

SOME STATISTICS ABOUT ROCK-CARVINGS OF LAKE ONEGA

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In the Neolithic Period (i.e. the Stone Age from the 5th to the 3rd millennia BC) Finno-Ugric pit-comb ceramic culture stretched around Lake Onega. Archaeological, hydrological and other data suggest that Lake Onega rock-carvings were made by these tribes (Fig. 1) (Lobanova 1988).

The discovered area of rock-carvings is located on the nearly 20 km long eastern coastline of the lake stretching south from the mouth of the Vodla River. 25 sites have been discovered on the almost horizontal surfaces of coastal bedrock of capes and islets. The culture of rock-carvings died out in the middle of the 3rd millennium BC. It was caused by the rapid rise of the lake's level – nearly 3.2 metres above what it is now. The water covered the carvings for almost a millennium (Pankrushev 1984).

FIELD WORKS, RETROSPECTIVELY

One and a half centuries have passed since the beginning of studying the rock carvings of Lake Onega (Poikalainen & Ernits 1990). The first about 80 petroglyphs were discovered in 1848 on Cape Peri Nos and Cape Besov Nos by C. Grewingk, the later professor of geology in the University of Tartu. In 1914 a Swedish archaeologist G. Hallström initiated a more extensive scientific field work at the sites of Lake Onega's rock-carvings. He copied most of the 412 petroglyphs discovered by then. In 1927 a geologist B. Zemljakov discovered new sites at Cape Kladovets and Cape Gazhi and the island of Big-Guri. A year later the ethnographer, archaeologist and writer A. Linevski conducted field work at Lake Onega, the results of his interpretation are published in his later papers (Linevski 1939, 1940).

In 1934 A. Briusov, an archaeologist from Moscow University launched an expedition to document the rock-carvings of Lake Onega. The following year ethnographer F. Morozov from the St.

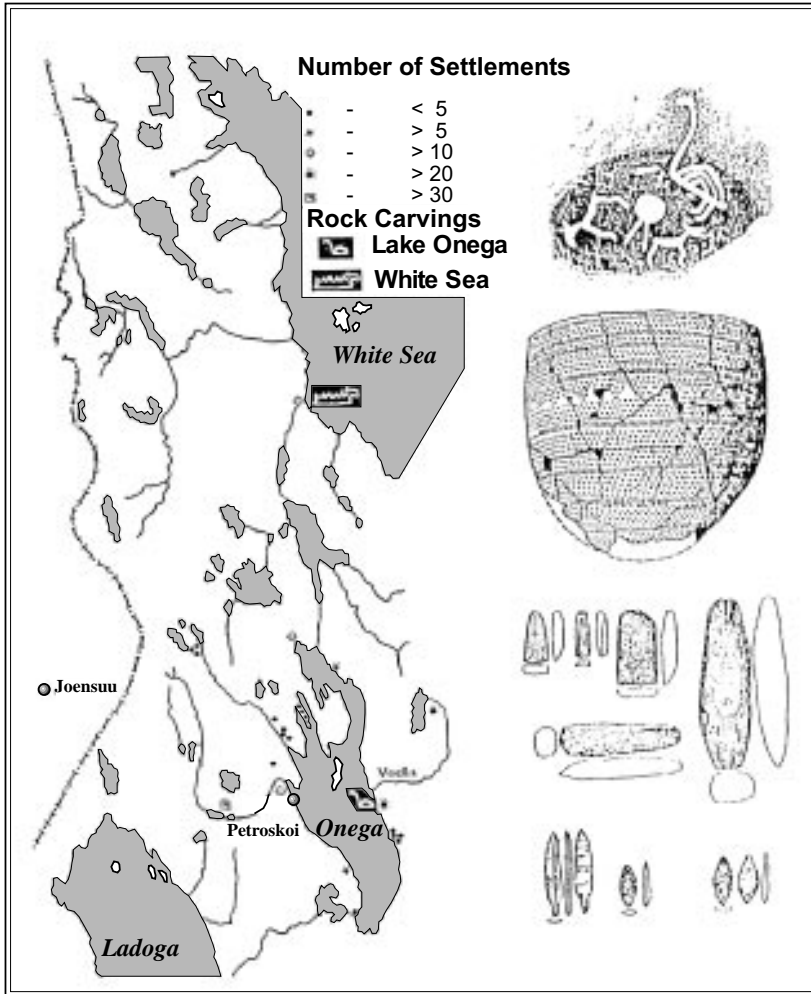


Figure 1. Distribution of pit-comb pottery in eastern-karelia and some archaeological artefacts from the Lake Onega rock-art region (by Lobanova 1988).

Petersburg National Hermitage removed the best known group of 83 petroglyphs from the bedrock of Peri Nos III and transported it to the Hermitage of St. Petersburg. Some petroglyphs were destroyed during their separation due to using explosives. A smaller group of petroglyphs had been moved to the Petrozavodsk local museum already earlier.

In the summer of 1935 archaeologist V. Ravdonikas from St. Petersburg University organised an expedition to copy petroglyphs. The expedition resulted in publishing the catalogue of rock carvings of Lake Onega (Ravdonikas 1936), containing the total of 482 petroglyphs. After Ravdonikas's research the field work of rock art territory was at standstill for a longer period of time. During 1967–1977 new sites were discovered on the islands of Small-Guri, Big-Golets and Moduzh and at the mouth of the Vodla River under the guidance of J. Savvateev, Karelian archaeologist. Also, several new petroglyphs were found from sites known previously. The total number of discovered petroglyphs (including museum exhibits) increased to 872 (Savvateev 1980).

In 1982 the petroglyph research group of the Estonian Branch of the USSR Society of Astronomy and Geodesy initiated its field work at Lake Onega. In 1988 the research group grew into the Estonian Society of Prehistoric Art (Ernits & Poikalainen 1990, 1994). In the course of field works that lasted until 1994 the society found a large number of petroglyphs among the already known groups. In 1986 they discovered a new locality of 194 petroglyphs at Cape Swan, among them the largest one found so far – depicting a 4.1 metres giant swan. By now the number of known carvings at Lake Onega has reached approximately 1300 (92 of them on rock slabs preserved at the museums). The society intends to issue all the documented material in a catalogue of three volumes, the first part of which has already been published (Poikalainen & Ernits 1998).

THE GENERAL DISTRIBUTION OF SITES AND MOTIFS

As the original purpose of rock carvings is yet unknown we should observe the topics of the motifs in the framework of the sc. 'motif prototypes', i.e. the bodies, phenomena, living beings or man-made devices which appearance is conveyed onto petroglyphs. The prototype, however, does not necessarily carry the meaning identical to that of the corresponding petroglyph. It is reasonable to believe that petroglyphs used to serve mythological (religious, or other) purposes for their creators, and the prototypes merely framed the images. The petroglyphs include only a small selection of the abundance of possible prototypes, whereas the depicted motifs are chosen on the basis of a certain set of rules, not rendered freely. The

petroglyphs of Lake Onega are clearly canonical, which, again suggests the religious background of the rock carvings.

The majority, i.e. about 42% of the total number of carvings represent ornithomorphic (water-fowl) motifs. 22% of these are silhouette carvings, 7% contour carvings, 9% partly sketched, 3% smaller outlined forms, 1% twin water-fowl carvings. Most of the ornithomorphic motifs resemble swan, other water-fowl prototypes are also used. The swan motifs are often stylised to long-necked unearthly creatures merging into crevices (Fig. 3, no. 14). Most of the twin ornithomorphic motifs are represented as symbolic (Fig. 3, no. 13).

The second largest group, i.e. 16% of the total consists of the so-called indefinite petroglyphs: smaller lines, curves, broken lines, spots and irregular shapes (Fig. 3, no. 1, 5, 12, 15). These images appear to be a kind of probing rather than otherwise frequently occurring incomplete figures.

13% of the carvings is made up of disc-shaped, circular, half-moon or crescent-shaped images. Usually they are supplemented by 1–3 radial lines (Fig. 3, no. 1, 2, 3, 7). Such petroglyphs are often interpreted as images of solar and lunar symbolism.

Although several rock-carvings of Lake Onega are quite clearly outlined, their original prototypes are either dubious or unknown, e. g. spade-shaped staffs with elk-head supplements, diapason-shaped images, etc. (Fig. 3, no. 3, 5, 7). Such attribute-like symbols constitute 3% of the total carvings.

8% of the images are made up of elaphomorphic or deer-like motifs, depicting elks and reindeer (*Rangifer tarandus*) as their prototypes. Without exception the elaphomorphic petroglyphs are all antlerless. Furthermore, even the elk heads supplementing other images, such as staffs and boats (Fig. 3, no. 7, 10) are antlerless. The deer-like animals depicted on the carvings are often unearthly in appearance, having either angular features, no legs or giant heads.

Other zoomorphic images are represented in the total of 4% of occasions: snake (0.8%) (Fig. 3, no. 6), bear (0.8%), beaver (0.6%) (Fig. 3, no. 1, 18), whale (!) (0.3%) (Fig. 3, no. 11), otter (0.2%), fish (0.2%),

fox (0.1%). The prototypes for some images could not be determined due to their extremely vague shapes. The total of zoomorphic motifs, excluding the ornithomorphic motifs, is 12%.

The anthropomorphic motifs form 7% of the total. Half of them are depicted in frontal view, the rest in profile. The human-like petroglyphs are characterised either by their worship or dance poses, hybridity (including zoomorphic or even vegetational elements), accentuated calves, three fingers, and sometimes also engagement in certain activities (Fig. 3, no. 12, 15, 16, 18). The most original, and also the oldest of them is a 2.5 metres high image of “Devil” (*Russ. Bes*) carved on a crevice at Cape Besov Nos (Fig. 3, no. 4).

5% of the carvings are boat-like, or scaphomorphic. These images are usually complemented by elk-headed stems. Generally it is believed that the upright lines on board represent humans (Fig. 3, no. 9, 11). More rarely the motifs are clearly anthropomorphic. Half of the boats, however, are unoccupied.

A little less than 2% of the total are unique motifs. One of the most remarkable among them is the “Magic Mill” found in 1986 at Cape Swan (Fig. 3, no. 17).

Topographically, the distribution of the motifs varies considerably. Ornithomorphic petroglyphs have been discovered in all sites without exception (Fig. 2 and Table 1). The motifs of the Vodla region are less variable than those of the Besov Nos region, although the number of discovered carvings is more or less the same. Nearly two thirds of the petroglyphs at the mouth of the Vodla are ornithomorphic, whereas lunar and solar symbols are completely lacking.

Different types of petroglyphs are more evenly distributed in the larger sites of the Besov Nos region. Although the water-fowl motifs seem to prevail here as well, the total number of lunar and solar symbols at Cape Karetski and Peri Nos VI exceeds the number of ornithomorphic carvings. On the other hand, among the 144 petroglyphs of the western cape of Besov Nos, there are no solar or lunar symbols, whereas the variability of other motifs is extremely large.

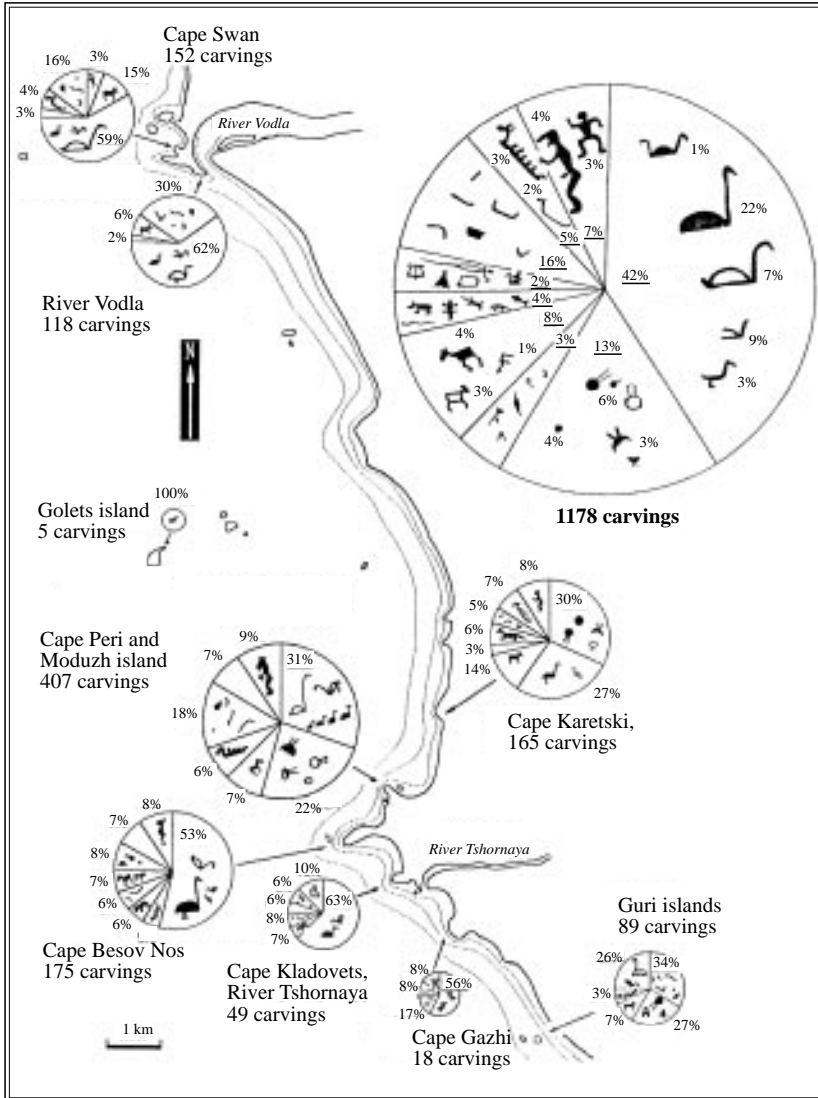


Figure 2. Distribution of rock-art sites and motifs at Lake Onega (1995).

Site	OM	IN	LS M	EM	AM	S M	ZM	AP	UP	Total	Height from water level	Distribution by size (cm) S / M / B
Cape Swan										152		
northern group (N)	59	7	-	16	5	4	2	-	1	94	105..262	28/32/40
western group (W)	3	1	-	-	-	1	-	-	-	5	147..193	75/25/ 0
southwestern group (S-W)	28	16	-	7	-	1	1	-	-	53	109..236	39/44/17
Beriozovye Ludy Island ¹	1	-	-	-	-	-	-	-	1			
Mouth of Vodla River	73	35	-	7	-	-	2	1	-	118	112..230	32/36/32
Big-Golets Island	5	-	-	-	-	-	-	-	-	5	100/0/0	
Karetski	45	8	46	23	13	12	10	5	3	165	-1..256	80/16/ 4
Peri and Moduzh										407		
The Island of Moduzh	9	2	-	1	-	-	1	-	-	13	28..37	100/ 0/ 0
Peri I	13	7	-	-	-	-	-	-	-	20	2..78	75/25/ 0
Peri II	6	3	3	-	2	-	2	-	-	16	6..111	54/15/31
Peri III	78	41	31	25	23	22	3	10	4	237	-3..149	78/21/ 1
Peri IV	10	8	4	-	2	1	1	3	1	30	43..72	90/10/ 0
Peri VI	7	12	44	2	6	3	3	6	3	86	0..100	87/ 6/ 7
Peri VII	2	-	1	-	1	-	-	-	-	4	19..118	100/ 0/ 0
Cape Besov-Nos										175		
Northern cape (N)	9	1	8	8	2	2	1	-	-	31	4..105	70/23/ 7
Western cape (W)	84	9	1	5	12	6	13	4	10	144	67..233	42/30/21
Cape Kladoverts and Mouth of Tshornaia River										49		
Kladoverts	30	3	2	1	3	1	-	-	1	41	60..196	71/25/ 4
Tshornaia	2	1	1	-	2	-	2	-	-	8	76..86	88/12/ 0
Cape Gazhi	10	3	-	1	1	1	2	-	-	18	78..118	72/18/ 0
Guri Islands										89		
Big-Guri	16	23	13	3	-	1	1	9	-	67	8..73	94/ 6/ 0
Little-Guri	7	7	2	3	1	2	-	-	-	22	55..81	82/14/ 4

Table 1. Statistical distribution of rock-carvings at Lake Onega (1995).

Notes:

¹ Savvateev has written about the egg-shaped carving of Beriozovye Ludy Island. I myself consider it to be of natural origin and thus it is not reflected in the total number of petroglyphs.

Abbreviations:

OM – ornithomorphic; IN – indefinite petroglyphs; LSM – lunar and solar signs; EM – deer-like or elaphomorphic; AM – anthropomorphic; SM – boatlike or scaphomorphic; ZM – other zoomorphic; AP – attributive petroglyphs; UP – unique petroglyphs.

The sizes of petroglyphs are as follows:

S (small) < 25 cm; 26 cm < M (medium) > 50 cm; 51 cm < B (big)

I have collected the data about the relative chronology of motifs by analysing superimposed carvings (Poikalainen 1990). The results of the study revealed that the oldest layer of motifs is constituted of **lunar and solar symbols**. The relative age of motifs descends through the following patterns: **elaphomorphic-ornithomorphic-anthropomorphic** and **elaphomorphic-attributive-scaphomorphic** (Fig. 3).

THE RELATIVE AGE OF SITES

The large total number of carvings and the distribution pattern of motifs suggests the longer existence of Karetski, Peri and Besov Nos sites. It is generally assumed that the petroglyphs were carved close to the water level. Considering the inevitable shoreline displacement in the course of time, the older age of carvings at these sites is supported also by the large range of heights of petroglyphs from the water level. The difference between the highest and lowermost carving is 257 cm at Cape Karetski, 166 at the western cape of Besov Nos and 152 at Peri III, whereas the average range of differences of the whole territory is 96 cm.

The difference between the absolute height of the carvings of Vodla and Besov Nos regions are caused by the faster rise of water level in the northern part of Lake Onega. Pankrushev argues that within 4 millennia the water level at the mouth of the Vodla must have risen a metre higher than at the Besov Nos region (Pankrushev 1984). The numerous petroglyphs of larger dimension and smaller variety of motifs in the Vodla region seem to be carved in a relatively shorter period of time and also later than most of the

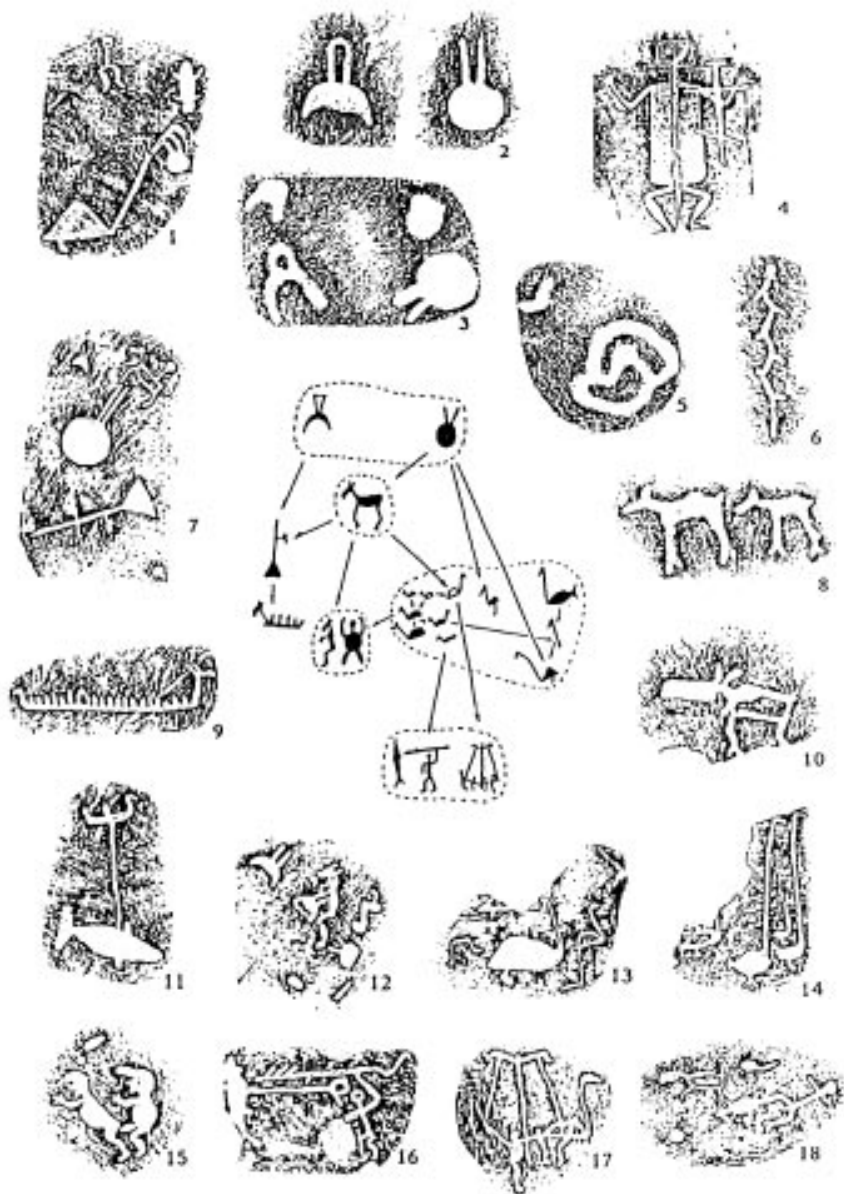


Figure 3. Some examples of rock-art from Lake Onega and the stratigraphy of the motifs in superimpositions.

petroglyphs at the sites of Besov Nos region. The lack of lunar and solar symbols at the mouth of the Vodla suggests the same.

The motifs and size of petroglyphs found at Cape Swan are more variable, also the range of heights is larger than that of the petroglyphs in the Vodla region. Therefore, Cape Swan could have been considered as the central sanctuary of the Vodla region, similarly to the western site of Besov Nos and Cape Peri in the Besov Nos region (Laushkin 1959, 1962). Therefore it is most likely that future discoveries will be made also northward of Cape Swan.

Translated by Kait Realo

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