The rock art explosion when it comes to the increase in motifs, the large number of sites and the large rock art areas with concentrations of rock art, occurs virtually simultaneously in all of northern Fennoscandia, between 5500BC and 5000BC. This is also the time when the sites become large (by number of figures), human are involved in various activities (hunting, dancing, journeying etc.), clear scenes and compositions and the first sites that evidence a long continuous tradition where rock art is being made in the same area for several thousand years, like in Alta, Nämfforsen and Vyg. The difference between the “Early Stone Age” sites and the “Late Stone Age” sites are presented in Figure 284. Concluding from the dates, the large rock art areas is initiated virtually simultaneously and people returned to these places to make rock art for thousands of years.

Vegetation and research intensity are problematic when it comes to the representativeness of the material record. The large figures at the polished sites in the Ofoten area are visible due to good preservation conditions. This must be bore in mind when looking at the Stone Age sites in general. The research activity in some areas has revealed large rock art concentrations by deturfing large areas of rocks. Without the deturfing of the rocks in Alta, the Alta area would have included “only” a few hundred figures. The excavations at Vyg revealed most of the rock art in the Vyg area, and we know that most of the large sites have been deturfed to find more rock art. One must be aware of the fact that areas with many small sites may prove to be large concentrations if one was to deturf rocks in the area. Examples of such areas from the Case studies is e.g. the Sletjord area in the Ofoten Case study where Hallström was told there were several more sites, but at his visit in 1908 they were overgrown. Other such examples could be the Tennes area in Troms, northern Norway where there are four sites with rock art but rock outcrops between the sites have not been investigated. In middle Norway, the Hammer site includes 16 sites that date from the latter part of the Early Stone Age to the Bronze Age. With this in notion in mind, one sense that more large rock art concentrations can be found in Fennoscandia. A good example of this is the Kanozero case study where the first rock art was discovered in 1997 and now the site includes more than 1000 figures.
Macrolandscapes – the wider picture

Location of rock art

Dating sites is important when it comes to the macrolandscape. Fennoscandia has undergone large changes in the landscape due to natural processes. The main change has been the land uplift, leaving rock art sites up to 100masl and like at Nämforsen more than 140km inland. Important for this thesis has been reconstructing lost relations. Reconstructing the landscape by raising the sea level has shown that the landscape has changed since the time of the making of the rock art. At some places it is problematic to see how the landscape would have been due to the changed landscape context both when it comes to natural and human intervention. The land uplift combined with the building of large hydro-power systems at Nämforsen and Vyg has left the landscape contexts somewhat unrecognisable to the ones in the past (Figure 208). It is therefore crucial to include lost relations when interpreting past landscapes.

When it comes to location for the rock art in the Case studies, there is one common factor for all the large rock art areas; the shore connection as presented by Helskog (1999). The only sites that do not have such a location in the shore zone, are a few of the paintings in northern Sweden. The polished rock art and the carvings are almost exclusively bound to the contemporary shoreline and, like at Nes and Valle in the Ofoten Case study, they are located at the same elevation even where there is no visibility between the sites. One would otherwise assume that carvings were made at different elevations if they were not shore connected. The Slettnes site and much of the rock art at Vyg were covered by transgressions, which backs the shore connection. There are several sites along the coast of Norway that were covered by marine deposits; amongst them are Kvalsund (Gjessing 1938) and Kirkely (Simonsen 1958) at Tennes in northern Norway and Hammer VI and VII (Bakka 1975b), Strand (Gjessing 1936a) in middle Norway. Several sites have also been suggested to be worn by the waves like at Slettnes in northern Norway (see Figure 148), Kirkely at Tennes in northern Norway (Simonsen 1958) and Strand (Gjessing 1936a) in middle Norway. The similarity in selected motifs and scenes at the same elevation (phase) in Alta like the reindeer corrals and the bear-hunting scenes that occur at the same elevation, links the dating to the previous shoreline. At the Nämforsen site, even after the land uplift had removed the seashore from Nämforsen, the shore connection was upheld by the large waterfall. At Kanozero the carvings are also made

213 At the Kirkely site the "wave erosion" is evident by the higher elevated figures not being eroded while the lower elevated figures are "wave eroded" like at Slettnes.
with strictly connected to the shore. The vegetation free zone was ideal since they were always available. The tidal effect is different in the Ofoten area, the Alta area, Nämfforsen and at Vyg by its coastal location. It is interesting that virtually all the rock art compositions and scenes were most likely made within the sea-spray zone as argued in chapter 4 (see Figure 80). All the large compositions at the coastal locations in the case studies at Alta, Nämfforsen, Ofoten and Vyg fall within 2m elevation, even if the largest scenes and compositions could be as long as 8m at the bear hunting scenes or the reindeer corrals in Alta. Even at the large composition at Leiknes 1 the figures seem to follow the same 2m interval (see Figure 96). At the inland case study at Kanozero, the scenes and compositions never break with this sea-spray zone. This is also the case when compared to the rest of the rock art in northern Fennoscandia. At Onega the annual fluctuations of water level in the lake varied as much as 80cm. This meant that some of the figures were submerged during one of my visits. The same was observed by Hallström as many of the figures were submerged during his initial visit to Nämfforsen at midsummer 1907 when the forceful rapids prevented his approach to Bradön Island. At the spring time, parts of the figures or the entire panel at the inland sites, like at Duved\textsuperscript{214} and Landverk in northern Sweden, are submerged due to high water-levels and the shore connection of the sites. The examples of shore connections between Stone Age rock art in northern Fennoscandia is numerous; hence I have argued that the majority of rock art in my case studies were shorebound when made.

It has been argued by Sognnes, using examples from middle Norway, that rock art sites from the Stone Age are located by conspicuous topographical features (Sognnes 1998:154ff; Sognnes 2002:202ff, fig 10.4). Some of these topographical features would stand out in the landscape, like the Hell site that is located at an island on a vertical rock cliff that could be seen from the sea. According to Sognnes, the topographical features chosen for making the Stone Age rock art may not be large, but frequently would be easily spotted by people paddling along the sound and fjords (Sognnes 2002:202). Other such conspicuous topographical features that has been connected to rock art is the rapids / waterfall (Goldhahn 2002b; Hallström 1960; Ramqvist et al. 1985b), such as those at Nämfforsen and Vyg (see Figure 207 and Figure 264). The Stornorrfors site was found in 1985 by Swedish scholars searching for rock art in locations similar to Nämfforsen where one have islands in waterfalls / rapids (Ramqvist et al. 1985b). By no doubt, many Stone Age rock art sites are located on islands in large rivers or at waterfalls (e.g. Glösa, Gärde, Nämfforsen, Stornorrfors in middle

\textsuperscript{214} At the Duved site, the whole site was submerged during my fieldwork in May 2004.
Sweden, Vyg in northwestern Russia). However, in the Ofoten area, the Kanozero area and the Alta area, they are not. Many of the rock art sites are located on small islands, such as the Goreliy, Jeloviy and Kamenniy sites at Kanozero, the Bradån and Notå island at Nämforsen, the Besovy Sledki, Jerpin Pudas and Nameless islands with rock art at Vyg. This is also found in middle Norway when reconstructing the land uplift, like at e.g. Hell, and in northwestern Russia at the small islands Guri and Mudosh at Onega. Sites are located at vertical rock cliffs (Jo Sarsaklubben at Nes, Valle 1 and 2 and Vik in Ofoten). This is also found in middle Norway at e.g. Hell and Stykket (see Figure 285). The majority of the sites are located at coastal rock slopes. This is also evident for large parts of the Stone Age rock carvings in the rest of Fennoscandia. There are also boulders with rock art located in the shorezone in the Alta-area (e.g. Slettnes 1-4, Langnesholmen 1-4). This is also found at e.g. Chalmn Varre on Kola Peninsula, Reppa in middle Norway (Sognnes 1981) and e.g. at Botilstenen and Åbosjön in northern Sweden.

There is no one common location factor of rock art sites except the suggested shore connection and the obvious fact that to make rock art, one need available rocks. In northern Norway there are also a few sites with cave paintings (most likely dated to the Bronze Age) (Hesjedal 1990:129). Rock art in northern Fennoscandia are located on vertical cliffs, horizontal coastal rock slopes, islands and on boulders. The one factor that is necessary when making rock art, the rock itself, has rarely been considered and should be explored in future rock art research. In ethnography, there are examples of people communicating with the spirits and communicating with stones (see chapter 4). However, returning to the conspicuous topographical features, many of the sites are located at locations that is in some way separates from the rest of the surrounding landscape. The caves, the waterfall / rapids, the vertical cliffs, the coastal rock slopes, the islands, the boulders all have one common denominator; they stand out from the rest of the landscape. They are located at places where the landscape character changes; like the waterfall / rapids or the island or boulders that appear from the sea. They are located at liminal places in the landscape. From the ethnographic record, we know that such places are laden with meaning. Some of these rock art sites stand out from a distance when moving in a landscape, while others only appear at close range. However, not only conspicuous topographical features make rock art stand out in the landscape. The large rock art images like at e.g. Sagelva or Jo Sarsaklubben, Nes in the Ofoten Case could be seen at a distance of up to 300m when paddling along the sound and fjords.
The main problem with a locational interpretation as presented above, is that we need to know the natural background in relation to the cultural background. What are the conspicuous features of a landscape? This is different in the different areas of northern Fennoscandia. What is conspicuous in one landscape may not be conspicuous in another or may not even exist in another. The two opposites in my case studies are the steep fjordal mountain landscape of Ofoten contrasting the flat landscape in the Vyg region. The change in the landscape also makes it important to view the sites in relation to the lost relations (e.g. the Vyg rock art that today is located 8km inland where the whole landscape character is changed due to the land uplift and the Hydro Power construction contrasted to when they were made in the rapids of Vyg and in the river estuary of the Vyg River).

A critique of the western gaze of nature has been put forward by Smith and Blundell for the interpretation of the macrotopographical features in relation to rock art (Smith &
Blundell 2004). However, as I have also argued elsewhere (Gjerde 2006; Gjerde 2009), one needs to account for both the large topographical features and the less conspicuous ones. The main problem is that we, in our “out of the office” experience in a landscape, often regard all features as conspicuous, special and meaningful. We do not know the cultural code of the natural features that could have been laden with meaning in the past. An example of this is the two different landscapes of northern Norway as viewed through the eyes of a reindeer herder and an angler, where the same topographical features were connoted with different meaning (Meløe 1990). Sognnes’ notion that the rock art sites are located at conspicuous topographical features (Sognnes 1998:154ff; Sognnes 2002:202ff, fig 10.4), seems to be the case for many of the sites, but as for the rock art in general there is not one locational factor that could explain the location of all the sites other than the shore connection.

Symbols and signposts – socializing landscapes

During fieldwork, I became aware that some of the sites were most visible from the lake or the sea. This became evident at the sites where the situation was more similar to the one in prehistory like at the inland lakes (see Figure 82). At the Landverk site (Figure 15), the two large elks were visible from a boat, but not from land. At Jo Sarsaklubben and Valle, I became aware that these figures could be observed at a large distance contrasting the rock. This can also be seen at the large paintings, e.g. like the large salmon figures at Honhammer in the northern part of western Norway (see Figure 286). The large natural sized figures situated on vertical cliffs seemed to be best observed from a distance and often from a observation point from boat at sea. With a raised shoreline, this constituted a methodological problem. A revisit to the Ofoten area by helicopter showed that figures could be seen at as much as 300m distance at a vantage point similar to the elevation of the polished carvings (see Figure 104 and Figure 105). When freshly made, the polished carvings, the carvings and the paintings would contrast the surrounding rock making them visible at a large distance. The best example in the Case studies comes from the Jo Sarsaklubben site. Looking at recent carvings in the shore zone, like at Onega, one can see how clear the carvings would appear in contrast to the rock surface even years after they were made (see Figure 287).
**Figure 286** The large salmons at Honnhammer III (Honnhammerneset), northern part of western Norway. The salmon figures measures between 1m and 1.20m. The vertical cliff stands about 5m up from the small ledge beneath the paintings. Illustration is compiled from 5 photos. The lowest salmon seems to appear from the crack where the red line in the rock twirls like flowing water. The salmon above this also seem to appear from this same natural feature possibly referring to the flowing river? Photos and illustration: Jan Magne Gjerde.

**Figure 287** Modern carving from Lake Onega in northwestern Russia. This carving was made more than 20 years ago according to a local informant. The person holding the spear is about 20cm tall. Photo: Jan Magne Gjerde.
By reconstructing lost relations, like the land uplift, one has a better opportunity to see how the landscape was in the past when the rock art was made, not only the present landscape. This is important since otherwise one would not see how the rock art sites were located in the past and place the interpretation of rock art in the context of the present landscape, making flawed relations between the rock art and its landscape.

The first rock art sites are located so that they can be seen from a vast distance. They are also located at the point or near a favourable bay for settlement (see Leiknes, Forselv, Jo Sarsaklubben, Nes Fort Øst, Nes Fort Vest, Vik, Fjellvika sites in the Ofoten case study). The Early Stone Age sites and many of the sites dated to the transition between the Early and Late Stone Age seems to be located at a point where the distance crossing the fjord or river is shortest (e.g. Brennholtet and Sagelva from the Ofoten Case Study). This is also the case for other sites in northern Fennoscandia, as suggested by Farbregd (1980), where rock art is located at both sides of such a crossing place for elk. The earliest carvings in Alta were made on both sides of the Kåfjord fjord where the Ausekarnes point (then a small island) is the shortest crossing place (see Figure 168). This location resembles the cherished crossing places found in the ethnographic sources; fjords, lakes and rivers have certain places favoured by large game animal when it comes to crossing waters. This is found in several ethnographic sources describing the favoured crossing places for cervidae (elk, deer, reindeer) over large parts of the circumpolar area (Grønnow et al. 1983; Popov 1948; Stewart et al. 2004). It seems like the earliest rock art is located at favourable places for animals. These were places where animals would “appear from the rock” or in the adjacent area or zone. The early rock art sites depicting large game animals on vertical cliffs that can be seen from a distance acted like signposts when moving in this coastal landscape. Based on the case studies and the Inuit perception of territory (Collignon 2006b), which have counterparts in other circumpolar hunter-gatherers perception of landscape, the early rock art is about marking favourable areas or zones, e.g. at Jo Sarsaklubben the reindeer can be seen standing at the vertical cliff as a symbol a reindeer area. Similar, the large reindeer at Sagelva could refer to the crossing places inland from the Sagelva site (Figure 118). These places would be places where knowledge of the land were inscribed into the rocks acting as memoryscapes.

Before I enter the interpretation of central places or meeting places, I will direct the reader to the relative and cultural preconception when it comes to distance. Distance and the perception of distance are culturally conditioned. It relates to how one moves in the landscape and the concept of spatial relations. Today modern communication lines and political and
administrative boundaries often hinder the knowledge of lost relations when it comes to moving in the landscape.

**Meeting places**

I am inclined to suggest; that even if large rock art areas like Nämforsen must have had its peak certain times of year when it was visited by many people, this was a place where people met at all times of the year exchanging information. The unique geographical location in relation communication and the large settlement record argues that there were always people at the large rock art areas like at Alta, Nämforsen, Kanozero and Vyg; hence, here one would always meet people.

The rock art sites in Nordland, northern Norway, with relatively many figures (Fykan, Klubba, Leiknes) were early on interpreted as places where people gathered and made the polished carvings and, at occasions, painted them with red colour. According to Gjessing, this most likely occurred at certain times of year when people repetitively visited the places followed by ritual cult (Gjessing 1945:313). The large number of carvings and the focus on boats has validated the interpretation that Nämforsen was a node in the Stone Age landscape that was also central into the Bronze Age. It has been suggested by several researchers that Nämforsen was a meeting place for several groups during the Stone Age (Baudou 1993; Forsberg 1993:242; Hagen 1976:127-130; Hallström 1960; Ramqvist 2002b:154-156; Tilley 1991:108-113).

As mentioned earlier, the large concentration of rock art has been interpreted as nodes in the landscape. Hallström interpreted Vyg, by comparison to Nämforsen, as a node because of its unique geographical location (ideal aggregation places by its location) (Hallström 1960:XI). While Hallström explained the rock art nodes in relation to the places’ unique character, Hagen interpreted these large concentrations of rock art, e.g. at Vyg, to be a result of the fact that they were ecological favourable places related to hunting magic (Hagen 1969:143). Vyg has also been seen as a meeting place for a large group of people or many groups that would gather for different types of social interaction at certain times of year (Stolyar 2000; Stolyar 2001:124). The favourable location of the large rock art sites, where coast and inland meet, would have been ideal meeting-places for dispersed groups with common traditions. This would be places where they could get together to hunt, fiest and perform tribe traditional activities (Hagen 1976:127-130). The Alta site has also been
interpreted as a meeting place for social interaction between coastal and inland groups during the Late Stone Age (Hood 1988).

When it comes to the early sites, most of them include few figures and solely large game. Even if this cannot be established, the early sites also seem to have been made (and possibly) in use during a rather short time (see the Ofoten Case, e.g. for the Jo Sarsaklubben site). Based on the current suggested dates, the large rock art areas of Alta, Kanozero, Nämforssen and Vyg were large rock art areas where it in this thesis has been shown that rock art was made for several thousand years. These sites were nodes in the landscape that people returned to make rock art for generations.

**Stone Age journeys**

Returning to the “unique geographical location” of the large rock art areas, one sees that they are all centrally placed when it comes to travelling. The Alta sites are located at the head of the large Alta-fjord that acted as a funnel both between the coast and the inland where the natural lines of communication met in Alta (see Alta Case study). The Nämforssen site is located at the head of the long Ångermanälen-fjord which would have been a “Stone Age highway” for people moving inland from the Gulf of Bothnia (see Case Study Nämforssen). When it comes to the Russian sites of Kanozero and Vyg, the similarity in the material record connects these sites to the large Onega site. They are all central areas in the major waterway systems in northwestern-Russia where the distance between the large rock art centres is about 300km. While the Onega carvings are located where the rivers enter the Onega sea from the East, the Vyg site would have been located at the Vyg estuary where it entered the White Sea. Further north, and connected to the large waterway crossing the Kola Peninsula, is the Kanozero site that is located at the Kanozero Lake as part of the Umba-Varzuga waterway between the White Sea and the Barents (see Figure 288 and Figure 235).

An important aspect of such a meeting place, is that people or groups of people journeyed to and from such nodes in the Stone Age hunter-gatherer landscape. The boats at Vyg are often associated with the whale hunt. However, the large boats could also communicate their communication abilities. Some of the larger boats room more than 10 people and must have been similar to the Umiak of the Eskimoes. The large boats and the actual journeys have been connected to the large journeys and stories of the travels and its rituals when starting or completing a long journey should not be underestimated. The journey in itself has been associated with rituals as suggested by Helms (1988; 1992).
The large variety of figures that has its counterparts in large areas of northern Fennoscandia supports the idea that Kanozero was a meeting place. The strategic geographical location also advocates the meeting place idea. Kanozero is in wide terms a place for cynegetic activities. I am convinced that Kanozero was a place where people knew others would meet, a meeting place where people could exchange information and ideas both functional and ideological.

Figure 288 The relations between the sites “related” to Vyg. The landscape is tilted in Google Earth. Thereby distance relations are distorted. Vyg according to leading communication lines from the Onega to the White Sea. Note that the Finnish rock paintings are not presented in this illustration. The distance as the crow flies from the Onega carvings to the Vyng carvings are c. 300km as the crow flies and the distance to the Kanozero carvings from Vyng are about 280km. Illustration: Jan Magne Gjerde.

In northern Norway, Bjerck (2007; 2008; 2009a; 2009b) claims that there seems to be a delayed colonization of the inner fjordal areas based on studies on settlement location along the coast of Norway. The settlements clearly have an outer coastal location. The explosion in rock art sites and the focus on journeys in rock art could be describing the intensity of journeys and the manifestation of familiarizing the landscapes. By about 5500-5000BC people in the north had an extreme knowledge of the land and by cynegetic activities their knowledge were manifested at places through the rock art in a manner similar to what Taçon (1994) defines as socialising landscapes in Australia where it became increasingly important to mark the land and this was performed by making rock art.
In his description of Finland, the land and the people, Nordenskiöld describes the communication by land and water in Finland as similar to the Kanozero area of Kola Peninsula: “Characteristics of Finland are the so-called winter-roads, which are used when the lakes are frozen over. By travelling partly by land and partly on frozen lakes long detours can be avoided”. The numerous watercourses in Finland have been of extreme importance as highways of communication ever since the Stone Age (Nordenskiöld 1919:374).

It is no problem finding boats involved in some form of hunting or fishing, like the halibut fishing at Forselv, the driving of reindeer in Alta or the whale hunting Vyg. However, the majority of the boats depicted are not part of such hunts. They simply depict boats (see e.g. Figure 289 and Figure 290). At Nämforsen, Hallström related the small boats to the fishing and hunting, while the large boats with a number of crew (see Figure 289) could illustrate the long journeys to and from the waterfall (Hallström 1945:33).

Figure 289 Boat image from Lillforshällen, Laxön in Nämforsen. These large boats made Hallström suggest they were illustrating long journeys. This boat has about 15 crew members. The boat measures about 1.8m in length. Photo: Jan Magne Gjerde.

I find my initial critique of current rock art research validated due to its interpretation that everything must always mean something much more than what is actually depicted in the rocks. A good example is when Tilley in his discussion on the Nämforsen material draws
attention to the ambiguity of the boat (elk-head boat and antlers as boats) (Tilley 1991:68). Tilley then continues in his cosmological quest of rock art: “Just as the vast herds of elks depicted did not exist, neither did these accumulations of small vessels nor the massive ships. What we are dealing with is not reality but a cosmological depiction of it” (Tilley 1991:77). I do not question that cosmology is included in Stone Age rock art, however, the large herds of elks exists in the forested area near Nämforsen, the reindeer flocks at Alta are real, the bear hunts were not part of peoples imagined world and the whale hunts at Kanozero or Vyg are not solely a cosmological incident. In his works on Nämforsen, Tilley strands in his boat moving along the cosmological river never considering the fact that a boat could actually be a boat.

The Case studies show that the large rock art areas are located at places that favours boats as communication. They are located at central places in relation to large waterways (rivers or fjords) or at coastal locations. These large waterways must have acted like Stone Age highways. This can best be seen at Nämforsen where the large Ångermanälven River when accounting for the land uplift, becomes the Ångermanälven-fjord that cuts about 140km inland to Nämforsen. No other fjord prove to be such a Stone Age highway connected to the Gulf of Bothnia during the Stone Age. This would have been an ideal line of communication between people living along the fjord and on the outer coast. The large waterfall at Nämforsen would be a natural stop before one could go further inland. The low inclination would make it possible to carry the boats past the waterfall and journey further inland making the Ångermanälven-fjord and the Ångermanälven River stable and one could travel by boat to Nämforsen during the Late Stone Age. The boat would have been central to the people settling the Ångermanälven region in the Stone Age. This could be one of the reasons why the boat is frequently depicted. In addition, it is the large boats with many people that are depicted where they could represent what Helms ethnographically refers to as the long journeys often connected to rituals (Helms 1988). Recently Lindgren has stressed the importance of being a traveller during the Stone Age when it comes to acquiring and exchanging raw materials and knowledge (Lindgren 2007). The importance of travelling, communicating, storing information, and then retelling the stories at certain places or at certain times is connected to certain people in society as suggested by Barth in Southeast Asia and Melanesia (Barth 1990).

The long journeys I suggest for the Stone Age has previously been suggested when it comes to acquiring raw materials like flint or “elite objects” such as amber. Long distance travelling have been suggested for the Bronze Age (Kristiansen 2002; Kristiansen 2004;
Kristiansen & Larsson 2005). However, rarely have long range travels during the Stone Age been discussed, although large boats rooming many people are depicted in the rock art. Long journeys can be connected to rituals and the importance of being a traveller when it comes to acquiring knowledge. Communication, and especially long-range communication should be stressed more for the Stone Age. Knowledge of the landscape would have been extremely important for people during the Stone Age. Examples from the Inuit world, suggest that it is the male hunters that through cynegetic activities are holders of the “wisdom of land” (Collignon 2006b). Through journeys, individual and communal hunting they had a geographical knowledge that must have been vital to them as hunter-fisher-gatherers.

Figure 290 Boat images at Bergbukten 3 in Hjemmeluft, Alta. The size of the large boat, above the middle of the photo, with three crewmembers, is about 67cm long. These boats belong to phase 2 and is dated to about 4200BC-3000BC (see Figure 152). Photo: Jan Magne Gjerde.

The head of the Alta-fjord would have been an ideal stop for people journeying between coastal and inland areas. The wider Alta area shows a unique geographical character were the inland valleys and the fjordal tributaries to the Alta fjord acts as funnels routing people through the head of the Alta-fjord through its natural lines of communication. The head of the Alta fjord by its location and the rock art has been interpreted as a meeting place.
and according to Hood, Alta would have been an ideal place for communication between different inland and coastal groups (Hood 1988).

Moving back to the rock art in relation to journeys, by no doubt some of the stories of the rocks most likely represents stories that occurred in the vicinity or at the actual place where the rock art is depicted. I have suggested this for the whale hunting scenes at Vyg (Gjerde 2005; Gjerde 2006; Gjerde in press-a), a theory that is supported by whale bones found at adjacent settlements. Thereby the whale hunting tells stories from the actual rock art place. But, as the case studies shows, the stories do not merely depict the actual place and the activity where it occurred, as presented in the hunting place theory of rock art. Even if there are places where I am convinced the hunting place would have been where the rock art site is located (e.g. Høgberget 1, Jerpin Pudas 3 (Vyg), Jo Sarsaklubben) they also depict activities that would have occurred in the area, thus referring both to the rock art place and their understanding of the macrolandscape. An example of this is from Bergbukten 4 where inland reindeer corrals are depicted, while the area where the rock art is located and the coast is represented by halibut fishing scenes (see Figure 183). Another example is from Nämforsen, where the landscape is depicted as seen from the Nämforsen site with the “inland” elk hunting and the elk and man walking on the shore and the boats depicted on the fjord. The figures are depicted as a cross-section of the landscape (see Figure 262 in relation to Figure 270).

When it comes to the travels of stories and the telling of stories about cynegetic activities, I will direct the reader to the Besov Nos panel at Onega where whale hunting is depicted. We know that the Beluga whale was not present in the Onega Lake. Most likely this is a story of and by people taking part in the Beluga hunting at the White Sea, perhaps at Vyg, linking the two sites stronger together. There are three whales at Besov Nos in Onega. Two of them were discovered by Ravdonikas (1936b:plate 25, 30). When revisiting the Besov Nos site, a part of a whale can be seen and what was interpreted as a human figure most likely is a boat with a hunting line (see Ravdonikas 1936b:plate 28 figure 56). The best visible whale hunting scene can be seen at Besov Nos (Ravdonikas 1936b:plate 30 figure 60 and 61). Another whale is depicted to the right of the whale figure, however, one can only see the whale and the hunting line since the rest of the figure is eroded. The area with other figures (Ravdonikas 1936b:plate 25), then most likely depicts three whale hunting scenes, where the best preserved is the middle one (see Figure 291). While the hunting scenes at Vyg is telling stories of cynegetic activities connected to the site, the whale hunting scenes at Onega tells stories of travels and hunting the white whale by the White Sea, some 300km away. As seen
in the case studies, there seems to be a geographical reference in the rock art that sometimes relate to areas, zones or the places where the activity occurred.

![Figure 291](image.png)

**Figure 291** The whale hunting scenes at Onega. Only the whale hunting scenes are chalked to make them more clear on the photo. This is the left and the middle whale hunting scene at Besov Nos. Scale in the middle of the photo is 10cm. Tracing of the figures at Besov Nos can be found in Ravdonicas publication on the Onega carvings (Ravdonikas 1936b:plate 25). Photo: Jan Magne Gjerde.

Hallström early on accounted for Russian flint in northern Sweden by suggesting travels over the Bothnian Sea (Hallström 1925:89). By adding the motif similarity and stylistic comparison of the rock art and the elk-head sticks found at the Olenii Ostrov burial site in Onega, Hallström suggested that a connection could hardly be doubted (Hallström 1960:317). Large boats and the actual (long) journeys may have been associated with rituals, as suggested by Helms (1988; 1992). In Hallströms work, when he suggests a similarity between the carvings from Nämfortsen and Onega and the brief account of the long journeys to and from such meeting places, I am of the mind that what Hallström meant, is that people through their journeys could have visited several of these “meeting-places”. Hallström travelled to and from the sites, revisited them, and hence, witnessed the similarities, not from the tracings in a book, but by first hand knowledge. Through my fieldwork, it has been of crucial importance to see the rock art *in situ*, to travel to and from the sites spending time in the landscape.
Microlandscape – miniature worlds

As shown in the numerous examples from the case studies there is no doubt that rock art interacted with natural features in the rock surface, from the tiniest crack up to the microtopography in the rocks acting as miniature landscapes or miniature worlds.

Some places, it seems like the animals appear from cracks interacting with the layering in the rock surface, like at Flatruet (Figure 292 and Figure 293) and Högberget 1 (see Figure 261) in northern Sweden or at Gjølgjavatnet (see Figure 294) and Hunnhammer 3 (see Figure 286) in middle Norway. In the light of ethnography, the rock surface acts like a membrane between this and the other world (Lewis Williams & Dowson 1990). Steps, cracks and the like were construed as pathways which connected the world and could only be followed by shamans and inhabitants of the spiritual world (Ouzman 1998:36) This has been well documented several places in the world, e.g. in South Africa (Lewis-Williams 2002a) and North America (Arsenault 2004a:299f).

Figure 292 The Flatruet site in northern Sweden where one can see how the figures are placed in relation to cracks and ledges as if the animals appear from cracks in the rocks. At a closer look it seems like the human representations and the elk figures are appearing from the cracks connected to the ledges from inside the rock surface, the “other world” Photo: Jan Magne Gjerde.
Figure 293 One of the elks at the Flatruet site in northern Sweden where the elk is appearing form the crack interacting with the elements in the rock. Photo: Jan Magne Gjerde.

Figure 294 Painted figures at Gjølgjavatnet middle Norway. Notice how the large elk figure appears as if it is coming out of the rock. Photo: Jan Magne Gjerde.
As seen in the Ofoten Case study, the tiniest crack or line in the rock could be included in the rock art like the mouth of the reindeer at Jo Sarsaklubben (see Figure 134) or the quartzline indicating the waterline where the swan is swimming at Leiknes (see Figure 135). At Bergbukten 1 in Hjemmeluft, Alta, bear tracks appear from a natural formation in the rock (see Figure 150), while at Vyg, the water runs over the rock surface indicating the river (see Figure 216). At Kanozero the inclination of the rock relates to the actual skier and relates to the topography (see Figure 240) and at Nämforse (HIIQ1), a quartzline represents the shoreline where a human and an elk is standing at the shore (see Figure 268). These examples show that rock art interacts with natural features. However, this does not mean that I regard all the rock art to be solely dependant on the natural features. The natural elements are included in rock art at many, but not all places. This argues for a study of human interaction with the rock itself. We have to consider that we do not know what features were part of the rock art story at any given time. We do not know the cultural code at any given time of the rock art and of the natural features.

What I find most interesting concerning the interaction of the elements, natural features and rock art, is the interplay with the macrolandscape. In all my case studies, I find places where rock art and the natural elements interact as rock art and natural elements seem to describe the figures in relation to a wider landscape, the macrolandscape. The rock art and the elements interact creating miniature landscapes or miniature worlds of the world in which the hunter-gatherer lives. At Bergbukten 1 in Alta the miniature lakes, valleys and rivers interact with the figures representing miniature worlds. At Nämforse the HIIQ1 site appear as a representation of the landscape seen from the rock art site (see Figure 262 in relation to Figure 270). Numerous examples relate the rock art to the natural topography in the area. At Bergbukten 1, one can also see how the rock art refers to topographical features through its positioning. In my opinion, when studying Stone Age rock art, both the motifs, scenes and the interaction with the microlandscape are references to places, areas and macrolandscapes. Like the bear dens in Alta, the reindeer corrals in Alta, the boats in the miniature river at Nämforse, the whale hunting and the hunting of elk at Vyg and the hunting of bear at Kanozero. They are all reference points to the macrolandscape and places in their real world. This brings me to the geographical knowledge and the memoryscapes stored in the rocks.

The miniature landscapes of the rocks were applied as a backdrop to tell the stories; such as the inland hunting for elks at Nämforse (Hallström IIQ1) (Figure 270), or the inland reindeer corrals at Alta (see Figure 171), the open sea halibut fishing scenes from Forselv (see Figure 75), and the Beluga whale hunting in the river and river estuary at Vyg (Figure 216).
The placement of activities and figures in relation to miniature water systems shows that the figures were placed in relation to the micro-landscape in order to tell stories related to the macrolandscape, to actual and imaginary places. Examples of this are found other places as shown through the examples from Nämforse at Laxön (“Nedre Hällkaret”) (see Figure 271), Bradön (see Figure 265, Figure 266, Figure 267). Many of the stories at Nämforse depicts cynegetic activities and knowledge with the microlandscapes as a backdrop, telling stories of their interaction with environment. The stories acted as memoryscapes related to geographical knowledge of the environment.

**Reconstructing Stone Age hunter-gatherer landscapes**

**Ethnographic landscapes**

Rarely do we have the opportunity to look at the landscapes of the past. One need to account for the changes in a landscape and relate to the activities in a landscape. Rock art contains an important door into the lived landscapes of the past. Accepting that at least some of the rock art depicts reality, one way of getting closer to the past as experienced in the past is through ethnography. I will exemplify this with whale hunting that is relevant for large parts of the scenes at Kanozero and Vyg. When trying to get a better understanding of Stone Age hunter-gatherer landscapes we need to find similar landscapes that include similar activities or manners in which to approach the world.

It is important to look for societies that live in the same “animal worlds” when seeking relevant analogy and ethnography (Helskog 2001b:4). Similarity in environment cannot be stressed enough. This has been somewhat neglected when it comes to rock art. It has been easier to compare and draw analogies in a south-north direction. Hence, it has been easier to apply ethnographic analogies from South-Africa and Australia rather than from the circumpolar area. An exception to this are some of Helskog’s work on northern rock art (e.g. Helskog 1999; Helskog 2004a).

Accepting a slight repetition of some of the results from the Vyg case study that may also have implications for the Kanozero case study, I will dive into the “Beluga landscapes” in the ethnography in relation to the rock art. When looking at the Beluga whale, the ethnographic descriptions of the traditional hunt are important. The ethnographic record of these large hunting places, or “Beluga landscapes”, where a well-coordinated hunting team, could yield a great supply of whale meat and oil with little outlay of effort (McGhee 1974:19). Whale meat and fish are cached (dug down) to last through the winter, thereby securing a year.
round supply of food (McGhee 1974:22; Stefansson 1914). These landscapes are places that are defined as perfect places for whale hunting.

Returning to Vyg, the topographic situation in the Besovy Sledki / Jerpin Pudas area shows a striking resemblance with the topographic situation of the Canadian Beluga landscapes as shown in the Vyg Case study (see Figure 209 and Figure 212). Several places could have worked as cul de sac places for the Beluga hunt in the Vyg area. The “natural” whale trap being between the rock art sites, Besovy Sledki North and Jerpin Pudas 3, in the bay of shallow water where the waterfalls would be a major obstacle and would have hindered the Beluga whales in going further upstream. The evidence for a direct connection between the topographic situation and the actual presence of Beluga and Beluga hunting is also strengthened by the distribution of the motifs. There seems to be a visualization of the whale hunt where it actually happened. This means that there is a “direct” link between the place of action (the whale hunt) and the action in the rock art.

**Figure 295** After Savvateyev (1970:253, plate 51). A whale hunting scene from New Zalavruga 9, Vyg. It appears as if the people have been thrown out of the boat during the hunt. The front of the boat is eroded.

In the ethnographic record, the dangers connected to the whale hunt are described vividly; “… accidents were common but drownings rare” (Lucier & VanStone 1995:82). A hunting scene representing this can be observed on New Zalavruga 9, Vyg (see Figure 295), where people are “thrown” out of the boat in connection with the whale hunt. The ethnographic record descriptions of the rituals connected to the whale hunt are elaborate.
I would suggest that the dangers inherent in the whale hunt could be one of the reasons why the rituals connected to the whale hunt are so elaborate.

Figure 296 Section of Jerpin Pudas 3. After Savvateyev (1977:72). The copulation scenes connected to the Beluga Whale can be seen in the middle of the tracing.

Figure 297 Rubbing of the large whale hunting scene at New Zalavruga 4. This has been interpreted as a training or initiation scene of the whale hunt. Note the clear erection on some of the male hunters. Rubbing: Jan Magne Gjerde.

The mentioned rituals in the ethnographic record are also connected to numerous taboos related to the whale hunt. One of the interesting observations is the distancing between the male hunter and his wife before and during the hunt (Lucier & VanStone 1995:59). After the successful hunt, the feasting also includes the “meeting” of man and woman. This could be what we see at the Jerpin Pudas 3 site where four copulation scenes are depicted next to a
Beluga and one of the couples is virtually on its way into the whale (see Figure 296). The connection between fertility, rituals and rock art have previously been suggested. The copulation scenes at Jerpin Pudas 3 at Vyg is one of the most direct links in the rock art of Vyg. Looking at the hunting scenes from Vyg, many of the hunters are depicted with an erection (e.g. Figure 297), perhaps emphasizing fertility and power. We know that hunting in hunter-fisher-gatherer societies have been associated with elaborate rituals. The ethnographic record sometimes vividly describes rituals connected to the hunt. They also describe elaborate rituals in relation to the hunting practices and the importance of communication between man and animals. We see that the boats and the elk-head sticks are associated with the elk. This can be explained through the elk morphology, that it is a good swimmer and moves fast both on land and at sea (Brandstrup 1985; Farbregd 1980).

The abundance of Beluga hunting scenes (more than 60 scenes of Beluga hunting from boat in the Vyg area (see e.g. Figure 297), shows that people have hunted Beluga from boats, sometimes also combined with hunting from the shore. From the ethnographic record we know that the gathering for the Beluga hunt reinforced hunting partnerships, cemented relations between participating societies and minimized inter-societal conflict (Lucier & VanStone 1995:86). Some groups of people would live in the areas all the time while others would migrate to the Beluga hunting landscapes during the hunting season (Lucier & VanStone 1995:3, 11; McGhee 1974). In traditional hunting societies the hunting leader or shaman (often the same person) could come from any of the societies that cooperated in the Beluga hunt (Lucier & VanStone 1995:51, 86). Such cooperation would strengthen the relations between the inland and coastal groups, as suggested for the Alta rock art area by Hood (1988). An increasing amount of people living at these favourable nodes in the landscape of hunter / gatherers could have triggered changes of many aspects in society and may even have advocated a change within the social organization. From the ethnographic record we know that large amounts of people gathered at adjacent favourable ecological places during the hunt. The Vyg area could be one of these places already as early as 5500BC. Most likely few people lived there year round, hence, people gathered at Vyg during the hunt as described in the ethnographic sources from northern Canada (Lucier & VanStone 1995; Nelson 1983[1899]). Vyg would then be such an important node in the hunter-gatherer landscape ideal for inter-societal relations where social interaction was important. The communication line along the Vyg River makes me suggest that this was a central place in the hunter-gatherer landscape where people met due to the fact that there would always be people
on the move to and from the Vỵg area. This would be a place where information was exchanged and communication in a wide sense was practiced.

The Beluga hunting scenes in the Besovy Sledki / Jerpin Pudas area are represented by single boats containing one person. This is also the situation at Zalavruga, but in addition, at Zalavruga you also find representations of collective hunting where several boats takes part in the hunt for one whale. One of the hunting scenes at New Zalavruga 4 has also been interpreted as depiction of training or initiation of the whale hunters215 (see Figure 297).

According to Ingold: “A place owes its character to the experiences it affords to those who spend time there – to the sights, sounds and indeed smells that constitute its specific ambience” (Ingold 2000:192). But how are we to witness or describe the experiences or the atmosphere of the past? The collective hunting, the communication and cooperation between the people, the smells, the colours, the perceptions of the whale hunting so visually expressed in the rock art, or the rituals associated with the whale hunt. The bay filled with red blood set against the white colour of the whale. The blood washed up on the “red beaches” that would stay red for a while. The sounds of the animals, the loud whirling from the beluga herd. The “rolling raven call” when the shaman or watch-leader saw the Belugas and the silent visual “language” and low-level voice communication where the hunters formed quickly for attack and altered the hunt as belugas veered or turned about. The complete silence until the sign was given and it was appropriate to frighten the prey. Then, the “exiting events”, with animals dashing about in shallow water, sometimes causing the kayaks to overturn and people to be injured. According to the ethnographic sources, feasting and social events followed a successful hunt (Lantis 1938:446; Lucier & VanStone 1995:69, 82-83). The majority of these experiences will remain foreign to us. However, we must try to interpret the rock art in the light of ethnographical sources.

**Hunting the largest animals**

Based on the main theme in Stone Age rock art, large animals and hunting scenes, it is evident that they tell stories of hunting. Furthermore, it is not just any hunt that is depicted, it is stories of hunting the largest animals. Depictions include the “hunting” or fishing of halibut at Forselv (see Figure 75) and at Alta (Figure 146). There are bear hunting scenes from Alta, Kanozero and Vỵg. Elk hunting is best illustrated at Nämforsten, but is also depicted in Alta,

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Kanozero and Vyg. At Kanozero one finds reindeer hunting, and at Alta also, reindeer hunting by boat and in reindeer corrals.

The hunting theme is apparent in all the Case Studies. What strikes me is that the hunting interpretation that was manifested in the 1930s became less valid for rock art research after the hunting scenes appeared in the material record. Could this be related to the research aims, of the majority of researchers, where the knowledge of the material record gradually was granted less importance in the interpretation of rock art? It seems like researchers “washed out” hunting and fishing when they distanced and discarded the hunting magic / sympathetic magic theory. Bear in mind that what we are studying is rock art by Stone Age hunter-fisher-gatherers. In northern Fennoscandia their economy was mainly based on hunting and fishing. By returning to the rock art and its lost relations one can discern other aspects of the past. In this thesis one has tried to gain a better understanding of prehistoric landscape conception and its conceivable role in northern Fennoscandian Stone Age hunter-fisher-gatherer cosmology.

Reconstructing the landscape of the largest animals involves the morphology of the animals. Common for all the large animals that appear in the rock art, is that they are migratory animals that come and go by the season. They often migrate along the same lines in the landscape, along natural lines of communication, like the reindeer do between the coast and inland areas in northern Norway, or at Vyg where the Beluga whale gather at late summer / early autumn. These lines of communication would be guided by the macrolandscape as to where it is possible to and where it is favourable to move during these migrations.

In the Arctic, there are between 6 and 8 months of winter. The returning animals have always been appreciated by the people inhabiting these areas. Knowledge of the animals morphology, when and how they migrate, would have been of great importance for the first people that entered northern Fennoscandia after the last Ice Age, and it is still vital for anglers or reindeer herders today. The areas where certain animals would be at a given time have always been crucial for hunter-fisher-gatherers. In northern Fennoscandia today there are virtually only domesticated reindeer present. The Beluga whale populations were slaughtered to a minimum during the 1960s. It is therefore hard to imagine what an impact these animals would have had on people living in these landscapes. There are other areas where animals are abundant. These areas and animal worlds can be used to get a glimpse of how it must have been during the migrations. We can apply ethnographic sources to get a better understanding

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216 Most prevailing is the bear hunting and reindeer hunting in Alta, northern Norway and the Beluga whale hunting at Vyg in northwestern Russia.
of the animal worlds depicted in the rock art, like the large flocks of Beluga whale or the large herds of reindeer that appeared in the landscape at given times every year. They are lost relations of the hunter-fisher-gatherer landscape depicted in the rock art. Herds of elk can still be observed in northern Sweden, however herds of Beluga whale like in Figure 311 or herds of wild reindeer like in Figure 312 is long gone from these landscapes.

Before 5500-5000BC we only see large game animals depicted but after about 5000BC collective hunting appear in the rock art. We see the reindeer corrals in Alta, Beluga hunting at Kanozero and Vyg and elk hunting at Nämftorsen. These are depictions of a hunting strategy that involved a vast number of people. The investment in the large hunting pit systems for elk connected to the rock painting sites in northern Sweden, the communal hunts depicted at Vyg with about 50 people participating in the hunt and the building and maintenance of the large reindeer corrals in Alta suggest that people were cooperating during the hunting. We know that these hunting periods for the migrating reindeer or Beluga whale were confined to a rather short hunting season. Ethnographic examples show that many people gathered at favourable ecological places during hunting seasons, such as among the Nganasan in Siberia where groups of people cooperated in the reindeer hunting (Popov 1948; Popov 1966), or amongst the Inuit where large groups gathered during the Beluga whale hunting season (Nelson 1983[1899]; Savelle 1995) and in Siberia where people gathered during the Geese molting (Popov 1948; Popov 1966; Storå 1968).

Within a hunter-gatherer landscape there are favourable zones or areas in relation to animals. This is either where large groups of animals congregate at certain times of the year, like the Beluga in river estuaries (McGhee 1974), or places where reindeer gather like the calving places or the jassat, where reindeer cool down on snowy patches during hot summer days to avoid the heat and insects (Anderson & Nilssen 1998; Kalstad 1994; Kalstad & Brantenberg 1987:17; Meløe 1990), as seen in Figure 298, or the feeding / resting grounds for migrating geese (Bollingmo 1991; Storå 1968). Returning to the earliest rock art (e.g. Valle in Ofoten and the clearest example from Fykanvatn in northern Norway, these sites would have been situated adjacent to the glacier and even now the steep mountains makes these areas hold jassat ideal for the reindeer to cool down and “get away” from the insects (see Figure 298). Places connected to the seasonal migration of reindeer are connected to landscapes where reindeer migrate; certain valleys, bogs, crossing places (over fjords, lakes and rivers). These places are among the Saami named suophåš and relate to such favourable

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places (Manker 1960; Sommerseth 2009:248; Vorren 1998:135). Such favourable places connected to the annual migration of large terrestrial game can be found in vast parts of the circumpolar area (Benedict 2005; Blehr 1982; Collignon 2006b; Grønnow et al. 1983; Popov 1948; Popov 1966; Stewart et al. 2004).

Figure 298 View of a typical aggregation of a large group of reindeer occupying an entire jassat (snow patch) during a hot summer day from Kvaenangsfjellet in Troms, northern Norway, 1985. Notice how the reindeer congregate and virtually "fill" the jassat but are not standing outside the jassat. Photo © Arne C. Nilssen, Tromsø University Museum.

The large rock art centres depicts congregations of animals. These are also depicted in areas where such animals are abundant or most likely would have been in prehistory. When viewing Stone Age rock art from all of Fennoscandia the selection of motifs show a regional variation where some animals appear in abundance in the different regions. One common animal is the elks are “everywhere”, even though they are more prevailing in Finland, northern Sweden, eastern and middle Norway. Even if it is highly subjective, a simplistic model of such congregations of favoured animals represented in the different areas rock art is presented in Figure 301. Here one finds the reindeer in Alta, northern Norway, the Beluga whale at Vyg, northwestern Russia, the elk at Nämforsen in northern Sweden. Looking at the
rest of Fennoscandia, the red deer at Vingen in western Norway\textsuperscript{218} (see Figure 302), the geese at Hammer in middle Norway (see Figure 281), the halibuts at Kvennavika, middle Norway (see Figure 300), the elks in Eastern Norway (see Figure 307 and Figure 308) or the swans at Onega\textsuperscript{219} (see Figure 299) all reflect the congregations of large game or important animals and most likely refers to favourable places both adjacent to the rock art but also in the wider landscape or area / zone.

\textsuperscript{218} A local informant in Vingen, Helga Vingelven, informed me that it was normal to see groups of red deer coming down in the Vingen area. The largest group she had counted consisted of a group of 87 animals.

\textsuperscript{219} The sheer number and domination of motifs led researchers to name an area with rock carvings at Onega the Swan Cae.
One of the large rock art concentrations where one animal is clearly favoured is the Vingen rock art area (see Figure 303), where the red deer is frequently depicted (Figure 302). Of the identified motifs in Vingen, the red deer dominate and an overview of the Vingen material by Viste (Viste 2003:43, tabell 4.1) shows that more than 50% of the identified figures are red deer. Vingen was by Brøgger in line with the hunting magic / hunting place theory interpreted as a hunters heaven (Brøgger 1925:78). The region where Vingen is situated is one of the areas with the highest numbers of red deer in Norway (Meisingset 2008). Not necessarily Vingen as such, but the Vingen area might be a favourable place that was central in the Stone Age hunter-gatherer landscape (Gjerde in prep-a).

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According to Viste there are 2159 figures in Vingen. Of these 564 are unidentified figures (lines and fragments of figures). Removing these, there are 1595 identified figure as Vingen. Of these are 941 animal figures where 859 are cervids and 756 represents red deer. Of the animals depicted in Vingen, the red deer make out more than 80%.
Figure 302 The Elva site in Vingen after Hallströms documentation. Notice how the red deer is following the ledge running up the “valley” interacting with the landscape. The whole Vingen area is dominated by such ledges (see Figure 303). Tracing after Hallström (1938:plate XXXVI). Photo from Gustaf Hallströms Archive at the Research Archive, University of Umeå, Sweden. Illustration: Jan Magne Gjerde.
Further applying the term *suophāš* or favourable places, they are connected to the animals. They are found in close relation to the large hunting pit systems for reindeer and elk. In northern Sweden, the Glösa site was first interpreted as a hunting place connected to driving elks over cliffs (Wetterberg 1845). The Glösa rock carvings are located on rock slopes in a small river a few meters from where the river ends in a vertical cliff that would have been an ideal hunting place using the hunting drive technique. Such hunting drives for elk is described in Sweden from historic times where they chased elks over cliffs (Granlund 1940). Through the case study of the Nämforsen area it is justified to assume that hunting of elk at least occurred adjacent to the rock art cliffs depicting elk (see e.g. Figure 258 and Figure 259). The Sagelva site depicting reindeer is one of the places in the Case studies that connects such favourable places to the rock art. Many of the rock art sites in the case studies are connected to such favourable places. Moving back to the rock carving site at Glösa in northern Sweden (Raa Alsen 13:1), situated about 145km west of Nämforsen, the site includes about 30 elk figures and a few geometrical motifs. The rock art site at Glösa has been dated to the Late Stone Age by stylistic means (Baudou 1995:fig 13; Forsberg 1993:228f; Forsberg 2000). About 500m southeast of the rock carvings at Glösa, a large hunting pit system for elks with more than 100 hunting pits starts. The system stretches for more than 6km between the two lakes Nälldsjön and Alsensjön (see Figure 304). The problematic dating of the hunting pits suggests that the hunting pits could be younger than the rock art. The large amount of hunting pits and long use of the pits suggest that these grounds were good hunting grounds or
favourable areas for elk hunting for a long time (Jensen 1977:278; Jensen 1989:208). By diagnostic artefacts and material, a few small settlements have been found in the area where the hunting pit system enters the Näldsjön lake. The Glösa site could be referring to a favourable area next to the rock art site connected the crossing places or lines of movement for elk. The other motifs at Glösa are geometric symbols interpreted as elk hunting pits seen from above (see Figure 305).

Figure 304 The large hunting pit system east of the Glösa rock art site. The hunting pits and hunting pit systems are marked in blue. The hunting pits form a system that runs between the two lakes. The carvings at Glösa are marked in red. Totally 99 pitfalls are surveyed in this hunting pit system. Background map and data after www.raa.se. Illustration: Jan Magne Gjerde

Figure 305 Photo and tracing of the main panel at Glösa (Glösa I). Tracing after Hallström (Hallström 1960:pl. V). Photo and illustration: Jan Magne Gjerde.
To assume that the geometric motifs depict only one thing or has one meaning would be a bit blunt. Traditionally one assumed that theses geometrical motifs could be hunting pits or hunting nets. However, since the geometrical motifs was interpreted as entoptic phenomena as symbols appearing during trance by the shaman (Grønnesby 1998; Lewis-Williams & Dowson 1988), few has regarded them as anything but representations of entoptic phenomena. They are, however, often associated with animals. Sometimes they can be representations of fishing nets, hunting nets or even hunting traps like at Bergbukten 4 in Alta where it seems that the elk and the hunting trap is depicted connected to a human being with an elk head stick possibly killing an elk stuck in a hunting pit. From the case studies, the Forselv and Vik site has such geometrical figures in close relation to the animals suggesting they are hunting nets or even representations of hunting pits (see Figure 127 and Figure 130). Several of the depictions of geometrical motifs have animals depicted as if they are going into or coming out of them or being stuck in them like in a hunting pit (see Figure 306).

Figure 306 Scenes interpreted as hunting pits from Alta. The left photo is from Bergheim 1, Hjemmeluft in Alta, the middle photo is from Ole Pedersen 1, Hjemmeluft, Alta and the right photo is from Bergbukten 4, Hjemmeluft, Alta. Left photo: Karin Tansem, VAM. Middle photo, right photo and illustration: Jan Magne Gjerde.

Figures interpreted as connected to hunting have been found in other parts of Fennoscandia, e.g. some rock art from eastern Norway have been interpreted as representing a hunting trap by Engelstad (1934:81ff) and Mikkelsen (1973). Looking more carefully at the images, I am convinced that many of the images depicts hunting pits, like in eastern Norway at Ekeberg 2 (Figure 307) and at Skogerveien where it looks like a hunting pit system is depicted connected to elks and elk-tracks (see Figure 308)\(^{221}\). Several hunting fences are known from Alta and sections of fences possibly refers to fences like those at Bergbukten 1 (see Figure 171) or at Ytre Kåfjord (see Figure 178) in Alta, northern Norway, is found at

\(^{221}\) This panel may also have a link to the wider landscape in zones and areas. The small whale could refer to the coast while the elk-hunt and elk tracks could refer to the actual place of the rock art (the crossing place) while the hunting pits and the elk-hunt to the left refer to a place further inland. They would then reflect areas or zones like in Inuit perception of landscape (see chapter 4).
Sporanes in southern Norway (see Figure 310) and at Vasstrand (Sandhalsen) and Evenhus in middle Norway (see Figure 309).

**Figure 307** Hunting pit for elk depicted at Ekeberg 2, Oslo, Eastern Norway. Section of the tracing after Engelstad (1934:planche XLIV).

**Figure 308** Hunting pits for elks depicted at Skogerveien in Drammen, Eastern Norway. Tracing after Engelstad (1934:Planche XLVII). The scale at the bottom right is 1m.
Figure 309  Hunting fence at one of the minor panels at Evenhus, middle Norway. Tracing after Gjessing (1936a). Photo and illustration: Jan Magne Gjerde.

Figure 310  Section of the Sporanes site in Telemark, Eastern Norway. Notice the hunting / guiding fences or elk hunting pits? Where the elks and reindeer are clearly connected. Tracing after Hagen (1969:fig. 64). The site has been dated to the transition between the late Stone Age and Bronze Age suggested by the mixture of motifs that are connected to the different time periods.

The numerous examples of hunting and collective hunting depicted in rock art as seen in the Case studies and other places in Fennoscandia, suggests, that an important theme in the rock art after 5500BC-5000BC was the collective hunting. Most evident is the Beluga Whale
hunting scenes from Vyg. Through several examples I have linked these activities to places, and many of the hunting scenes and depictions refers to places in the hunter-gatherer landscape. The animal tracks may also refer to such places, and I have argued that some of these tracks are referring to large game crossing places. The depicted hunting pits can also link the rock art to hunting places, and undoubtebly some places of rock art is connected to the actual hunting place like in northern Sweden where the elk hunting pits are virtually situated next to the rock art sites. In many motifs and scenes, the successful hunt or the quarry from the collective hunt are depicted.

The animals depicted in the rock art is migrating animals, like the reindeer, the elk, the beluga, geese and even the bear. These are animals that appear and disappear from regions form season to season. The annual cycle is important for hunter-gatherers and their lives are structured in close enactment with the temporality of the year. The seasonal aspect in the rock art with the winter elk hunt (New Zalavruga 4), the summer / autumn Beluga hunt (New Zalavruga 8) and the massive summer / autumn hunt for molting geese222 (New Zalavruga 6) witness important stories of central aspects in hunter-gatherer societies. The arctic climate with up to 6-8 months of snow would have made hunting more important to the people inhabiting these northern areas.

At Vyg the theme in rock art is dominated by large game and hunting. Some of the stories on the rocks are describe hunting the largest animals. These stories was most likely told and retold acting as mnemonic references to the people living and coming to Vyg. At many places the rock surface interacts with the figures on the rocks and could have acted to position the figures or scenes exactly where they are. Sometimes these could be references to actual places and act as memoryscapes for the people that dwelled in the Beluga landscapes of Vyg. According to this notion, the three Beluga hunting scenes are found at Onega where no Beluga hunting has occurred, are a reference to hunting that most likely occurred in the White Sea about 300km north of Onega. This strengthens the idea that people journeyed and took part in the Beluga hunting at Vyg, and telling the stories at Onega.

Our options are limited when it comes to reconstructing the animal worlds of the Stone Age, but, the annual cycles would suggest the importance of being at the right place at the right time when it comes to hunting. The abundance of animals can rarely be seen today mainly due to intensive hunting (like for the Beluga whale) or that species are driven from the

222 Amongst the Ngasasan in the Taymyr-peninsula in Siberia where traditional hunting lived well into the 20th century, the hunting for molting geese was done from mid july when the molting started un til November (Popov 1966:46).
lands (like for the wild reindeer in northern Norway). However, through analogy we still sometimes get a glimpse of how all inclusive these large congregations of animals would have been and what enormous impact they would have had on hunter-fisher-gatherers in the Stone Age. This can be seen as for the congregation of Beluga whales (Figure 311) or the congregation of wild reindeer (Figure 312).

Figure 311 Belugas gathering in the river estuary on Sommerset island, Canada. With kind permission of © National Geographic Society.
Geographical knowledge and memoryscapes

The environmental changes would most likely make people look for focal places to make their landscape familiar during these changes. Alta, Kanozero, Nämfforsen and Vyg could be such focal places fixating memories onto the land with the relations between people and topography. According to Tilley, “Human activity become inscribed within a landscape such that every cliff, large tree, stream, swampy area becomes a familiar place“ (Tilley 1994:27). When the environment is rapidly changing, people would have to make changing places familiar. Familiarizing landscapes could be seen as reoccurring “colonization phases” where meanings were adjusted, at times redefined, and constantly interacting with the environment. By “finding” places like Nämfforsen, Gärde, Kanozero or Vyg that remained “stable” and main characteristic features in the landscape, I suggest that Nämfforsen and other sites of a similar character became places where the inhabitants made unfamiliar landscapes familiar. This was done by manifesting their stories and their memoryscapes into the rocks of Nämfforsen. The unique geographical location when it comes to communication for all the large rock art areas made these places central in the Stone Age hunter-gatherer landscape.

When it comes to the location of the rock art sites, the earliest sites, depicting only
large game, seem to have been situated at favourable places for hunting (e.g. Jo Sarsaklubben, Sagelva in Ofoten, Fykanvatn in northern Norway). Many of the early sites are connected to the shortest distance crossing waters (rivers, lakes, fjords) and this seems to be the case for the sites solely depicting large game, like Brennholtet and Sletjord 2 in Ofoten, northern Norway. While the earliest rock art at the large rock at centres also seem to have been connected to hunting and the hunting place, gradually the rock art represents not only a reference to the actual place or location where the rock art and the rock art site is situated but also references to the wider landscape, such as at Alta (see Figure 181, Figure 182 and Figure 183), Nämforsen (see Figure 268, Figure 269 and Figure 270) and Vyg (see Figure 192 and Figure 216). The large rock art areas are located at meeting places with a unique geographical location when it comes to communication and journeying during the Stone Age.

Information could be stored as memoryscapes on the rocks at Nämforsen, communicating and telling stories of geographical knowledge in a way that could be retold over and over again as the stories were manifested into the rock, made visible to the next generations. Journeys like the boats in the rocks at Alta, Nämforsen, Kanozero and Vyg could be laden with stories. The rock art place at Nämforsen could act as a place where communication was central. Inland of Nämforsen were the attractive hunting grounds where elk was hunted in vast numbers (e.g. Bastuloken area). The connection between the elk-hunting, the rock paintings and settlements can clearly be seen at the rock painting sites inland of Nämforsen. Innumerable hunting pits and a concentration of 12 rock-painting sites with 20 panels depicting virtually only elk evidence an extremely rich area for the Stone Age hunter-fisher-gatherers inhabiting the area. The stories at Nämforsen inhabited animals, humans and activities connected to places both coastal and inland. As previously stated, Nämforsen was a place where people made rock art for c. 4000 years. The new finds of rock paintings shows that the rock art of this area was rich and that it acted on different levels in the landscape. The Nämforsen area with connected paintings shows how the environment was included in the rock art of communication by the depiction of stories where the macrolandscape and the microlandscape interacted in the rocks where man, animals and the spirits interacted at several levels mirroring their world.

The landscape along the coast and water systems in northern Fennoscandia often represents a warren of similar small topographical formations. Detailed knowledge of the terrain related to where animals were found was of crucial importance for the hunter-gatherers as presented in chapter 4 based on ethnography from the circumpolar area. With a mobile hunter-fisher-gatherer strategy one most likely stayed at places most likely for a short period.
of time, but it was necessary to mark the landscape with information at a detailed level. Some
of the rock art places may pinpoint good hunting places. According to Farbregd, this
knowledge must have been important to hunter-gatherers (Farbregd 1980:43). I find this a
valid interpretation for some of the earliest rock art places since it seems as if they mark
favourable places or areas like in Ofoten at Jo Sarsaklubben, Brennholtet and Sagelva. The
example by Farbregd from the Gjølgjavatnet Lake in middle Norway has previously been
connected to the hunting place interpretation in relation to collective hunting in water
(Petersen 1929:34). At the Gjølgjavatnet Lake, the paintings of large game at the Almfjellet
and Rauhammaren site are situated on each side of the Lake Gjølgja, where the lake is at its
narrowest. They have been interpreted as places where elks were driven over the cliffs and
hunted in the lake (Petersen 1929:34). Since hunter-gatherers in northern Fennoscandia would
rely on hunting and fishing, such places would be of importance to them. In relation to
geographical knowledge, examples have validated the hunting practice in relation to rock art.
In relation to ethnography on hunter-fisher-gatherers perception of landscape (Collignon
2006b; Shirokogoroff 1935), hunting places were important and references in the hunter-
gatherer landscape.

Rock art could have been made at good hunting places at the locational level like the
sites Jo Sarsaklubben. Sites are also found at suitable crossing places acting as reference to
adjacent cliffs where animals would cross rivers (Nämforsen) lakes, (Sagelva in Ofoten) or
fjords (Brennholtet Forselv and Sletjord in Ofoten). Some places the activity adjacent to the
actual hunting place reflects such a hunting place like at Vyg (Gjerde 2009) where Beluga
whales most likely were hunted in the bay where Beluga hunting scenes were manifested on
the rock slopes. The close connection to the hunting place is also present at the sites with
paintings inland from Nämforsen where the elk-hunting pits are closely linked to the cliffs
with rock art depicting the red elks like at e.g. Boforsklacken, Högberget 1 and Lillklippen
(see Figure 257 and Figure 258 in the Nämforsen case study). The rock art in itself could also
relate to such places, e.g. the elk-tracks can likely be interpreted as crossing-places like at
Forselv and Sletjord in Ofoten, Bergbukten in Alta, New Zalavruga 4 at Vyg and Kamenniy 3
and Kamenniy 6 at Kanozero. Geographical information could be stored in a motif or a scene
like the bear-dens in Alta, the reindeer corrals in Alta and the halibut fishing scenes at Forselv
and in Alta. These could be links to places in their macrolandscape. They would know where
the reindeer corrals were located, they would know where the bear dens were and they would
know where the good fishing places for halibut were. As they had knowledge of the
landscape, hunter-fishers would also have a similar knowledge of the seascape or the
maritime landscape. Finally, it looks like the whole panels at times act like memoryscapes where there is a close link to the actual landscape like at Bergbukten 4 in Alta, northern Norway (see Figure 183) at New Zalavruga 8 at Vyg in northwestern Russia (see Figure 216) or at Närnforsen (Hallström IIQ1) in northern Sweden (see Figure 270). At this level it also seems like the miniature landscapes and elements on the rock surface interact and could act as memoryscapes representing the macrolandscape like at Bergbukten 4 in Alta or at Bradön in Närnforsen or New Zalavruga 8 at Vyg. Geographical knowledge was important to the hunter-gatherers in the Stone Age and numerous examples indicate that this information was part of the stories in the rocks.

Relating the rock art of hunter-fisher-gatherers to hunter-fisher-gatherer perception of landscapes as presented by Collignon (2006b), (see Figure 67), is fruitful. Based on her theory the Inuit cannot separate knowledge of the land from knowledge of the animals, and animals cannot be separated from land. Areas or zones include certain animals and some areas are favourable places for these animals. The landscape is divided into zones and includes both rich and empty areas. Moving to the rock art, animals then represent zones or areas. These can be directly linked to the actual place and the animals present, like the paintings of elk, connected to favourable areas for elk, or the reindeer at Sagelva in Lofoten that is related to favourable areas for reindeer. Similarly, animals in rock art appear as “rich zones” and empty zones with no animals (see Figure 177). One can argue that rock art seems to be representations of the hunter-gatherer landscape divided in rich and empty zones. These zones and areas are in rock art related to the miniature landscape in the rocks (e.g. Bergbukten in Alta or Närnforsen at Bradön, Figure 266) and the elements of the rock (like the river at New Zalavruga 8 at Vyg, (see Figure 216). Similarly at Bradön at Närnforsen the panel seems to reflect the empty and rich zones in the macrolandscape as viewed from the vantage point when observing the panel Figure 268). When viewing the rock art from the case studies they seem to reflect the hunter-gatherer landscape as represented by the animals and activities in the rocks related to areas or zones in the macrolandscape.

**Cosmology and rituals**

Rock art in relation to cosmology has to be approached through ethnography. The studies of Helskog (1999) where he relates rock art to the shore connection, thus linking the location of rock art sites to arctic cosmology seems to be valid for all the sites in the case studies. All the rock art scenes and compositions concur with the upper tidal zone (the sea-
spray or the river-spray) area. The rock art is located in the middle world in the three-tier as discussed in chapter 4. There are also rock art sites that by the distribution of motifs seem to reflect the division of the three worlds as previously suggested by Helskog (1999; 2004a). An example of this is from Bergbukten 4 in Alta (see Figure 184).

Nämforsen is one of the places where the shoreline connection has been apparent up to today, linking the rock art sites to the forceful rapids. A well justified interpretation of the Nämforsen site was conducted by Tilley when he related the location of the Nämforsen rock art to the cosmological river (Tilley 1991). The rock art from the Late Stone Age has often been linked to shamanism (as discussed in chapter 4) and in the Case studies there are examples of representations that could be connected to shamanism. There are human representations depicted with elk-head sticks at Alta, Kanozero and Nämforsen (see e.g. Figure 55). There are examples of human representations that are depicted with a drum (see Figure 58). The drums are referred to as the shamans’ equipment for a journey and among the Kemi Lapps there is a description where they refer to the drum as a boat applied by the shamans on their journeys. At Kamenniy 7 there is a human representation holding a boat in his hands and an object that could be a drumstick in the other. He also seem to have some form of headgear that may refer to animal antlers (see human figure in area 3 in Figure 225). There are examples of human representations depicted riding reindeer both at Forselv (see the right end of the left section of the panel in Figure 127) and at Storstienen in Alta, northern Norway. In Alta there are also examples of what I interpret as shaman journeys (Alta and Kanozero). The best examples are found at Bergbukten where it seems that the reindeer is turning into human representation flying over the landscape and later turning into a reindeer again (see Figure 64). Such “transformations” that coincide with people transferring into animals and vice versa can be found e.g. at Kanozero where reindeer are depicted as if they are linked to humans or combined like the bear-human at New Zalavruga 15, Vyg or the bear-human at Kamenniy 3 at Kanozero.

Numerous examples of what has been interpreted as shamans on their journeys can be found in the rock art from the Stone Age in the Case studies. Since one before 5500-5000BC does not have human representations in the rock art of Fennoscandia, it is hard to relate the rock art to shamanistic practice even if this could be the case. I will briefly turn to the ethnography from Siberia to aid the interpretation of the shamanistic practice and rock art. The association between the hunting practice and rock paintings has been described for the Suruktaakh-khaya cliff (see Figure 84) in the valley of the Markha River, a tributary to the large Lena River in Sibera, Russia (Okladnikov 1970:92f). The association between red paint
and animal blood has been pointed out by several scholars, for South Africa, Australia and northern America. The link between the red paint and animal blood has also been forwarded as relevant for the circumpolar area. Among various primitive tribes, ochre is considered equivalent with blood, the chief element of life and basic source of youth and strength. Indeed, sometimes it is used simultaneously with blood in a ceremony. Among the Chukchi, for instance, the drawings of animals on the magical panels which serve for their "multiplication" were formerly done with blood or ochre, since the figures were to take on vital forced genuine reality thanks to the blood (Sarychev 1802:161 in Okladnikov 1970:102).

Hunting large animals was sometimes connected to danger and the animal should be hunted in the proper manner to obtain a balance between man, animals and the spirits. The hunting practice or the cynegetic activities (Collignon 2006b) were often incorporated into elaborate rituals. One description of such a ritual is the Shingkelavun amongst the Evenki of Siberia.

The Shingkelavun rite was performed to obtain luck and success in hunting. The Shingkelavun rite was described by Animosov (in Russian) in 1949 and retold by Okladnikov in 1970 (Animosov 1949:177 in Okladnikov 1970). Brief references to the ritual is also later made by Animosov (1963a:178; 1963b:109). The Shingkelavun rite lasted for many days, and was carried out by the entire clan near the rock, cliffs, and trees sacred to it—the bugady. On the first day, the shaman “walked” under the bugady asking the dunne-mushunin (that is, the bugady-woman, ancestress) for help in the hunt, but she sent him to another, a zoomorphic bugady which roamed in the form of a giant female elk, or wild doe among a herd of wild animals of the particular species. With the permission of the she-elk bugady, the shaman caught animals in her herd with a lasso. On the shaman's return, if the number of the animals proved inadequate, he revisited the dunne-mushunin, and by stealth stole magical strands of wool which then turned into animals as soon as the shaman shook them out on the home territory of his clan.

The second stage of the ritual included all the males of the clan. The Evenki hunters wore ritual costumes, with caps made from the skulls of reindeer or elks, imitating the heads of these animals. The hunters performed a pantomime dance, portraying the characteristic movements of the animals, and accompanied it with an improvised song addressed to the beasts. The central figure of the rite was the best of the dancers, an actor-hunter. He represented the leader of the animal herd, and his pantomime was supposed to bring all the animals of the taiga to the clan's hunting grounds after the fashion in which he was leading his fellow dancers. At the end of the dance, the group of hunters, embodying the figures of animals in living forms and plastic movements, headed by their leader, who apparently played
the part of the master of the animals, the bugady, developed a new theatrical action, different in character but analogous in aim. The hunters went into the taiga and returned laden with rose willows and young larches, from which they built a kind of decoration representing the taiga surrounding a new clearing covered with bushes, the favourite grazing place of the elk and wild reindeer. Among the rose willows sprang up herds of elks and wild reindeer, represented by wooden figurines. Other animals and birds were to be seen in the larch taiga. Meanwhile, the old men, without pause, recited stories and legends, and to their measured, rhythmic speech, small wooden figures were placed beside the she-elks, representing their calves. The other animals also had plentiful offspring. Thus the magical multiplication of animals took place, and the taiga was filled with life. The final act of the Shingkelavun ceremony began with the hunters again going to the taiga, carefully searching for the tracks of animals. The hunters then performed a hunting scene with figurines before several sacrificial reindeer were slaughtered, and their skins hung on long poles as offerings to the supreme deity Oshkori, the lord of all taiga. The meat was eaten by all participants (Anisimov 1949:177 in Okladnikov 1970:97-98). Living tradition by shamans performing rituals at rock carving sites has recently been documented in Siberia (Célestin-Lhopiteau 2009).

According to Okladnikov, the necessity of such ceremonies for the multiplication of animals during the Neolithic (Late Stone Age) must have been the sacred paintings on cliffs serving as clan shrines, depicting the animals in the same positions in which they were probably represented by the hunters in the Stone Age, who performed their religio-magical pantomines before the matriarchal clan deity represented on the sacred cliff—the "she-elk," the bugady (Okladnikov 1970:98). The performance of the hunt with dancing and imitation of animals shows that the elk hunting scene at Hallström IQ1 could not just be the representation of a communal elk hunt, but also a ritual where the people performed rituals similar to the described Shingkelavun. People that appear to be dancing or walking in procession is also found at New Zalavruga 11 at Vyg and at Ytre Kåfjord in Alta (see Figure 178). Another such “dance” or performance can be witnessed at Bergheim 1 in Hjemmeluft, Alta where five people are “dancing” round an elk-head boat where one of the dancers are holding a long spear and two of the dancers are holding the elk-head boat. The “initiation” of the boat and rituals connected to the hunting season and / or during the launch of the boat is described in various ethnographic sources (e.g. Thornton 1931:165ff) and it is likely that such initiations before the hunt occurred at Bergheim 1, Hjemmeluft, in Alta during the Stone Age (see Figure 313). The spear or harpoon seen at Bergheim 1 in the hands of one of the “dancers” can also
be seen at a seal hunt at the contemporary Bergbukten 1 panel in Hjemmeluft Alta (see Figure 314).

Figure 313 The "dancers at Bergheim 1 in Hjemmeluft, Alta. Two of the dancers are holding an elk-head boat and the person at the top is holding a long spear / harpoon. The boatfigure is ca. 30cm. Photo: Jan Magne Gjerde.

Figure 314 A seal hunt from an elk-head boat at Bergbukten 1, Hjemmeluft, Alta. A person is holding a spear / harpoon aiming for the seal. The seal is slightly eroded and could be a small whale. But by comparison to other figures it appear to be a seal. The boatfigure is 16cm long. Photo: Jan Magne Gjerde.
Vast amounts of red ochre found at Nämforsen dated to between about 4200BC-2400BC indicating large production of red ochre at Nämforsen during a long time period (George 2005; Larsson et al. 2003). Inland from Nämforsen there are several cliffs with elks painted in red on the cliffs similar to the painting on the cliffs in Siberia (Sarychev 1802:161 in Okladnikov 1970:102). The rock paintings inland from Nämforsen could be ritual places connected to the hunting of elks similar to the bugady of the Evenki. From the ethnographic records from the circumpolar area, we know that the seasonal hunting events were connected to elaborate rituals that encompassed various social interaction. The most elaborate descriptions is connected to the Inuit whale hunting (e.g. Lantis 1938; Lantis 1940), however we know that the elk hunt (Animosov 1963a; Okladnikov 1970) and reindeer hunting (Popov 1948; Popov 1966) in Siberia was connected to elaborate rituals. The bear hunting represented in the Stone Age rock art, at e.g. Alta, Kanozero, Onega and Vyg, can also be connected to elaborate rituals (Elgström 1971; Hallowell 1926; Honko et al. 1993).

The animals in the rock art of the case studies reflect the animals central place in arctic cosmology and rituals. It is therefore not far-fetched to link both the rock art and the location of rock art among arctic hunter-fisher-gatherer cosmology. As rock art includes the cosmology it is also in close relation to reality. Regarding rock art simply as reflection of cosmological depiction would be to diminish the reality and the geographical knowledge in rock art. These factors are intertwined.

**Cosmography of rock art - from reality or cosmology to reality and cosmology**

According to Websters Encyclopedic Unabridged Dictionary of the English Language (1994), Cosmography can be defined as a science that describes and maps the main features of the heavens and the earth, including astronomy, geography and geology or a description or representation of the main features of the universe (description of the world).

The rock art in all case studies are made by hunter-fisher-gatherers where hunting and fishing were central parts of their lives. Knowledge of the land and knowledge of the universe is therefore important. Central to this knowledge and wisdom of the universe is in virtually all ethnographic studies from the circumpolar area focused on some form of shaman. This must not be equalled with shamanism. The shaman was a holder of wisdom and he or she had knowledge of the universe. A central function for the shaman was connected to hunting and
thereby the large game that people in the past relied on to return every year. This was crucial for surviving as hunter-gatherers, specially in a harsh robust arctic climate where winter-time normally covers 6-8 months of the year.

Studying the Stone Age rock art in northern Fennoscandia, the theme that seems to fit most of the rock art is depicting large game and cynegetic activities (connected to hunting) as introduced by Collignon representing Inuit perception of landscape (territory) (Collignon 2006b) for the description of hunter-fisher-gatherers knowledge of the land. Adding to Collignons cynegetic activities is the cosmology (the knowledge of the universe).

Cosmography would include the knowledge of both cosmology and reality. The scenes in the rock art depicts actual hunts (like the bear-hunting at Kanozero, the Beluga whale hunting at Vyg, the elk hunting at Närnmforsen, the reindeer hunting in Alta and the halibut fishing at Forselv in Ofoten). Closely related to these hunting scenes are the other parts central to the cynegetic activities, representations of journeys, these be real, like the numerous boat depictions where many of them would refer to actual journeys, or cosmological represented by some of the boats, the elk-head sticks, shaman-drums and journeys by shamans like at Kamenniy 7 at Kanozero or at Bergbukten 4 in Alta. Some places one can also see what can be referred to as the transformation between human and animals and connected to one of the characteristics of the shaman where he could transform from human to animal and vice versa. This also included travelling between the worlds. By wide definition, what is depicted in the Stone Age hunter-gatherer rock art are stories reflecting their cosmography.

In the Early rock art, rock art both by location and theme seems to reflect the cynegetic activities located at places connected to hunting or so-called favourable places for animals. They could act as signposts in the landscape. Gradually the stories on the rocks related to places that not necessary was the actual place of the rock art, but could act as memoryscapes relating to real and cosmological places as part of their cosmography, like the inland reindeer corrals and the open sea halibut fishing at Bergbukten 4. Through the case studies, the best example of how the cosmography is represented at one panel is at Bergbukten 4 site (see Figure 183 in relation to Figure 184) where all the three worlds similar to the ethnographic world view is depicted but also clearly refer to the real world with elk-hunting, reindeer hunting and halibut fishing. The rock art including the microlandscapes, at times with clear links to the macrolandscape truly represents interacting landscapes centred around Stone Age hunter-gatherer cosmography.
Chapter 7 The Author’s Reflections

Towards an understanding of lost relations of Stone Age Rock Art in northern Fennoscandia

From the beginning, crossing borders and studying the rock art anew has been central to this thesis. Most studies of rock art in northern Fennoscandia is based on documentation that was conducted with different research aims. The central theme was the motif, not its surroundings. In this thesis I have argued that landscape is a central element to rock art at different levels from the canvas of the rock to the wider landscape through viewing rock art in relation to the natural background of northern Fennoscandia. The approach is centred round an understanding of lost relations of hunter-gatherer Stone Age rock art in northern Fennoscandia. The approach relies on the reconstruction of past relations in the landscape in relation to rock art. The reconstruction of the lost relations have focused on reconstructing the natural background (mainly through reconstructing the landscape changes by the land uplift), including ethnographical sources to interpret the rock art at different levels in relation to landscape and a thorough documentation of the rock art and its lost relations. Central to this has been to study the sites in situ.

In chapter 2, I searched the research history for clues as to which rock art and landscapes had been studied in the past. As with all research this thesis rests on the shoulders of giants. When it comes to northern Fennoscandia this thesis on rock art would have been completely different if I was not triggered by the aims of Gustaf Hallström when he in 1906 set out to study all known rock art in Fennoscandia crossing the national borders. As for Hallström, the recent growth of the material record witnessed during my initial overview was overwhelming. As stated by Bjerck (2002) the shift from where one before could know “all” of the material culture within large regions to the individual shortcomings of knowledge due to the increasing growth of the material record and increasing knowledge production has led to a shift in focus to local and regional studies during the last decades. The lack of the opportunity to grasp large regions crossing national boundaries has also been stressed by Ramqvist where he sees this as a virtually impossible task (Ramqvist 2002b). The problems encountered crossing boundaries have been numerous. However, to get to grip with the material record much time have been spent visiting numerous sites in northern Fennoscandia.

The Author’s reflections was Hallström’s final chapter in his second volume of Monumental art (Hallström 1960:366) where he summed up some of his ideas on rock art in relation to his life-long work. In many ways I have experienced and walked along the footsteps of Hallström in this thesis and it is in the honour of Hallström that I have initiated the summary of this thesis in the words of Hallström.
Since the final work of Hallström in 1960, few have tried to cross administrative and political boundaries in which the results from this thesis advocates in further research.

The representativeness is problematic when looking at the find distribution of rock art. I am convinced carvings will appear in Finland sooner or later. Some areas have many sites due to large research activity. Within the material record, this is best evidenced by the distribution of rock art on both sides of the Finnish border (see Figure 90). I am amazed if not sometime in the near future, more rock art is found in northwestern Russia. The newly discovered site at Kanozero shows the potential for finding new rock art in this large area. Vital to the research history has been visiting the sites that is the basis for the increasing knowledge of rock art. The importance of the opportunity to visit Kanozero, finding more rock art making this one of the large known concentrations of rock art in northern Fennoscandia is yet to be fully realized. Visiting the photoarchives in St.Petersburg and in Umeå has given me the opportunity to see many of the rock art sites before modern constructions ruined the landscape context of some of the sites. Therefore, some of the sites have been better investigated through the eyes of Hallström and Ravdonikas.

In the research history chapter I have tried to view the growth of the material record because I find this important since there is no general overview of this enormous material record. Central has been to relate how rock art has been dated, thus relating it to its wider archaeological context. Knowledge of the material record is vital in comparative studies, and it is therefore problematic that most comparative studies in rock art has accepted that there is similarity in the material record without even suggesting what grounds their assumptions are based. Through the research history I have focused on how landscape has been studied in relation to rock art. Already in 1906, Hallström saw that there could be an interaction between the elements and rock art, however, it was to take just less than a century before this was appreciated and included in the interpretation of rock art. Accepting that natural elements is part of the storied rocks made me enter the art of documentation.

In chapter 3, a revision of the documentation of rock art was investigated. Most of the rock art studies base their analysis on old documentation with completely different research aims and thereby also results. The available documentation was mainly aiming to document the figures in the most accurate manner in which to identify the motifs. At many of the sites new figures appeared that was not included in the initial documentation. New techniques has made it possible to see more of the actual figures at the sites, and many sites need to be re-documented. In many regards, the interpretation of rock art is never better than the documentation. With a new research aim, the landscape of rock art, I needed to revisit and
redocument rock art sites. Central to the documentation (mainly based on photography) was to take a step back to be able to grasp the landscape of the rock art. To get a better understanding of rock art and landscape I followed the advice by Fett “Everything is allowed, as long as it gives a good impression of the landscapes character and tells us why they made the rock art exactly where it is [my translation224]” (Fett 1934:80). I do not reject the accurate tracing of figures, however, as a means to get a better foundation for the understanding of rock art, the landscape of rock art may include more information than how many crew members are in a boat in Alta or whether there are 15 or 17 elks in a group at Nämforsen. Documentation and the art of documentation is important since it reflects the research aims and also guides the interpretation and the understanding of the lost relations in the rock art.

Even if the aims of documentation is problematic, my major concern and also one of the main problems in getting an overview of the material record and crossing borders, is the lack of material publication. A rough estimate suggests that more than half of the material record of the rock art in northern Fennoscandia remains unpublished. This is a major obstacle when performing any studies at a regional or an inter-regional level.

In chapter 4, the core of the approach to the study of rock art and landscape was presented. In this chapter, I discussed the term landscape and the term landscape in relation to rock art. After an initial approach to the understanding of the indefinable concept of landscape oozing of ambiguity, one moves to the lost relations of landscape and rock art. Since dating rock art sites is crucial for the interpretation of the lost relations in a landscape, I briefly discussed dating in relation to rock art and landscapes. Since rock art in northern Europe has a long tradition of rock art production, it would be problematic studying the polished rock art site at Jo Sarsaklubben and the Aldon225 site in northern Norway since the distance in time is more than 10000 years. Within the lost relations, change is a major topic. The natural short term changes, or the temporality is discussed in relation to landscape and rock art where e.g. the seasonal aspect in relation to rock art and landscape is discussed. Short term changes seem to be important in the rock art. The majority of the rock art in northern Fennoscandia is located in the shore or the shore spray zone less than 2m above the upper tide, so the shore connection is important. The seasonal aspect is also represented in the rock art as witnessed by the “seasonal” activities in the winter-hunting for elk, the spring time hunting for bear and

224 “Alt er tillatt, bare det gir et godt inntrykk av landskapets karakter og forteller hvorfor risteren ristet akkurat der” (Fett 1934:80).
225 Aldon is a rock art site most likely not more than 200 years old. The figures include reindeer, a Saami person with a shotgun and "modern" boats with sail. It is situated on the Saami holy Aldon mountain in Varanger, northern Norway.
the Beluga whale hunting at late summer / early autumn. By being located in the shore zone this would also mean that the carvings was available throughout the year. However, there are also examples where rock art is most available through the winter months, like the islands in the rapids of Nämforsen or the cliff walls most easily observed standing on frozen lakes during winter.

Accounting for lost relations also includes long-term changes, like the large natural changes and the modern man-made alterations to landscape. The reconstruction of the landscape by accounting for the land uplift has shown for many of the sites that the location of the rock art sites has changed dramatically. Applying old documentation (photos) in order to get a better understanding of the landscape has aided the knowledge of the landscape setting before modern alterations such as hydro-power constructions, modern housing or roadwork.

Central to the reconstruction of lost relations of Stone Age hunter gatherer landscapes has been embracing ethnography. Through ethnographic landscapes of the circumpolar area one may observe analogies to their cosmology which is central to the understanding of rock art. The selection of the animals in Stone Age rock art is also key animals in circumpolar ethnography. Cosmology has been discussed and found important in relation to rock art. Numerous examples show that most likely “shamans” are depicted in the rock art over vast parts of northern Fennoscandia. Central to the shaman performance are knowledge of the universe. This includes knowledge of land. Such knowledge is achieved through journeys, both real and cosmological.

Within the knowledge of the shaman and the hunter-gatherers is the knowledge of land or geographical knowledge. The shaman in this thesis is understood as a holder of knowledge or a holder of wisdom practiced through communication with humans and the spirits. Through a comparison between Inuit knowledge of landscape (territory) (Collignon 2006b) there seemed to be clear similarities between how Inuit perceived the landscape and how Stone Age rock art included information on landscape centred round important animals. According to the Inuit perception of landscape animals cannot be removed from land. They define their landscape or areas and zones within a landscape in relation to animals. Why a rock art site is located at its location or why rock art is positioned at the rock surface in clusters and focus on few areas on a panel instead of being evenly distributed has puzzled researchers. The deliberate placing of the images may refer to such rich and empty zones or areas in Stone Age hunter-fisher-gatherer landscape. Adding to this, some of the motifs or scenes include information that most likely refers to known places in the landscape like the bear-dens in Alta, the geese-hunting at Vyg, the reindeer corrals in Alta and the elk-hunting at Nämforsen. The
makers of the rock art would know where such places were. Adding to this, natural elements or the microlandscapes of the rocks were applied as a backdrop to tell the stories. Numerous examples from the Case studies evidence this. Even if we are not able to pinpoint the actual place like at Nämforsen (see Figure 270) or at Onega (see Figure 88), they are references to places in their landscape. By studying the different levels of landscape one gets closer to an understanding of the rock art including the natural elements that were included in their landscapes of rock art referring to their surroundings or the macrolandscape. The different levels of landscape shows that information interacting with the rock art could be stored in the tiniest crack in the rock surface to the location of the sites.

In **chapter 5** the “cracking” landscapes of rock art in northern Fennoscandia is presented in five case studies. Even though the starting point was crossing boundaries between east and west centred on northern Fennoscandia and the sites. The selection of the case studies was not a straight-forward task and hindsight would *maybe* change the extent and / or selection due to the time consuming fieldwork. Returning to the starting point the concentration of paintings in southern Finland could perhaps have been included. The case studies chosen includes rock art sites that cover all of the Stone Age from the initial pioneers settled northern Fennoscandia to about 2000BC. Central in the case studies was to get a comparable study of large contemporary concentrations of rock art in northern Fennoscandia. The thread in the case studies was the lost relations of rock art through the dating. Dating is also important for the reconstruction of the macrolandscape. Then the scales of rock art and landscape is presented where the macrolandscape and the microlandscape is discussed in the case studies. This was to show how rock art and landscapes interacted at several levels.

**Chapter 6** is a discussion of the case studies. The results are viewed in relation to chapter 4 and related to the rest of Fennoscandia where I find it justified. As the case study in Ofoten indicates, the initial rock art in northern Fennoscandia was made in the pioneer phase when people entered to Fennoscandia after the Last Ice Age. About 10 rock art sites are known that can be dated to before 5500 BC in Fennoscandia. The rock art sites includes only large game animal and the figures are generally large, depicted in life-size, like the large killer whale at Leiknes more than 7.5m long and the large elk figure from Gärde in northern Sweden of more than 3.5m in length. Then at about 5500-5000BC, what I have named the rock art explosion, there is an enormous increase in the number of sites and motifs. This is also when one gets the large concentrations e.g. at Alta, Nämforsen and Vyg. Now the variation in motifs are multiplied. However, like the Ofoten case study shows the depiction of large game at close to life-size is still being made. The initial rock art at the large rock art
areas had previously been dated to about 4200-4000BC and the results from this thesis advocates for an origin of the first rock art at these places between 5500BC to 5000BC. That is, the large rock art centres and the change from few large game motifs to more complex compositions including humans and human activity. It is at this point we see collective and communal activities in the rock art like dancing, processions, collective hunting etc. This incident that seems to be all-inclusive seems to occur simultaneously over large areas at the same time suggesting a rapid spread of ideas and people.

With the new dating suggestion, this shift in rock art or the rock art explosion occurs virtually simultaneously over vast parts of northern Fennoscandia. This incident also seem to concur with the rest of Fennoscandia, even though more research should be made for the results to be conclusive.

The large concentrations of rock art seem to be located at unique geographical locations suggesting they were ideal for meeting other people living by a mobile strategy. These were places where people met and they were central places in the Stone hunter-gatherer landscape. At Alta, Närnforsen and Vyg they are clearly located at unique ecological locations referring to reindeer, elk and Beluga whale.

Knowledge of the landscape would have been extremely important for people during the Stone Age. Ethnographic examples from the Inuit world, suggest that it is the male hunters that through cynegetic activities are holders of the “wisdom of land”. By journeys, individual and communal hunting they had the geographical knowledge that must have been vital to them, living as hunter-fisher-gatherers. The rock would work as a membrane between the worlds communicating their activities with the spirits. The rock art would work as memoryscapes that stored information for others to see and communicate. Stories were told and retold over and over since they were manifested in the rocks. New stories were constantly added. The stories of the Stone Age rock art in northern Fennoscandia included animals, humans and activities connected to places both coastal and inland. The miniature landscape and the microlandscape was applied as a backdrop to tell stories like the winter-hunting for elk (see Figure 215) or the Beluga hunting in the river estuary (see Figure 216). Rock art was made at the large rock art areas for more than 3000 years being part of the long memories of people that inhabited the area.

Stone Age rock art includes stories of reality and cosmology. Rock art seem to be narrating an intertwined cosmography of Stone Age hunter-gatherer lives. To get a better understanding of the cosmography of rock art one need to be aware of the lost relations of landscape and rock art. It all boils down to getting to grips with the lost relations of landscape
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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 ........................................... 254

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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.

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 Innanuit 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.

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.

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) Sawwatejev in Archaeologija Karelii 1996. Illustration: Jan Magne Gjerde.

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 Savvatceev (1983:122). Illustration and photo by Jan Magne Gjerde.

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. 295

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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. 299

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Compare with map (Figure 209). Photo: Jan Magne Gjerde.

Figure 209 Beluga Landscapes at Vyg. The Besovy Sledki/Jerpin Pudas area. Base map modified from Ravdonikas 1938:14, plate 4 with added information. The different sections in tracing nr. 1 (Jerpin Pudas 1) have been put together in Photoshop (Ravdonikas 1938:plate 20). Tracing nr. 2 (Jerpin Pudas 2) is made from photo with scale in Photoshop. Tracing nr. 3 (Jerpin Pudas 3) is from Savvateev 1977a:72 figure 15. Tracing nr. 4 (Besovy Sledki North) is a section of the panel from Ravdonikas 1938:plate 22. Tracing nr. 5 (Besovy Sledki South) is a section from Ravdonikas 1938:plate 32. All the tracings are made into the same scale to make it easier to compare the different sites and figures. The scale under each tracing is a total of 40 cm. Illustration: Jan Magne Gjerde.

Figure 210 Photo of the last rapids of Vyg in Belomorsk where the river Vyg enters the White Sea today. Notice the extremely flat landscape where the river becomes a major geographical reference. Photo: Jan Magne Gjerde.

Figure 211 Photo of the Vyg River estuary where it enters the White Sea today. Notice the extremely flat landscape where the river is the geographical reference. The houses on the island in the middle of the photo where the settlement is located at the waters edge, like it was also in the Stone Age at the River Vyg. Photo: Jan Magne Gjerde.

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Figure 214 Tracing of New Zalavruga 4 from Savvateev 1970:plate 35. Tracing is modified by marking the area with maritime motifs and figures with blue. Illustration: Jan Magne Gjerde.

Figure 215 Elk hunt during winter. Three hunters are skiing when hunting elks. The skiing scene depicts the movement of the skiers where the ski tracks give reference to the topography. New Zalavruga 4. Photo: Jan Magne Gjerde.

Figure 216 Tracing and photo of New Zalavruga 8. Some of the figures in the tracing can be seen in the photo. In the photo, the whale is situated slightly above the middle. One can here see the "miniature" river running over the whale hunting scene as a geographic reference to where the hunt occurred in the lower parts of the river or in the river estuary. Tracing after (Savvateev 1970:fig. 48). Photo and illustration: Jan Magne Gjerde.

Figure 217 The "river" at Vyg. Tracing of New Zalavruga 15. Tracings from Savvateev 1970:plate 70 and Ravdonikas 1938:plate 19. The tracings from Savvateev and Ravdonikas are reworked and joined together. The left part of the "river" is Ravdonikas documentation. One can here clearly see that Ravdonikas and Savvateev documented the carvings with different techniques. Above photo compilation of the same composition where the carvings have been marked with white chalk to make them visible on photo. Photo and illustration: Jan Magne Gjerde.

Figure 218 Human representations with elk-head sticks at New Zalavruga 15, Vyg. Tracing after Savvateev (1970:62).

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Figure 221 Rock art at Kanozero. Section of the Kamenniy 7 panel. There are figures on this side of the outcrop, and on the top stretching to the back of the outcrop. A total of 430 figures are documented at the Kamenniy 7 panel. Compare with tracing in Figure 225. The dark line at the lower part of the site is the shadow of a tree. Photo: Jan Magne Gjerde.

Figure 222 Section of one of the whale hunting scenes at Kamenniy 7. The illustration is made up of 3 frottage sheets. The length of each sheet is about 1m. The total length of this scene is about 3m. Frottage and illustration: Jan Magne Gjerde.

Figure 223 The large whale figure at Kamenniy 7. Lines from the whale shows that this is a large Beluga whale hunting scene. Compare with the tracing in Figure 225. Photo: Jan Magne Gjerde.

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Figure 276 Shoreline dating at the Skavberg site. The isobase 15 and 17 curve in blue. The elevation of the Skavberg 1 site at 18.5m, the elevation of the Skavberg 2 site at 17masl and the elevation of the Skavberg 3 site at 12masl in red. This shows that the shoreline at the Skavberg area is virtually standstill between about 8500BP and 5400BP. Thereby the carvings at Skavberg 1 and Skavberg 2 could have been made between 8500 to 5400 assuming they were shorebound. Data after SeaLev (Møller & Holmeslet 1998). Illustration: Jan Magne Gjerde.

Figure 277 The Skavberg 2 site before removing the lichen (top photo from 2003) and after removing the lichen (bottom photo from 2007). The previous documentation is painted red on the rock surface and visually dominates the rock surface making it difficult to see the vague lines that appeared clearer after the removal of the lichen (compare night photo in Figure 278). Photos and illustration: Jan Magne Gjerde.

Figure 278 The large elk figure at Skavberg 2 when first found in august 2008. One can see that some of the lines were already painted in red (compare Figure 277). Looking carefully one may see the elk figure in Figure 277 by comparing it with the night photo. The bear figure under the elk becomes clear on this photo. One can see vague lines on the rock surface, however it is hard to discern motifs due to the erosion on the rock surface. The night-photo is taken after the figure was marked. The elk figure is about 2.9m long. Photo: Jan Magne Gjerde.

Figure 279 The Gärde site in northern Sweden. The carvings appear in three groups. The group with the large elk figures is located at the island. The large elk figure to the left could be a bear. The carvings with the elk and elk tracks are located at the riverbank to the left in the photo. The third group is made up of lines that cannot be identified as a motif. Tracings after Hallström (1960:plate 3 and 4). The figures are made into same scale. The scale to the right under the large elk figures measure 2m. The largest elk figures to the right measures 3.65m. Photo and illustration: Jan Magne Gjerde.

Figure 280 The large elk figures at Gärde. Tracing to the right after Hallström (1960:plate 4). The scale to the right of the tracing measures 2m. The largest elk figure is total 3.65m long. Photo and illustration: Jan Magne Gjerde.

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Figure 282 Examples of elk-head boats from the north dated to the Late Stone Age. Boats from Alta, northern Norway after Helskog (1989b:fig 4). Boats from Námforsen, northern Sweden after Hallström (1960). Boats from Kanozero, NW-Russia after authors’ tracings. Boats from Onega, NW-Russia after Hallström (1960:plate XXVIII) and Ravdonikas (1936b:plate 1 and 13). Boats from Finland are from top to bottom from the sites: Patalahiti, Saraakkallio, Saraakkallio, Pyhänpää after Lahelma (2005b:fig 1). The Pyhänpää boat figure is depicted as the antlers of an elk and is included in this overview to show the link between the elk and the boat. Illustration: Jan Magne Gjerde.

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Figure 284 The clear difference between the “Early Stone Age” and the “Late Stone Age” rock art. Images are not presented in the same scale. However, the Early Stone Age animal depictions are with a few exceptions much larger. Thereby this illustration shows a relative difference in scale. Top left: Polished bear from Valle (Finnhågen), northern Norway, after Gjessing (1932:plate XXVIII). Middle left: pecked elk from Gärde, northern Sweden, after Helskog (1960:plate IV). Bottom left: Pecked reindeer from Bøla, middle Norway, after Gjessing (1936a:plate LIII). Top right: pecked whale-hunting scene from New Zalavruga 8, Vyg, northwestern Russia, after Savvatenev (1970:plate 48). Middle right: Pecked reindeer corral and bear hunting scene, Bergbukten 1, Alta, Northern Norway, after Helskog (1999:figure 5). Bottom right: pecked elk-hunting scene from Námforsen, northern Sweden, after Hallström (1960:plate XX). Illustration: Jan Magne Gjerde.
The "other world" Photo: Jan Magne Gjerde

Representations and the elk figures are appearing from the cracks connected to the ledges from inside the rock. At a closer look it seems like the human is interacting with the elements in the rock. Photo: Jan Magne Gjerde

Carvings (Ravdonikas 1936b:plate 25). Photo: Jan Magne Gjerde

The photo is 10cm. Tracing of the figures at Besov Nos can be found in Ravdonicas publication on the Onega carvings. This is the left and the middle whale hunting scene at Besov Nos. Scale in the middle of the photo is 10cm. Tracing of the figures at Besov Nos can be found in Ravdonicas publication on the Onega carvings (Ravdonikas 1936b:plate 25). Photo: Jan Magne Gjerde

Tracing after Gjessing (1936a:pl. LXX). Photo © Arne C. Nilssen

Figure 300 The "collection" of halibuts at Kvennavika, middle Norway. The halibut figures are depicted on the surface, the "other world" Photo: Jan Magne Gjerde

Swan figures at Peri Nos 3, Onega. Photo: Jan Magne Gjerde

View of a typical aggregation of a large group of reindeer occupying an entire jassat (snow patch) during a hot summer day from Kvenangsfjellet in Trøndelag, northern Norway, 1985. Notice how the reindeer congregate and virtually "fill" the jassat but are not standing outside the jassat. Photo © Arne C. Nilssen, Tromso University Museum.

The large salmon at Honnhammer III (Honnhammer narset), northern part of western Norway. The salmon figures measures between 1m and 1.20m. The vertical cliff stands about 5m up from the small ledge beneath the paintings. Illustration is compiled from 5 photos. The lowest salmon seems to appear from the crack where the red line in the rock twirls like flowing water. The salmon above this also seem to appear from this same natural feature possibly referring to the flowing river? Photos and illustration: Jan Magne Gjerde.

Modern carving from Lake Onega in northwestern Russia. This carving was made more than 20 years ago according to a local informant. The person holding the spear is about 20cm tall. Photo: Jan Magne Gjerde

The whales at Onega. Only the whale hunting scenes are chalked to make them more clear on the photo. This is the left and the middle whale hunting scene at Besov Nos. Scale in the middle of the photo is 10cm. Tracing of the figures at Besov Nos can be found in Ravdonicas publication on the Onega carvings (Ravdonikas 1936b:plate 25). Photo: Jan Magne Gjerde

Figure 292 The Flatræt site in northern Sweden where one can see how the figures are placed in relation to cracks and ledges as if the animals appear from cracks in the rocks. At a closer look it seems like the human representations and the elk figures are appearing from the cracks connected to the ledges from inside the rock surface, the "other world" Photo: Jan Magne Gjerde

One of the elk at the Flatræt site in northern Sweden where the elk is appearing form the crack interacting with the elements in the rock. Photo: Jan Magne Gjerde

Figure 294 Painted figures at Gjølgjavatnet middle Norway. Notice how the large elk figure appears as if it is coming out of the rock. Photo: Jan Magne Gjerde

After Savvateyev (1970:253, plate 51). A whale hunting scene from New Zalavruga 9, Vyg. It appears as if the people have been thrown out of the boat during the hunt. The boat at the boat is eroded.... Photo: Savvateyev (1977:72). The copulation scenes connected to the Beluga Whale can be seen in the middle of the tracing...

Rubbing of the large whale hunting scene at New Zalavruga 4. This has been interpreted as a training or initiation scene of the whale hunt. Note the clear erection on some of the male hunters. Rubbing: Jan Magne Gjerde

View of a typical aggregation of a large group of reindeer occupying an entire jassat (snow patch) during a hot summer day from Kvenangsfjellet in Trøndelag, northern Norway, 1985. Notice how the reindeer congregate and virtually "fill" the jassat but are not standing outside the jassat. Photo © Arne C. Nilssen, Tromso University Museum.

Figure 302 The Elva site in Vingen after Hallström's documentation. Notice how the red deer is following the ledge running up the "valley" interacting with the landscape. The whole Vingen area is dominated by such ledges (see Figure 303). Tracing after Hallström (1938: plate XXXVI). Photo from Gustaf Hallström's Archive at the Research Archive, University of Umeå, Sweden. Illustration: Jan Magne Gjerde. 

Figure 303 Vingen in western Norway. Main parts of the carvings are located on rock slopes and cliffs. The Elva site is marked and the figures in Figure 302 are situated on the left side of the Vingen River. The white arrow marks the outflow of the Vingen River. Notice the ledges that are restricting movement for man and animal walking between the coast and the mountain area. Photo and illustration: Jan Magne Gjerde. 

Figure 304 The large hunting pit system east of the Glösa rock art site. The hunting pits and hunting pit systems are marked in blue. The hunting pits form a system that runs between the two lakes. The carvings at Glösa are marked in red. Totally 99 pitfalls are surveyed in this hunting pit system. Background map and data after www.raa.se. Illustration: Jan Magne Gjerde. 

Figure 305 Photo and tracing of the main panel at Glösa (Glösa I). Tracing after Hallström (Hallström 1960: pl. V). Photo and illustration: Jan Magne Gjerde. 

Figure 306 Scenes interpreted as hunting pits from Alta. The left photo is from Bergheim 1, Hjemmeluft in Alta, the middle photo is from Ole Pedersen 1, Hjemmeluft, Alta and the right photo is from Bergbukten 4, Hjemmeluft, Alta. Left photo: Karin Tanssem, VAM. Middle photo, right photo and illustration: Jan Magne Gjerde. 

Figure 307 Hunting pit for elk depicted at Ekeberg 2, Oslo, Eastern Norway. Section of the tracing after Engelstad (1934: planche XLIV). 

Figure 308 Hunting pits for elk seen at Skogerveien in Drammen, Eastern Norway. Tracing after Engelstad (1934: Planche XLVII). The scale at the bottom right is 1 m. 

Figure 309 Hunting fence at one of the minor panels at Evenhus, middle Norway. Tracing after Gjessing (1936). Photo and illustration: Jan Magne Gjerde. 

Figure 310 Section of the Sporanes site in Telemark, Eastern Norway. Notice the hunting / guiding fences or elk hunting pits? Where the elk and reindeer are clearly connected. Tracing after Hagen (1969: fig. 64). The site has been dated to the transition between the late Stone Age and Bronze Age suggested by the mixture of motifs that are connected to the different time periods. 

Figure 311 Belugas gathering in the river estuary on Sommerset island, Canada. With kind permission of © National Geographic Society. 

Figure 312 Wild Reindeer at Hardangervidda, southern Norway, in 1966. Notice how the reindeer follows the topography. Photo © Fjellanger Wideroe. 

Figure 313 The "dancers at Bergheim 1 in Hjemmeluft, Alta. Two of the dancers are holding an elk-head boat and the person at the top is holding a long spear / harpoon. The boatfigure is ca. 30cm. Photo: Jan Magne Gjerde. 

Figure 314 A seal hunt from an elk-head boat at Bergbukten 1, Hjemmeluft, Alta. A person is holding a spear / harpoon aiming for the seal. The seal is slightly eroded and could be a small whale. But by comparison to other figures it appear to be a seal. The boatfigure is 16cm long. Photo: Jan Magne Gjerde.
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