4. SACRED PLACES IN RELATION TO THE LANDSCAPE

Taatsi (65) in Kittilä, June 2008

Nowadays most people approach the Taatsi sieidi from the direction of the forest road from Pokka. A footpath to the shore leads down from the road. A traveller approaching from the forest can walk almost all the way to the edge of the shore cliff before noticing anything unusual. Only a glimpse of the Taatsi sieidi can be seen behind the steep bank. However, the situation may have been different before the top stones of the sieidi were knocked down. In spite of this, the impression has been quite different for visitors approaching from the lake. From the water, the large boulder rising on the shore is visible for a long way.

The direction of approach is therefore very significant for the visibility of a sieidi. This significance is emphasized when the shape of the sieidi is studied more closely. Its unusual features may be observable only from one direction. Before the top of the Taatsi sieidi was destroyed, a viewer from the west, from either lake or land, could discern a human face in the rock wall. The viewshed analyses of GIS systems provided hints of the significance of the direction of approach, but they cannot perceive anthropomorphism or other meanings created by the human mind. This is why it is important to use other sources of information in addition to spatial data.

In addition to vision, also the other senses and, through the body, the entire surrounding landscape are connected to experiencing Taatsi. Standing in front of the boulder, I hear the water lapping against the shoreline rocks, shiver with cold in the June sleet, and feel respect for the ancient sacred place. Campfire remains testify of experiences including the smell of smoke and the heat of fire. The realm of experience is within humans themselves, their memories and the meanings they attach to the place. However, reflections of these can be reached through methods of spatial analysis.

4.1. Sacred places as elements of the landscape

geasseijás
fiervvá geđggiid
humahalan

ja dat vástidit
muhto in máhte sin giela[311]

Nils-Aslak Valkeapää 1988: Beaivi, áhčážan

As I mentioned earlier, Sámi sacred places are only rarely associated with manmade structures. The sacred places are found in nature. Through the sacred places and myths related to topography, ethnic Sámi religion was closely tied to place and landscape.[312] Elements of the landscape are considered to have been very significant in the selection of Sámi offering places. The idea of outstanding topographic features has been connected to offering places.[313] In the following chapter, I take a closer look at the location of Sámi sacred places in relation to the topographic features of the landscape and at what kind of landscape elements the sacred places themselves were.

The locations of the sacred places in my research material in relation to the topographic features of the landscape are shown in Figure 15. Here, the definition of landscape features is based on a map estimate or observations made in the field. In later chapters, I provide more detailed definitions for terms such as *proximity to water*. The feature describing the topography means the environment in which the sacred place is located. The features are defined as river, lake, smaller waterway, headland, island, hillock, hill, fell, and forest. Of course, hills and lakeshores can also be forested, but in this categorization forest means an area with none of the other topographical features listed here. Topographical features can be combined, if a hill is located next to a lake or a waterway in a fell area. Features related to water or high places are dominant elements, but two offering places are located on even, forested ground with no connection to water. A connection to water is formed if the sacred place is located either on a headland or an island or near a lake or river. Fells, hills, and lakes are the most commonly represented topographical features. The proportion of lakes increases if islands and headlands are also included in this category, as they are usually associated with lacustrine landscapes, with the exception of one headland and one island located in a river. Rivers and smaller waterways, such as brooks and ponds, are also represented by five or more places. On the other hand, a location on even, forested ground, far away from waterways, seems to be atypical of sacred places.

Places within a certain group exhibit some variation. **Rivers** are the most homogenous of the topographic features. A sieidi or sacred place near a river is always right next to the water, with the exception of Ladjokeädgi (106), which is located 20

311 *during the summer night / I talk to / the stones at the water's edge / and they answer / but I don't know their language* (Translated by Ralph Salisbury, Lars Nordström, and Harald Gaski.)
312 Lahelma 2008, 121–142.
313 Mulk 1996, 52; Mulk 2003, 125.

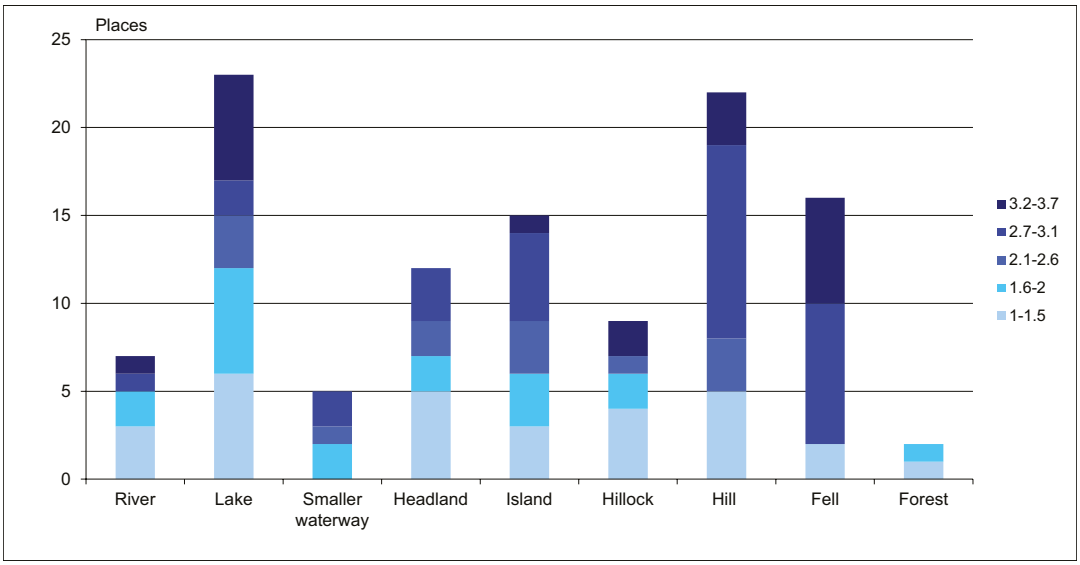

Figure 15. *Features representing the topography of a sacred place. In four cases, the place belongs to two groups.*

Figure 16. *Ladjokeädgi by the River Tenojoki.*

metres away from the River Tenojoki (Figure 16). Sometimes the stone is right in the shallows (Figure 17). Largish rivers with sacred places nearby have been selected as topographical elements. They are the Rivers Emäjoki in Hyrynsalmi, Koskikaltiojoki and Paatsjoki in Inari, Kemijoki in Kemijärvi, and Utsjoki in Utsjoki.

Lakes as topographic elements are more heterogeneous than rivers. Lakes associated with sacred places are very different in size. The largest of them is Lake Inarijärvi. The smallest is Lake Pyhäjärvi in Kittilä, which has a diameter of about one kilometre from east to west. Even smaller are the sáiva lakes, which belong to the lake category. The smallest of them is the Proksi sáiva lake (12) in Enontekiö. Its diameter from northeast to southwest is about 270 metres. In the case of four lakes, only the name of the lake has been mentioned in the sources. The lakes classified as sacred places are Lake Seitalompolo (16) in Enontekiö, Lake Pyhäjärvi (59) in Kittilä, Lake Pyhäjärvi (81) in Pelkosenniemi, and Lake Ajakkajärvi (86) in Posio. The other lakes have or have had a sieidi or other offering place in the vicinity. The offering place may be located on the lakeshore or in the shallows (Figure 18). The farthest sieidis with which a lake has been associated as a topographic feature are a lost sieidi stone that has been located about 30 metres from the shore of Lake Saarijärvi (62), with the precise location unknown, and the sieidi of Lake Äkäsjärvi (79), which is located on top of the shore cliff about 50 metres from the shore. At the Äkäsjärvi sieidi, the lake is the dominant element of the landscape, even though it is located rather far away from the sieidi stone (Figure 19).

Figure 17. *Seitigädgi in the shallows of the River Utsjoki.*

Figure 18. *The Lake Ketojärvi sieidi stone in Enontekiö is located in the shallow water close to the lakeshore.*

Figure 19. *The Lake Äkäsjärvi sieidi stands on a high bank. The lake, located slightly further away, dominates the landscape.*

At two places, lake and hillock features together dominate the landscape equally. At Sieiddesáiva, the sieidi stone (19) is located on a hillock 50 metres away from the sáiva lake. The Njuohkarggu sieidi stone (108), on the other hand, is located between Lake Njuohkarjávri and a smaller lake to the northeast of it on a mound-like isthmus. **Hillocks** as topographical elements are elevated features that have not been designated as hills (in Finnish, *vaara*) on the map. However, there is not necessarily any difference in elevation between a hill and a hillock. The median height of hillocks is 340 metres. Offering places can be located either on top of or along the slope of a hillock. Uhriharju (82) in Pelkosenniemi and Pyhäkumpu (97) in Sodankylä are examples of mound-like sacred places where the precise location of the offering place is not defined (Figure 20). At Uhriaihki (21) in Enontekiö, on the other hand, the River Muonionjoki is located 260 metres away, but the mound on which the offering tree stands is a more dominant landscape element, as the river is out of view behind the trees. There are only two cases where the topographical element of a sacred place is a **forest**. At Kirkkopahta (74), the closest other element is a brook 300 metres from the sieidi and at Somosen kirkko [The church of Somonen] (89), it is Lake Jyrhämäjärvi, located 270 metres away. Neither waterway is visible from the offering place (Figure 21).

Figure 20.
Uhriharju in Pelkosenniemi; an example of a sacred place characterized by a mound-like landscape feature.

Figure 21.
Kirkkopahta in Muonio is located in a forest landscape (in the photograph: Anna-Kaisa Salmi and Rosa Vilkama).

Figure 22. *Rytiniemi in Lake Särkijärvi, Kittilä, is an example of a small headland on which a sieidi once stood (in the photograph: Rosa Vilkama).*

All sacred places associated with **headlands** are sieidis. The headland is the dominant topographic element when a sieidi is located or is known to have been located on the headland. In two cases, however, Seitaniemi (71) in Lake Kaarantojärvi and Seitavuopio (18), the sieidi is in the curve of the headland and not out on the headland itself. The location of the sieidi on the headland may vary: it may be located near the shore, in the water, or in the middle of the headland, farther from the shore. The sieidi at Näkkälä (9) is located 10 metres from the shore, and at Keimiöniemi (73), the assumed location of the sieidi is 90 metres from the shore. Headlands are usually in lakes, but the size of the lake can vary. There is only one case, Lapinniemi (88) in Rovaniemi, where the headland is in a river. Like lakes, headlands also vary in size (Figures 22 and 23).

Figure 23. *Porviniemi, a 370-metre-long headland with a sieidi in its south-eastern part, is located in Lake Pallasjärvi, Muonio.*

Smaller waterways as topographical features refer to brooks, creeks, ponds, or springs that are in most cases not named. The precise locations of sacred places associated with smaller waterways are not known. They can be destroyed, lost, or spread over a wide area. As for **islands**, a more closely demarcated boulder or rock is known in five cases, but in other cases, the topographic feature refers to the sacredness of the whole island or an undefined part of it. Of the five known rocks, the sieidi at Ukko (46) in Lake Ukonjärvi is located in the middle of the island. On Annansaari (26), on the other hand, the sieidi is next to the island in the water. The other places are uninspected or the sieidis located on them have been destroyed. The islands are different and vary in size (Figures 24 and 25); the smallest are treeless islets, and the largest is Ukko in Lake Ukonjärvi, which is about 2.5 kilometres long from NNE to SSW. The lakes in which the islands are located also vary in size. The smallest is Lake Jänkkäjärvi (56), 730 metres long from east to west. One of the islands, Kylänsaari (84) in Pello, is located in a river.

Figure 24.
Sitakallio in Lake Iijärvi, Inari, is an example of an offering place on a treeless islet (photograph by Anssi Malinen).

Figure 25.
Moossinasaari in Lake Inarijärvi is an example of a large island that has been used for offering activities, but the location of the offering place is not precisely known (photograph by Anssi Malinen).

In two cases, the island or lake is associated with a fell. Ravdojavri (111) is located on a small island in Stuorra Rávdojávri in a fell landscape. Lake Pyhäjärvi (14) in Enontekiö is located on the fell of Pyhäkero. **Fell** means an extensive sacred area, with the exception of three sieidis and three offering places located in a fell landscape. The elevations of fells or offering places located on them vary from about 200 metres to 1300 metres, with a median of 530 metres. The precise location of the sieidis is not known, and thus their relation to the fell landscape is also unknown. As for the offering places, a precise location is known for only one of them; an offering hollow on top of the Guivi (103) fell. The other offering places may have been located either on top of or along the slope of the fell, or the entire fell could have been considered as sacred. Of the landscape elements marked as **hills**, four are sacred places formed of the entire hill, the others are sieidis or offering places located on hills. However, the precise location is unknown for most of them. Three sieidis for which the location is known are placed in various ways in the hill landscape: the Dierpmesvárri (3) sieidi is on the slope (Figure 26), as well as Sieiddakeädgi (113), whereas the remains of the Keivitsa (95) sieidi and the Saitavaara (77) sieidi are located on top of the hill (Figure 27). Hill elevation varies between 170 and 950 metres with a median of 315/325 metres.

Figure 26. *A sieidi stone on the slope of Dierpmesvárri (photograph by Anna-Kaisa Salmi).*

Figure 27. *The Saitavaara sieidi on top of the hill.*

Even though waterways and high places are emphasized in the topography of the locations of sacred places, a closer study of the topography reveals plenty of variation in location. Sacredness could be associated with large landscape elements such as fells and large lakes and rivers, but also with less conspicuous features, such as islets, ponds, and creeks. As for sieidi stones, there is also variation in their location on the slope or top of a high place, such as a hill or fell, or on the shores of waterways, in the water, or slightly farther away from the shore. The selection of a sacred place therefore does not seem to have strict, established forms.

Even though the locations of sacred places have certain unifying characteristics, the landscape elements associated with them also reflect the typical topographical features of each area. On the map, sacred places related to waterways, including islands and headlands, are especially numerous in the areas of Inari and Western Lapland. Sacred places related to fells and hills, on the other hand, are especially typical of Northern Lapland (Figure 28). In the study of the locations of sacred places in Inari and Utsjoki, topographical differences are accentuated (Figure 29). Sacred places located on even, forested ground are completely missing. In the municipality of Inari, dominated by Lake Inarijärvi and numerous smaller waterways, water-related landscape features are the most common locations for sacred places. In the Utsjoki fell area, which is crossed by rivers, sacred places are more often located near rivers and fells than in similar places in Inari.

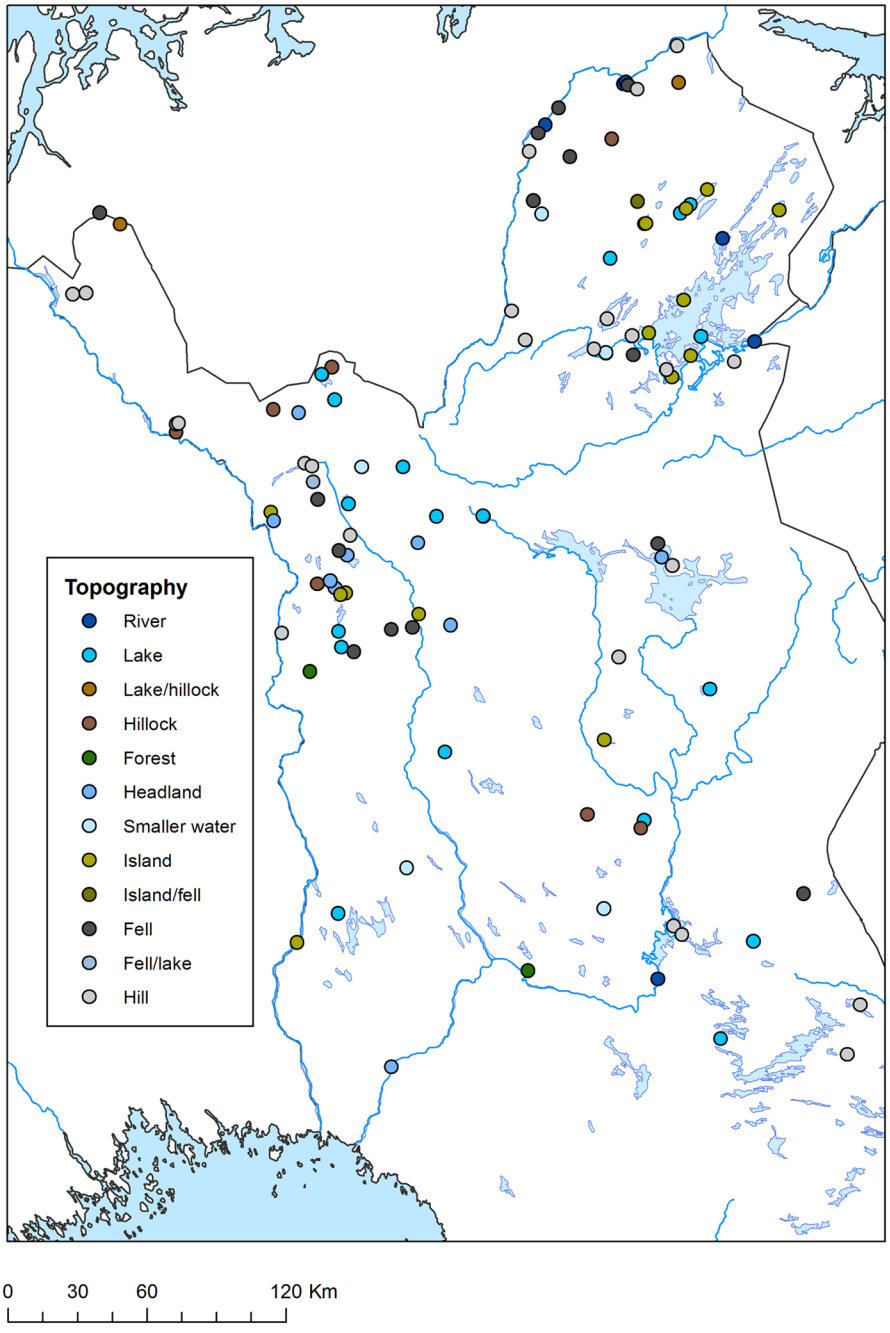

Figure 28. *A distribution map of the landscape features related to sacred places.*

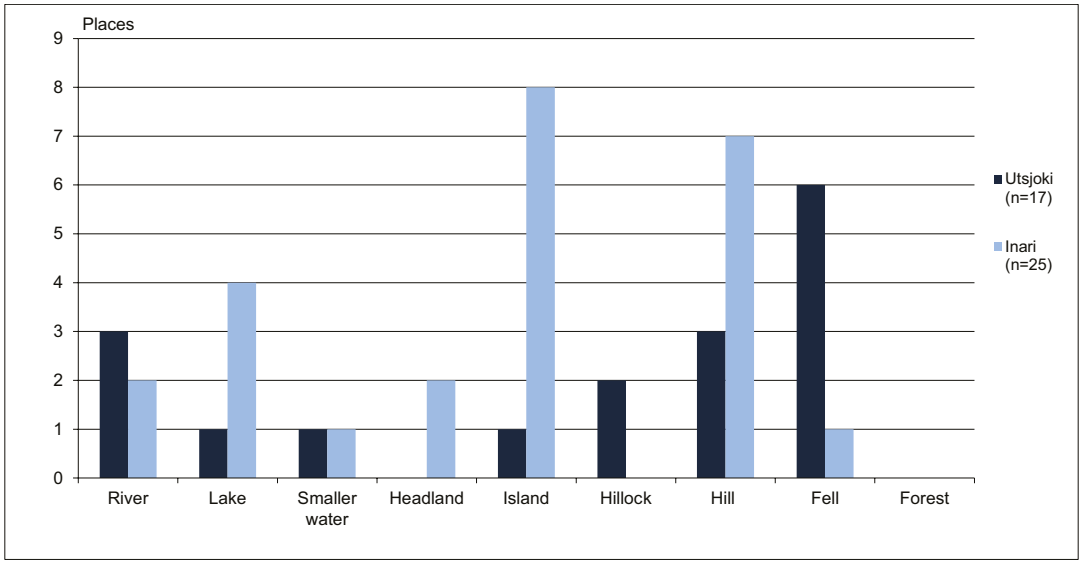

Figure 29. *A comparison of the features representing the topography of sacred places between Utsjoki and Inari. In four cases, the place belongs to two groups.*

Obviously, there are regional differences in the locations of sacred places. Some differences can also be observed when groups of sacred places defined by users or deities associated with sacredness are studied. Sacred places of different user groups can be identified through written sources. For some places, mention is made of whether it was visited by an individual person or a larger group, such as the whole village or people from an even larger area. Figure 30 presents a comparison of sacred places used by either a larger group or an individual. Only those sacred places for which written sources provide information on user groups are included in the comparison (21 places in total). However, the small sample size is a problem, because this information is not available for the majority of the places.

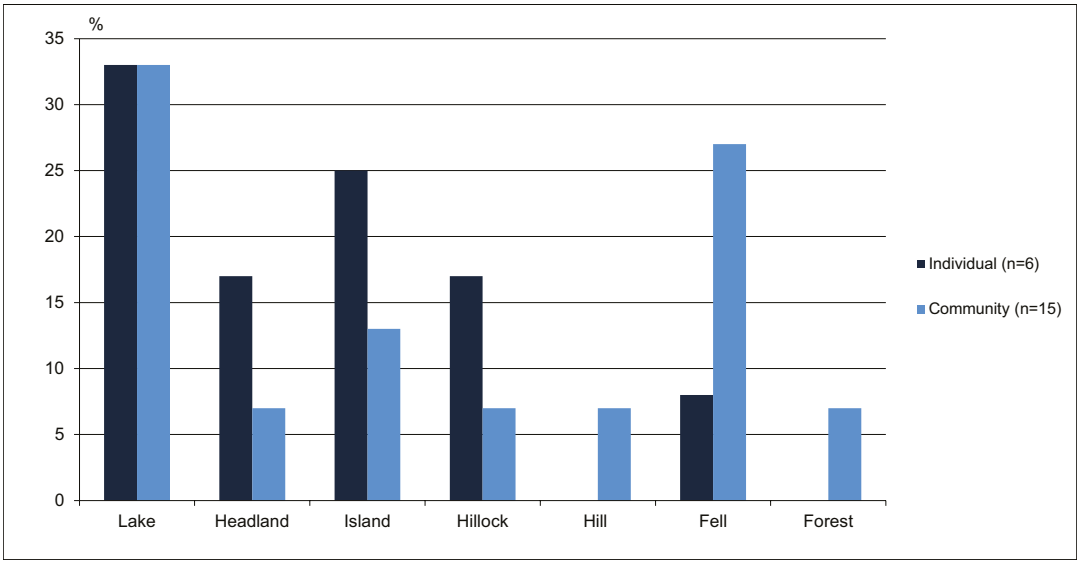

Figure 30. *The landscape features of sacred places used by individuals and communities as percentages of the total amount of features. In the private category, one sieidi belongs to two groups.*

Those landscape features that were generally the most representative were also dominant at places used by both groups and individuals. However, the sieidi in the forest, used by a community, forms an exception to the rule. Large landscape elements such as fells and lakes are represented at places used by the community. Even though the fairly high number of fells at places used by communities reflects the general distribution, it is interesting in the context of a remark made by Tornæus. He notes that sacred places used by communities were located in high places so that everybody could see them.[314] Also other large landscape elements, such as lakes, were highly visible. Places used by individuals are distributed equally between different groups. Only islands and lakes are represented by more than one sacred place. Of these, Seita-laassa (36) was associated with fishing and the others with fishing and reindeer herding. No direct connection can therefore be made between these offering places and a means of subsistence practised only within the family. In some cases, it is said that the sacred place itself chose an individual person to offer to it. For example, regarding the Proksi sáiva (12), Paulaharju reports that "it was so powerful that it didn't give fish to just anybody. There was only one man who could reap its fruit."[315] On the other hand, it should be kept in mind that many private sacred places have disappeared for that very reason. Information about them has not been passed on to the larger community.

The topographic location of a sacred place has been considered to be associated not only with the meaning of the offering but also the deity to whom the offering was directed.[316] I return to the connection between topography and the means of subsistence related to offering in Chapters 5.1., 5.2., and 5.4. As for the question of the connection between topography and deity, I approach it through the place names of sacred places. My study includes those places with a name related to femininity (such as Akka [Old woman] or Naarassaari [Female Island]) or a male deity (Ukko, Tiermes/Dierpmis). Again my results are in line with the general observations. Hills as feminine places and islands and hills as masculine places are more significant than for the locations of all sacred places together (Figure 31). This is partly due to the area of Lake Inarijärvi and Lake Ukonjärvi, which contains two islands named for the male deity Ukko, both of which are paired with a hill named for the female deity Akku. These two have had a connection related to the realm of stories. A story tells of how Ukko and Akka were conversing at Lake Ukonjärvi.[317] The emphasis on masculine hills, on the other hand, is due to two hills that have been named for the thunder god Dierpmis. These hills are located geographically far from each other in Kuusamo (68) and Enontekiö (3).

When landscape elements related to sacred places are studied with the help of various restrictions, the features making up the largest general groups are emphasized. These are thus the features associated with the largest number of stories and local tradition. However, topographic features related to sacred places can generally be

[314] Tornæus 1900 [1672], 26; cf. Bergman *et al.* 2008, 4.

[315] Paulaharju 1962 [1922], 170. Original Finnish text: "*oli niin haltiakas, ettei se antanut kaloja kenelle tahansa. Oli vain yksi mies, joka siitä osasi viljan ottaa.*"

[316] Mulk 1996, 64.

[317] Itkonen 1948 II, 308. However, Itkonen's account confuses the island of Ukonsaari in Lake Inarijärvi and Ukko in Lake Ukonjärvi. There is a hill related to Akku close to both lakes, but the hill between Lakes Inarijärvi and Ukonjärvi is probably associated specifically with Ukko in Ukonjärvi.

considered as rather heterogeneous in nature. Water and elevation as landscape elements are common factors for sacred places, but water features, for example, exhibit variation in the type of waterway and its proximity to the sacred place.

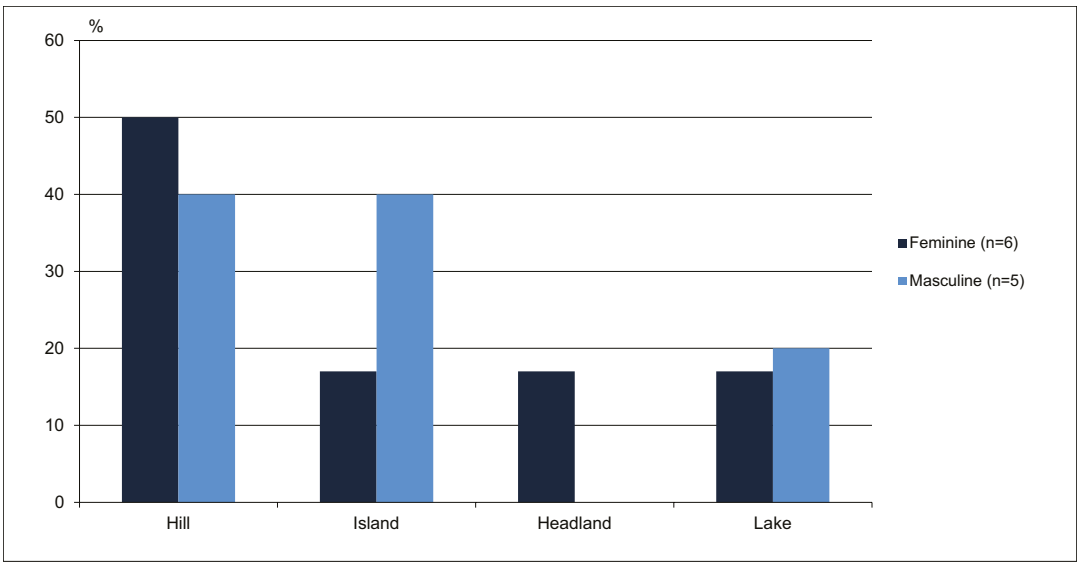

Figure 31. *Landscape features according to the feminine and masculine deities associated with sacred places.*

Sacred places are not only located in relation to topographical elements; they may in themselves form significant elements of the landscape. According to Samuli Paulaharju, the conspicuous character of a natural element was often a reason for it being chosen as an offering place. He describes how "only unusual stones that were larger or in some way different from others […] caught his [the offerer's] attention."[318] M. A. Castrén also emphasizes that offering places are exceptional in size or appearance.[319] Both Castrén and Paulaharju mention the size of the offering place as a noteworthy feature. Paulaharju even leads the reader to believe that the offering place was chosen specifically on the basis of external criteria instead of symbolic criteria or the experience of a particular place as sacred in spite of human intervention. Later, some researchers have also supported the idea of the selection of offering places on the basis of external criteria.[320] Such special criteria related to the appearance of the potential offering place included, according to the literature[321], the following:

- anthropomorphic or otherwise unusual stone shape
- standing out from the landscape, visibility
- unusual stone surface (for example, grooves or cracks)
- stone colour
- stone size
- stone height

[318] Paulaharju 1932, 5. Original Finnish text: "Vain erikoiset, muita isommat taikka muita merkillisemmät pahdat […] herättivät hänen [uhraajan] huomiotaan."
[319] Castrén 1853, 60.
[320] Vorren & Eriksen 1993, 187–188.
[321] E.g. Acerbi 1802, vol. II, 303; Paulaharju 1932; Itkonen 1948 II.

These features were documented from places inspected in connection with the fieldwork that I carried out. The sieidi stone could still be found at 23 of the inspected places. Usually the criteria mentioned above related to the selection of offering place were associated specifically with sieidi stones. Table 6 indicates how many of the inspected sieidis displayed these features. Further on, I will return to the problems related to interpreting anthropomorphic shapes and the meanings associated with anthropomorphism. Stones of atypical shape here refer to sieidi stones whose shape makes them stand out from the surrounding stones. Such an interpretation is naturally based to some degree on intuition. In written sources, some sieidis are said to resemble, for example, a salt cellar, a sitting "Lapp geezer", a *goahti*, or a chair.[322] Paulaharju in particular has described sieidis in colourful terms. For example, there is Ladjokeädgi (106) in Utsjoki, which has been described as shaped like a flat-backed, wall-hanging salt cellar or the seat of Staallo (Figure 32).[323] The visibility of a sieidi in the landscape is discussed separately. Unusual surface refers to geological factors that make the sieidi stone stand out from the surrounding stones. The sieidi stone at Koskikaltiojoen suu (29) is a so-called *rauk*[324] (Figure 33). In the south-eastern corner of Sieiddakeädgi (113), on the other hand, there is a cavernous hollow into which water has eroded cups (Figure 34). A third example of an unusual surface is Seitigädgi (112), with belt-like bulges along the side (Figure 35). The atypical colour of the stone has been documented when it is mentioned in the sources or when the colour of the sieidi is clearly different from that of the surrounding stones. As an example of atypical colour, the stone on the shore of Lake Seitalommol (15) in the northern part of Lake Pöyrisjärvi has been interpreted as a sieidi in archaeological survey, but its identification on the basis of written sources is uncertain. Due to its eye-catching white colour, the possible sieidi stone stands out from its environment (Figure 36).

Table 6.
The number of features representing the offering places at the inspected sites (n=23).

Element	Amount
Atypical shape	14
Anthropomorphic or zoomorphic	8
Unusual surface	5
Atypical colour	4
Atypical size	20

Figure 32. *Viewed from the shore, Ladjokeädgi resembles a chair or a salt cellar.*

[322] E.g. Paulaharju 1932, 30, 39, 41; Paulaharju 1965 [1927], 262; SKS KRA. Kohonen, Marjatta 526.1961.

[323] Paulaharju 1932, 30.

[324] The term *rauk* means a limestone rock, especially common in Gotland, from which the waves of the sea have eroded the weaker stone material. The term can also be used for other stone pillars formed through erosion.

↟

Figure 33. *The sieidi at Koskikaltiojoen suu [The mouth of the River Koski-kaltiojoki] is a so-called rauk (in the photograph: Eeva Miettinen).*

↖

Figure 34. *Cups formed in the cavernous hollow in Sieiddakeädgi (photograph by Anna-Kaisa Salmi).*

↑

Figure 35. *Belt-like bulges on Seitigädgi in Utsjoki.*

Figure 36. *A white stone on the shore of Lake Seitalommol, interpreted as a sieidi, stands out because of its colour.*

The height of the stone is naturally a factor influencing the visibility of the sieidi. However, a sieidi can be large without being especially tall. An example of such a sieidi is Sieiddakeädgi (113), which is about 1.5 m tall but 6 m wide. At the inspected places, the height of the sieidi varies from 0.2 m to 10 m. Sieidis less than 0.5 m high are located in water, and the height refers to the part of the stone that is visible above the surface. For this reason, the height can vary according to whether the water is high or low. The smallest sieidi on dry land is the Säytsjärvi (44) stone, which is 0.7 m high. The tallest sieidi is the rock formation at Taatsi (65). The majority of the inspected places have a height of between 1.5 and 2.5 m.

The manifestation of sacredness in the landscape was related to the combined impact of the two factors mentioned above, location and appearance. There may be several stones in a particular place, one of which has an unusual appearance or is located apart from the others, or a lone stone may be less conspicuous in appearance. I return to the question of sieidi visibility in Chapter 4.2.1.

The influence of external factors on the selection of sacred places has been discussed above. According to Anders Huggert, unusual landscape elements have been considered to be associated with the presence of a deity.[325] The deep emotions evoked by certain types of landscape have indeed been considered as common to all humans. Such landscapes are, for example, mountains, places where the vegetation changes, and places with a panoramic view.[326]

On the other hand, topographic phenomena have not always been experienced in the same way. For example, the idea of mountainous regions as attractive and calming is considered to have entered Western thought only by way of Rousseau.[327] Landscape elements or stone forms that seem exceptional in a researcher's eyes may not have caught the local people's attention. The place may have been made significant by its location in relation to the daily chores or by stories related to it. Such a place does not always seem in any way special for an outside observer. Itkonen relates that the Skolt Sámi had sacred places that did not particularly stand out from their environment.[328] Sacred places can be very extraordinary in their landscape or completely ordinary. A place can also be temporarily treated as a sacred place during the performing of a ritual and then return to being a natural place. A sacred place can be characterized equally well by the visible and tangible as by the invisible and intangible.[329] Such immaterial, symbolic factors influencing the choice of sacred places may be, for example, stories or memories. Examples are stories of sieidis whose shape results from a human having turned into stone.[330]

Sacredness can therefore be associated with a wide variety of landscape elements. Sacred places may have been very unusual in shape or they could have blended in with their surroundings. A place may have been considered sacred due to external, visible factors or due to symbolic, invisible values associated with it. In the following

[325] Huggert 2000, 63.
[326] Taçon 1999, 37.
[327] Relph 1986, 124.
[328] Itkonen 1948 II, 320.
[329] Arsenault 2004, 78.
[330] Andelin 1859, 274; Itkonen 1962, 128; Manyuhin 1996, 72.

chapter, I take a closer look at two characteristics considered typical of sacred places, especially sieidis: anthropomorphism and visibility. The characteristics selected for closer study are often repeated in research and have even been used for identifying sieidis in the absence of written sources.[331] Later, however, I point out why using only external criteria for identifying sieidis is problematic.

4.1.1. Anthropomorphism and zoomorphism as characteristics of sieidis

Anthropomorphism means attributing human traits to animals or inanimate objects. Likewise, zoomorphism means seeing animal traits in inanimate objects. Humans often have an unconscious tendency to see human forms around them.[332] For this reason, anthropomorphic features may be observable in many stones from a certain viewing direction. However, in this chapter, I deal only with those sacred places that have been described as anthropomorphic or zoomorphic in written sources or reports. This does not mean that individual people could not have experienced also other stones as having a human or animal shape.

Anthropomorphism has often been mentioned as a typical feature of sieidis, especially, out of all offering places.[333] Of the 107 sacred places in my research material, 64 are stone sieidis. Eight stones or bedrock formations have or are said to have had anthropomorphic or zoomorphic features. In addition, one sacred fell is said to contain stones that resemble humans. However, it must be kept in mind that the figures presented above do not contain the whole truth about sieidis. Some sieidis are known only from written sources and have not been documented by an archaeologist. Some stones, on the other hand, have been destroyed, and only written descriptions or photographs remain as evidence of their shape. One example of such a place is the Taatsi (65) sieidi, in which a human face could be seen before its top stones were pushed down (Figure 37). However, the number of preserved anthropomorphic stones seems to indicate that anthropomorphism was not a random feature. On the other hand, there are not so many anthropomorphic stones that a humanlike shape could be considered as a determining factor in the identification of sieidis. Itkonen notes that anthropomorphic stones were more sacred than other stones.[334] On the basis of this, anthropomorphism can be considered as an important feature of sieidis, but not a general one.

The significance of anthropomorphic features in Sámi ethnic religion is also supported by the fact that in some areas, stones with a human or animal shape have been separated from other offering stones. For example, the *storjunkare* mentioned by Rheen is considered to refer to a stone object of human or animal form that controls the animal world and on which hunting luck depends.[335] According to Tornæus, the *storjunkare* was known only in Luleå Lapland. Non-figurative stone or wood objects, on the other hand, Tornæus calls by the name *säite*.[336] In the area of Finland, however, both figurative and non-figurative offering stones have been called sieidis (Table 1).

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[331] For example, Pentikäinen & Miettinen 2003.

[332] See, for example, Guthrie 1995, 3.

[333] Manker 1957, 34; Mulk 1996, 52; Pentikäinen & Miettinen 2003, 56–59.

[334] Itkonen 1948 II, 310.

[335] Rheen 1897 [1671], 39; Mebius 2003, 50.

[336] Tornæus 1900 [1672], 27–28; cf. Högström 1980 [1746/1747], 182; Rydving 1993, 99.

Figure 37.
In this photograph taken by Samuli Paulaharju in 1920, the human figure in the Taatsi sieidi is easy to distinguish. Later, the stone was partly destroyed (National Board of Antiquities/3490:2567).

The known anthropomorphic sieidi stones are located in the northern parts of Finland. Based on the descriptions, the southernmost anthropomorphic sieidi has been located in Keivitsa (95) in Sodankylä. However, anthropomorphism seems to be a feature that is associated with sieidis widely, not only in one area. A typical characteristic of anthropomorphic stones was that they were not shaped but were left in their natural form. Paulaharju does mention an exception in Kittilä, where the stone was worked to a human shape.[337] On the other hand, Ernst Manker mentions that there were a few cases among the zoomorphic stones in which human hands had helped the forces of nature.[338]

The majority of the anthropomorphic stones resemble a human profile. In some cases, a standing human is also mentioned. Written sources describe, for example, the Keivitsa sieidi as a stone god resembling a kneeling man whose hand pointed towards the north.[339] Sitting figures are known from Sweden.[340] Most zoomorphic stones, then, according to Manker, resemble birds.[341] Zoomorphic sieidis are rare in Finland. The sieidi stone at Lake Säytsjärvi (44) in Inari, which is said to resemble

[337] Paulaharju 1932, 7.
[338] Manker 1957, 34.
[339] Paulaharju 1941, 10; cf. Tallgren 1910.
[340] Manker 1957, for example, survey numbers 57, 168, and 243.
[341] Manker 1957, 34; cf. Schefferus 1963 [1673], 170.

the nose of a fish, is an exception (Figure 38). In this case, too, the interpretation of zoomorphism seems to be based only on the description of an informant documented by Paulaharju. On the other hand, anthropomorphism and zoomorphism are always intuitive interpretations made either by people who once used the places or by people who now observe them. The fish-nosed sieidi at Lake Säytsjärvi is a good example of the fact that what one person sees in a stone is not always so clear to everybody. Schefferus already states that, in his observation, the stones were "described as having more likeness than others could see", because the people wanted to see the form of *Storjunkare* in the stone.[342] The meanings assigned to a stone are not necessarily visible through the eyes of an outsider. Thus, anthropomorphism may have been more common than the figures presented above lead to understand.

Figure 38. *The Lake Säytsjärvi sieidi, said to resemble the nose of a fish.*

Sieidis not only resembled people, they were also believed to have acted on occasion like living creatures. Sometimes the spirit was seen as separate from the stone. Itkonen relates how the known destroyer of sieidis, Päiviö Vuolab, once saw the spirit of a stone sieidi crawling around in the form of a naked child.[343] The sieidi stone itself also sometimes acted like something alive. It could move, eat offerings, smoke tobacco, laugh, and sing.[344] It could feel human emotions, such as pride, anger, and vengefulness.[345] People could communicate with sieidis in various ways. The Taatsi sieidi answered offerers with a sound like jingling bells coming out of the stone.[346] The sieidi was also asked for advice by placing a hand on the side of the stone, in which case the hand was stuck to the stone and would not come free until the asker correctly guessed what would happen. Sometimes the sieidi appeared in dreams to give advice. The sieidi could also be punished by chopping pieces off of it or by

[342] Schefferus 1963 [1673], 170.
[343] Itkonen 1948 II, 308.
[344] Qvigstad 1926, 321; Paulaharju 1932, 22, 27; Itkonen 1948 II, 318.
[345] Paulaharju 1932; Manker 1957, 34.
[346] Paulaharju 1962 [1922], 138.

destroying it completely.[347] It was thus believed that sieidis had many ways of acting in the world and communicating with people. Sieidis that reacted to human actions can be added to the relational worldview that I mentioned earlier.[348] They were a part of the world inhabited by different living creatures where contacts were not restricted only between humans.

4.2. Visibility in the landscape

> *Et problem med folk er at med en gang de fyller et rom, er det folkene man ser og ikke rommet. Store, øde landskaper slutter å være store, øde landskaper hvis de har ett eller flere mennesker i seg. Mennesket definerer hvor blikket skal ligge. Og menneskets blikk er nesten alltid rettet mot andre mennesker.*[349]
>
> *Erlend Loe 2004: Doppler, pp. 139–140*

In this chapter, I discuss sacred places as landscape elements defined by both their visibility and what is visible from them. By visibility I mean cognitive activity that is not only associated with observing the environment in order to structure space, but also with mental models and cultural frameworks that both guide the observation process and have their roots in it. The space structured through looking and seeing may be influenced, for example, by the manmade environment contemporary to or older than the moment of viewing, natural formations, or astronomical phenomena.[350]

I approach the concept of visibility through viewshed analyses performed by GIS software. The analyses are based on a raster-based elevation model[351] and computational lines of visibility from a certain point to the areas where viewshed is not blocked. A line of visibility between two cells is formed if the land surface does not rise up to block visibility. Cells are assigned either the value 0, if they are not visible, or 1, if they are visible. The viewshed area is formed of the cells with the value 1. The viewshed is influenced, for example, by the viewing height, which is usually defined as 1.7 metres,[352] and the curvature of the earth.[353] I use a viewing height of 1.5 m, which is a better match for the average eye level of ancient people.[354] However, this is an estimate; in reality, a human observer's height has varied depending, for example, on whether he has sat in a boat or skied on thick snow.

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347 Holmberg 1915, 31, 35–36.

348 Cf. Lahelma 2008, 121–142; see also Äikäs 2012.

349 "One problem with people is that as soon as they fill a space it's them you see and not the space. Large, desolate landscapes stop being large, desolate landscapes once they have people in them. They define what the eye sees. And the human eye is almost always directed at other humans." Erlend Loe 2012: Doppler, p. 146. Translated by Don Bartlett and Don Shaw.

350 Cf. Wheatley & Gillings 2000, 3.

351 In my work, the square size of the elevation model is 25x25 metres.

352 Wheatley & Gillings 2002, 205.

353 Norvasuo 1989, 32.

354 Niskanen 2006; cf. Granö 1929: 118.

4.2.1. The three zones of the viewshed

My study of visibility from sacred places divides the viewshed into three parts. The idea of these so-called zones in viewshed analysis is based on a layered concept of landscape. The layers can be thought to be located in three levels of the landscape. The first level is formed of the geographical area in which the archaeological remains are located. The second level is formed of the area from which the remains can be seen or experienced physically and on the landscape development of which the remains have had a great impact. A much larger area is formed of the third level, the area in which the remains are present, but less directly, for example, visible at a distance.[355] This theoretical idea presented by Graham Fairclough has also been applied in practice in viewshed analyses. In what follows, I present some archaeological applications of this tripartite division.

Peter Fisher, among others, has suggested this kind of zoned visibility as a solution for the problem of object-background clarity associated with viewshed analyses. One of the problems of viewshed analysis is the decrease in acuity in more distant objects.[356] The landscape in the foreground is seen more clearly than the landscape far on the horizon. There have been attempts to simulate the weaker visibility of an object located further away by using a so-called fuzzy viewshed, in which acuity decreases as distance increases.[357] Fuzzy viewshed can be implemented, for example, by dividing the surface into groups.[358] The most commonly established practice in research uses a division into three classes. In his study of the island of Orkney, based on fieldwork and maps, David Fraser separated three viewshed classes estimated on the basis of local conditions. He divides viewshed into restricted viewshed, or the area that is viewed at a distance closer than 500 metres, intermediate viewshed at 500 m to 5 km, and distant viewshed at distances over 5 km.[359]

Tadahiko Higuchi has also divided the landscape into three meaningful zones in the context of experience. He uses the terms *short-distance views*, *middle-distance views*, and *long-distance views*. Higuchi considers trees as a basic element of the landscape in Japan, and uses the height of trees as the basis for his division. In the short-distance view, trees can be seen as individuals and their details, such as leaves and trunks, can be distinguished. At this distance, the importance of other senses in observation is emphasized. Higuchi has used the example of the wind rustling through the trees. A short-distance view becomes a middle-distance view at a distance that

[355] Fairclough 1999, 132.

[356] Object-background clarity is one of the practical problems of viewshed analysis. A theoretical possibility of seeing is completely different from actually recognizing what one is looking at. The recognition of an object at a long distance often requires some kind of advance knowledge of what one is looking at, if the object has not been marked with a highly visible sign (Fraser 1983, 380; Wheatley & Gillings 2000, 6). In a familiar environment, people often have such advance knowledge. On the other hand, if there is advance knowledge of the location of the object, merely seeing the location may be significant in itself even if the actual object cannot be seen. The human ability to distinguish phenomena is also not the same for objects located close by and far away. At a distance, the landscape becomes misty, which in landscape painting is known as atmospheric perspective. Particles and water vapour in the atmosphere lower visibility (Norvasuo 1989, 33).

[357] Fisher 1992; Wheatley & Gillings 2002, 210.

[358] Baldwin *et al.* 1996.

[359] Fraser 1983, 299.

is sixty times the height of the tree. This distance varies depending on the height of the tree species typical of the area. In the middle-distance view, the observer can make out the outer edges of the treetops, but not individual trees. Thus the forest is seen, but not the trees. At this distance, the significance of topography in the view is emphasized. A middle-distance view becomes a long-distance view at a distance that is 1100 times the height of the trees. In the long-distance view, the trees form an undefinable structure in which the outlines of the treetops cannot be distinguished. Large topographical features and the horizon are important.[360]

David Wheatley and Mark Gillings have used Higuchi's division in archaeology in their study of a prehistoric travel route in Southern England. They estimated tree height at 6 metres and the longest distance visible as 18 km.[361] Different models have also been proposed, for example, based on the visibility of the activity taking place at the sites.[362] In Finland, Sirkka-Liisa Seppälä has noted in her studies of the Rapola site that the close distance is emphasized in the visible area at a radius of about five kilometres. The longest possible viewing distance may vary greatly depending on the topography of the area, as well as the nature and especially elevation of the sites under study. In Finnish conditions, the greatest observable distance has been estimated as 30–40 kilometres at most.[363]

In the study of sacred places in northern Finland, viewshed zones cannot be delineated on the basis of trees, because the vegetation in this broad geographical area varies greatly, and there have also been changes within the long chronological period under study.[364] In my research, I use the terms *restricted viewshed*, *intermediate viewshed*, and *distant viewshed*. Restricted viewshed is less than 300 metres and intermediate viewshed is between 300 metres and 3 kilometres. Distant viewshed covers areas even further away. Various possibilities were tested in order to determine the viewsheds. The chosen areas are broad enough to include possible archaeological remains and landscape elements, but not so broad that they would make results uniform, especially in the case of sacred places located close to each other. The zone of restricted visibility has to be narrow enough to reflect an area that a human can observe with several senses.[365] Further away, in the intermediate viewshed zone, the

[360] Higuchi 1983, 11–17.

[361] Wheatley & Gillings 2000, 16–19.

[362] Baldwin *et al*. 1996; Llobera 2007, 58.

[363] Norvasuo 1989, 31–39; Seppälä 2003, 20.

[364] Viewshed analyses have been criticized for being based on modern topography and not taking into account palaeovegetation (e.g. Chapman & Gearey 2000). Taking into account past vegetation has been considered difficult or even impossible, because it would require carrying out pollen analyses and constructing models based on them (e.g. Fisher *et al*. 1997, 587). However, some attempts to reconstruct the palaeoenvironment have been made. In Finland, Tapani Tuovinen has discussed shoreline displacement and its effect on the proportion of water and dry land (Tuovinen 2002, for example 204). Vegetation reconstructions have also been made based on pollen analyses and known vegetation types (Fraser 1983, 289–291; Tschan *et al*. 2000). In the case of vegetation reconstructions, it should be taken into account that in addition to tree height, forest characteristics are also determined by thickness. Trees do not completely block visibility, unlike land surface (Tschan *et al*. 2000, 40; Seppälä 2004, 22). The landscape may have been very different in the past, and the effect of trees and vegetation on visibility may have been dramatic. However, one benefit of spatial analysis is that it strips the environment of modern vegetation and enables observation where it would not otherwise be possible.

[365] Cf. J. G. Granö's (1929: 16–21, 116–119) concept of "near vicinity" (*Nähe*).

significance of vision is emphasized. The intermediate viewshed reflects the space that people may have associated with activities at the sacred place. I do not consider the area of intimate activities related to rituals to be as extensive as, for example, the area in which people roamed daily in search of food. The area associated with a sacred place can be approached, for example, from the basis of Johan Ervasti's description. According to him, an offering place is surrounded by an area of 2.5 to 3 km that was sacred and associated with special rules.[366]

The banded viewshed calculated from sacred places can be used to examine the visibility of other archaeological remains and various landscape elements from the sites and the experienced proximity of the sites to each other. The zone of restricted viewshed is associated with the study of sensory observations. Other archaeological remains that do not have an immediate significance for the experience of the sacred place but are a part of the cultural landscape related to it are located in the intermediate viewshed zone. The distant viewshed of more than three kilometres is relevant only in restricted cases.

In the study of these zones, however, it should be kept in mind that they are only tools for research and do not represent actual interfaces with the landscape. Interpretations must differentiate between the real world and the picture obtained by GIS viewshed analyses. Even in a reconstruction of the prehistoric world based on palaeovegetation, individual lines of visibility cannot be fully equivalent to actual lines of visibility in prehistory. They cannot be used to construct assumptions of individual observations, but instead maps depicting lines of visibility describe possible lines of visibility and viewshed models.[367] Sirkka-Liisa Seppälä states: "Visibility zones can be considered as formal models that *do not directly reflect the reality*, but may be realistic. They can be used, for example, to study what maximum area could have been visible from a given point, a kind of *theoretical maximum*, so to speak."[368]

4.2.2. Vision compared to other senses

Viewshed analysis has been considered as an important part of landscape studies. It has been judged a good method for approaching people's mental landscapes and for describing not only the environment, but also the cognitive and social landscapes of past people.[369] However, if viewshed analysis is to be used for grasping human experiences and mindscapes, two things must be kept in mind. The experience of seeing is always subjective in nature, and the landscape is not experienced solely through vision, but through multiple senses.

Seeing is always dependent on the seer. No two people can look at a physical landscape and see the same thing. What we see is influenced by our experiences, knowledge, sense of self, and personal history. The landscape is in the beholder's eye. John Berger notes that our place in the world around us is constructed through seeing. What we see

[366] Ervasti 1956 [1737], 39.

[367] Wheatley & Gillings 2000, 5–6.

[368] Seppälä 2004, 46 (my italics). Original Finnish text: "Näkyvyysalueita voidaan luonnehtia formaalisiksi malleiksi, jotka *eivät suoraan kuvasta todellisuutta*, mutta voivat olla realistisia. Niiden avulla voidaan esimerkiksi tutkia mikä alue olisi annetusta pisteestä voinut laajimmillaan näkyä, kyseessä on siis eräänlainen *teoreettinen maksimi*."

[369] E.g. van Leusen 2002, 5.12; Llobera 2007, 51.

and what we know can never be fully paralleled; what we know and believe influences how we see things.[370] There are numerous different ways in which people in different circumstances of life can comprehend their environment. Lifestyle, age, and gender all affect how an individual's impression of his or her environment is formed.[371] A biologist can look at a meadow and see a biodiversity of species, whereas a farmer may see potential arable land, and an archaeologist may see an ancient cultural landscape. The same signs are interpreted through each individual's own sphere of experience.

Seeing is not only individually but also culturally structured. The Western, scientific way of seeing has been criticized for intellectually and physically separating subject and object by classifying, listing, analyzing, and differentiating.[372] How, then, can a researcher be free of the burden of the Western gaze? How can we look without seeing through our own culture? Gabriel Cooney's answer is: "We cannot hope to think like a prehistoric person did about their landscape but we can reconstruct an overview of what the elements of that landscape may have been and then try to understand what they meant for the people who were carrying this landscape around in their heads."[373] Views are historically and socially constructed impressions of the world, and therefore the views of an archaeologist and a person belonging to the culture under study are significantly different from each other.[374]

The emphasis on vision at the cost of other senses, associated with viewshed analysis, has been considered as a modern, Western phenomenon. Seeing as a form of sensing has been raised above the other senses. However, different cultures emphasize the significance of different senses.[375] The distinction we make between seeing and other senses, such as touching or hearing, may have been less significant in premodern communities.[376] In addition, many researchers have quite correctly pointed out that a spatial experience is multi-sensorial and also has components based on kinaesthesia, touch, and action.[377]

Instead of studying only what can be viewed, archaeologists should aim to understand the significance of the different senses in human experience: how they are related to each other but also interfere with each other. The critique aimed at the dominance of vision has also brought the other senses within the domain of archaeological research. The sensory world of the past has been approached through, among others, sound, feeling, texture, colour, and smell, as well as brightness and shadow.[378] In the following chapters, I examine some of the different meanings that humans may have ascribed to what they see. I also approach Sámi sacred places not only through the seen but also the *heard* landscape. In this way, through the seen landscape, my research approaches the more fully-experienced landscape.

370 Berger 1972, 7–8.
371 Bender 1993a, 2.
372 Thomas 1993, 22–25; also Foucault 2001 [1975], 202–203, 266–285; Bender 1999, 31.
373 Cooney 1999, 47.
374 Owac 2006, 3.
375 Thomas 1993; Gell 1995; Thomas 2004, 198–199; Frieman & Gillings 2007; cf. Tilley 2004, 15–16.
376 Ingold 2005, 269; also Giles 2007, 107.
377 For example, Ingold 2005; Frieman & Gillings 2007, 5. On the importance of vision, however, see Llobera 2007, 52.
378 Houston & Taube 2000; Trevarthen 2000; Cummings 2002; Frieman & Gillings 2007, 6–7.

4.2.3. Sacred places as visible elements

In this context, sacred places as visible landscape elements refer mainly to sieidis for which the precise location and size of the sieidi stone is known. In addition, sacred places consisting of an island or some other clearly delineated area are included. Other sacred places, such as fells and waterways, are more dominant as visible elements. Of the 49 sacred places inspected in the context of this research, the ones selected for closer study are those 29 at which the location of the sacred place could be found with sufficient accuracy to define a viewshed. The definition of a sieidi viewshed is based on information from GIS analysis and field observations. I used GIS viewshed analysis as a point of comparison for field observations when I considered the direction from which the sieidi would be best visible. A sufficient accuracy for this purpose can be achieved by assuming line-of-sight reciprocity[379] based on the view from the sieidi.

In studying a sieidi viewshed, it is worth keeping in mind that in some places, the location of the sieidi may be visible from afar, but the sieidi itself cannot be seen. For example, the narrow headland of Porviniemi (75) in Lake Pallasjärvi can be seen from Palkaskero at a distance of about 2.5 kilometres, but the sieidi stone itself peeks through a stand of birches only at a close distance (Figures 39 and 40). GIS viewshed analysis takes only the topography into account, not the sieidi as a visible element. Therefore it can be used to figure out the visibility of the location of the sieidi but not of the sieidi itself. Sometimes seeing just the location may be important for constructing a mindscape. For example, a person looking out at Porviniemi from Palkaskero might be conscious of the existence of the sieidi on the headland, which imbued the landscape with a sense of sacredness.

The visibility of the sieidi stone itself was affected by other factors in addition to topography. In this study, sieidi visibility is analysed by taking into account the size and location of the sieidi and any other stones located nearby. In the analysis of sieidi location, I pay attention to topographic features that a rough elevation model does not include, such as small mounds or depressions. I also take into account the modern vegetation around the sieidi. In addition to vegetation, other stones also affect the way in which a sieidi can be distinguished in the landscape. In stone-free terrain, even a smallish stone stands out, but in a rocky area, only a stone of unusual size is noticed. The question of surrounding stones is related specifically to distinguishing the sieidi, not just seeing it. A person may passively see several stones without being able to pick out the sieidi among them.

[379] Viewshed analyses usually assume total reciprocity between the point of viewing and the object viewed, that is, the point of viewing is assumed to be equally visible from all points of the viewshed area. However, viewshed is affected by the height of the viewer and the object of viewing, as well as their relationship to the topography (Fraser 1983, 380; Fisher 1996, 1298, especially Figure 2), and thus the projective view from a place and the reflexive view to a place may be different. The distinction between seeing and being seen may be essential (Tilley 1993, 69). In spite of this justified critique, the difference between projective and reflexive view diminishes as the view distance in relation to the viewer's height increases. When the viewer's height is short in relation to the view distance, reciprocity may be assumed (Wheatley & Gillings 2000, 7–8).

Figure 39. *Porviniemi seen from Palkaskero.*

Figure 40. *The Porviniemi sieidi behind the birch trees on the shore (in the photograph: Siiri Tolonen, Sarianna Kivimäki, Anna-Kaisa Salmi, Rosa Vilkama, and Lasse Märsy).*

The change of seasons naturally influenced sieidi visibility. Here, I examine sieidi visibility mainly in the summer, which, in an environment characterized by broad-leaved trees, can be considered as the worst possible time for observation. If a sieidi was visible during the season of lush vegetation, it was usually also visible during other seasons. For example, in midsummer when the trees are in full leaf, the Näkkälä (9) sieidi is hardly visible at a distance of a few metres, but when the leaves have fallen, it can be distinguished from a distance of kilometres (Figures 41 and 42).

Figure 41. *The Näkkälä sieidi in August, when foliage still partly reduces visibility (photograph by Anssi Malinen).*

Figure 42. *The same sieidi in September, after the leaves have fallen (photograph by Jari Ylönen).*

The seasons affect visibility not only in relation to vegetation, but also through snow cover, for example. People read a snow-covered landscape in a way different to a snowless landscape; different features are emphasized and gain significance. People's conceptions of the landscape and their activities within it change. The snow also changes the surrounding sounds; the environment becomes quieter, and individual sounds are emphasized. In addition, snow may cover the smallest sieidi stones (Figure 43). The season also influences visibility in a very concrete way through light. In Lapland, the polar night in the winter creates visibility conditions different to the bright summertime. In addition to the season, also the time of day, climate, and weather may either improve or impair visibility.[380]

Figure 43. *The Lake Äkäsjärvi sieidi stone covered by snow (photograph by Anssi Malinen).*

Based on a three-step evaluation in the field, the visibility is bad in 17% of the 29 places, average in 45%, and good in 38%. The most common element affecting visibility was the amount of trees. Trees could either surround the sieidi (45%) or constrain visibility from one direction (28%). The thickness of the tree cover and the species of trees naturally affected visibility. The trunks of the spare pine forest surrounding Kirkkopahta (74) did not impair visibility as efficiently as the dense thicket of downy birch in full leaf at the Erkuna sieidi (4). In 34% of the places, the microtopography of the area influenced visibility.

How is the visibility estimated in the field then reflected in the results of viewshed analyses? Field observations are based on estimated restricted viewshed. In GIS analysis, good visibility could correspond with as large a viewshed zone as possible. Figure 44 shows that visibility is weighted towards small viewsheds of less than 10 ha. However, the majority of sacred places in these places have a weak reliability value. When visibility for the two most reliable classes is examined, the situation changes slightly. Now areas of up to 20 ha are relatively equally represented. Places with the best and worst visibility are distributed evenly throughout the research area, and they consist of sieidis, offering places, and sacred places alike. The places with

[380] Wheatley & Gillings 2000, 7.

the best visibility are often located in the vicinity of water, whereas those with the worst visibility are farther away from water. This is not surprising, because water offers an unimpeded view.

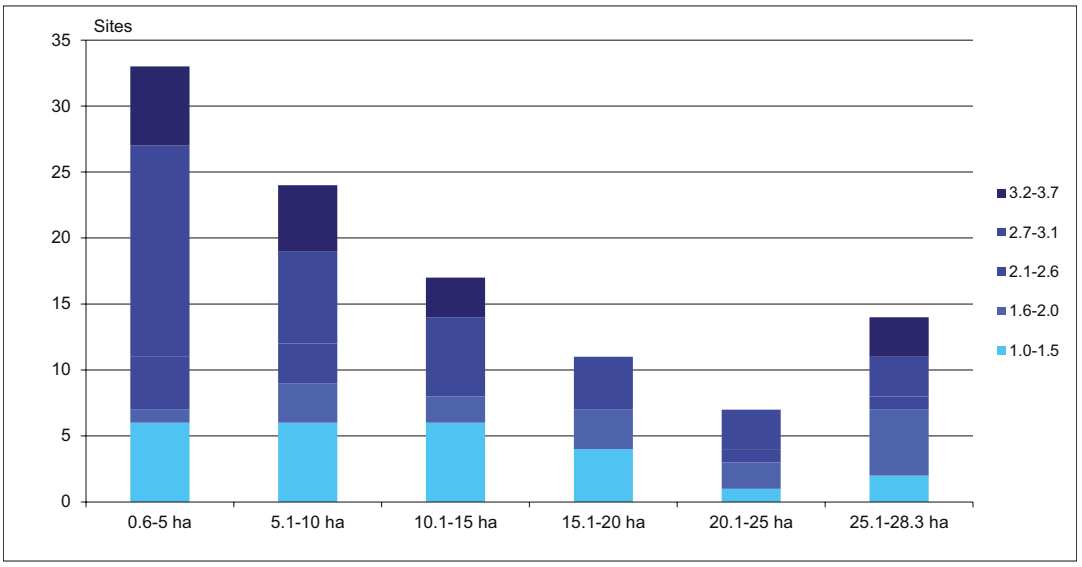

Figure 44. *The size of the restricted viewshed zone of sacred places in hectares. A viewshed where all cells are visible would be 28.3 ha.*

When the intermediate viewshed zone is examined (Figure 45), medium-sized groups are emphasized. At a distance of three kilometres, there will naturally be so many topographic obstacles that a full viewshed cannot be obtained. Additionally, for the intermediate viewshed zone, places with either good or bad visibility are distributed over the entire research area. Only in the Enontekiö area are there slightly more places with good than bad visibility. The connection with water is not as significant for good visibility in the intermediate viewshed zone as it was in the restricted viewshed zone.

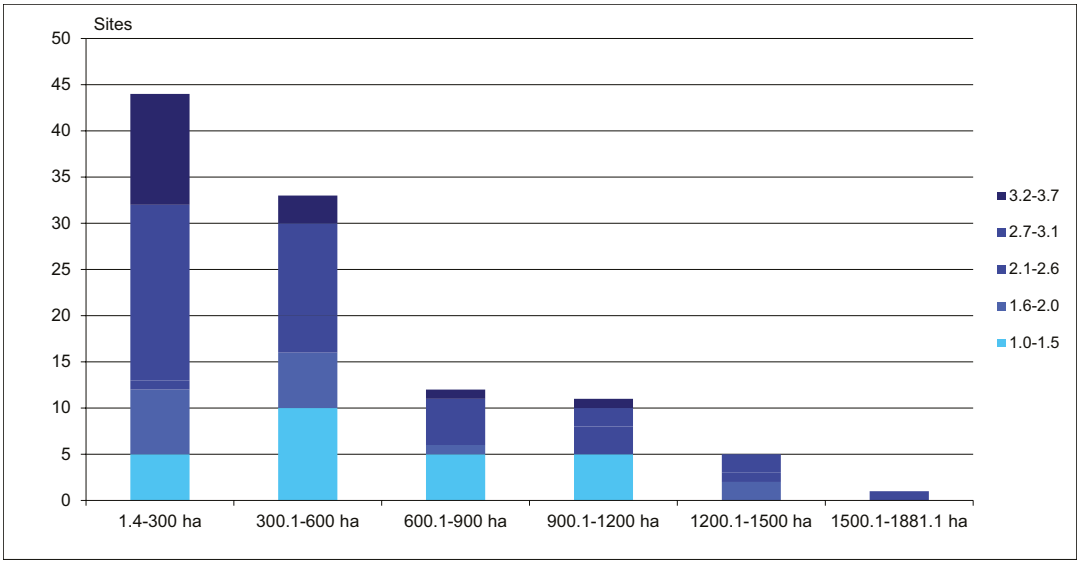

Figure 45. *The size of the intermediate viewshed zone of sacred places in hectares. A viewshed where all cells are visible would be 2827.4 ha.*

Sometimes the restricted viewshed zone may be a full-coverage panoramic view, but in the intermediate viewshed zone, topographic features impair visibility. At the sacred place of Lake Ajakkajärvi (86) in Posio, shown in Figure 46, the view extends out to the lake along the water, but the intermediate viewshed zone is restricted by the hills surrounding the lake in the north and south.

Seeing and distinguishing stones are not always the same thing. If the surroundings are rocky, foreknowledge is required in order to distinguish a sieidi from the other stones, whereas in stone-free terrain a sieidi stone catches the eye. Even in a rocky environment, however, a sieidi may stand out due to its unusually large size or remarkable colour or shape. Of all the inspected places, sieidis in rocky areas were usually larger than sieidis with no other stones in the near vicinity. Sieidi stones in water form an exception. They did not rise higher than a half metre above the water surface, but could be distinguished from other stones due to their separate location.

According to field observations, the direction from which a sacred place is visible does not seem to be significant. The visibility of sacred places is distributed evenly in all compass directions. In three places, the direction of visibility could not be estimated in the field because the sacred place could not be approached from all directions. With the exception of four cases, the results of GIS viewshed analysis matched field estimates for the direction of visibility. The exceptions are due to microtopography that cannot be distinguished in the 25-metre cells. For example, at Porviniemi (75), the sieidi stone is hidden behind a slope rising eastward when viewed from the east, and at Sieiddakeädgi (113), due to the dune-like slope, the sieidi can be seen only in the direction of the contour lines. However, the viewshed analysis does not take into account these bumps, which are too small for the elevation model with a cell size of 25 metres, and this skews the visibility (Figure 47).

On the basis of field observations, instead, it does seem to be significant whether a sacred place is viewed from the land or from the water. Of all the inspected places, in 11 cases (39%), the sacred place is better visible from the land and in 17 cases (61%) from the water. Ladjokeädgi (106) in Utsjoki is an example of a sieidi with visibility strongly tied to waterways (Figure 48). At Lake Äkäsjärvi (79) in Muonio, the location of the sieidi, a high bank, is better visible from the lake, but the sieidi itself, which is formed of three raised stones under a metre in height, is hidden behind the bank when viewed from the lake and is better visible from the land. Lake Äkäsjärvi is yet another example of the differences in visibility between the sieidi itself and its location.

The difference is slightly smaller in viewshed analyses, but is still in favour of visibility from the water. Of all sacred places, 46 places (43%) do not have water in the restricted viewshed zone, whereas 61 places (57%) do. When there is water in the vicinity of a sacred place, it often covers either a very small or a significant area of the restricted viewshed zone (Figure 49). Especially in the Inari area, water often covers 76–100% of the restricted viewshed zone.

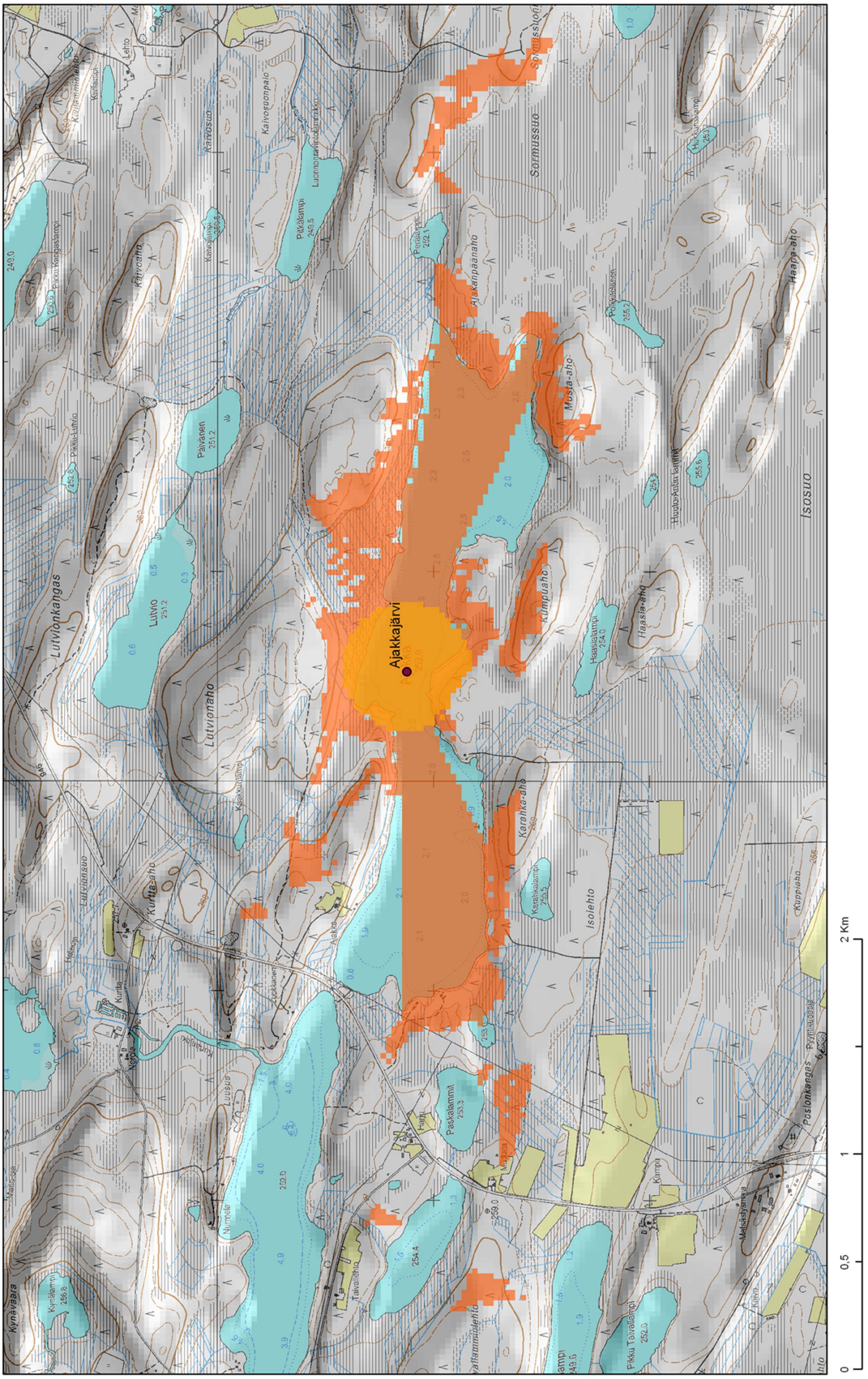

Figure 46. *The zones of restricted viewshed (light orange) and intermediate viewshed (dark orange) for the sacred place in Ajakkajärvi, Posio. Basic map sheet © National Land Survey of Finland, licence no. 051/MML/11.*

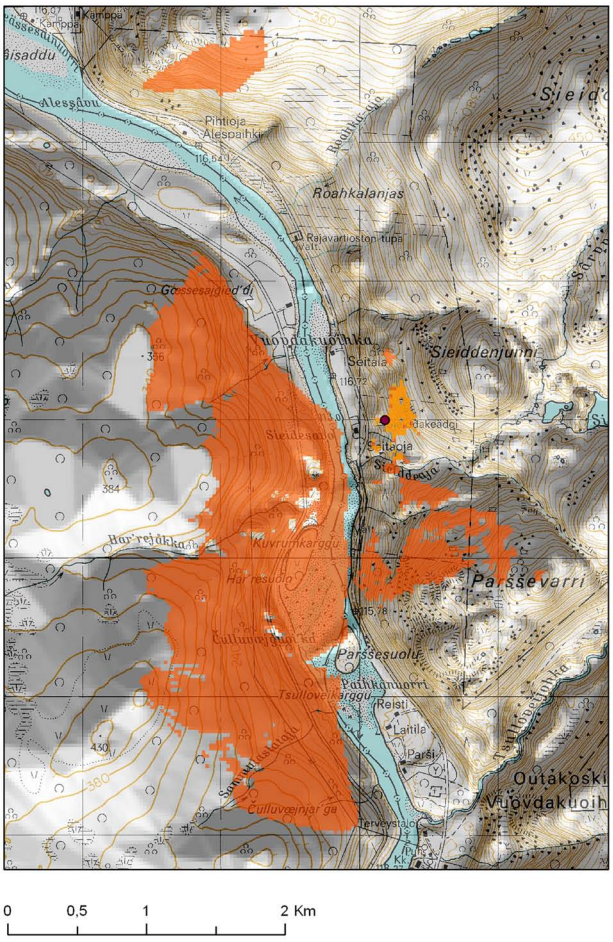

Figure 47. *The result of the viewshed analysis for Sieiddakeädgi diverges from field observations, in which the visibility of the sieidi from the north was accentuated. The figure shows the restricted viewshed zone in light orange and the intermediate viewshed zone in dark orange.* Basic map sheet *© National Land Survey of Finland, licence no. 051/MML/11.*

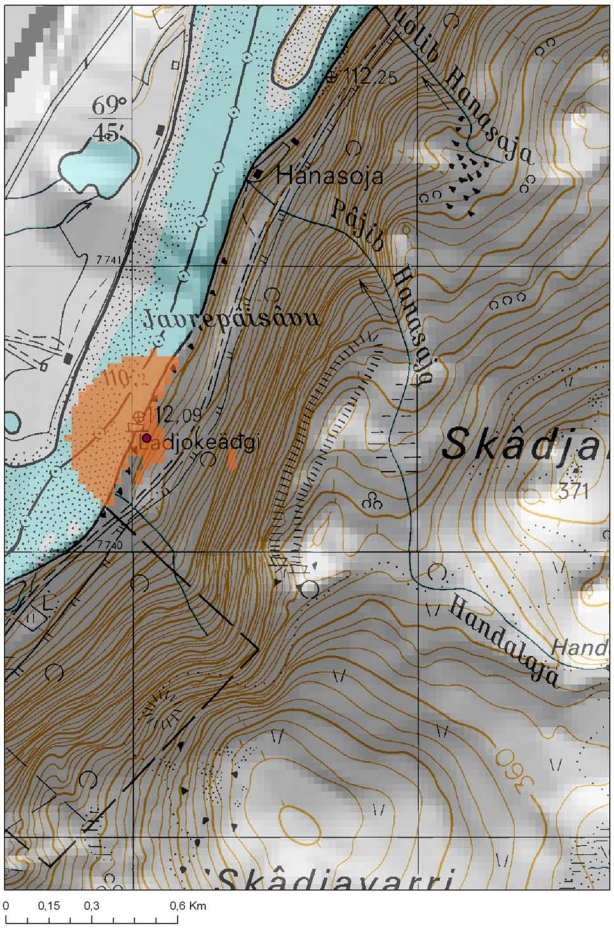

Figure 48. *The restricted viewshed zone of the Ladjokeädgi sieidi consists mainly of water areas.* Basic map sheet *© National Land Survey of Finland, licence no. 051/MML/11.*

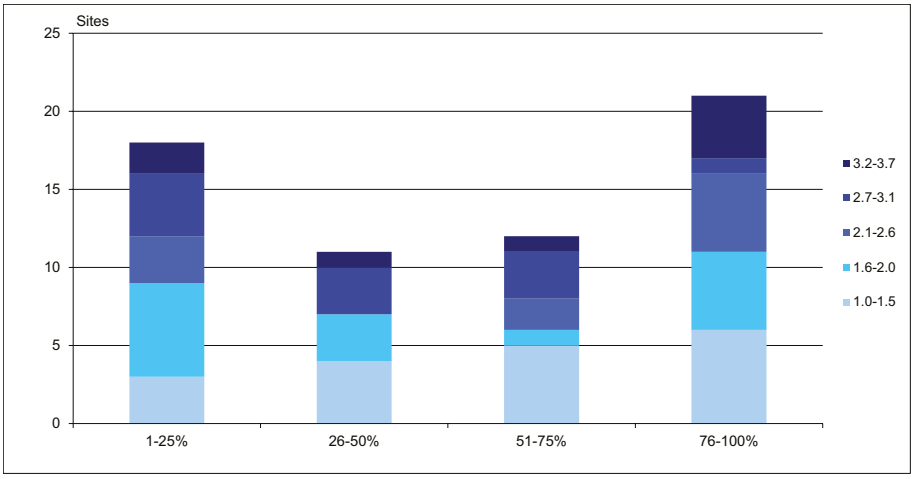

Figure 49. *The proportion of water in the restricted viewshed zone of a sacred place.*

For a sacred place and especially a sieidi stone, standing out in the landscape has been considered as a central feature for selection.[381] For example, Rolf Kjellström defines a cultic place as a place that has been selected because it is isolated and in a particular location.[382] However, the sieidi stone is not always the only stone present. In some cases, an offering place may be formed of several stones, such as Mustalommol (8) in Enontekiö.[383] In some cases, a sieidi may be located in stony terrain with many other stones around it. Often the sieidi stone still stands out even in these cases due to its unusual shape or size. There are also exceptions, such as the sieidi stone at Seitavuopio (18) in Enontekiö, which cannot be distinguished from the surrounding stones without local knowledge of the sieidi location.

Sieidis that stand out from the landscape have been described as dominating their environment.[384] Written sources, too, have paid attention to the visibility and isolated location of sieidis. For example, the sieidi at Dierpmesvárri (3) has been described thus: "visible for kilometres, a solitary […] stone statue […] Such a huge, lonesome block of bedrock has no rival on the entire fell."[385] The following is said of Kirkkopahta (74) in Muonio: "This stone sticks out from the pine woods like a hut, and there are no other stones in the whole forest."[386] Places that dominate their environment have been considered as important for forming traditions.[387] They are elements that stand out from the landscape and guide human action. J. Qvigstad notes that sieidis were visible elements to which people passing by paid attention even when visibility in the dark polar night was very poor.[388]

The significance of places that dominate their environment to the experiencing of a landscape has also been questioned. Rather than landscape locations visible at a distance, important places could have been those associated with memories or with everyday life. They are not necessarily visually monumental. People know their surroundings through settling and living there.[389] Focusing the attention on

[381] Mebius 2003, 24.
[382] Kjellström 1985, 118.
[383] Cf. Collinder 1953, 171.
[384] Pentikäinen & Miettinen 2003, 46.
[385] Paulaharju 1932, 39–40.
[386] Paulaharju 1932, 49.
[387] Eskeröd 1947, 82–83.
[388] Qvigstad 1926, 318.
[389] Fitzjohn 2007, 42–43, 47; cf. Ingold 2005.

topographically outstanding features is, according to Benjamin Smith and Geoffrey Blundell, a late phenomenon with its origins in Renaissance landscape painting. For example, the !Kung San of the Kalahari are more interested in smaller and, to the Western eye, less impressive features in the landscape.[390] For sieidis, visibility has not always been a central criterion for making places sacred either. Some sieidis are very modest in size, and even a large stone does not necessarily stand out in heavily wooded terrain.

The visibility of a place has also been considered as having an effect on how the place has been approached. In the study of monumental places, it has often been thought that the place has been observed and approached primarily from the direction from which it is best visible.[391] However, for some places, an important aspect of the experience of the place may well have been the surprising appearance of the sieidi in the landscape. The visitor's experience of the Taatsi (65) sieidi is very different depending on whether the sieidi is approached from the water, in which case the sieidi on the shore cliff can be seen from far away, or from the forest, in which case the sieidi can be seen behind the cliff only at a distance of a few metres. Earlier, however, before the top stones were pushed down, the sieidi could have been observed from farther away. The direction from which a sacred place is approached may also have been influenced by a recognizable shape visible from a certain direction. The island of Ukonsaari (47) in Lake Inarijärvi is an example of an offering place with a steep profile that is especially eye-catching when viewed from the west (Figures 45 and 46). Furthermore, the view from the middle of the find concentration focuses on the west (Figure 50), whereas the view from the top of the island focuses on the north. This could well mean that offerings were left in a place that was visible from the same direction from which the island was most impressive.

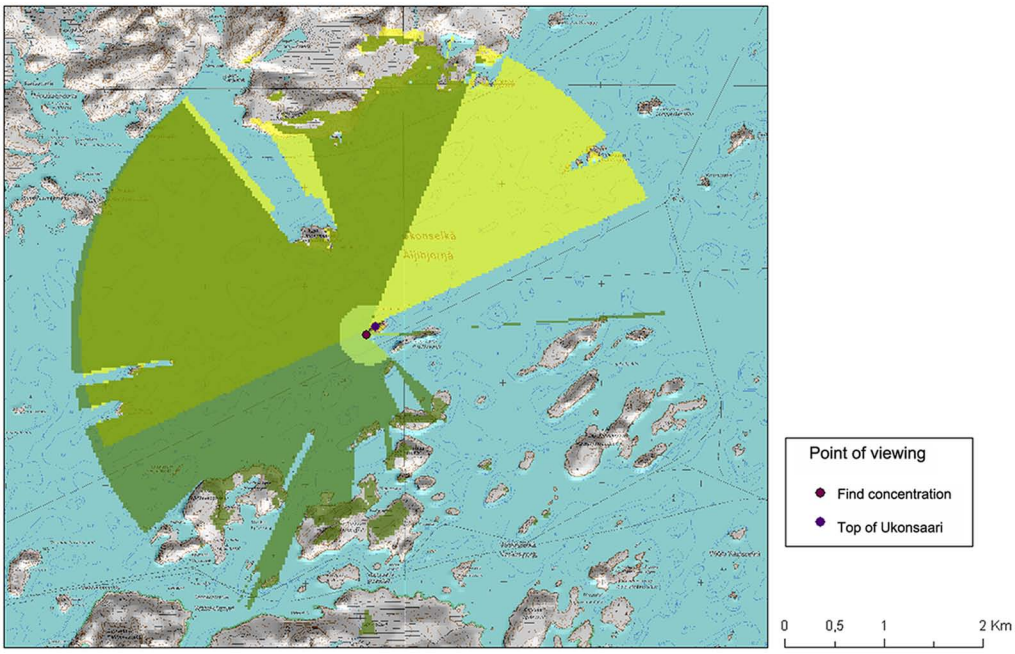

Figure 50. *Ukonsaari in Inari is an example of a sacred place considered as dominating the landscape. The figure shows a view both from the top of Ukonsaari, Inari (yellow), and from the site of the find concentration (restricted viewshed zone in light green, intermediate viewshed zone in dark green).* Basic map sheet © *National Land Survey of Finland, licence no. 051/MML/11.*

[390] Smith & Blundell 2004.

[391] Jerpåsen 2009, 125.

Figure 51.
The well-known profile of the island of Ukonsaari in Lake Inarijärvi seen from the west-southwest.

Figure 52.
Seen from the north, the shape of Ukonsaari is not as conspicuous.

Anthropomorphic sieidis are another example of places at which the viewing direction is significant. Three inspected places at which the directions of anthropomorphism and visibility can be compared do not, however, provide any occasion for generalization. In these places, with one exception, the directions of best visibility and anthropomorphism were different from each other. One of these aspects of viewing or neither of them may have been significant for approaching the place. Elin Rose Myrvoll has stated that some Sámi sacred places are important, visible elements in the landscape over large areas, whereas for others, the significance of visibility depends on the viewing direction, for example, due to anthropomorphism.[392] Places visible over a large area include, for example, hills and fells. The Ukonsaari island can also be seen from afar, in which case it may have gained significance either due to broad visibility or direction-dependent visibility. The division used by Myrvoll therefore cannot always be made.

[392] Myrvoll 2008, 38.

The visibility of a sacred place can thus have been significant as a feature dominating the landscape or a factor influencing the direction of approach of the place. On the other hand, there are also cases in which the sacred place appears suddenly in thelandscape and cannot be seen over large areas. This may also have been a part of the experience of sacredness. The visibility of a sacred place was not always necessarily significant for the selection of the place, but instead, the experience of sacredness was influenced by other factors. I return to the issue of visibility later, examining, among other things, the visibility of other ancient monuments from sacred places.

4.3. The connection of sacred places to water

Can you hear the sound of life
in the roaring of the creek
in the blowing of the wind[393]

Nils-Aslak Valkeapää 1994: Trekways of the Wind

Above I have demonstrated that the viewshed of sacred places often contains water. It follows that the connection with water may have been one of the factors affecting the selection of a sacred place. Itkonen has noted that sieidis are often located on lakeshores, islands, or headlands.[394] In addition, my own observations of the dominant topographic elements of sacred places confirm this impression (Figure 15). In the following chapters, I take a closer look at the locations of sacred places near waterways with the help of viewshed analysis. Sacred places are considered to be located near waterways if there is water within the restricted viewshed zone (< 300 m). In addition, sacred places located on islands or headlands are also included, even if no water happens to be directly visible in viewshed analyses due, for example, to the size of the island. If the precise location of the sacred place is not known, the coordinates are set to the centre point of the island or headland, although the ritual activities may have taken place closer to the shore. In the case of large islands, the surrounding water has been a dominant element even if the offering place was not located near the shore. This has most likely been the case on the island of Ukko (46) in Lake Ukonjärvi (Figure 53). In addition to Ukko, other large islands included in the study are Moossinasaari (30) in Inari, Seitasaari (99) in Sodankylä, and Isosaari (70) in Muonio. The headlands of Keimiöniemi (73) in Lake Jerisjärvi and Lapinniemi (88) in Rovaniemi are also included. Water is also associated with the ridge of Uhriharju and the pond of Pyhänkasteenlampi (82) in Pelkosenniemi, even though the pond cannot be seen from the viewing point as defined on the Uhriharju ridge. Thus, water is associated with 68 sacred places out of 107. The waterway is usually a type of standing water, either a lake or a smaller pond (Figure 54). It is more rarely a watercourse, either a river with rapids or a smaller creek. In some cases, both elements are present. The study of sieidi location has shown that sieidis are located close to water more often than other sacred places. Only 25% of sieidis are *not* close to water. All sacred places located close to rapids are sieidis.

[393] Translated by Ralph Salisbury, Lars Nordstrom, and Harald Gaski.

[394] Itkonen 1948 II, 316.

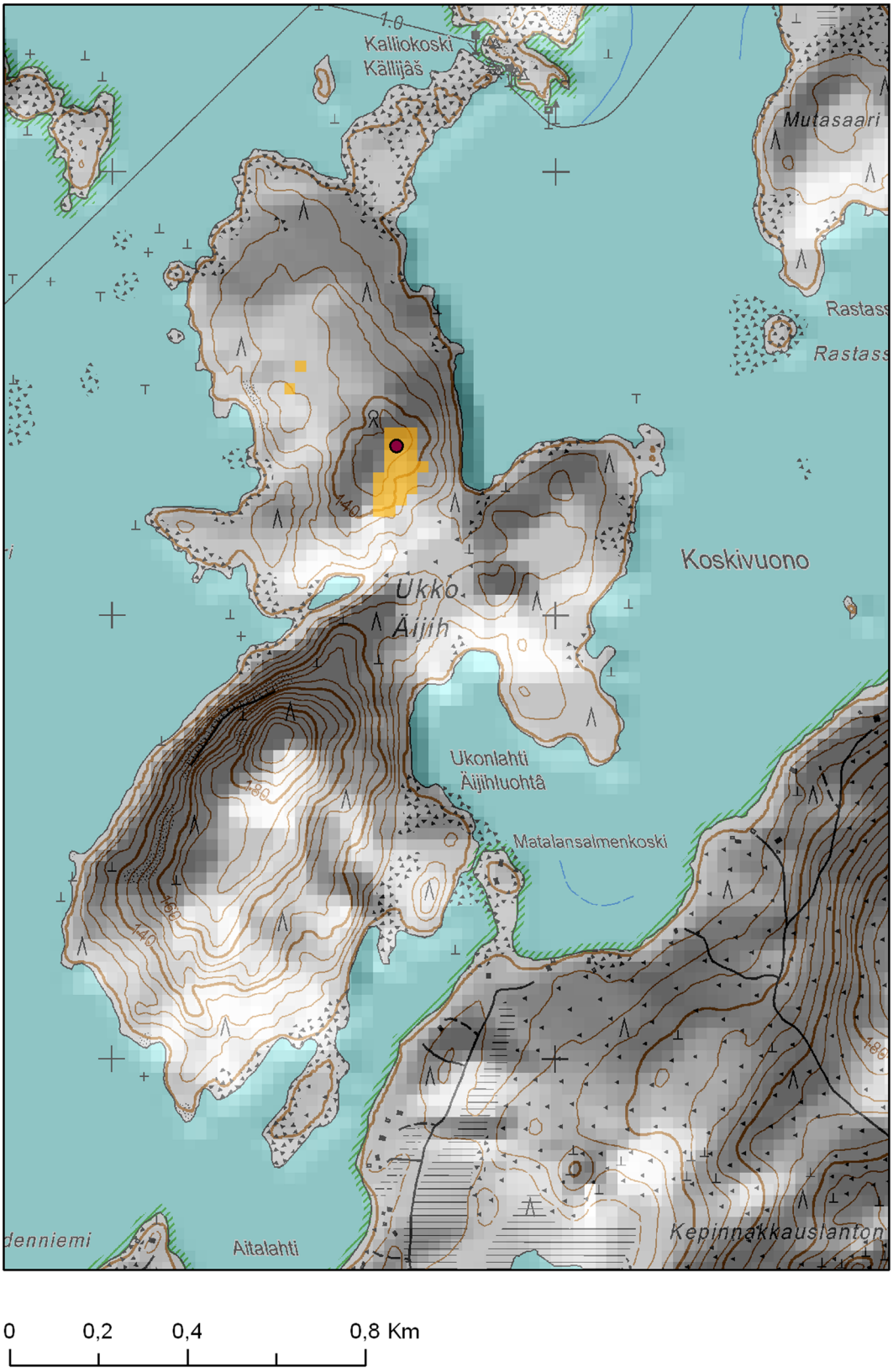

Figure 53. *The restricted viewshed zone (orange) of the Ukko sieidi stone in Ukonjärvi does not reach outside the island.* Basic map sheet © *National Land Survey of Finland, licence no. 051/ MML/11.*

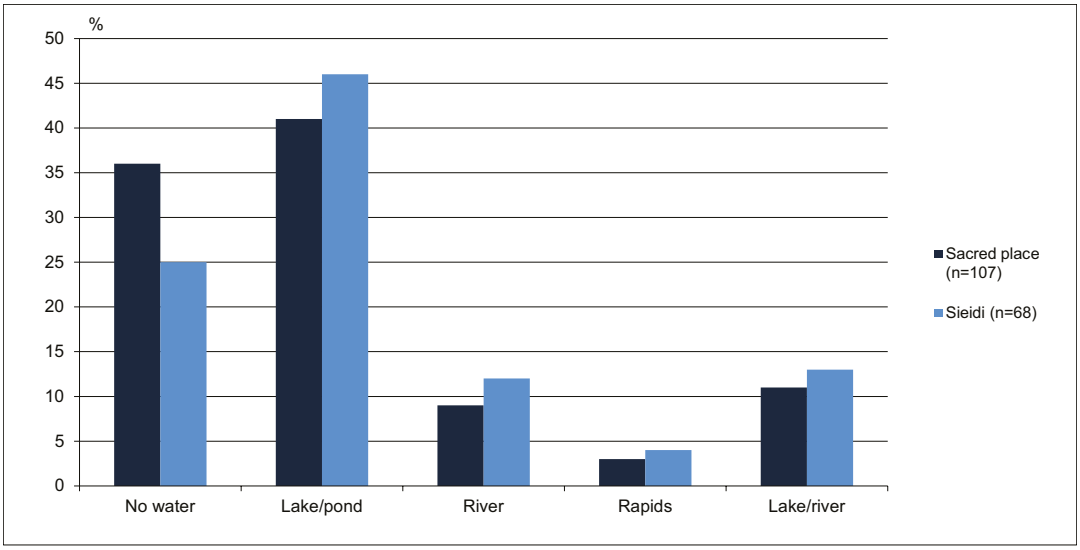

Figure 54. *The locations of sacred places (including sieidis) and sieidis in relation to water as percentages of all places.*

In Inari, with its thousands of lakes, 68% of sacred places are located close to water and 60% on lakeshores, whereas in the fell area of Utsjoki, the corresponding figures are 53% and 27% respectively. In Utsjoki, rivers are a more dominant element than lakes. The natural environment thus has an effect on how sacred places are located in relation to waterways. The greatest numbers of water-related sacred places can be found in the lake areas of Inari and Western Lapland, whereas sacred sites located further away from lakes are situated in the hill and fell areas (Figure 55).

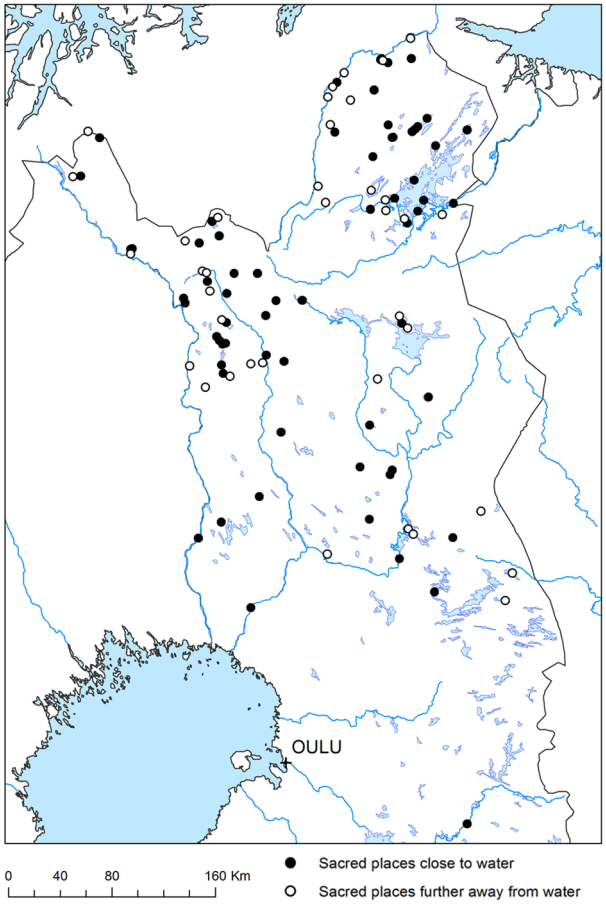

Figure 55.
Map of the geographical distribution of sacred places located close to and further away from water.

A connection to water is, however, a common feature in the location of sacred places. The relationship between sacred places and waterways may have several reasons from functional to symbolic. Here, I examine these reasons starting from the more symbolic and moving towards the functional, although without making value judgments about the significance of various types of reasons. Both symbolic and functional issues may have influenced the selection of locations at the same time.

4.3.1. Liminality as a determining factor for sieidis

A connection with water is one of the landscape features described as liminal. The term *liminality* has its origin in the Latin word *limen*, which means threshold. Liminality refers to a time or place in which the normal forms of social behaviour do not apply. Liminality is a state of being between two levels of existence. It can be experienced in time, state of consciousness, being, or place.

In his book *Les rites de passage* (1909), Arnold van Gennep developed the model of a rite of passage consisting of three stages: separation, transition – called the liminal stage – and finally reincorporation. According to van Gennep, the division into sacred and profane was essential to liminality. The difference between these two spheres was so great that moving from one to the other could not be done without a liminal stage.[395] Later, Victor Turner examined the definition of a liminal stage in more detail. He viewed liminality as a transitional stage related to social interaction.[396] Turner separated liminality from the experience of the sacred, whereas van Gennep had combined the two. Thus, not all liminality is ritual. A transition from one social status to another can be experienced as liminal without any ritual. An experience of liminality can also be associated with everyday activities, such as hunting.[397]

In archaeology, however, liminality has mainly been associated with ritual life. Contacts with the supernatural and contacts between humans and spirits have been considered as typical.[398] In such a definition of liminality, a sacred place is viewed as a meeting place. According to Eliade, it is the *axis mundi*, the axis of the world, where cosmic dimensions meet and moving between these dimensions becomes possible. A sacred place is a link between the natural and the supernatural, a kind of contact interface between deities and humans.[399]

Sámi sacred places – and especially sieidis – have also been described in research literature as meeting points between worlds. Topographical features have been considered as especially important for their location. The topographical location reflects the location of sieidis on the edges of the world.[400] Meeting points between different worlds have been described as liminal. According to Antti Lahelma, liminal places are located on the border of three elements, earth, water, and sky, between the human and spirit worlds.[401] In the case of sieidis, water and high elevation in

[395] Van Gennep 1960 [1909].
[396] Turner 2007 [1969], 122.
[397] Willerslev 2001, 47.
[398] Backe-Forsberg 2005; Mulk & Bayliss-Smith 2006; Mulk & Bayliss-Smith 2007; Lahelma 2008.
[399] Eliade 2003 [1957], 58–59; Raivo 2002, 159.
[400] Bradley 2000, 13; Mulk & Bayliss-Smith 2006, 102; Halinen 2010.
[401] Lahelma 2008, 60; cf. van Gennep 1960 [1909], 22; Helskog 1999, 73; Westerdahl 2005; Mulk & Bayliss-Smith 2006, 101.

particular have been considered as liminal features. Sieidis are found on lakeshores and islands, where earth meets water, as well as on cliffs and fells, where earth meets sky (Figure 15). Here, I focus especially on the connection with water as a liminal factor, while allowing that a location at a high elevation, at the junction of earth and sky, can also be seen as liminal.

The idea of sieidis as relaying elements at the edge of different worlds is based on the concept of the tripartite world. The tripartite Sámi cosmology has been viewed as an example of worlds meeting in liminal places. Based on their archaeological research in the Sámi areas of Sweden, Inga-Maria Mulk and Tim Bayliss-Smith have deepened the picture of the three worlds. According to them, the upper world is characterized by the south, warmth, life, and the colour white, whereas the north, coldness, death, and the colour black belong to the lower world. The lower world was populated by the spirits of the deceased who could be contacted through dreams and with the help of witches. The souls of the deceased had to cross a river on their way to the lower world, whereas new souls returned to the middle world through the sacred springs.[402] The elements of the tripartite worldview are related to the afore-mentioned liminal elements: the earth can be viewed as corresponding to the middle world and the sky to the upper world, whereas water is a mediating element between the middle and lower worlds.[403] However, it must be kept in mind that the idea of a tripartite world, as well as other cultural features, varied in different parts of the Sámi area. Mulk and Bayliss-Smith emphasize that the "map" of sacred Sámi geography presented above cannot be considered as a mental model shared by all individuals, but only an abstract representation. According to them, it still reflects ideas of which landscape elements were considered as normal and which were defined as special or sacred.[404]

How typical, then, were liminal landscape features of sacred places? As I mentioned above, 64% of sacred places are located close to water (Figure 54). Mulk and Bayliss-Smith have mentioned both rivers and sacred springs as connecting elements between the middle and lower worlds. Elsewhere, they stress the meaning of rapids as gates between the worlds.[405] This might indicate that rivers and springs had a special status as liminal waters. In 24 cases reviewed in the material, the sacred place was located near a river, and in three cases, near a spring. In three cases, the sacred place, which was in all three cases a sieidi, was also located near rapids. As water elements related to sacred places, the springs are less reliable than the rapids. In the case of two of the springs, the Sámi background of the offering tradition is not certain, and in the third case, Suttesája (114), the tradition may be quite recent. It is not mentioned in written sources. The rapids, on the other hand, are related to known sieidi sites: Onnela (110), Koskikaltiojoen suu (29), and Lake Sompiojärvi (100).

Waterways important in Sámi mythology also include the double-bottomed *sáiva* lakes mentioned earlier. In six cases, a sieidi is also located near the *sáiva*. In three cases, the sieidi is located on the shore of a large *sáiva* lake. They are They are

[402] Mulk & Bayliss-Smith 2006, 96.
[403] Cf. Mulk & Bayliss-Smith 2006, Figure 8:5.
[404] Mulk & Bayliss-Smith 2006, 97.
[405] Mulk & Bayliss-Smith 2006, 26.

Lake Näkkäläjärvi (one sieidi) and Lake Pöyrisjärvi (two sieidis).[406] Other *sáiva* lakes related to sieidis are smaller in size. *Sáiva* lakes are an especially liminal type of waterway; due to their double-bottomed nature, they offered access to the lower world. The rich mythology related to these waters seems to indicate the spiritual significance of this element.

The 39 sacred sites with no water in the restricted viewshed zone are, with the exception of two cases, characterized by another liminal element, namely a location at a high elevation. They are located at the top or a slope of a fell or a smaller hill. A location at a high elevation has been thought to connect the earth and the sky. Sometimes there is also a connection to water, when the view from the hilltop or slope shows not only the horizon but also a river or lake. In six cases, there is a lake or river at the foot of the hill. The sacred places that are not associated with any liminal element are Somosen kirkko (89) in Rovaniemi and Kirkkopahta (74) in Muonio. The first of these cannot with any certainty be associated with the Sámi. In the case of 11 sacred places (10%), both liminal elements can be found.

Liminal features are thus typical of sieidi location. Sieidis could then be viewed as places where humans could contact other worlds or places between this world and others, as well as between humans and spirits. In addition to topographical features, liminality could also be indicated by various prohibitions and restrictions. In some cases, women were not allowed to approach the sieidis. Samuli Paulaharju relates that women had to leave the boat when it passed the Kalkkiniemi sieidi.[407] In some cases, women could approach the sieidi only dressed in men's clothing.[408] In this way, the sieidi was a place that changed social behaviour. Women approaching the sieidi took on a social role that deviated from the ordinary. T. I. Itkonen also describes a change in social status by noting that during offering rituals, unlike at other times, everyone was equal: men and women, masters and servants.[409] This fits with Turner's view of liminality as a state of equal status. According to Turner, people in a liminal stage have no status and no personal attributes. This is why the stage is characterized by equality and a sense of solidarity.[410]

However, liminality was not the only reason for sacred places being located close to water. Earlier, I already referred to the connection between offering places and means of subsistence. I return to this theme in more detail in later chapters. A location at the shoreline was natural for sieidis related to fishing. On the other hand, not all sieidis close to water were used exclusively in connection with fishing. There are also known reindeer sieidis close to the shoreline, for example, at Seitigädgi (112). A location at a high elevation may also have been related to subsistence. According to Åke Hultkrantz, many sieidis were located on ridges along which wild reindeer travelled.[411]

Contacts with other worlds, too, did not have to concentrate on certain places or people. In the Sámi community, a witch (*noaidi*) was a member of the community

[406] Therman 1940, 255.
[407] Paulaharju 1932, 24.
[408] Itkonen 1948 II, 312.
[409] Itkonen 1948 II, 315.
[410] Turner 2007 [1969], 107–108.
[411] Hultkrantz 1985, 25.

who could function as an intermediary between the worlds. Witches were specialized in travelling in liminal states. When a witch fell into a trance, he could leave his body and travel to different worlds. Spirit helpers guided the witch on his travels, and he could, for example, search for a cure for diseases.[412] Even though witches were the experts in contacts between the worlds, also other people could contact other worlds through dreams or by making offerings, for example. The presence of a witch was not required for offering.[413] The bulk of ritual activity was carried out by individuals, not witches. Witches were mainly responsible for tasks that required special knowledge: travelling between the worlds and taking care of the community's common rituals. Individuals and groups also had an active role in taking care of their own well-being.[414] The uneven distribution of ritual abilities between individuals, which is related to shamanism, has been considered as a transitional phenomenon brought on by Christianity. Earlier, contacting, communicating, and exchanging gifts with nature, both ritual and practical, were direct and open to all.[415] On the level of the family, adult men and women made offerings, and everyday offerings to the female deity *Máttaráhkkhá* were often made near dwellings.[416]

Overall, the idea of three worlds and moving between them was important in Sámi ethnic religion. It is reflected in many beliefs and represented, for example, in the decoration of noaidi drums and the organization of the *goahti*.[417] This may have led to the research emphasis on the liminal nature of sieidis. Birgitta Fossum, among others, considers borders and borderlands as central to the understanding of Sámi ritual landscapes.[418] In her view, borders are naturally constructed onto the landscape, and they can be formed by different topographical environments, such as land and water or fell and plain. Transitional zones and borderlands in the landscape are often endowed with special functions because they cannot be categorized: they are neither one nor the other, and are in that way related to liminal places.[419] However, a dualistic way of dividing topograpic features has not been the only way to understand the world. As Vesa-Pekka Herva has noted, in relation to the landscape, qualitative differences and meanings in topography cannot be conceived of by means of the simple opposition of sacred and profane or other similar contrasts.[420] Atypical landscape features may have been associated with numerous meanings other than liminality. The water can simultaneously have been a gateway to another world, a fishing resource guaranteeing subsistence, a passage route, and the source of a sound associated with sacredness. The ruggedness of a fell may also have aroused feelings of sacredness in ways other than as a liminal element.

Landscape elements have had numerous meanings, and at the same time, the border of meaningfulness has been shifting. According to the liminal view, sacred space is on the other side of the border and is defined in the world as being of anomalous

412 Mebius 2003, 170–176.
413 Paulaharju 1932; Itkonen 1948 II; Mulk & Bayliss-Smith 2007, 94; cf. Kuropjatnik 1997, 44; Sergejeva 1997, 30.
414 Jordan 2001, 102.
415 Schanche 2004, 5.
416 Mulk & Bayliss-Smith 2007, 96.
417 Yates 1989; Mulk 1996, 52.
418 Fossum 2006, 35.
419 Østmo 2004, 186.
420 Herva 2009, 252.

elements.[421] However, sacredness is not static in nature. Just like the meanings associated with landscape elements may change, the border between sacred and profane also changes. In my opinion, liminality should not be approached as a strict borderline between sacred and profane. Liminality in the world of experience and as a border observed in the landscape is shifting and situational. In later chapters (5.1., 5.2., 5.3., and 5.4.), I deal with the meeting between sacred and profane. After this, I return again to the question of the nature of liminality.

4.4. Water as part of the soundscape

> *Normalt hører vi aldrig verden, som den er. Vi hører en redigeret produktion. De lyde, vi kan lide, dem trækker vi frem. Ringlen ved billetlugen, når de gør kassen op. Den fanfare, der annoncerer den lille cirkusprinsesse, vi er forelsket i. Den kogende lyd af otte hundrede mennesker i et fuldt telt. Mens de lyde, vi ikke kan lide, dem skubber vi væk. Lyden af læderforstærkninger på kanvassen, som er mørnet. Lyden af hestene, der er angste. Lyden af toiletterne. Af de vindstød i august måned, der fortæller, at sommaren er ved at være forbi. Og resten af lydene er ligegyldige, dem toner vi ned, trafikken, byen, almindeligheden. Sådan lytter vi.*[422]
>
> *Peter Høeg 2006: Den stille pige, p. 235*

Water has meaning not only on a symbolic and subsistence-related level, but also as a part of the soundscape of a given place. The splash of waves on shoreline pebbles, the roar of the rapids, and the sound of voices from the opposite shore become a part of the experience of place. Water is a more permanent sound element than the sounds made by vegetation or animals.

Auditory archaeology or archaeoacoustics is a field of research that recognizes the meaning and influence of sound in everyday life in the past. Through sound, people constructed and expressed their social relationships. Sound was an important element that provided people in the past with information about the environment and the activities of other people and animals.[423] Even though past sounds have long since fallen silent, the study of present sounds helps us to better understand the meaning of sound in our world of perception. The past was not silent. Through the study of sound, we can expand our vision-based impression of how the landscape was experienced. One sense cannot be raised above the rest. In addition to vision and sound, touch, smell, and taste have also been important.

An essential feature of sounds is their transience. The sounds of the past are no longer here for researchers to listen to. This raises the question of how these long-gone

[421] Mulk & Bayliss-Smith 2006, 102.

[422] "Usually we never hear the world as it is. We hear an edited production. The sounds we like, we draw forward. The ringing in the ticket booth when they balance the cash. The fanfare that announces the little circus princess we're in love with. The bubbling sound of eight hundred people in a full tent. Whereas the sounds we don't like, we push away. The sound of leather reinforcements on deteriorated canvas. The sound of frightened horses. The sound of the toilets. Of the gusty wind in August that tells us summer is soon over. And the rest of the sounds are irrelevant - we tone them down - the traffic, the city, the mundane. That's how we listen." Peter Høeg 2008: The Quiet Girl, p. 231. Translated by Nadia Christensen.

[423] Mills 2004; Mills 2005.

sounds can be studied. I approach the issue of past sounds in Sámi sacred places in three ways: firstly, by listening to and documenting the present soundscape; secondly, by creating a soundshed zone with the help of GIS, and finally by examining the descriptions of sounds in sacred places found in written sources. In this way I approach the sounds that could and can be heard in sacred places from the present and, by means of the less time-restricted GIS analysis, move towards the time when the oral tradition of Sámi ethnic religion still existed. These different ways of describing the soundscape bring out different meanings of sounds and hearing. They also move between the concrete and the abstract, the analytical and the personal, as well as the general and place-specific soundscape.

The documentation and mapping of present sounds has been used as one way of studying soundscapes.[424] Even though the modern world contains many sounds that did not exist in the past, and a part of the sounds of the past have fallen silent, the documentation of present sounds stimulates us to realize the significance of sounds. An auditory scene analysis consists of all the sounds that can be heard in a certain place at a certain time.[425]

An auditory scene analysis was carried out at two sieidi sites in the summer of 2009 and one site in the summer of 2010. All three sieidis were located close to water. The first one was in Inari, on the shore of Lake Nitsijärvi (29) in the place where the River Koskikaltiojoki runs into the lake as small rapids. However, in July 2009, the rapids were very small indeed due to the scarcity of water. The second sieidi was located on the very top of the ridge-like headland of Porviniemi (75), which sticks out into Lake Pallasjärvi. Excavations were in progress at both sites at the time of the auditory scene analysis, but the analysis site was selected at some distance from the excavation site. In the summer of 2010, in connection with a kayaking survey, we visited the sieidi at Sitakallio (42), which is an islet in Lake Iijärvi and thus completely surrounded by water. The boxes below contain notes on the sounds observed.

7 July 2009, 9.45–10.00, Lake Nitsijärvi, Inari

- Water gurgling
- Mosquitoes buzzing
- Human voices
- Birdsong
- A passing car

3 August 2009, 14.35–14.50, Lake Pallasjärvi, Muonio

- A bird
- Waves hitting rocks (a bubbling sound from the shoreline rocks)
- The wind blowing
- Strengthening sound of waves
- Shouting
- A shovel thumping
- A bird from afar

27 July 2010, 12.10–12.25, Sitakallio, Inari

- Birds chirping and squalling
- The wind blowing
- Waves gently lapping
- My husband talking
- Paddles splashing
- Kayaks clattering against each other
- The far-off sound of a motor

[424] I use the term *soundscape*, coined by R. Murray Schafer (1980), to describe the sounds that surround people and are not merely sensory perceptions but imbued with interpretation, significance, and imagery. People experience and interpret soundscapes while living within them (Feld 2006, 226). A sound and its interpretation cannot be separated; we do not hear just a loud, shrill beeping, but a fire alarm. Cultural models affect how we interpret what we hear. This is why different social groups, for example, can have different soundscapes (Smith 2006, 145). The term soundscape specifically means individuals' and a community's understanding of their auditory environment. It is connected with the phenomenological idea of an active body that not only receives sensory impressions but also experiences and understands them as a part of the lived-in world.

[425] Bregman 1990; Mills 2004; Uimonen 2005, 43.

Sounds can be divided into human-generated and natural sounds. Human-generated sounds are clearly time-bound. The sound of a passing car has been a part of the soundscape at Lake Nitsijärvi only since the road to Näätämö was built. The thumping of a shovel at Lake Pallasjärvi is related to the excavation work and is therefore tied to the time of the excavation. On the other hand, human voices have most likely been a part of the soundscapes of sieidis even at the time of their earliest use. Human voices also describe the different social nature of visits to sacred places; my own experience included my husband at Sitakallio and the excavation crew at the other sites. Furthermore, when making offerings to sieidis, people may have visited them alone, with their family, or with a larger group. At Sitakallio, the soundscape of the site also included the kayaks that we used to approach the site. The clatter of kayaks and the splashing of paddles may earlier have been replaced by the squeaking of rowlocks, for example. Since this sieidi is located in the middle of an expanse of water, visiting it must always have included the sound of some form of transportation. However, the natural sounds probably better describe the situation even at the time the sieidis were used, at least in the summer. The water has gurgled and birds have sung as well in the 11th and 18th centuries as today.

In addition to the separation of sounds, the sound samples I documented indicate two other things. Firstly, the observations at Lake Pallasjärvi and Lake Iijärvi are more detailed than those at Lake Nitsijärvi, written earlier. This confirms the view that by consistently paying attention to the soundscape, the number of observations increases. An auditory scene analysis arouses the researcher to notice the richness of the soundscape. The second issue has to do with the relationship between the listener and the sounds heard; our backgrounds and experiences affect how we interpret what we hear. An ornithologist would certainly have heard much more than merely birdsong; she might have been able to identify the bird species and whether it is typical of the area. Also for people in the past, different sounds in the environment would have become more significant. An auditory scene analysis describes a subjective and time-bound experience of a soundscape, but it stirs the researcher into noticing that the landscape is not devoid of sound.

After this subjective observation of sounds in the field, I move now to the more abstract description of sounds based on spatial data. I approach the sounds of water, which already made an appearance in the auditory scene analysis, with the help of GIS analyses. The viewshed analysis of GIS programs has also been used to study sounds. This is based on the idea that the same topographical landscape features that restrict view also restrict sound. Viewshed analyses are used to create a sound map of the potential distribution of sound in the past. I use viewshed analysis to examine the effect of the sound of water in sacred places. The way sound travels in the landscape is influenced by many factors, including atmospheric features, wind, temperature, and humidity, as well as ground features, such as topography, obstacles, and texture. These features are especially important if the sound travels farther than several hundred metres. This is why reconstructing the soundscape at a given moment is impossible. In the study of soundscapes through the meanings of sounds that have had a long-time influence on it, only permanent and long-standing features, such as topography, are significant. Features subject to change, such as weather conditions, can be ignored, because they do not affect the long-time structure of the sound-

scape.[426] For this reason, viewshed analysis, which is based on topography, can also be used as a model for creating a soundscape.

Viewshed zones created with GIS function as soundshed zones in the analysis of sound. The soundshed zone is restricted within the area of the restricted viewshed zone, approximately 300 m from the sacred place (Figure 56). This has been considered as the distance at which the soundscape surrounding a person includes many natural sounds, such as birdsong and the rustling of leaves, that can no longer be heard from farther off.[427] The restricted viewshed zone defines the area in which senses other than vision can also provide information. At a short distance, the topography-independent features related to the travelling of sound do not rise in significance.

As I noted earlier, the soundshed zone of a sacred place includes water at 64% of the places. For the soundscape, however, the proximity of water is not as significant as the *type* of waterway in question. Standing waters and watercourses form different soundscapes. Standing waters are more common in the material. At the shores of such waters, such as lakes or ponds, the sound of water can be heard mainly in windy weather as the waves beat on the shore. Standing waters are also important as carriers of sound; in tranquil weather, sound can be carried along the water for long distances. The sound of watercourses, such as rivers or creeks, is constantly present and carries for longer distances. Sound-making waterways have been considered to form a part of the bodily experience of a ritual landscape and the manifestation of the landscape as an actor.[428] The sound of rapids is especially loud. That said, rapids are rare in connection with sacred places.

The sound of water associated with sacred places mostly consists of the sound of waves, less frequently of the sound of running water. In some cases, the way in which standing water carries sound may also have been significant. Sounds are carried on the water to the sacred place, and the sounds of rituals carried out in the sacred place are carried elsewhere. Standing water as a soundscape has more tendency than watercourses to change according to the weather. Waves require wind, whereas other sounds carry better in still weather. The seasons, too, affect what we hear; lakes freeze and rapids run faster or slower. This changing soundscape may have formed a part of the experience of sacred places. Changes in the sound of water may also have accompanied the ritual annual cycle; some of the sieidis were visited in the spring in connection with migration (*geinnodat*), at a time when flowing water may also have been at its peak.

Water can be described as part of the soundscape with the help of various terms used in sound studies. *Keynote sounds* are those created by the geography and climate of the landscape, such as the sounds of the wind, forest, birds, and animals. They are background sounds to which we do not actively pay attention. The sound of water can also be a keynote sound. On the other hand, water can be experienced as a *soundmark*, which, like a landmark, anchors the listener to the area and is significant to the community.[429] In particular, the roar of fast-flowing rivers or rapids can be

[426] Mlekuz 2004.
[427] Ohlson 1976, 35.
[428] Goldhahn 2002.
[429] Schafer 1980, 9–10.

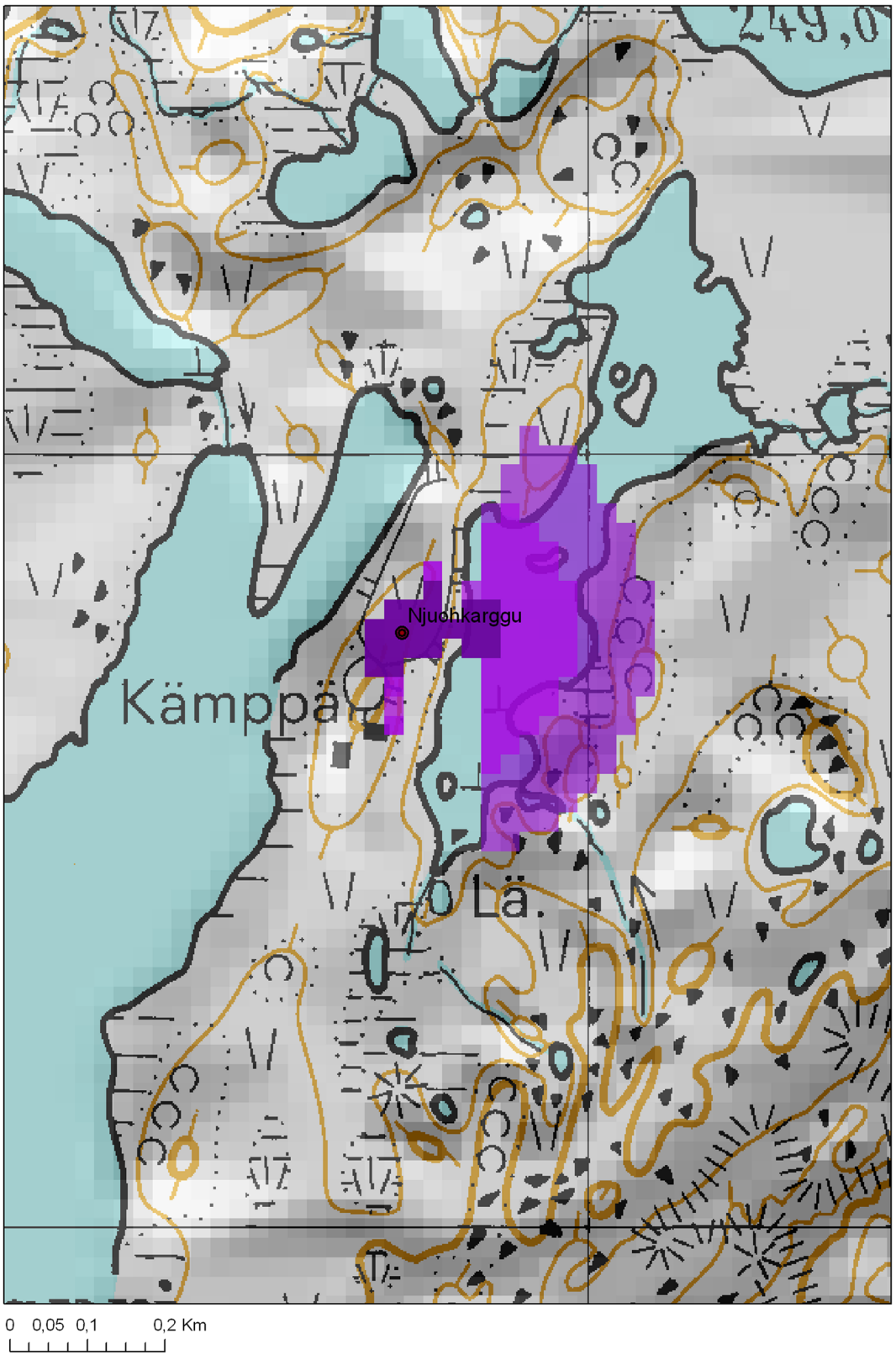

Figure 56. *The restricted soundshed zone of Njuohkarggu presented as a fuzzy viewshed. A fuzzy sound horizon indicates to what extent the phenomenon exists, not whether or not it exists. The map describes the variance from audible to inaudible.* Basic map sheet © *National Land Survey of Finland, licence no. 051/MML/11.*

experienced as a soundmark. *Community sounds* are also socially significant because they connect and organize people. Such sounds can include, for example, church bells and prayer calls from minarets.[430] According to Alain Corbin, church bells created a territorial, sacral space within the area where they could be heard.[431] Sounds related to sacred places may also have had such a socially connecting function. The sound of water, which can also be heard elsewhere in nature, may have acquired new meanings when it was connected with offering activities.

Not all sounds have thus been equally significant. The significance of a sound cannot be taken for granted, but it depends on the relationship between the actor and the landscape.[432] What sounds then have had meaning? What sounds were experienced as worth listening to? What were the dominant sounds in the landscape? All spaces, both built and natural, have acoustic properties. Even if sounds are present, not all places have been selected as theatres of action on the basis of them. The sounds may have been secondary from the viewpoint of the activity or they have not influenced the selection of the place, but may have been considered as otherwise significant. It is difficult to estimate which acoustic properties are planned and consciously chosen and which are coincidental. On the other hand, sound may have been important at a place where no signs of acoustic properties remain. *Recurrent patterning* and *closeness of fit* do indicate that places were deliberately chosen. Closeness of fit is evidenced by buildings that can be explained only by deliberate planning.[433] This cannot be used in the case of soundscapes at natural sacred sites. In estimating deliberateness, only recurrent patterning can be applied to natural places. The proximity of water in sacred places forms a recurrent pattern, but it can also be explained by symbolic and functional features other than the generated soundscape. The location of sacred places has most likely not been selected on the basis of the sound of water, but it has still been a conscious or unconscious part of the experience of the sacred place.

Water has been experienced as an element connected to the sacred in many cultures.[434] Water is a part of the Sámi worldview because it is related to the lower world. Water was used to travel from this world to the lower world. The sound of water could thus also have ritual meanings. People often endow natural sounds, such as thunder, with symbolic meanings.[435] The sound of water too may have been a significant symbolic element. According to Knut Helskog, the sounds of waves may have had an influence on the selection of shores for petroglyphs. Shores are meeting places for the soundscapes of land and water.[436]

Meanings given to sounds can also be found in written sources. Written sources and their descriptions of the sounds of the environment are the third element in the study of past sounds. In my study of sounds, I use written sources from the 19th and early 20th centuries containing descriptions of sieidi soundscapes (Table 7). The main emphasis is on sources describing Finnish Lapland. The time described by the sources can be considered as a rather late phase in the use of sieidis, but they nevertheless

[430] Mills 2004.
[431] Corbin 2006.
[432] Mlekuz 2004.
[433] Scarre 2006.
[434] Strang 2004, 83–102.
[435] Guthrie 1995.
[436] Helskog 1999, 78–79.

take us closer to the meanings associated with sieidi soundscapes. Even though sounds were not a particular research subject when the sources were written, the writings still contain mentions of various sound-related beliefs.

Table 7. *Sounds and silence mentioned in written sources.*

Source	Sound	Sound source	Acceptance
Friis 1871	Everyday sounds	Human	Forbidden
Holmberg 1915	Crying children and other noise	Human	Forbidden
Paulaharju 1922	Tinkling bells	Sieidi	Accepted
Paulaharju 1922	Song	Human	Accepted
Paulaharju 1922	Yoik	Human/Sieidi	Accepted
Paulaharju 1927	Speech	Human	Forbidden
Paulaharju 1932	Echo	Sieidi	Accepted
Paulaharju 1932	Cursing and making noise	Human	Forbidden
Paulaharju 1932	Tinkling bells	Human (Reindeer)	Forbidden
Paulaharju 1932	Song and music	Sieidi	Accepted
Ravila 1934	Yoik	Human	Accepted
Ravila 1934	Speechlessness	Human	Accepted
T.I. Itkonen 1948 II	Song	Human	Accepted
T.I. Itkonen 1948 II	Noise	Human	Forbidden
T.I. Itkonen 1948 II	Squeaking rowlocks	Human	Forbidden

Echoes are one special form of sound related to the sieidis that are mentioned in the sources. Antti Lahelma considers the echo generated by vertical cliffs at the waterline as one factor influencing the selection of rock faces for rock paintings.[437] The vertical cliffs rising up from the water in connection with sieidis may also have been considered as sacred due to the special soundscape caused by echoes.[438] Samuli Paulaharju describes an echo associated with Taatsinkirkko (66) as follows: "The water runs there and falls and takes an echo as if someone were preaching there […] The Lapps have sung their sieidi prayers under Taatsinkirkko. It rumbled, and that is why they sung there."[439] The echo thus livened up the sounds of both water and people. In some communities, echoes have been considered as made by spirits.[440] An echo may have been interpreted as an intermediary between the worlds of the living and the dead or as the participation of ancestors in the ritual.[441]

Another sound mentioned in written sources to have been heard at sieidis is the yoik, which was closely connected with offering activities.[442] On the other hand, for some sieidis, absolute silence is mentioned to have been important in order to show respect for the sieidi. Everyday sounds could anger the sieidi or disrupt the peace of

[437] Lahelma 2008, 60.

[438] Lahelma 2008, 121–142.

[439] Paulaharju 1932, 50. Original Finnish text: "Vesi juoksee siellä ja tippuu ja ottaa kaijun niinkuin saarnattaisiin siellä. […] Taatsinkirkon alla ovat lappalaiset laulanhet seitarukouksiansa. Se kun kumisi, siksi siellä lauloivat."

[440] Waller 2006.

[441] Nordström 1999, 134.

[442] Qvigstad 1903, 38; Mebius 2003, 137.

the sacred place. For example, concerning Golleahkku (27), Paulaharju relates the following: "When we rode past the rocky Golleahkku of Gonjalvuono, we had to put hay or snow in the reindeer bells. If the bells were allowed to clamour, Golleahkku would become angry and cause our journey to go badly."[443] Knud Leem has also noted that a *goahti* should not be built close to a *basse* mountain so that the crying of children would not cause a disturbance.[444]

In the auditory scene analysis, I paid attention to human voices as a part of my experience of sieidis. In written sources, human voices are also considered as being more important than natural sounds. In some cases, everyday sounds and noise are forbidden, but often various ritual-related sounds, such as yoiks, are mentioned as suitable sounds. In addition, sounds related to approaching the sieidi site, such as the squeaking of rowlocks that I mentioned in the auditory scene analysis, may have to have been silenced.

According to the relational worldview, the sieidi itself could also be a source of sound. In addition to humans, the sieidi too could sing yoiks.[445] The Taatsi sieidi answered offerers with a sound like tinkling bells coming out of the statue.[446] Sounds produced by the sieidi were a part of the ritual interaction.

Altogether, offering places were associated with both silence and loud sounds. According to Riitta Rainio, folk religions had an acoustic dimension; humans controlled the space around them by making noise and staying silent and negotiated with parties central to subsistence, such as the spirit world. Noise-making aimed at scaring the otherworldly forces and silence ensured that the spirits were not disturbed, frightened, or insulted.[447]

Written sources also emphasize human voices as either controlled or accepted. In my soundshed and GIS analyses, I have for my part brought to light the significance of natural sounds. The sound of water, in particular, was present in many sacred places, and water has been associated with sacred properties in many religions. Even a quiet water sound may be pronounced if other sounds are controlled.

Taken together, the different ways of approaching sounds related to sacred places create a comprehensive view of the soundscape. At the sieidis, keynote natural sounds could still be observed: the sounds of animals, wind, and water. Some of these were background sounds that did not actively draw the attention, but some could acquire new meanings due to recurrent patterning, which could also be seen in the GIS analysis. For example, the sounds of water may have become community sounds due to the symbolic meanings associated with water. On the other hand, sacred places could also be associated with sounds that are currently available only through written sources. These include sounds related to ritual activity and the sounds made by the sieidi. In addition to all these sounds, written sources also give us information on the silence related to sieidis.

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[443] Paulaharju 1932, 25; cf. Itkonen 1948 II, 320; Viinanen 2003,15. Original Finnish text: "Gonjalvuonon kallioisen Golleahkkun ohitse ajettaessa piti panna porontiukuun heiniä tai lunta. Jos tiuvut saivat täysin äänin mouhuta, niin Golleahkku suuttui ja antoi huonon matkan."

[444] Leem 1956 [1767], 443–444.

[445] Paulaharju 1962 [1922], 143.

[446] Paulaharju 1962 [1922], 138.

[447] Rainio 2005.

Whatever the sounds or the lack of sound, they were not completely without meaning. Ingold and Kurttila have emphasized hearing as a part of the Sámi world of observation. The crunching of snow, the barking of dogs, and the jangling of reindeer bells were not background sounds, but a part of the lived-in world. We experience the environment in a multisensory way, with the entire body, in order to coordinate our actions in the landscape.[448] The cooperation of multiple senses is also significant in experiencing rituals. In some communities, the smells and fragrances associated with rituals have a special meaning, whereas in others, sounds are considered more important. Rituals cover all senses and emotions.[449] People did not listen to the roar of the rapids with their eyes covered, but lived in a landscape where water pounded the shore pebbles, a smell of offered fish lingered in the air, and a sieidi watched from the profile of a stone.

4.5. Summary

The topographic features of sacred places are dominated by water and high elevations. However, a certain kind of location has not been an unconditional rule for the selection of a sacred place, but the natural environment of the area affected the selection of places. For example, the proximity of lakes was pronounced in Inari and that of fells and rivers in Utsjoki. Closer study also shows that the relationship between sacred places and topographical features was not homogenous; there were differences in the sizes of the waterways and high places, as well as in the location of the sieidi in relation to the topographical element.

Atypical shape and size are dominant features in sieidi stones that are examined as landscape elements. However, a special surface or colour is more rarely encountered. An atypical shape may indicate anthropomorphism or zoomorphism. These features occur so often that they are most likely not coincidental, but they are also not the sole factor determining the selection of a sieidi stone. Anthropomorphism may have increased the significance of the sieidi. Atypical size makes the sieidi stone stand out from surrounding stones. The majority of the inspected sieidis were 1.5 to 2.5 metres high. In addition to microtopography, vegetation, and other stones, the size of the sieidi was one factor affecting the visibility of the sieidi. The majority of the inspected sites had average or good visibility. Trees were the usual obstructing factor. The direction of visibility did not seem to be significant. The direction from which the sieidi was visible may have been related to the direction from which the sieidi was approached. However, good visibility was not necessary for the experience of sacredness, but some of the sieidis may have been quite unobtrusive.

Proximity to water has also been a typical feature of sacred places. In the restricted viewshed zone, there is water in 64% of all 107 places. Water can be considered as a liminal feature that connects worlds. It may also have had meaning as a transport route, provider of subsistence, or sound related to sacredness. The auditory scene analysis emphasized the sound of water, but also other natural sounds and human sounds as a part of the soundscape. Of the waterways related to sacred places, standing waters are more common than watercourses and also create a different soundscape. Written sources provided information on both silence and loud sounds in sacred places, as well as on sounds imbued with a special meaning, such as echoes or jingling bells.

[448] Ingold & Kurttila 2000, 189.

[449] Park 1994, 206; Watson 2001, 178–179; Insoll 2004, 106, 111. On the study of emotions in archaeology, see Tarlow 2000.