower than the flat area of Zalavruga shown in **Figure 196** and **Figure 197**. Photo and illustration: Jan Magne Gjerde.

The large amount of settlement sites in the Vyg area has produced a number of ^{14}C -dates with good elevation data. The first carvings at Vyg would have been made at Besovy Sledki North and at Jerpin Pudas 3. It is most likely that the first rock carvings were made in relation to the shoreline when the Shoirukshin waterfalls by Besovy Sledki appeared. The carvings at Vyg were most likely were made in the shoreline as evidenced by the

transgression covering the panels at New Zalavruga. The erosion at Jerpin Pudas supports this assumption. Since the geological data is somewhat problematic, I have related elevation of the carvings to the ^{14}C dates from the adjacent settlements. The starting phase of the rock art is then related to the settlement covering the carvings at Jerpin Pudas 3. This ^{14}C is from 23.5masl and date to $6510\pm 100\text{BP}$, calibrated to 5560-5370BC by OxCal v.3.51¹⁵⁸.

A recent study of the shore displacement data in the White Sea (Kaplin & Selivanov 2004:30-32) shows that there has been no drastic sea level fluctuation by over 10m during the past 8ka BP as previously suggested by Deviatova (1976). The transgressions occurred in the White Sea during the Holocene at are dated from the late Boreal – early Atlantic (8.5-7.5 ka BP), late Atlantic (6.5-5.2 ka BP), middle Subboreal (4.5-4 ka BP) and middle Subatlantic (1.8-1.5 ka BP) (Kaplin & Selivanov 2004:31). These transgressions have implications for the dating of the carvings at Vyg as it shows that the land uplift process has been very complex in the White Sea region with several transgressions complicating the material record (see Figure 200).

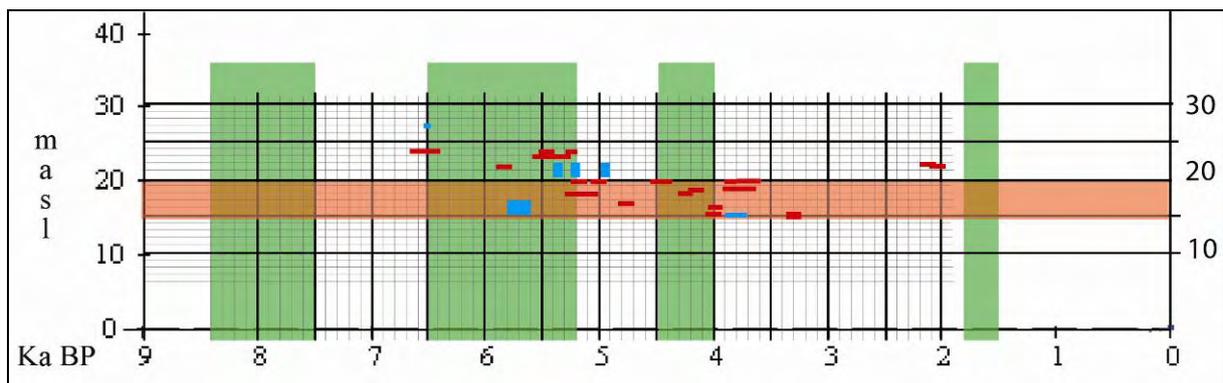


Figure 200 Presentation of the different geological and archaeological dating that have implications for the dating of the Vyg area rock art. The dark red lines are ^{14}C dates from the Vyg area after Savvateev (1970; 1977) and Savvateev et.al. (1978). The blue lines are geological data after Deviatova (1976). The green areas are representing the transgressions documented by Kaplin and Selivanov (2004). The bright red horizontal line between 14.5masl and 19.5masl is representing the elevation of the carvings at Vyg. Illustration: Jan Magne Gjerde.

¹⁵⁸ A problem when comparing ^{14}C dates and dating in general in north-western Russia is that "calibration" is most often done by extracting 2000 years from the ^{14}C date (Nadezhda Lobanova, personal communication 2005 and Vladimir Shumkin, personal communication 2005). As shown by Savvateyev, Deviatova and Liiva (1978) where the ^{14}C dates 5840 ± 70 and 5520 ± 60 is referred to as 3.5-3.9 thousand years ago.

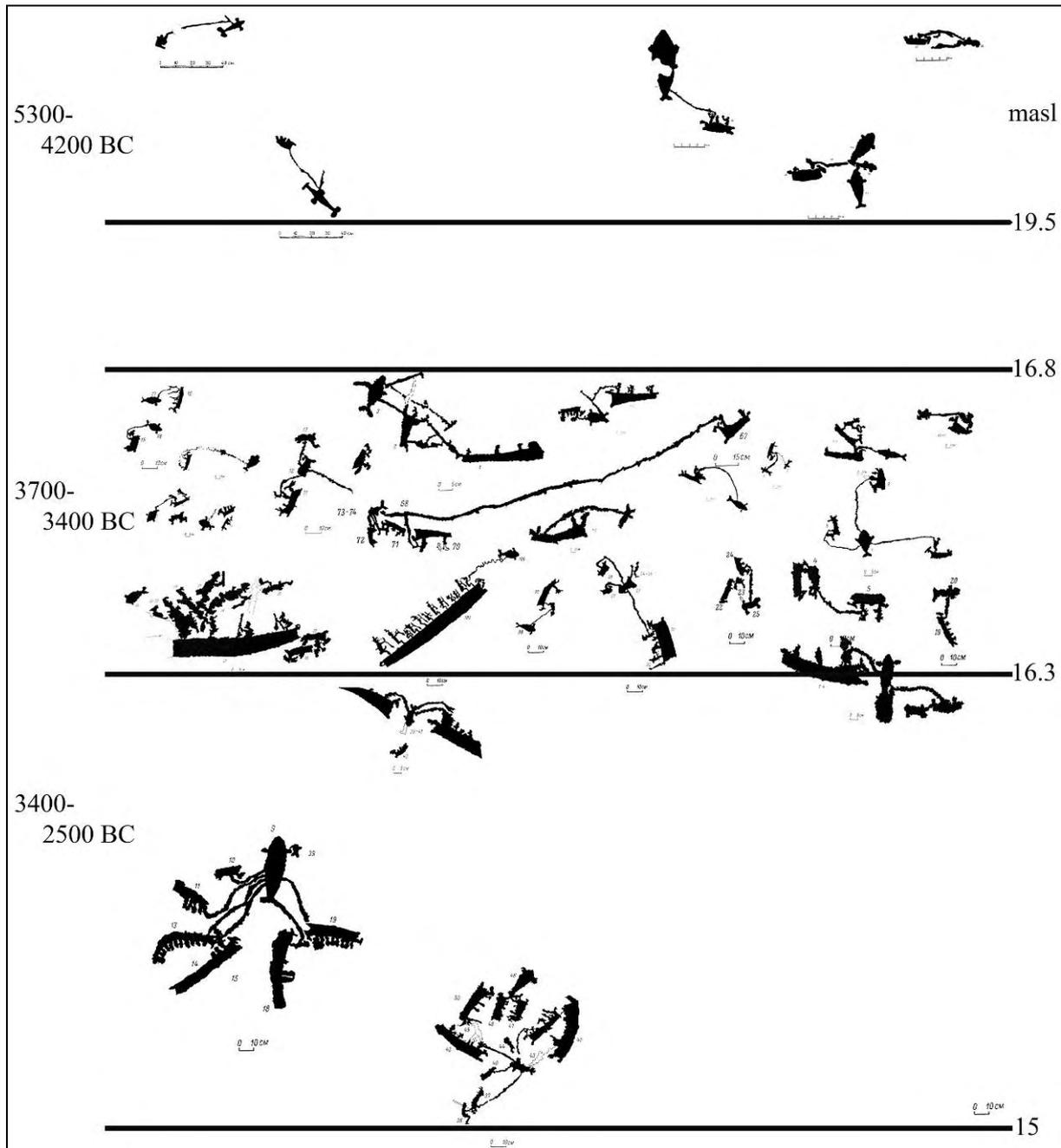


Figure 201 Whale hunting scenes at Vyg. Many of the scenes are fragmented and are not included in the illustration. This illustration includes 31 of the whale hunting scenes at Vyg. The figures are placed in accordance to their elevation. Elevation data to the right and suggested dating to the right. At the top, above 19.5masl are whale hunting scenes from Besovy Sledki and Jerpin Pudas 3. The rest of the hunting scenes are from New Zalavruga. One can clearly see how the whale hunting gradually became a highly advanced hunting strategy where up to 50 people and 6 boats cooperated in the whale hunt. Tracings after (Ravdonikas 1938) and (Savvateev 1970). All the tracings are made into the same scale. The scale in the lower right of the illustration is 10cm. Illustration: Jan Magne Gjerde.

Based on the current data, the initial carvings at Vyg must have been made before 4300BC at Jerpin Pudas 3. On the basis of the overlaying settlement remains and transgressions, it is probable that the earliest rock art at Vyg was made as early as about 5300BC at Jerpin Pudas. The youngest carvings at Jerpin Pudas is from about 4300BC. The

earliest carvings at Zalavruga was made c. 3700BC. This means that when the carvings were made at Zalavruga, most likely the Jerpin Pudas 3 carvings were already covered by settlement remains. The carvings at New Zalavruga has to be older than the latest remains covering them, with a ^{14}C -date of about 2450BC. This means that the highest elevated carvings at New Zalavruga must have been made before about 3380BC. The horizontal stratigraphy at Zalavruga and the shoreline data advocates that the carvings at New Zalavruga were made between 3700 and 2500BC. The carvings at Old Zalavruga was located at c. 14.5masl and would by relative shoreline dating be younger than the carvings at New Zalavruga, estimated to c. 2000BC. Based on these assumptions, the ^{14}C dates from the adjacent and covering settlement record, and the prerequisite that the carvings were shore bound, the Vyg carvings are dated to c. 5300-2000BC. The internal chronology is problematic, although one can relate the figures into phases by the material that shows that some of the figures are made at different elevations and that there is a relational chronology based on the land uplift and the ^{14}C dates from the settlements. This is attempted for the whale hunting scenes at Vyg, that is presented in Figure 201. The whale hunting scenes at Vyg shows that there is a development towards a more complex whale hunting where the latter whale hunting scenes witness a cooperate hunt with as much as 6 boats and perhaps as much as 50 persons taking part in one whale hunt (see Figure 216).

Macrolandscape and microlandscapes at Vyg

Macrolandscape

Many settlements from the Stone Age have been surveyed and excavated along the Vyg River that runs from the Onega Lake to the White Sea. A concentration of settlements from the Stone Age have been documented in the lower Vyg region and many settlements have been excavated in the area of the rock carvings due to the Hydro Power construction (Savvateev 1977; Savvateyev 1988).

From the Vyg site, the distance to the Onega carvings is about 300km. By following the waterway along the Vyg River southwards, one enters the Onega Lake, where a large concentration of rock art with more than 1500 figures is situated on the eastern shores of the Onega Lake (see Figure 202). The recently found Kanozero site on Kola Peninsula follows the Uмба River system from the White Sea. The Kanozero site is located about 280km from the Vyg site.