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A NATURAL-GEOGRAPHICAL STUDY OF PREHISTORIC SITES

Abstract

The aim of this research was to study the natural-geographical features of the immediate surroundings of known prehistoric sites at the time when they were settled. The purpose of the study was to verify and specify the description of the natural conditions of prehistoric sites, as well as to record new information about them. The features of the surrounding area were evaluated in view of human activities. As the basic data source of the study served the 1:50 000 reductions of base maps (Maanmittaushallituksen karttapaino, Helsinki). Soil maps on the scale of 1:20 000 would have been very useful, but unfortunately they were only available in the case of the Taipalsaari region (Soil maps 1:20 000 No. 3134 01–12). It was however possible to use a drumlin field map published in 1973 in Fennia by Gunnar Glückert in the analyses of the Savonlinna, Kerimäki and Enonkoski areas.The maps were used for studying the features of the site, its surroundings and the shore associated with it, as well as the natural communications of the surrounding area. The collected data is presented in exact form so that it would be comparable and suitable for statistical analyses.

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The research area

This study is part of the Ancient Lake Saimaa Project of the Department of Archaeology at the University of Helsinki. As plenty of prehistoric sites are known in Savonlinna and Puumala, the study areas were chosen in these regions. The base maps 1:50 000 served as the basic data source, and the study areas were defined according to the coverage of map sheets. The study areas and the map sheet numbers are illustrated in Fig. 1. The northern (Savonlinna) study area covers an area of 40 x 30 km and the southern (Puumala-Taipalsaari) 40 x 60 km. Thus the range of the study covers prehistoric sites also from Enonkoski, Kerimäki, Punkaharju, Ruokolahti, Savitaipale, Taipalsaari and Lappeenranta.

From the Savonlinna and Puumala regions all known Stone Age, Early Metal Period and Iron Age dwelling sites and the find places of stray finds, hillforts, cairns and rock paintings were analyzed. No cemeteries are known in this area. From the Taipalsaari region only the dwelling sites were studied.

The collected data and the classification principles

The following factors were studied: the soil types of the site, the geomorphological formations and the dominant geomorphological features associated with the site, passableness and the possible routes, the location of the site, the declivity direction of the site and the wind directions. The shores associated with the sites were classified according to the shape of the shore, the width of the lake, the extent of shelter, the material, and the steepness during the time of settlement. The sites were classified according to their location on an island, isthmus or mainland on one hand, and their location in relation to the shape of the shoreline on the other.

The collected data was classified in order to make it suitable for statistical analyses. An alternative selection was made for each studied characteristic. The information was collected into the SAIMAA database of the Department of Archaeology at the University of Helsinki.

The bulk of the collected data was stored into

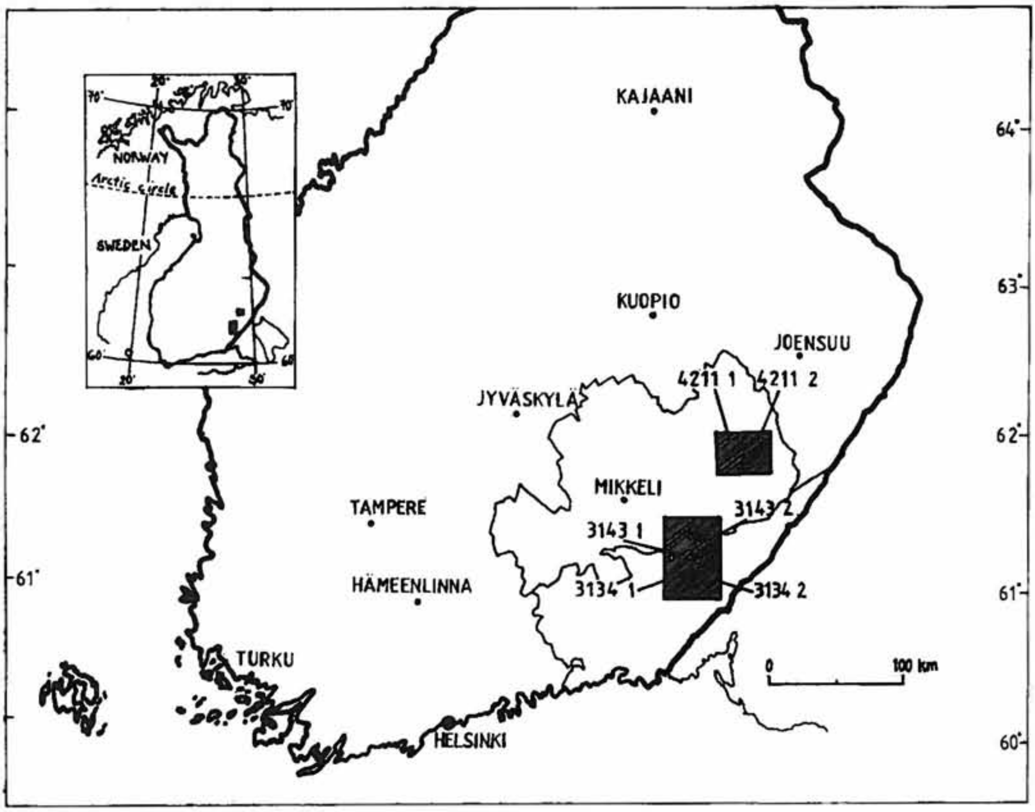

Fig. 1. The study area and the base map sheet numbers.

the Environment files or E-files. The information associated with cardinal points such as the slope orientation, the wind conditions and the shelterness of the shore were collected in the X-examination files, which are more suitable for that purpose. Examples of Environment cards and X-cards are illustrated in Fig. 2.

Alternatives of the same sort were marked with the same first number so that it was possible to group them easily together (for example all locations on different kinds of islands were numbered from 11 to 19 and the locations on an isthmus from 21 to 25, so that they could be grouped into alternatives 1 and 2).

E-card

On top of the card (Fig. 2; above) is indicated the identification information of the site: the situation municipality, village and survey number. The abbreviation "Z" on the right top of the card denotes the shorelevel at the time when the site was occupied. The shorelevel of Lake Saimaa varied considerably during prehistoric times, which has naturally influenced the size and shape of the mainland and the islands of the Saimaa watercourse. The cards were filled in according to the circumstances that prevailed during the period of the given shorelevel. In cases where the site had been in use for long time or no precise dating exists several E-cards were made according to different alternative shorelevel situations. In these cases "Z" identifies each card and connects them with correct X-examination cards.

The geomorphological formation

The geomorphological formation where the site is located is given in this section. It relates to relief and soil. The soil in turn gives an indication about the vegetation if we know which climatic period prevailed at the given time. The alternatives are presented in Appendix 1.

There are also formations in the alternative selection which do not appear at all in the Lake Saimaa region because one of the aims of the project was that it would be possible to apply the menus of the databases to the prehistoric sites of other areas, too. However, the formations which occur only in Lapland were left out of this selection.

The smallest geomorphological formation was chosen to this section. For example in a case where the site was located on a small kame hill alongside a large drumlin, the "Geomorphological formation" section was given the alternative "a kame" and not "a drumlin". The drumlin was instead booked in the section "Dominant geomorphological feature 1".

Soil

The next characteristic is the soil of the site. The purpose was to specify the soil according to the classification used in building technology (the so-called RT-classification). This succeeded very well in the areas with available 1:20 000 soil maps. But as it was already mentioned maps were not available on the bulk of the research areas and the specifying had to be done on the basis of the data obtainable from topographical maps and survey reports. That is why such generalizing titles as "till" and "glacifluvial material" had to be taken into the alternative selection. Usually the topographical maps show only whether the soil material is moraine or sorted material, and at best whether the material is coarse or fine. The soil descriptions in the survey reports — if any — are often based on determinations made only by the eye, and for example "sandy pine wood" may mean anything between gravel and silt. However, in some cases it was possible to specify the soil quite accurately although not entirely exactly. Because of these cases general titles were included in the selection, for to keep the statistical processing simple only one alternative could be selected from the menu presented in Appendix 1.

Dominant geomorphological features

The sections "Dominant geomorphological feature 1, 2 and 3" describe the characteristics of the environment where the site is situated. In most cases several dominant geomorphological features were found because the sites are usually surrounded by various physical features and not just by one homogenous environment. To help the statistical analyses this section was divided into three subsections, each of them containing only one piece of feature information.

The feature which was estimated to be the most significant one was listed in the section "Dominant geomorphological feature 1", the second most significant in the section "Dominant geomorphological feature 2" and the third in the section "Dominant geomorphological feature 3". If there was still another essential physical feature which had not been listed in the previous sections, it was listed in the "N.B." section in the lower part of the E-card.

In order to provide as many-sided an image as possible about the environment of the site also fairly limited appearances were mentioned as dominant features if only they were close enough to the site. The order of listing the geomorphological features was formed according to the principle that "the distance of the feature from the site determines the order of listing, yet so that the feature which fills up a larger sector of the imaginary circle around the site is mentioned first".

The alternatives of these sections are almost the same as in the "Geomorphological formation" selection, but here the formations are thought to be larger or to form a complete area of the same type of formations. "Water" was also listed among the alternatives on account of little islands that were surrounded by vast open seas, because in such cases the water has certainly been a dominating environmental element. The used alternative selection is presented in Appendix 1.

Location

The location of the site is considered from two different viewpoints: in the section "Location 1" the sites are grouped according to their prehistorical location on an island, isthmus or mainland (See the menu and figure in Appendix 1).

In the section "Location 2" the sites have been classified according to their prehistorical location in relation to the shape of the shoreline in the following way:

Location 2; the site has been situated

1. at the foot of a cape
2. in the middle part of a cape
3. at the head of a cape
4. at the mouth of a bay
5. at a "turning point"

This section will be presented more accurately in the section "The shape of the shoreline".

Municipality: SAVONLINNA | Village: Pääskylahti

Name: Pääskylahti | Surv. No.: 1 | Z: 84.9

Geomorphological Formation: 6 | Soil: 23

Dominant Geomorph. Form. 1: 210

Dominant Geomorph. Form. 2: 190

Dominant Geomorph. Form. 3: 10

Location 1: 30

Location 2: 1

Passableness: 3

Possible Routes: 36

Extend of Open Sea: <500: 30 | >500: 15

The Shape of the Shore <150: 10

The Shape of the Shore <500: 66 | >500: 100

The Material of the Shore: 3 | The Steepness of the Shore: 3

N.B.:

Municipality: SAVONLINNA | Village: Pääskylahti

Name: Pääskylahti | Surv. No.: 1

Purpose : wind conditions | Z: 84.9

Ray : m

Centre p.: | Group:

N.B.:

1
3 1
3 1
2 3
3

Fig. 2. Example of an Environment card (above) and an X-examination card (below).

Passableness

It is problematic to evaluate exactly the roughness of passage in the terrain. In this study I have tried to give an indicative value for the difficulty according to the image that I perceived by evaluating and comparing sites to each other on the map. The base of the scoring was the relative altitude of the terrain (See the scale in Appendix 1).

In addition to the relative altitude many other circumstances contribute to the fact whether the place is easy or difficult to reach. Often vegetation affects the roughness value more than topography. We cannot form very reliable conclusions about vegetation if they are based merely on knowledge of soil texture because common climatic conditions, the degree of crown closure, the density and age of trees and the micro-climate affect remarkably the forming forest type and the abundance of field layer vegetation. Nevertheless washed coarse soil material was considered to be favourable for walking and skiing because of the scarce field layer flora. Correspondingly fine material was considered to be a disadvantage.

The unfavourable factors also include precipices and steep slopes, unoriented hilly relief, kettle holes, bad drainage, swampy depressions and large peat bog areas. As favourable factors were regarded gentle slopes, geomorphological formations such as even deltas and eskers, long drumlins and terminal or recessional moraines and favourable fault or valley patterns (which means here that the place is easily accessible from many directions).

Lakes and especially peat bogs are problematic in the sense that although they limit passage in the summer they form excellent routes when frozen because they are treeless and flat. The ratio of the length of winter frost to the length of summer time is dependent on the prevailing climatic period. Also the otherwise so favourable faults and valleys could be too wet and rank for walking in the time when the land is unfrozen.

Because of all these above mentioned influential factors the scale was left "sparse" so that they could either drop or raise the roughness value.

Possible routes

How to define the possible routes provided by the physical environment is another difficult matter closely associated with the previous environmental characteristic. It is widely known that the dwelling sites of the hunting culture population were on the shores of water bodies and that they all had access to some kind of waterway. Therefore only those watercourses that were long enough to connect wide areas together were considered as waterways worth mentioning. Furthermore, waterways which run along the shores of vast open seas or across the seas were not accepted because it was considered that with Stone Age technology and flat-bottom rowboats travelling would not have been too safe on these routes that were far from suitable for "every weather". So only fairly sheltered channels that exist for example in long straits formed by faults were accepted as waterways.

Currents are paradoxically advantageous: on one hand it would have been easy to row downstream if the current was not too fast or the channel too rocky, but on the other hand rowing back upstream would have been hard and wearisome work. Another uncertain issue with currents is whether there was a current at all and if there was, then how strong it was during the time of settlement. (Notice the possibility of the narrowing of the channel and the creation of the damming situation when the shorelevel gets lower.)

As inland routes were counted those formations and relief features that were suitable for the purpose: deltas, long eskers, recessional and terminal moraines, depressions, valleys and plains (assuming that they are even). Isthmi that connect wide areas form a quite definite route group. Narrow isthmi which separate two water bodies are exceptionally favourable cases. At such points a land route crosses two easily accessible watercourses. The used alternative menu is presented in Appendix 1.

The classification makes a distinction between the sites which were situated at a short distance from routes and the sites which were located precisely on the supposed route.

Comparing the cards that were filled according to the different height of the shorelevel on the same site reveals changes in the route situations in the course of time (a reason for abandoning a dwelling site?).

Both inland and waterway routes were stored in the same section. In the cases where there were both inland routes and waterway routes it had to be decided case by case which routes would have been more significant for the users of the site. Fortunately that decision was usually made quite easily: positive features like the general rarity of the given route type and the length and distinctness of the routes were favoured.

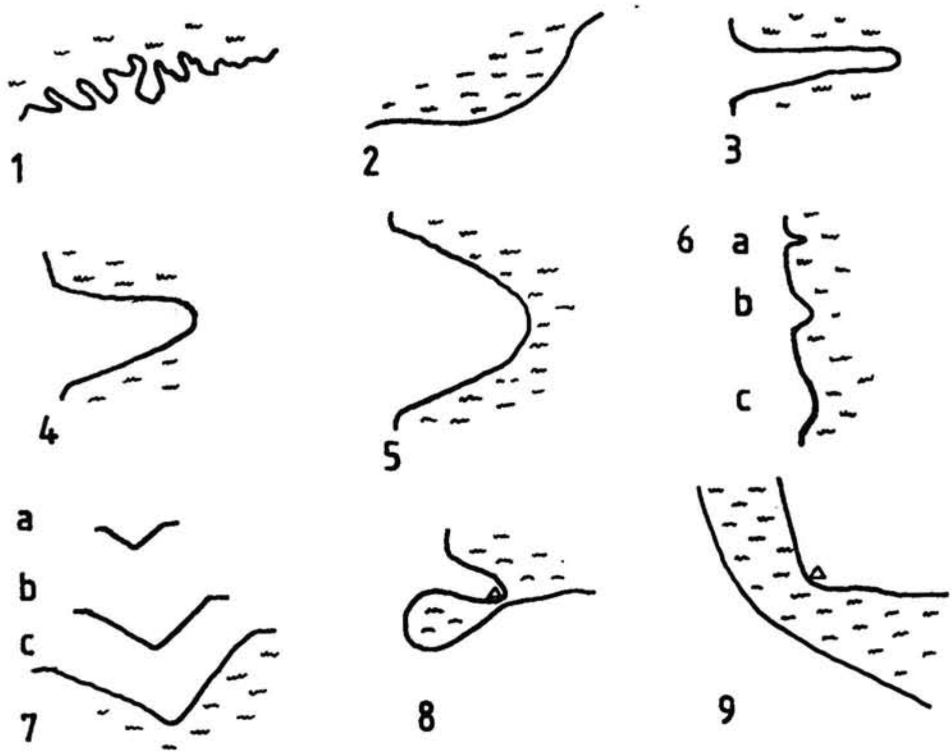

Fig. 3. Shore shapes appearing in "the shape of the shore" -selection: 1) a winding shoreline (no 20); 2) a gently curving cove (30); 3) a long, narrow cape (61); 4) a long cape (62); 5) a long, broad cape (63); 6) short capes: 6a) a short, narrow cape (64); 6b) a short cape (65); 6c) a short, broad cape (66); 7) triangular capes: 7a) small (67); 7b) medium-sized (68); 7c) large (69); 8) a baymouth; 9) a "turning point" (90).

The extent of open sea

This characteristic involves the shore associated with the site (thus this feature could not be given to sites which did not seem to be associated with a shore). The extent of open sea means the distance between the shore of the site and the opposing shore.

The extent of open sea was studied at two different levels. In the section "Extent of open sea: < 500" the width of the lake could be measured within a radius of 500 meters from the shore.

In the section "Extent of open sea: > 500" the vastness was estimated within a larger radius than in the previous section. Two different scales were used in order to get a better idea of the shelterness of the shore. For example there were situations where the shore was partly sheltered by little islands but behind them opened the wide open sea. In another example the shore might have been sheltered by a little bay from the sides but in the front the shore was beaten by the surging waves of the wide open sea.

The selections are presented in Appendix 1. Initially one of the aims was to arrange the alternatives of these selections so that they would be in relative order of magnitude. In practice it proved that within some of the alternatives there were so many various cases that this aim could not be fulfilled.

The shape of the shoreline

The shape of the shoreline was also viewed on different size scales like the extent of open sea. The observation radii were 100–200 m, 500 m and over 500 meters. The observations made on different size scales indicate for instance that dwelling sites were often located in small coves on the otherwise straight shoreline.

The alternative selections were fundamentally the same for all size scales. The size definitions are, however, always valid only for the given observation scale. A cape or a bay is considered long when its length exceeds the half of the observation radius. A triangular cape means a cape with a steeply sharpening end. On a winding shore the shoreline winds in and out on a small scale but frequently. The degree of generalization in the examination increased naturally with the increasing observation scale — the general shape of the shore was seeked. The alternative selection is presented in Appendix 1. See also Fig. 3.

The feature "Location 2" is normally associated with the smallest noticeable shape of the shore because in practice it has proved to be the most important one to the dwellers and users of the shore. There are two exceptions: in the first place the situations where "The shape of the shore 1" is so minute that it is supposed that "The shape of the shore 2" has had greater significance, secondly the situation where the smallest shape of the shore is not a cape.

The alternative turning point which appears in both "Location 2" and "The shape of the shore" selections means that the site was situated at a clearly remarkable turning point in relation to water routes. The alternatives number 00 and 110 are for those cases where it is impossible to determine the shape of the shore on the given scale because of the too small a size of the pond or island. When such a minute island was situated in the vicinity of the mainland it was possible to define here the shape of the shore on the mainland.

The material of the shore

The material of the shore means the material of the associated shore and therefore it may differ from the "Soil" of the site. The alternatives are the following:

1. rock
2. pebble
3. sandy beach
4. clay/mud
5. till

The steepness of the shore

This characteristic is called the depth of the shore as well because the steepness is observed downwards from the waterline. This feature should not be mixed with the steepness of the slope.

The classification gives only a rough estimate of the steepness because the definition was made from the basemaps on the scale of 1:50 000. The shore depth estimations were done simply by comparing distances between the shorelevel contour and the next lower contours on the map. The steepness alternatives:

1. a shoal
2. very shallow
3. shallow
4. gently sloping
5. quite steep
6. steep
7. bluff

N. B. -section

It is possible to give further information here about the above mentioned environmental features (abbreviated because of lack of space). When none of the alternatives suited precisely, the best one was given above and the second best in this section.

The data collected to X-examination cards

The basic structure of an X-card is very well suited for presenting information associated with compass directions. There are fill-in places in a rhombic pattern for values associated with the cardinal points, which has the advantage that a visual image of the phenomenon can be easily obtained with a quick glimpse (See Fig. 2; below).

In this study the X-examination cards were used to express the declivity direction of the site, its wind conditions and the shelterness of the shore associated with the site. For each of these characteristics was made a card of its own.

The declivity direction of the site

The compass direction to which the ground declines on the site (that is the direction of the normal to contour lines) is the declivity direction of the site. If the shore associated with the site "opens" to another direction it is mentioned in the N.B. -section of the card.

The principle is that the cardinal point to which the ground declines is given value two and the others value zero. In cases where the ground is notably inclined between two cardinal points the one to which it declines more gets value two, and the other value one. If the ground in the immediate surroundings of the site is almost flat all the fill-in places remain with value zero.

The wind conditions

The wind conditions of the site were considered on the basis of the surrounding topography. The relative altitude of a hill and the steepness of its slopes affect the degree of shelterness created by the hill. High summits have a wind lifting effect but after having passed the highest point the wind descends gradually again. At a distance of 20 x h (= the height of the summit) the lifting effect of a barrier ceases entirely. So it depends on the distance between the site and the highest point of the hill whether the site remains at "a dead angle" in relation to the wind. The magnitude of the relative altitude difference and the steepness of the slope affect the width of wind shelter below a hilltop.

The windbreak ability of elevations also depends on their number and shape because these features affect their wind directing capacity. In addition the situation pattern of the elevations affects the length and rectilinearity of valleys between them which in turn have an effect on the wind. For example straight hill surfaces can direct wind and could produce "windtunnels" where the wind speed increases.

One may of course ask if there is any sense in this kind of consideration when the density of vegetation and the height of trees have a very strong effect on windiness. It is obvious that in many cases vegetation is likely to have a stronger effect on the wind than what topography has, but anyway at least certain shelter directions can be revealed by studying the topography.

The used scale is from one to three. If the ground does not elevate in short distance at all in the studied compass direction, the windiness value is the greatest, or three. The situation is considered undetermined when there is a less than five-meter-high knoll next to the site or when the distance from the nearest elevation is too long (cf. "dead angle"). When the site is estimated to be fully sheltered in the given direction, its windiness value is one.

When we know the wind conditions on the site it is easier to decide how suitable the place was for a dwelling site or for a temporary place of shelter.

The shelterness of the shore

This characteristic could be called "The storminess of the shore" as well for the object of this inquiry is how strong the waves can beat the shore associated with the site from each cardinal point.

How big waves can beat the shore depends first on the local shape of the shoreline — e.g. capes create shelter behind themselves — secondly on the extent of open water in front of the shore and on the depth of the water body and finally, especially in borderline cases, on the relative altitude of the opposing mainland (which affects how the wind may blow to the surface of water).

Shelterness was studied in relation to all cardinal points. It is reasonable to think that at narrow straights (width less than 400 m) the wind can not create noteworthy waves (the given value is 1), and that to produce big waves open sea is needed (which means at least 1.5 km of open water in front of the shore). The situations which fall between the two above mentioned were marked with value 2.

The sites that might have had wide or many harbour areas (e.g. large dwelling-site areas, hillforts, dwelling sites situated on a narrow isthmus etc.) are problematical. Such cases were either given a mean value or, if it was supposed that there had been several harbours in different cardinal points, the best possible value which could be found in the examined direction (so the result is a positive combination of the values of all the different harbours).

"The back side" or the mainland side of the shore was given value 1. It is also worth noticing that the wind condition and shelterness data is dot-like in the sense that the presented phenomenon may have differing values between the given cardinal points (so it is not possible to interpolate intermediate values).

One possibility is to stress more the most general wind directions so that they gain greater significance in evaluating the suitability of a location for a dwelling site.

Epilogue

In this paper I have introduced the topics and data-collection principles of a study which combines physical geography and archaeology. Since this kind of inquiry has not been made before it is possible that there will be rearrangements or regroupings among the used alternatives in the analyzing phase of this study.

References

Glückert G. 1973: Two large drumlin fields in central Finland. *Fennia* 120.

Appendix 1. Alternative selections.

Geomorphological formation			
1.	a delta	16.	a Pulju moraine
2.	a sandurdelta	17.	a glacial karst moraine
3.	an esker-delta	18.	a Rogen moraine
4.	an esker	19.	a De Geer moraine
5.	a kame-esker	20.	a recessional "push" moraine
6.	a kame	21.	a terminal moraine
7.	kame and kettle country	22.	a stabilized dune
8.	a kettle hole	23.	a beach ridge
9.	a (flat) clay plain	24.	smooth basal till bed
10.	a radial moraine	25.	smooth supraglacial melt out till bed
11.	fluting	26.	a supra-aquatic cap of a hill (a scull-cap hill)
12.	a drumlin	27.	a bedrock hill (uncovered rock exposed in places but the hill is mainly covered by moraine)
13.	a drumlin shield	28.	a bedrock exposure
14.	a crag and tail	29.	a fault
15.	an ablation moraine		

Soil		
10.	boulders	> 20 cm
11.	cobbles	2-20 cm
12.	jagged rocks and/or stony soil	> 2 cm
13.	jagged rocks and stony soil	2-20 cm and > 20 cm
20.	gravel	0.2-2 cm
21.	sand	0.2-2 mm
22.	fine sand	0.02-0.2 mm
23.	sorted coarse glacifluvial material	0.02-20 mm
24.	sand and fine sand	0.02-2 mm
25.	sand, fine sand and silt	0.002-2 mm
26.	gravel and sand	0.2-20 mm
30.	silt	0.002-0.02 mm
31.	clay	< 0.002 mm
32.	sorted fine glacifluvial material	< 0.02 mm
33.	silt and clay	< 0.002-0.02 mm
40.	till	
41.	gravelly till	
42.	sandy till	
43.	clayed till	
50.	peat	
60.	bedrock	

Location 1. The site has been situated on			
11.	an island of a pond or a small lake	21.	an isthmus between two mainland areas
13.	an island in a strait	22.	an isthmus between islands
14.	an island at the junction of straits	23.	an isthmus between very large islands
15.	an island of a lake	24.	an isthmus between an island and the mainland
16.	a very large (several kilometres in diameter) island of a lake	25.	an isthmus between a very large island and the mainland
17.	an island in a watercourse	30.	the mainland
18.	a very large island in a watercourse		
19.	a very large island at the junction of straits		

Dominant geomorphological feature			
10.	a clay plain	120.	an area of Pulju moraines
20.	a swamp	130.	glacial karst moraine country
31.	the I Salpausselkä	150.	fluting and grooving
32.	the II Salpausselkä	160.	a (large) drumlin
33.	the III Salpausselkä	170.	a (large) crag and tail
34.	the Central Finnish ice-margin formation (Näsijärvi-Jyväskylä)	180.	a drumlin shield
35.	Jaamankangas (-end moraine)	181.	a crag and tail shield
40.	an area of De Geer moraines	190.	a drumlin field
50.	an area of Rogen moraines	191.	a crag and tail field
60.	an esker chain exposures	200.	a moraine area broken by bedrock
61.	a remarkably long esker chain	201.	a basal till area broken by bedrock exposures
70.	a dune area	202.	a residual till area broken by bedrock exposures
80.	a delta area	203.	an area of glacifluvial material broken by bedrock exposures
90.	a large kame/large kame hills	210.	bedrock terrain
100.	kame and kettle country	220.	water
101.	an accumulation of stratified sand at the bottom of a valley		
110.	an area of ablation moraine hummocks		

Passableness value		
		range of relative altitude
1.	plain	0-10 m
3.	gently rolling country	10-25 m
5.	hilly country	25-50 m
6.	mountainous country	> 50 m
+1:	precipices/steep slopes	- kettles / hilly country
		- a large peat bog / swampy depressions / bad drainage
		- disadvantageous fault or valley pattern (See the opposite)
-1:	advantageous fault or valley pattern (the place is easily accessible from various directions by smooth routes)	
		- gentle slopes regardless of otherwise remarkable relative altitudes
		- even deltas and eskers / long drumlins or terminal moraines or recessional moraines

Possible routes. The site has located	
10.	in the vicinity of a waterway
12.	on a waterway
15.	in the vicinity of a remarkably long waterway
17.	on a remarkably long waterway
20.	in the vicinity of an inland route
22.	on an inland route
25.	in the vicinity of a remarkabky long inland route
27.	on a remarkably long inland route
30.	in the vicinity of a junction of waterways
32.	at a junction of waterways
34.	in the vicinity of a junction of remarkably long waterways
36.	at a junction of remarkably long waterways
38.	in the vicinity of several waterway junctions
40.	in the vicinity of a crossing of inland routes
42.	at a crossing of inland routes
50.	on an inland route with easy access to two water bodies (= the site has located on a narrow isthmus between two watercourses)

The extent of open sea			
Extent of open sea: < 500 m		Extent of open sea: > 500 m	
10.	open	00.	extremely wide open sea
20.	sheltered by islands	10.	wide open sea
30.	strait (broadness > 200-300 m)	15.	open sea
35.	junction of straits	20.	sheltered by islands
40.	narrow strait (< 200-300 m)	30.	strait (> 400-1000 m)
45.	junction of narrow straits	35.	junction of straits
50.	bay	40.	narrow strait (< 400 m)
55.	sheltered bayhead	45.	junction of narrow straits
60.	pond	50.	bay
		55.	sheltered bayhead
		60.	pond or small lake

The shape of the shore			
00.	too small a pond to identify any shape of this scale	65.	short cape
10.	strait	66.	short, broad cape
20.	winding shoreline	67.	small triangular cape
30.	gently curving cove	68.	medium-sized triangular cape
40.	bay	69.	large triangular cape
50.	profound bay	601.	narrow cape
60.	cape	602.	broad cape
61.	long, narrow cape	90.	"turning point"
62.	long cape	100.	none of the above mentioned
63.	long, broad cape	110.	too small an island to identify any shape of this scale
64.	short, narrow cape		