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## **The petroglyphs from the lake Onega**

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### Introduction

The lake Onega is the legacy of the last ice age glaciers and is the second greatest European lake - the first is the lake Ladoga - both are located in Russian Karelia in the very north of Europe. The population on its coasts was always thin, but nowadays, due to its natural beauty (pic.1, [1,2,3,4]) is getting to be more and more a tourist destination. The Neolithic petroglyphs [5], which were in the past just of the scientific interest, are now added to the tourist attractions. More than thousand petroglyphs are to be found in various sets on the rocks of the approximately twenty kilometers long part of the lake east coast. This is probably the largest petroglyph site not only in Europe but also global. It is just unbelievable that the international scientific literature found the interest in these petroglyphs just in the last years in spite of the fact, that the research started already in the 19th century. As usual – all, what is in the east Europe, especially in the Russia or by the Slavs, is of no interest or simply ignored in the western dominated part of the world.

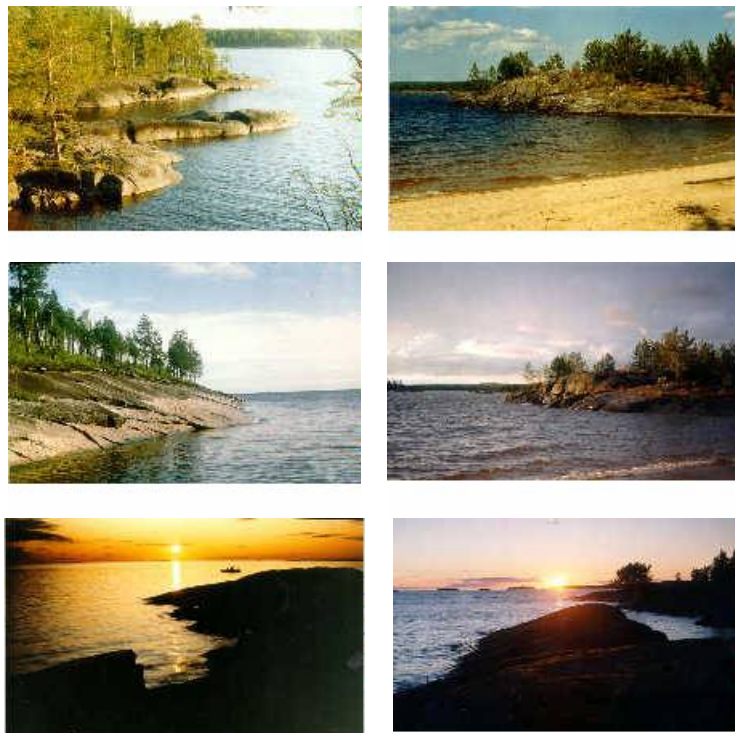


Fig. 1  
The views from the lake Onega [1, 2, 3, 4]

Besides their number and the vast area, where are they to be found, are these petroglyphs exceptional in their contents. Hardly somewhere else can be found petroglyphs, which would have such a high degree of abstraction and symbolism. Numerous are figures, which are marked as sun or moon signs, various animals as well as those, which can not be simply explained. The whole petroglyph complex, as also the single groups, which are extremely unique, are witness for the extraordinary high degree of the lake Onega ancient settler culture. In Karelia are to be found also other petroglyph sites, but as the

compositions or as the individual, are the lake Onega petroglyphs unique and different from them. They are to be found chiseled in the red granite rocks mostly in the narrow band less than a meter over the water shed, somewhere also under the water, seldom higher. From their position and from the change of the water level in the past the scientists estimated their age and the duration of their "use". They are generally divided in two sets, the primary, which are on average larger, and the secondary ones, which are younger and smaller, some also substantially smaller, and which are chiseled in the rocks on the places between the primary ones. More on that later.

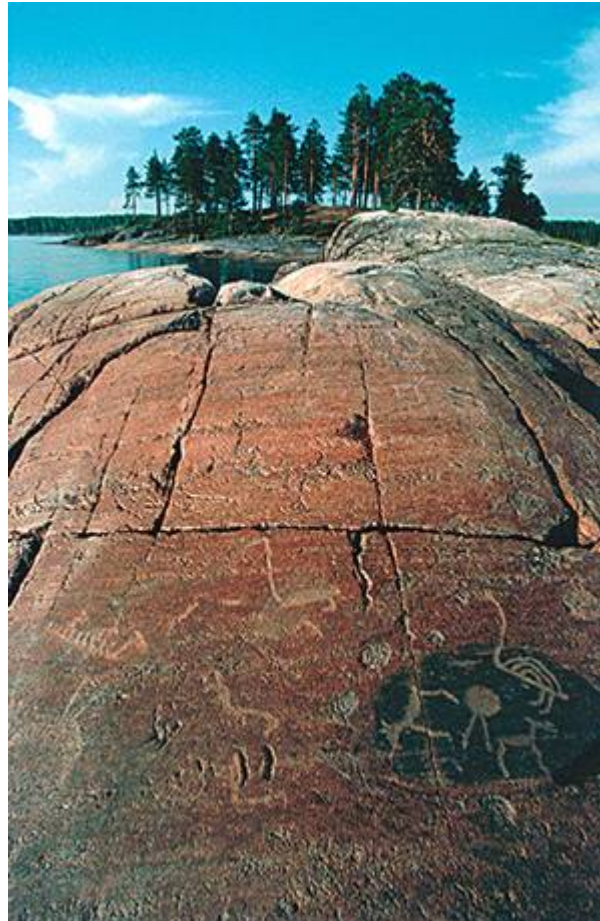


Fig. 2

The petroglyphs chiseled in the coastal granite rocks, which were ground by the glaciers of the last ice age [1, 2, 3, 4].

The Karelian petroglyphs were already broadly discussed. Measured on the scientific success too much - but on the other side not enough to attain some base thesis on the "philosophy" of the petroglyphs without contradiction - especially concerning the petroglyphs from the lake Onega (pic. 2). The aim of this work is to give the interpretation of the petroglyphs from some different viewpoint, but leaning on the already known facts. Naturally, it is far from perfection, but the author hopes to be in the right frame. The arguments and the descriptions will be given just for the assumptions which can be made without contradictions. The past work on the subject will not be evaluated, but for all remaining information excellent works of J.A. Savvateyev [6,7,8] and N. V. Lobanova [67] is recommended. Concerning the Karelian petroglyphs, J.A. Savvateyev gives the overview of the whole specter of the related research problematic concerning petroglyph discovery and interpretation. From this work, the majority of the data on petroglyphs and on their locations was used.



Fig. 3

The from the bone carved elk head – from the grave on the island Olenyi [9, 10]

The interested reader will find the results of the newest research, thesis, opinions and the richest catalog of petroglyphs as from Onega lake so also from Karelia in the book of N.V. Lobanova [67].

The Onega lake petroglyphs can not be compared to the cave paintings of Alta Mira or Lascaux. Not only that the last are substantially older than the petroglyphs, the cave paintings are real art masterpieces - that can not be said for the petroglyphs. The articles (pic. 3) from the graves on the island Olenyi [9,10] prove, that the Onega Lake artists were not less proficient as the cave artists. The paintings were preserved protected from the weather in the cave and the petroglyphs due to granite rocks in which they were chiseled. This naturally does not mean, that the Onega lake culture did not have any other highlights. The painters and the stone cutters had very different intentions with their works. The cave painters were the artists. Their work could have the religious or the descriptive meaning, but is more the artistic legacy.

The stone cutters from lake Onega were not artists. To some petroglyphs, especially to the ones which depict the animals, can not be denied certain aesthetics, but their creators were above all "technicians". Their aim was not to express some beauty with the petroglyphs. The petroglyphs have had a definite aim and task: an object to use.

The comparison of the petroglyphs from different groups shows that the "abstract" figures - the depictions which do not represent any known object, as for example the elk, birds, deer, humans etc. - are very similar or are actually equal [67]. These may be interpreted as the symbols with exactly defined meaning. As the consequence, that they were intentionally chiseled in according to exactly defined purpose and that the whole group was with the aim planned and purposeful made. The mutual positions of the figures, their choice and their layout in the group as also in the natural environment have had the defined sense corresponding to an unknown narrative.



Fig. 4

The stone Roof exhibited in the St. Petersburg's Hermitage [11].  
Courtesy of Государственный Эрмитаж, Санкт-Петербург

In Hermitage [11 ] of Sankt Petersburg is exhibited the rock, coated with petroglyphs, named the stone Roof (pic. 4). This rock originate from the east coast of the lake Onega, where it was broken out from coastal rocks on the cap Peri Nos in the year 1934 [12 ]. We shall limit ourselves above all on the petroglyphs from this rock, besides some central ones from the cap Besov Nos. But at first we shall make a survey of the relationships among the whole group of the lake Onega petroglyph sites.

### **The tales on tales and the research philosophy**

*„...the interpretation of petroglyphs ...is more art than science...“. ... the petroglyphs research is “...the world of the intellectual adventure ..“.*

(free after A. Okladnikov [13])

Which is the relationship among the groups of petroglyphs, as well as among the individual petroglyphs, besides the interpretation of the petroglyph itself, is the main task of the research. Naturally, the question how to interpret the petroglyphs can not be avoided. The notions of the researchers are divided on this subject – short on that in the following. What say the critics ? A. Faradyev [14] pointed out, that the past research of Onega petroglyphs and the way of the research, are dogmatic – one sided according to the narrow defined access – as the tales on tales. Leaning on the opinion of A. Formozov:

*“... Literature on (Karelian) petroglyphs is full of imagination and the work with these sources is getting to be more cumbersome ... Anyway, they all agree the petroglyphs to be deceptively simple. But the issue of the discussion remained unchanged: this is the question of the prehistoric mind and the spiritual world of the Karelian petroglyph makers, on one side, and the same of our contemporary investigators, on the other side ...”*

He strongly condemns the past research, which he divides in semantic, archaeological and complex. Petroglyphs ought to be divided in a sense of the especial cultural emergence. The common view may be developed from the opposite directions, as the semantic and archaeological are. He stated that the rock color, light, water and the natural surroundings are the constituent parts of the rock art. Petroglyphs should be, according to his views, without any structural system. On some sites are they in dense groups, on the other just single. Any planning, clear or aimed, is not present. The peculiarities of the natural surroundings are not shown, background absent. According to this, Faradjev proceeds to so called "ecological" approach in the three levels of creativity, which should be cared of in the rock art research:

- The direct level, corresponding to the material make of petroglyphs.
- The visual creativity, corresponding to the direct observation according to the ecological viewpoint.
- The symbolic or the generalized creativity.

Here simplified stated:

- The rock type, which tool and how it was made,
- where, how and which figure was chiseled in relation to the near and far surroundings,
- what is the meaning of the individual figure and of its group.

and completed with the remark:

*„...The topographical and the relief peculiarities are the additional parts of the chiseled visible figures, which could have had or got various meanings for the stone cutters...“*

He warns to have the biased visual impression, and can not help himself not to lean on Kants statement – probably to excuse himself - *“... generally there is not possible to resist the metaphysics...”* in the petroglyph investigation.

And investigators themselves?! Already A. Bryusov [15]– one of the leading researchers of Karelian petroglyphs– hold the lake Onega petroglyphs for the single composed figurative narration. The next - A. Linevsky [16 ] - was also convinced, that the petroglyphs compose a closed entirety, which should be possible to be interpreted. The petroglyphs are the „economy yearbook“ and the data on wedding rituals in spring. Also the „economic almanac“ – the work, which should be accomplished in the given season, is evident from the stone Roof petroglyphs, which are clearly distributed according to the firmament. The third – Laushkin [17] interpreted the petroglyph set mythical– depicted are the good and evil mythic forces and persons. Their symbols he compares and interprets very emotionally with the figures from the Finnic epic Kalevala. It is valid for all researchers – they cope with the interpretation of the individual petroglyphs and their interpretations clearly totally diverge.

The stone Roof petroglyphs cannot be explored totally separated from the entirety of the lake Onega petroglyphs. Also the assumptions on their creators, on their origin and the possible "use" should be examined in the broad context. According to Laushkin - and the general opinion of the scientists - the entire east coast part, on which the petroglyphs are to be found, is a unique solar sanctuary [17,18]:

*“... These rocks were not chosen by the ancient Onega settlers casually for their somewhat unusual creations. Here, with a view of the sunset, happened doubtless complex events, witchcraft, sun and his nocturnal twin moon worship, predecessors and totems, some secret rituals, which of astounding details we shall never learn and they were probably also not known to the all tribe members at their ancient time. We may just state general ideas them of from the ethnographic reports on the ritual procedures, which other nations in the similar circumstances performed...”*

*“... Regardless the distances between the petroglyphs of the various groups is (the whole coastal part with the petroglyphs) unconditionally the unified composition (shrine). Neither more on the south, nor more on the north, generally nowhere on the Onega lake coast is to be found something similar ...”*

*“... The petroglyphs are united in a common content, common style and the other general peculiarities . . . . The sole issue possible to discuss about is – are they older or younger, or are they central or peripheral, or are they dedicated to this or an other part of the sanctuary. Just the closeness of the water – hardly two meters from the majority of petroglyphs – and the closeness of the wood, show that they were both parts of the sanctuary. ...”*

The sunrise and the sunset are according to Laushkin explicitly the central issues in the religious rituals on the lake Onega. From the Lapp religions and myths he derives the notions on the sacrifice to sun, on the forefather and totem worships:

*“... According to all evident was the sun worship the main ritual, the hunter and the fertility rituals the secondary ones... The worship of the dead, which of traces are to be seen in Onega depictions, is also tightly connected to the sun worship...”*

In Laushkins opinion are Onega petroglyphs the clear indicators, that the natives possessed very developed cosmic faith, in which was the sun already the personified, human like, being. And the opinion of Savvateyev[19] :

*“...Alas, the trials to explain with the old tales and narratives are very seductive and dubious, the danger of the real errors is great. For the very simplified stages, especially for the single depictions of our petroglyphs, is naturally easy to find the corresponding folkloric designs. ... Though the sense and the meaning of the petroglyphs are not entirely explored, are they very important for the explanations of the prehistoric age. ... Especially are important [the petroglyphs] because in them a certain level of the development of the primeval consciousness and the culture of the northern Europe is displayed. ... They mean the decisive changes in the human consciousness and in his worldview. ...”*

It will be never possible to find the exact interpretation, explanation or meaning of individual petroglyphs in spite that their figures clearly depict a sign, animal, object or a human being. This figures can just be expected to be the reflection of the generally valid symbol interpretations, which are present in all past and modern cultures. Everybody is confronted with the same questions, problems and living conditions in spite of the individual differences in intensity, action and significance. The common subconscious and its basic symbols reflect general human living circumstances - birth and death, consciousness and cognition, adolescence, sexuality, human relations, subordination and power, hunger and surplus, eternity and brevity, love and hate, generousness and greed, forgiveness and revenge, hope and hopelessness... this side and other side - all repeating daily, seasonally, yearly and in the life, but in each case somewhat different but always somewhat similar. Naturally, this can be accounted for only in the case petroglyphs are really an art of religious expression.

But let us return to the lake Onega petroglyphs.

First – in many cases are petroglyphs not chiseled on the technically most corresponding sites. Second - petroglyphs are not always visible, named the pictures with the invisibility hut [20]. Their visibility

depends on the light fall angle and on the weather conditions, is it wet or dry. These facts prove, that the reason for the choice of the given petroglyph site was not the quality and convenient rock surface, but something else. Also the different orientation of the figures in the same group shows, that these reasons were not always the same, but the figures were chiseled obviously at different times, at various occasions. Their appearance or visibility in various circumstances influenced their current interpretation, their relation at the time of their creation as well as the later rites.

From this follows the direct connection of the petroglyphs with the sun - the sun shows and hides them - bringing them in the changing set. This set variations were interpreted according to their beliefs. Almost in all cultures, especially in the early ones, the people engaged to predict the future around the extraordinary events, or according to "mysterious magic" rules, as the divination from the liver of the scarified animals, from the position of the planets and stars, from the throw of the bones etc. It is essential, that the prophecy grounds on something, that is at least at the beginning not biased, not dependent on the human being - on the liver form, on the throw position, on the position of the planets and stars - because through these independent events act "supernatural" forces.

So was this task - more or less a statistical event – something, by the divination "supernatural", under the sun influence the supernatural agents, something creating always new relationships - in the visibility of the petroglyphs dependent on the light and weather.

The druid, the shaman or the witch doctor had the task to interpret the meaning of the individual petroglyphs and their sequence according to the questions set as a prophecy or an advice. This was besides the sun worship - if it really was - the main task of the sanctuary – the advice by the troubles and the divination, mostly for the lucky hunting.

We shall try to find out the base of the divination rules, of the sign and symbol interpretation in spite of the fact, that the proper myths will be never known.

The entire lake Onega petroglyphs, or maybe only a part of them, were "active" or were in "use" more than 1500 years [21][67]. All petroglyphs are not known and will never be – they were already partially destroyed or drowned. There are approximately more than 1000 petroglyphs in the region of Besov Nos [22]. From this follows the new petroglyphs were chiseled very seldom – on average less than one in a year. Very probably just on an exceptional event, which was very important for the tribe or its chieftains. It is improbable, that they were chiseled for the "documentation" or of some artistic tendency.

J.A. Savvateyev stated: “... *Simply expressed, [the rock art] was purposeful and directed on the urgent and real demands...*” [23].

On the first impression are the petroglyphs deliberately distributed - just thrown around. At a closer look it is soon clear they are positioned exactly on the spots, where they should be and are interconnected in an unknown way. Each petroglyph is unique - but chiseled always in a certain relation to the already existent ones. We shall try to find out also this relation - in which spatial relations are individual petroglyphs and their groups - but only on the stone Roof. Very probably are also the petroglyph groups of each site distributed according to an unknown rule. There was unfortunately not enough data known for this examination, but this changed with the excellent book of N. V. Lobanova [67], in which a very rich, precise and complete data on Onega lake petroglyphs is collected, analyzed and published, thus a future research in this direction may be enabled.

We assume, that not only the petroglyph sites, but also the petroglyphs themselves and their mutual positions correspond to the sun positions on certain dates and times. This would be the base lead for the research and the probable interpretations.

The ancient lake Onega settlers immigrated from the south after the last ice age [24, 25, \*]. The first settlers certainly did not forget their old country myths, religions and narratives. They brought them along. With the time they adapted and completed them to the new homeland. This happened also at the migration time, but it can be supposed, that the essence of the myths remained preserved.

From this follows, that with the knowledge of the original myths or world notions of primeval southern tribes, as far as they are known, may be investigated the myths of the ancient settler tribes from the lake Onega. and then on the corresponding notions concluded.

It should be remarked that the lack of the "technical civilization" doesn't mean a "primitive" culture. We consider old cultures and civilizations as Sumerian, Egyptian, and Babylonian etc as the high cultures. In the fact they were. Their spiritual world and legacy remained due to the technical means, which enabled the preservation of some of their achievements. The spiritual world and the achievements of some technically underdeveloped culture were probably equal or even higher, but they were not preserved due to the absence of the adequate technical means. The civilization in the technical sense emerges only at the certain population density. The specialization leads to professions, which doubtless promote the development of the techniques. For the necessary population density a sufficient quantity of food is needed. As an example can be used our "true" and "highly developed" world religions, which are legacy of the very under nurtured nations. So the "development stage" of the religion cannot be dependent on the nurture and on the technical development.

The lake Onega culture very probably had neither the first nor the second in excess. They probably hungered in winter. This limited their population and their "technical development". So it cannot be stated, that the petroglyphs correspond to some "primitive" religion. The complexity of their spiritual world is proven with the high abstraction degree of the symbols as well as with their abundance. Beside this - on this subject later- also the high degree of the planned composition and choice of the petroglyph sites and positions.

What myths could the old settlers bring along from the old country? In the region of Volga, their old country, there came already the agriculture age. The lake Onega settlers were the hunters and (probably) sun worshipers. In their myths were certainly still present the religious notions characteristic for the agriculture. Also their social structure belonged very probably to agricultural type. If our assumption is valid these characteristics should be from the petroglyphs evident. Closely is related also the question concerning the emergence of the religion, consciousness and culture.

So what may be concluded on the culture, consciousness or religion? On the development of the culture, consciousness and religion through the history? On this issue was spilled already a sea of ink. Simplified cited from [26], which opposes to the postulates of the analytical psychology:

*"... The fundamental question is – is in the history of culture “the proper sequence” of the consciousness development steps. Does the history lead doubtless and necessary from the matriarchal to the patriarchal, from Uroborus over the separation from the primeval parents and the fight of the hero to the changes?*

*This question may be with the high certainty denied...*

*... The cannibalism, human and animal sacrifice, worship of dead, divination – just enough to mention some most known phenomena, are present in the current primeval cultures as also in the early ancient cultures so far back as the stone age, where our history knowledge on culture ends or begins. The same have all later culture development ages, be it of a particular society or of the whole mankind, their tales of creation, which would otherwise belong only to the primeval stages ...*

*... So it is not possible to state, that a matriarchal and patriarchal consciousness follow through the history as law and rule. We have change through the history but not a development, no evolution ...*

*... To this conclusion came the majority of historians, which are or were engaged with the study of religions, as they tried to pass an evolutionary stamp on the history – the sequence of the faith let it be in souls, spirits and gods or the before faith, spirits, polytheism and then monotheism. These forms of religion is not possible to arrange in any historic form ...*

*..As far as it concerns the archetypes, our consciousness usually divides all in the opposites and equals to some “zoological facts”, for example the uroboric relationship of mother and child. Otherwise stated – there are no opposites. The nature and the spirit, the archetype vision and the reality are mixed and they are the one and the same. Just our consciousness divides that, what is the single entity...”*

So, there is no an evolution of the religions through the history – and this confirms our assumption that the lake Onega culture originates from the primeval culture of agricultural progenitors through adaptation to the new life circumstances and living conditions. It can be stated as certain, that the old lake Onega settlers preserved the essence of their myths and religion, adapting them with the time to the new circumstances. Their culture is not a new one, not an especial or singular event. It was later also adapted to the changes brought in by the later immigrants..

The subconscious archetypes, examined by the analytical psychology (Jung and Neumann), are present in each culture, consciousness and religion. They are many, the order of their importance and their symbols depend strongly on the given culture and religion. These, at least the most important, we shall try to find out in the petroglyphs.

Which archetypes do we expect to find?

In all old primeval cultures, especially in farmer cultures, is present the Great Mother [27], the primeval notion of the fertility and birth, she donates the life, nurture and the protection to her children. She may be also fatal, she may bring the death. She is mostly depicted as a full female with the excessive sexual characteristics.

The next notion, the next archetype, is the notion of the beginning and of the end, birth and death, eternity, eternal comeback, movement and renewal. Its symbol is Uroborus [28 ], which is in some cultures depicted as a snake devouring its tail, or a female being giving birth and devouring its children - the Egyptian Nut, giving birth to sun and devouring it, various incarnations of Parvati etc.

The archetype of death, its symbol, and notion is always present, but its depiction is very dependent on the given culture and has no general form. Also in all cultures and religions there are present the birth, initiation, wedding rites - as well as their archetypal notions and symbols.

In search of archetype symbols and their interpretation, is to be taken in account that they are always connected to the basic opposing notions in the consciousness. Good and evil, life and death, male and female, day and night, light and darkness, summer and winter – they are also present in all myths and religions. From the sameness of the archetype depiction and the archetype itself, in our case the corresponding petroglyph as the symbol, follows, that the petroglyph will be exactly the symbol of the depicted content. Naturally, with some limitation – some very general notions can be depicted just with the real case– with „zoological facts”, or better with the picture of the real repeating event, which gets in this way the symbolic character. This viewpoint connected with the teachings on the subconscious archetypes is the only way to interpret the archetypes.

## **Geographical position**

*... Either southerly, or northerly, generally nowhere on the lake Onega coast there is something similar to be found...*

K.D. Laushkin [29]

Why did the ancient settlers choose exactly this Onega lake coast for their sanctuary? Except the petroglyphs on the river Vyg, at the White Sea, are in Karelia plenty of smaller lakes as also the Europe’s largest lake – the lake Ladoga, with plenty of appropriate rock sites, suitable to chisel the petroglyphs, but there is nothing to be found. The researchers consider the seclusion of this eastern coastal part for the most suitable reason for colonization compared to the White Sea or the lake Ladoga. Besides the seclusion and so greater possible protection against other human groups, offer the lake as

well as its surroundings comparatively sufficient amount of nurture. The coast consists mostly of the plain smoothly ground granite rocks and the solitary sand banks in between. The forest reaches actually to the coast – all is very suitable for the hunt and the fishing, as well as defense. East of the lake there are the reindeer and elk migration paths and other wild to be found.

As already mentioned, for the researchers is undisputed, that the old settlers worshiped the sun. Therefore the reasons for the location of the sanctuary should be looked for also in their religion, in their relationship to the sun. It should be noted here, that for the old lake Onega settlers the sun was of real importance, but we have nowhere clear evidence that they worshiped the sun as a deity. No doubt, the sun was the central notion of their everyday life, what doesn't mean that they in the fact worshiped the sun. We also, nowadays, live – perhaps not so obviously – in the rhythm defined by sun, but we do not worship it. For the sun worshipers they were proclaimed mostly by Laushkin with the Kalevala based interpretation of the petroglyphs.

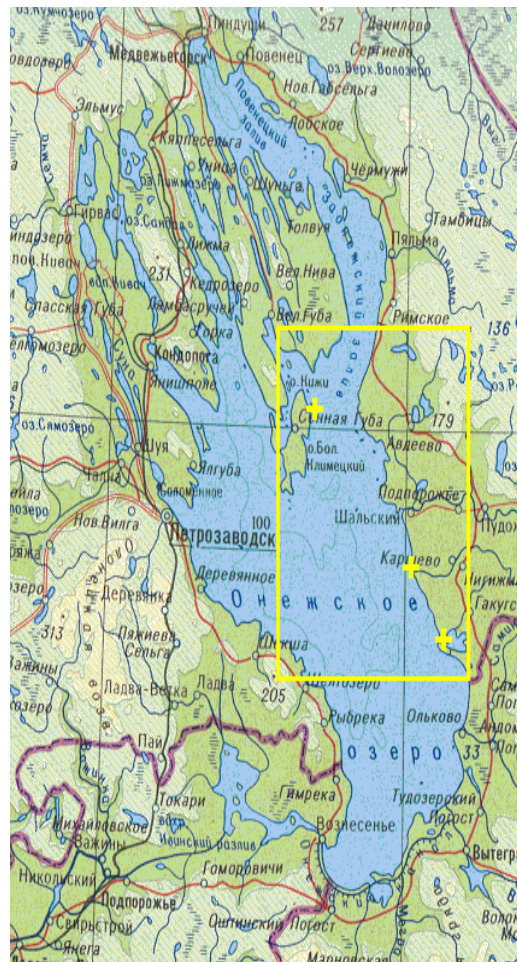


Fig. 5

The map of the lake Onega [30]. On the northeast is the gulf Zaoneshky zaliv. This goes over to the northwest in the gulf Povenetsky zaliv, reaching to the city of Medvezhegorsk. The north cross is the site of the island Olenyi ostrov (Deer island), the middle one the cap Besov Nos (Devils cap), the south cross the Muromsky monastir (Muromsky monastery) at the lake Muromsky. The framed area is enlarged in the next fig. 6.

The lake Onega has an exceptional geographic location (pic. 5, [30]). It is to be found close under the north polar circle, where the sun in the white nights just shortly sets and in the dark winter days just shortly rises over the horizon.

For Besov Nos, to be found on  $36.05^{\circ}$  E,  $61.6667^{\circ}$  N , in Julian year -4000, gives the simplified calculation [31]

Summer solstice 27./28. 7. -4000, maximum sun height  $52^{\circ} 26'$ ,  
Day duration 19h 59m,  
Day angle  $299.55^{\circ}$ ,

Winter solstice 21. 1. -4000, maximum sun height  $4^{\circ} 13'$ ,  
Day duration 4h 58m,  
Day angle  $74.5^{\circ}$

Equinoctial 21./23. 4. -4000, maximum sun height  $26^{\circ} 41'$ ,  $27^{\circ} 14'$ ,  $27^{\circ} 37'$

It has to be mentioned, that the angle between the directions of the sunrise and the sunset at the winter solstice happens to be close to  $60^{\circ}$ .



For us it is interesting the framed area from pic. 5, especially the east coast. The cap Besov Nos is to be found over the lower edge of the framed area, with the crosses are marked the locations of the Olenyi

island in the north and the Muromsky monastery in the south. In the pic. 6 is given satellite photography of the framed area [32].

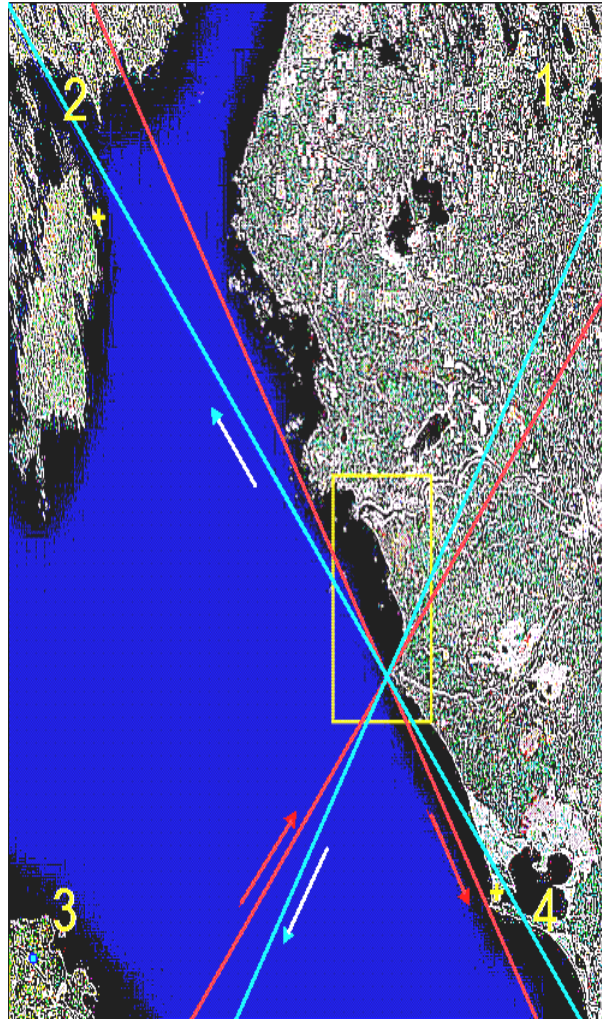


Fig. 6

The satellite photograph [32] of the Onega Lake framed area in the fig. 5. Framed is the area of the petroglyph sites on the east coast, the north cross marks the island Olenyi, the site of the largest Neolithic burial ground in Europe. The south cross marks the position of the Muromsky monastery. All explorers agree the petroglyphs and the coastal part of their sites – length appr. 20 km – for the single unique solar sanctuary. This in spite the fact, that the petroglyphs were not “at the same time” chiseled and were not always “in use”.

Given are the directions of the sunrises (red) and the sunsets (blue) at the solstices as they are seen from the cap Besov Nos - the arrows direct to the sun, clockwise in the quadrant:

1. Sunset in winter, sunrise in summer
2. Sunset in summer (direction Olenyi island), sunrise in winter (direction Muromsky monastery)
3. Sunset in winter, sunrise in summer
4. Sunset in summer, sunrise in winter

This part of the east coast is oriented mostly in the north-south direction, the caps from east to west as shown in the satellite photography pic. 7, which is the framed area from pic. 6.



Fig. 7

The satellite photograph [32] of the lake Onega east coast part – the framed area in the fig. 6, where are located (almost) all Onega Lake petroglyphs. The area reaches from the estuary of the river Vodla in the north (top) to the Guryi islands in the south. The three caps are Pery Nos, Besov Nos, and the Kladovets Nos, by the estuary of the river Chornaya. Compare to the previous and the next figures.

This fact surely did not remain unknown to the sun worshipers and was probably the primary reason for the sanctuary location. Such coast could be considered as holy, as mystic, as the place where dwell and was formed by the supernatural forces bound to sun. The orientation of the coast as well as the caps was probably the base propriety related to sun at midday, at equinoctial and the solstices. The later announced the season change and were therefore of the essential importance for the determination of the migrating wild hunting season, to replenish or to use the stores, to prepare the dwellings for winter and for the foretelling the incoming spring times.

Everywhere, where the people depended on the precision of the prediction the sunrises and the sunsets were attentively observed. The sunrise and the sunset directions were precisely marked in relation to some remarkable location. For this purpose is in the plain European areas – mostly in Lausitz, in Poland, Bohemia and Slovakia - from this and later ages, known the henges [33], the most known the Stonehenge in England. In the mountain areas was for this purpose suitable the mountain relief as for example in the Schwyz valley, where the name of the locality originate from this propriety [34]. Also the lake Onega shamans attentively observed the shift of the sunrises and sunsets with the time. The task of the round henges or of the mountain relief was taken over by the shape of the coast, and the petroglyphs were chiseled on the observation locations.

From north to south, the following petroglyph sites are to be found [35, 36]:

cap Lebyazhi (Swan),  
river Vodla estuary - Kochkovo,  
island Golets,  
cap Karetsky Nos,  
cap Peri Nos,  
cap Besov Nos,  
cap Kladovets,  
cap Gazhi Nos,  
islands Guryi.

In the satellite photography pic. 6 are given the directions of the sunrises and sunsets at the solstice as seen from the cap Besov Nos. The locations of the monastery Muromsky as well as the island Olenyi for the graveyard are not casually but they were chosen according to named directions.

The island Olenyi is in the direction of the sunset at the summer solstice, the direction to monastery Muromsky is the direction of the sunrise at winter solstice. The choice of the island Olenyi for the graveyard is religious – in this direction sets the sun at the height of its power, which starts then to fade, it is the direction of languish and death. The excavations showed that the deceased were buried mostly with the head eastwards and the legs westwards. Some had at the feet semicircular distributed stones – as their firing places had – and they were coated with the layer of the red ochre [37] (Ravdonikas and Gurina [17]). According to Ravdonikas and in Laushkin [38] should be stated, that they were actually buried with the face and the legs westwards and not with the head eastwards – what would be religiously correct – naturally by the same actual position of the skeleton.

Similar was the location of the monastery Muromsky bound to winter solstice – in that direction is the rebirth of the weak sun, which then gains on power and banishes the winter. The idea, that the location of the monastery Muromsky had an especial meaning in pre Christian folk tradition, naturally bounded to petroglyphs, cannot be avoided. Its importance was very probably the reason, that the monks just there built the monastery. Also in other places the churches and the monasteries were built on the old pagan rite locations. The answer is very probably to be found under the monastery basement.

In pic. 8 are marked up to date known petroglyph sites. In pic. 9 are given the directions of the sunrise and sunset at solstices as seen from the petroglyph sites. Obviously were the locations in no case arbitrary but intentionally and carefully selected. The petroglyph sites are really the part of their natural surroundings confirming the use of the “ecologic” access in their research.

The directions are approximate – by the long northern sunrises and sunsets it is understandable, because the sun moving tilt is very small relative to the horizon and the uncertainties unimportant.

In any case it is from the picture pic. 9 clearly evident why was this coast selected for the sanctuary. Almost all caps, islands and the coastal line are positioned relative to each other according to the firmament and the directions of the sunrises and sunsets at the solstices. On the locations, where was

this relation especially distinctive the petroglyphs were chiseled, which had therefore a certain meaning and purpose. On the locations, where no petroglyphs were found, it can be expected, that they were destroyed or not yet discovered.

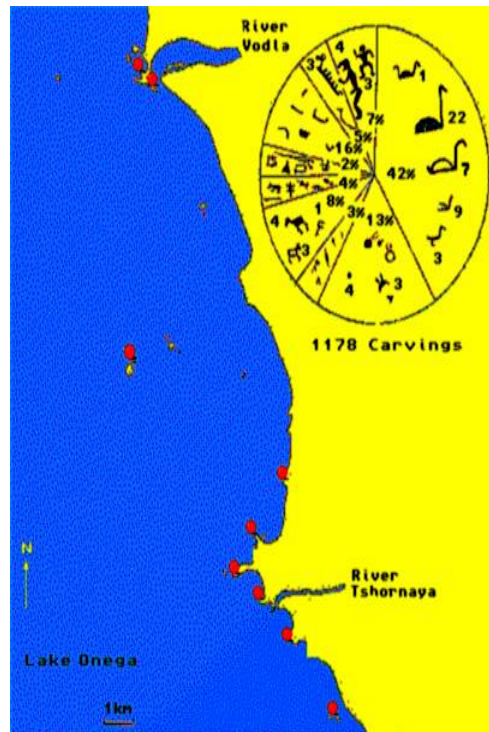


Fig. 8

The petroglyph sites (according to Poikalainen [22]).  
In the circle is depicted the statistics of the petroglyph figures - the majority are birds.  
At the time there are known 1178 figures.



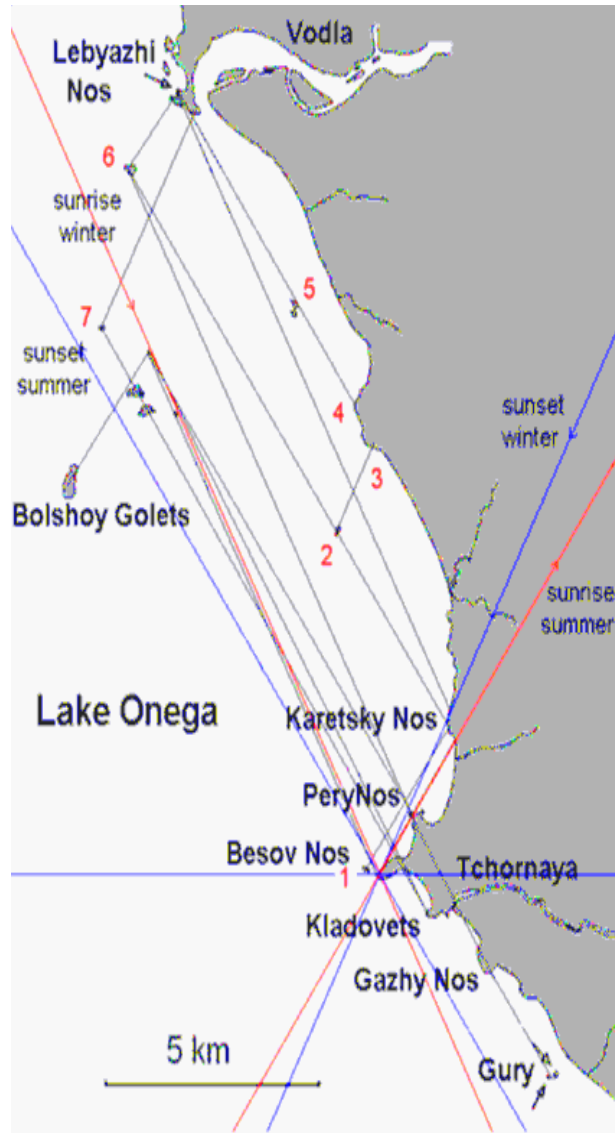


Fig. 9

The directions of the sunrises and the sunsets at the solstices and the petroglyph sites.

Numbered are the positions, which were used for the selection of the petroglyph site, but they are without the petroglyphs.

Perhaps were the petroglyphs also there, but they were destroyed through the time or are simply not yet discovered.

1 the island Bes, later (probably) renamed in Besika, now Porsheny - sunrise in summer towards cap Karetsky Nos 2 sunset in summer from the cap Karetsky Nos, 3 sunset in winter towards the site 2, 4 sunset in summer towards the islands 5 and the cap Lebyazhi Nos, 6 sunrise in summer towards Lebyazhi Nos, sunset in summer from the cap Karetsky Nos, sunrise in winter from the cap Pery Nos, 7 sunset in summer from the cap Kladovets and the small Goleshky islands, from the other site on the cap Besov Nos and the small Goleshky island. Besov Nos – Pery Nos the sunrise in summer, Karetsky Nos – Besov Nos the sunset in winter, Guryi islands – Gazhy Nos – Pery Nos the sunset in summer, the big island Golets – the small island Golets the sunrise in summer, Besov Nos – the small Goleshky islands the sunrise in winter and the sunset in summer, Pery Nos – the small Goleshky islands the sunset in summer.

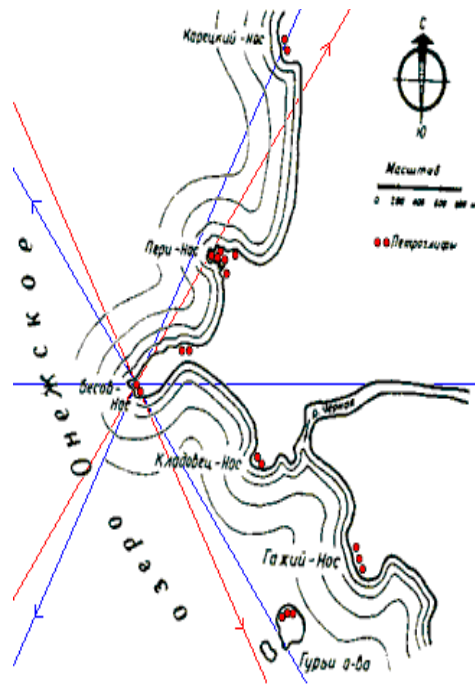


Fig. 10

The five caps (after Laushkyn [17]). Interesting is their symmetric position in the relation to cap Besov Nos. The petroglyph sites are marked with circles. The position of the Guryi islands is wrong; they are situated a little bit more south. The directions of the sunrises and sunsets at solstices and the east-west direction are given as seen from the cap Besov Nos. The petroglyph groups were mutually distributed very possibly according to a certain rule, which cannot be determined without the knowledge of the precise group positions.

The locations in the immediate neighborhood of Besov Nos are evident from pic. 10 [39]. Very probably were they also selected according to an unknown rule, which cannot at the moment be defined with the to author known data. It is evident that the petroglyphs were according to the given directions chiseled in. This geographic peculiarity – this coast and such especial mutual position of the caps and islands were surely the reason to choose this landscape for the solar sanctuary.



## The trias - trinity

Before we turn the attention to the stone Roof, we shall consider the most known lake Onega petroglyphs.

The trinity (in original publications named trias) from cap Besov Nos keep the researchers for the most primeval, the most ancient petroglyphs group (pic. 11). It consists of the apparition or “evil spirit” (named demon, in folk tradition Besika – the she devil) - the human like figure chiseled over the already present rock cracks, then the next petroglyph interpreted as the figure of an otter and the third petroglyph, obviously depicting the sheat-fish (pic. 12, [40]). Others, in-between chiseled petroglyphs are later made, their distribution depends on the primeval ones.



Fig. 11

The petroglyph named Besika (she-devil) – “the evil spirit or demon” – in the petroglyph trias on the cap Besov Nos at the sunset [1, 2, 3, 4, 8].

This primeval petroglyphs are the best reflection of the early ancient settler myths and believing. They had to preserve the myths and the believing, which was brought by the first settlers from their primary homeland, but already intermingled with the influence of the new homeland. Without the adequate interpretation of this trinity there is possibly not a great sense to interpret the remaining petroglyphs. In the „evil spirit“ of the trinity, the depiction of the Great Mother is to be recognized. It is interesting, that this trinity was in the middle ages by the locals – already christened and under the monk influence – related to the devil and she – devil, his wife. Interesting is, that the figure of this “evil spirit” clearly relates to the female gender. Namely, the expression for devil is rather common and doesn’t have primary a gender character, but is mostly male, it is actually arbitrary in this sense. The same is valid for fairy, which is female, but doesn’t have any especial sexual meaning. So gets the expression she-devil Besika an accentuated sexual meaning. The she-devil is married to the devil – and from this connection the offspring is to be expected.

In this way had the petroglyph trinity probably still in the middle ages “seduced” the locals to the pagan fertility rites. It is understandable that the monks tried to expel this “satanic forces” with the cross chiseled partially over the Besika. It is also interesting that Besika is the sole petroglyph, which was considered to be so dangerous to be “dis powered” by cross. They were exceptionally well successful – even all the researchers mark Besika as “besika – the she-devil”, the “demon” or the “evil spirit”, what was the petroglyph surely not for its creators.

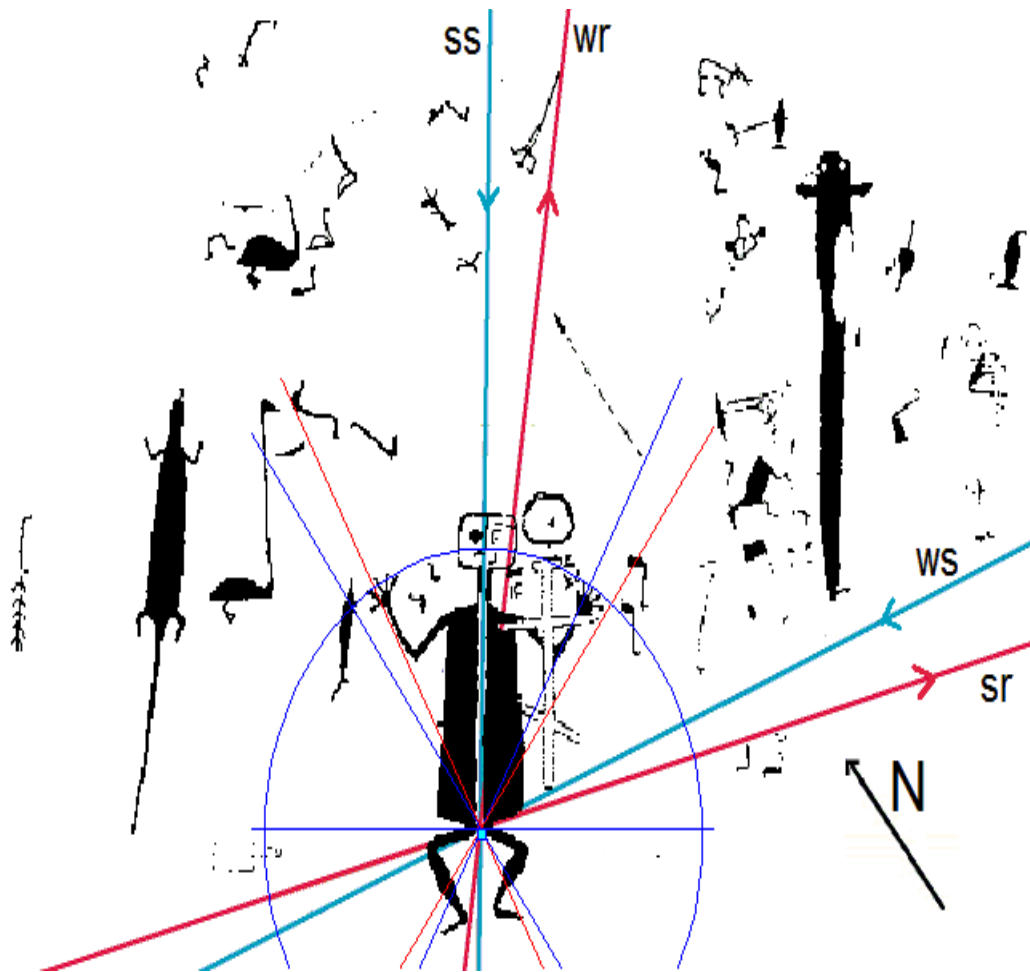


Fig. 12

The triple (trias) [6, 7, 8, 17, 18, 25] on the cap Besov Nos – the westernmost cap. The researchers consider the central figure for the symbol of the female evil spirit - corresponding to the dark side of the Great Mother. In the folk tale has the figure the name Besika – She-devil – named clearly under the Christian influence. The figure should be the personified vulva (for the symbol of vulva was held also by Ravdonikas and Laushkyn, at the time also Stolyar) and the researchers appoint it the role of the dark entrance in the underworld, as it is chiseled along the straight rock crack (considered by others as the esophagus of the figure). Its mouth is situated at the bifurcation of the crack. Very probably was the direction and the bifurcation of the crack, as well as the smooth rock surface the reasons for the ritual meaning of this site. The figure sole is greater than two meters. Lashkyn considers the whole rock for "the coast of the dead", the starting point of the boats with the dead to the burial island Oleyni. The cap Pery Nos should be then "the coast of the living". Here should the old settlers perform sacrifice rites.

The north direction is very possible as marked [67]. The crack, as the figure, are oriented in the direction of the sunset at summer solstice (ss). This fact would explain the interpretation of the figure as the symbol of something evil and the dark entrance in the underworld . It is not by accident that the underarms of the figure have the same mutual angle as the mutual directions (rotated for appr. +38.30°) of the sunrise (wr) and sunset (ws) at the winter solstice and that the central point is located on the position of the sexual organs. The symmetry is evident from the circle centered on this spot. The figure has one eye open and the other closed - very probably the symbols of the day and the night, the summer and the winter...

The three big figures are the primeval petroglyphs; other figures - much smaller - were chiseled in later, what is evident from their distribution.

The monks from Muromsky monastery to destroy the power of the evil spirit chiseled the orthodox cross in.

The Great Mother, the petroglyph figure, should be the symbol of the personified vulva – as the symbol of fertility. This idea as vulva is kept also by some other researchers [41], but not as the symbol of fertility, yet the precipice for the souls of the dead, the entrance in the bowels of the underworld deity. The rock crack, situated towards sunset at summer solstice, its bifurcation at the mouth of the figure, should be correspondingly interpreted by the old settlers and worshiped.

The other big petroglyphs, the otter and the sheat-fish, should be the symbols of the local spirits, which govern the nutrition resources from the lake – according to some researchers. This can be naturally accepted, but with the slight reinterpretation. The worshipers of the Great Mother stopped to be farmers and so they couldn't celebrate her agricultural festivities. Their basic source of their nutrition became the hunting and the fishing. These both aspects they unified in the trias – the rites to worship, buy off, calm and satisfy the Great Mother along with the worship of their “new” nutrition masters. So they kept the “fertility blessing” and the “hunters luck”.

The head of the Great Mother figure very probably depicts the opposition of the day and night, of the summer and winter etc. The closed or the blind eye is on the west, the open eye on the east side (pic. 12). The prolonged forearms of the figure cross on the spot where are the sexual organs to be expected. These direction build with the crack – which is the symmetric of the figure – on both sides the angle of ca 30 degrees. The angle between the directions of the sunrise and sunset at the winter solstice, 4000 years b.C., on the cap Besov Nos, was ca 60 degrees. The same angle builds the legs. The angle of sunrise and the sunset directions is the same as between the directions of the nose and the elbows. It is very possible that there was a certain connection or relation between the Great Mother and the sun. The left arm points to the sheat-fish, which is by many researchers held for the masculine symbol of the group due to its prolonged form. According to researchers, the smaller petroglyphs in trias were later chiseled, what is evident from their distribution. For them we do not have at the time any interpretation. So contains and hides the trias the legacy myths from the old settler primary homeland earlier [\*] than the fourth millennium before our era – very probably the offspring of a farmer society from the big Russian steppe.



## The stone Roof

*... and on the stone roof is everything especial: the workout, style, contents as well as the high...*  
( Savvateyev [42])

In the following, we shall examine the petroglyphs from Peri Nos III – the third petroglyph group, the famous stone Roof from the lake Onega.

The stone Roof was broken out from its rock base and is at the time exhibited in the St. Petersburg's Hermitage. As the fact there is only a part of the Roof – partially it was damaged by the explosive removal, and a part remained on the spot (pic. 4) [67].

As already mentioned got the rock its name due to its form. The angle between the both wings is approximately 163 degrees and is not constant due to the slight obliquity. The roof apex runs in the direction –naturally corresponding to the original site – from north – northwest to the south – southeast, and is not sharp.

These properties were sufficiently important to the old settlers to be selected as an altar, as the middle point of their rites –as it seems to be from the present viewpoint and knowledge.

The sun naturally at first lighted the east wing of the stone Roof, the west wing later, and this probably step wise, due to the obliquity. At the evenings, in summer, was the west wing again only partially lighted, the east wing was naturally totally in shadow. So was the light-shadow transition dependent on the daytime as well as on the season. It was thus with the markings the clock and the calendar in entirety.



Fig. 13

The stone Roof on its original site on the lake coast (Ravdonikas, [43]). It is evident, that in the Sankt Peterburgs Hermitage only the greater part of the Roof is exhibited. The view is approximately to the west. The quality of the picture does not enable to determine the exact geometric data as for example the inclination to the west. The same picture of higher quality is given in [67].



Luckily, were the petroglyphs of the stone Roof already before the break out copied – and luckily remained the photography of the Roof on its original place. Unluckily is the quality of the published photograph (pic. 13, [43]) of the stone Roof on the original place not enough sharp to determine exactly the angle of the roof wings to the horizon. Therefore, it is not possible to determine the path of the light-shadow border in the day and year. In addition, the path of the pole shadows – the poles were probably placed on the characteristic points of the figures – is not possible exactly to determine. The afternoon sun was more “important” for their rites. The sun visibility was better than before the noon. There were no the changing tree tops as they were on the east. This is evident from the petroglyphs themselves – some show clearly that they suited the sight towards the sun and not from the sun as it would be the case of pole shadow.

Later will be shown, that the inclination and the obliquity of the Roof is not necessarily of the prime importance and they can be neglected. More important as the projection on the horizontal plane are the geometric relations on the surface of the Roof – on the geodetic surface.

There is slight difference in the firmament directions, what is negligible considering the actually possible precision. So it is possible to use the primeval graphic copy of the Roof petroglyphs and of its surroundings (pic. 14), made already by Linevsky [44]. This is actually the sole copy, which shows all there at that time existent petroglyphs.



Fig. 14

The petroglyphs from the stone Roof and its surroundings as copied from the rock by Linevsky [44]. The arrow marks the north direction, the size is evident from the centimeter scale. This petroglyph copy is the base of all following examinations.

We shall mention, that already at the time of Linevsky was the Roof not more complete. From the photography (pic. 13) is evident, that it is cut by the broad cracks. From the relationship between the figures can be concluded, that on the places corresponding to the empty space on the copy there were probably forever forlorn figures.

Moreover, how was it in the winter? The Roof was at least hidden by the fresh snow. On other situations, we can make only guess. If the snow was dry and the wind strong – everybody who was in such places knows how this wind cuts and does not leave the snow on the exposed surfaces – then was the Roof visible, in the relief of some figures probably remained the snow and has made them even more visible. Naturally, the wave drizzle, the ice, and frozen snow need not be forgotten. Perhaps had the old settlers covered and cleaned the Roof – at least it was their sanctuary. Perhaps was the Roof always covered and exposed only occasionally, if used.

Let us put the guess aside and examine the reliable facts. What can be said considering the figures in general?

It is characteristic that the figures of the reindeer and the elks are very distinctive – they are unmistakably marked by the heads and legs. Shear opposite are the human and the human like figures. They are very simplified but identifiable. This means, that the man himself does not have a significant position in the scene shown, but just his deeds are of importance. Some birds can be identified immediately and some are very unclear. It may be the similarity of the birds, which shadows the clear sight, what can be distinguished just by the real expert. Some figures or signs are very mysterious – naturally just for us, but we can suppose that they were wholly clear and chiseled for the ancient settlers.

Naturally, it has to be taken in account that between the makings of various figures probably the centuries passed – so the witch doctors with already changed symbol notions probably chiseled them in. In any case is valid the proposition, that each petroglyph, each figure, depicts the essence of the subject to be shown. They can be compared to the child drawings – in them is present only the essence of the subject, which is comprehended and considered important by the child. The petroglyphs are the expression of the much more developed and grown up spirit, therefore is this clearly the only parallel, which can be made. The sole art of the chiseling, the tools and the base material allowed the creators just the “minimalist” expression, which is characteristic for the child drawing.

Looking on the petroglyphs of the stone Roof, we cannot avoid the question – why, for which purpose, at which occasion, why just here, in this size and in these directions – were they chiseled?

For the partial answers on this question, we shall examine the spatial relations and the positions of the single petroglyphs, their compositions and groups. This fact is the most real fact to cling on – it is the geometry of the petroglyphs. As in the geometry, there is a point – here we have some characteristic point, center of the figure or of its part, then the distance between the points, the line that determines the direction and the angles between directions. Already was mentioned the impression, that the petroglyphs are not arbitrarily distributed, but they are on the spots where they should be. This means that there were certain rules, according to which they were chiseled in – for their location, size, and the orientation on already present ones. The primeval have to be positioned in relation to the sun as the sun should have been central in their rites.

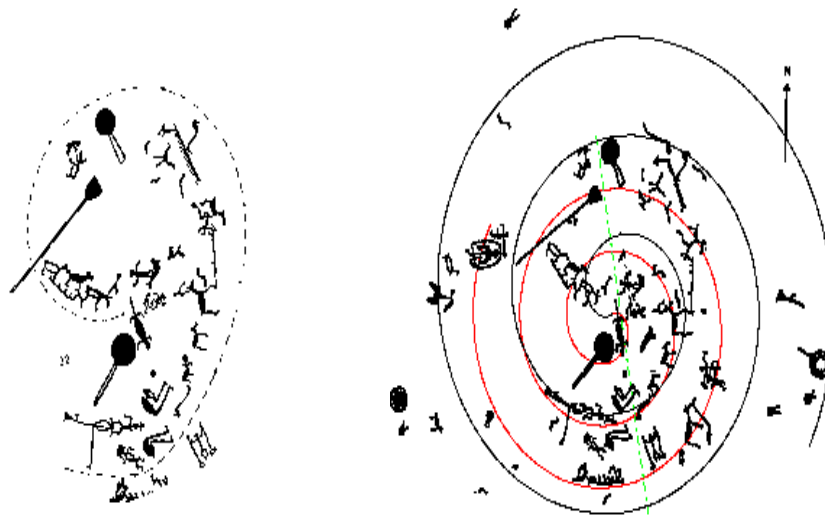


Fig. 15

The north polar light and the assumed spiral distribution of the petroglyphs depicted on the stone Roof. Sure, the north polar light has made also the big impression on the old Onega settlers. The spiral distribution of the petroglyphs could reflect the frequent spiral appearance of the polar light.

The distribution according to Savvateyev [8] is shown on the left. For the comparison on the right with two Archimedes spirals.

The stone labyrinths have the spiral form [61] in Karelia, but in our case is the similarity more accidental than aimed.

As with the trias, the researchers consider the largest petroglyphs as the oldest ones. Later were created step wise the other ones. It is clearly evident the spiral distribution of the single figures (pic. 15), especially noted by researchers. For this could be the model the “aurora borealis”, the northern lights, because of their frequently spiral forms and which had made surely a very strong impression on the observer. Unluckily, on the influence of the northern lights in the myths on the lake Onega can be just speculated. The northern lights very probably inspired the creators of the spiral stone labyrinths in Karelia. They are intentionally spirally constructed, what for the petroglyphs of the stone Roof can not be confirmed. From pic. 15 is evident, that the spiral distribution more casually emerged in opposition to the planned one – the difference to the real spirals is to large.

## The petroglyphs from the stone Roof

The explanations and the interpretations of the petroglyphs, of the single figures and their groups were extensively up until now described by Savvateyev [6]. None of these explanations and interpretations was generally acknowledged or accepted. The statistics of figures [22] is real, but doesn't give beside this any trustworthy explanation, the interpretations of the single figures depends to much on the sole imagination of the examiner.

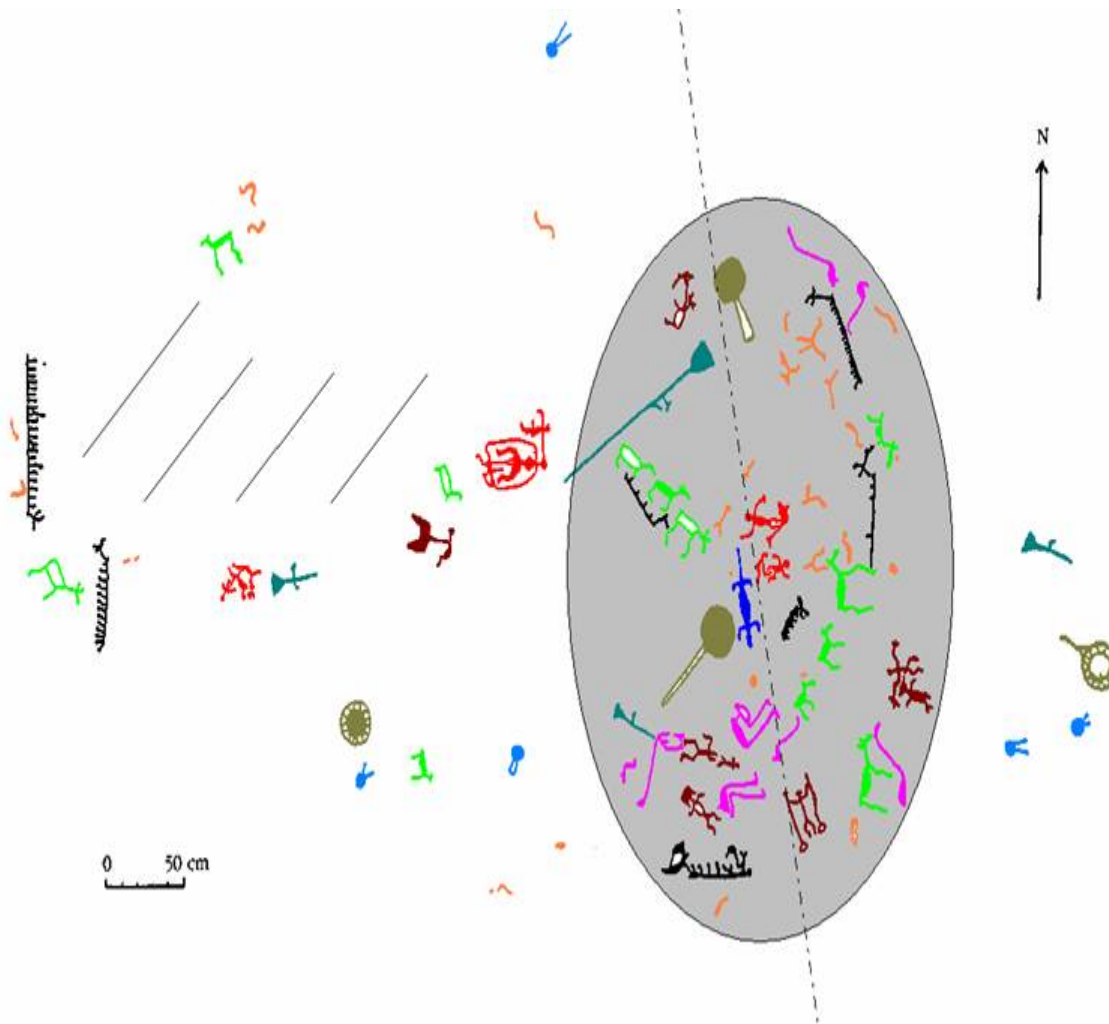


Fig. 16

The petroglyphs from the stone Roof – the groups are colored or shadowed. The shadowed area marks the petroglyphs of the Roof part in the Hermitage, the dashed area is the probable site of the petroglyphs already destroyed through the millennia - there was the rock strongly damaged as seen on the photograph from 1934 (fig. 13). The roof ridge is marked by the dashed line.



Let us examine the groups of the similar figures, the petroglyphs of the similar contents. In the pic. 16 are this figures – reindeer, elks, boats, birds, signs etc. They are very probably the symbols of the similar notions and they have probably the similar task – naturally always in some other sense or on some other occasion. The points, which are considered as the main points of the petroglyphs - as for example is the center of the figure, its head or belly, or some other part deserving an especial attention – will be determined. From this main or characteristic points will be compared the directions, their mutual distances, the angles of directions to the other points – all that may connect meaningful various figures and pictures. These connections should show the relation to the sun position, so also to the date and possibly the sequence of figures. The figures which will emerge as the main figures will be interpreted with the subconscious archetypes. Naturally it will be never possible to discover the possible corresponding “tale”.

The single petroglyphs, the single figures, oriented and of the mutual size as in the original are compared in (pic. 17.1-12). They are not in the proper mutual distance, what is not important for this examination, as also not the comparison with the adjoining figures. For the late is mutual distance essential. In all figures is the north above. We shall give them for the better understanding and reference already now their names, which shall be justified later.



Fig. 17 /1-12

The petroglyphs from the stone Roof ordered according to the approximately similar contents.

17.1 These signs were described as the fish or the sun signs. We consider them as the auxiliary points for the determination of the directions and the distances in the whole group of the petroglyphs. The most important directions let be shown with the “tails”, the cross connection of them the eventual changes through the times. All signs are of the same order of magnitude.

17.2 These two petroglyphs are considered primeval. We interpret them as the main locations with the direction and distance data. The directions are again given with the “tails”, the cross connection is again interpreted as the change through the time. Very probably is also the length of the “tail” important. Later, it will be shown that this follows from the relationship to other figures, but their exact task is up to now not possible to determine. Also these two are of the same order of magnitude.

17.3 The sun signs, for us the main locations of the whole group. The upper sign, the hollow is on the east, the lower in the west of the group and they are the symbols of the sunrise and the sunset. The “tail” determines very probably some unknown important direction and distance. The signs are of the same order of magnitude and they belong to the primeval petroglyphs.

17.4 The signs, considered being spears, by some to be poles or the scepters of the druids. According to the funds from the graves of the island Olenyi they can be really interpreted as poles or scepters. The elk head, cut from the bone (pic. 3), was probably the side grip on the scepter, as it shown with the sidestroke in the petroglyph. We consider them as the data on the important directions and distances. Their main points are marked with the elk's head, with the triangle and with the tip. The three signs of them are of the same order of magnitude, the fourth is trice larger as the rest. This one is considered the primeval. For the sake of simplicity we shall keep the name scepter.

17.5 The boats and if they really are, are they the log-canoes. Characteristics are their orientations, mainly directed north south, and the improbable number of the rowers – except by one – but various from boat to boat. The front is clearly shown by the elk's head. Interesting is the mutual distance of the adjoining rowers – by the two boats oriented north south they diminish towards the stern, by the third one they extremely augment. The tilted ones have quite different density, but the rowers are evenly distributed. The last two are unclear. The rowers – even if they are seated – are not comparable to the magnitude of the other figures. Some researcher consider them as the symbols of the deceased souls transport to the island of the dead – the island Olenyi [45]. We consider the as the measuring scales – but more about later.

17.6 These „erotic“ figures – the sexual intercourse and the birth (father, mother and the child) – is very probably the symbol of life and creation. The figure of the artificial defloration is very probably the symbol of the transition to the mature female age, the on the fish or swan dancing human figure should depict the pregnant woman. The figures are of the same order of magnitude, but they are all as the previous ones, variously oriented. The petroglyph composed from three humanlike figures was very differently interpreted by the researchers – from the artificial insemination to the murder and human trap. We consider, that the figure in reality depicts the full-breasted female, which just gave birth, the birth connection is still not cut, and the afterbirth not excreted. She holds in the arms the child and helps herself by the birth. The prolonged arm of the third humanlike figure reaches to her head. We interpret it as the newborn child, who tries to escape from the mother, which holds it with the mouth – what can be interpreted as the mother's intention to swallow it. It is actually the symbol of the beginning and the end, of the birth and death, all in one composition. This petroglyph we consider as the central petroglyph of the whole stone Roof set. Its principal points are the children, the breasts, and the head of the mother. The figure is somewhat larger as the other “erotic” figures.

17.7 Sole two depictions of the hunt – above: the hunter stabs with the spear the elk in the neck, down: the armed man – one of two clearly distinguishable male figures in the whole stone Roof complex – is after a fight with the wolf or the bear, already vanquished, probably laying dead. We interpret this petroglyph as the death symbol. The hunt is giving the life – the nurture with the death of the prey. In the second symbol is the hunter himself dead. The main points are the bodies of the hunters, the animals and the weapons. The hunters are not of the comparable same size.

17.8 The human and the humanlike shapes:

- dancer with moon (?) sign,
- figure with mask,

- figure with totem poles (?), rods or scepters, very probably the symbol of a shaman
- froglike figures – as interpreted by the researchers.

The figures are of the same comparable size and of the same order of magnitude as the previous ones. They are fully differently oriented; their gender is not distinguishable.

17.9 The otter (?), the swift hunter on the beach as well as in water. The connection with the trias is possible; it is also the centrally located figure parallel to the peak of the Roof. The position of the legs corresponds rather to a reptile or an amphibian than to an otter. Very probably is a depiction of a salamander – its two colors may be the symbols of the day and the night - the duality, as it is also with the peak of the roof, which separates the east from the west wing, the light from the shadow. The salamanders could survive in these geographic locations – they survive in the alpine heights . The body is very large compared to humanlike figures, what promotes the interpretation as otter, but the exceptionalism isolates the figure from the rest.

17.10 The elks and the reindeer. The change from the summer to the winter fur is probably depicted with the totally chiseled out versus the sole contour figure. Probably is this also the difference in the figure of elk and reindeer. The herds are oriented to the southeast and northeast, the animals are all female, one is pregnant, one has already young. The smallest elk of the northeastern herd carries a round sign on the head. The solitary animals have each its individual orientation. The bodies are size comparable and correspond to the order of magnitude of the human figures.

17.11 Large, clearly depicted bird figures – heron, diver with young, a couple of swans (?) etc. Their bodies are bigger than the size corresponding to the human like figures - except taking in account the probable smaller average human size as nowadays at that time in Europe. Each figure has an individual orientation.

17.12 Other smaller figures cannot be sufficiently explained. They may be sea gulls or some other flying birds. Some look like castaway deer horns or are just the helper figures for an unknown relation in the whole petroglyph complex. Some researchers interpret the birds as the dead soul carriers, liberated by the death [45].



## The relationships between stone Roof petroglyphs

We found out, that the ancient lake Onega settlers selected the above mentioned coast part due to its geographic peculiarities and locations, which in this or other way correspond to the local sunrises and sunsets by the solstice. This fact was interpreted as the influence of the supernatural forces, this part of the coast had to be consecrated and connected to the sun in some divine manner.

Our conjecture is, that the locations of the single petroglyphs are also interconnected in relation to the sun in a similar way.



The orientation of the single petroglyphs will be compared to the firmament – to the equinoctial, with the directions of the sunrises and sunsets at the solstices. A very complex depiction is expected due to the apparent disorder in the petroglyph distribution and orientations. The reader should not be bothered by this fact. It is not the intention of this writing to follow each in the figures shown direction, from every main point in every interesting angle. The aim is to show the complexity of the relations and to found out the base rules of the petroglyph distribution and relations. The interested reader may on his own follow or verify the relations shown or even find out the overlooked ones. The significance of the sunrise and sunset directions is immediately evident from the picture pic. 18.



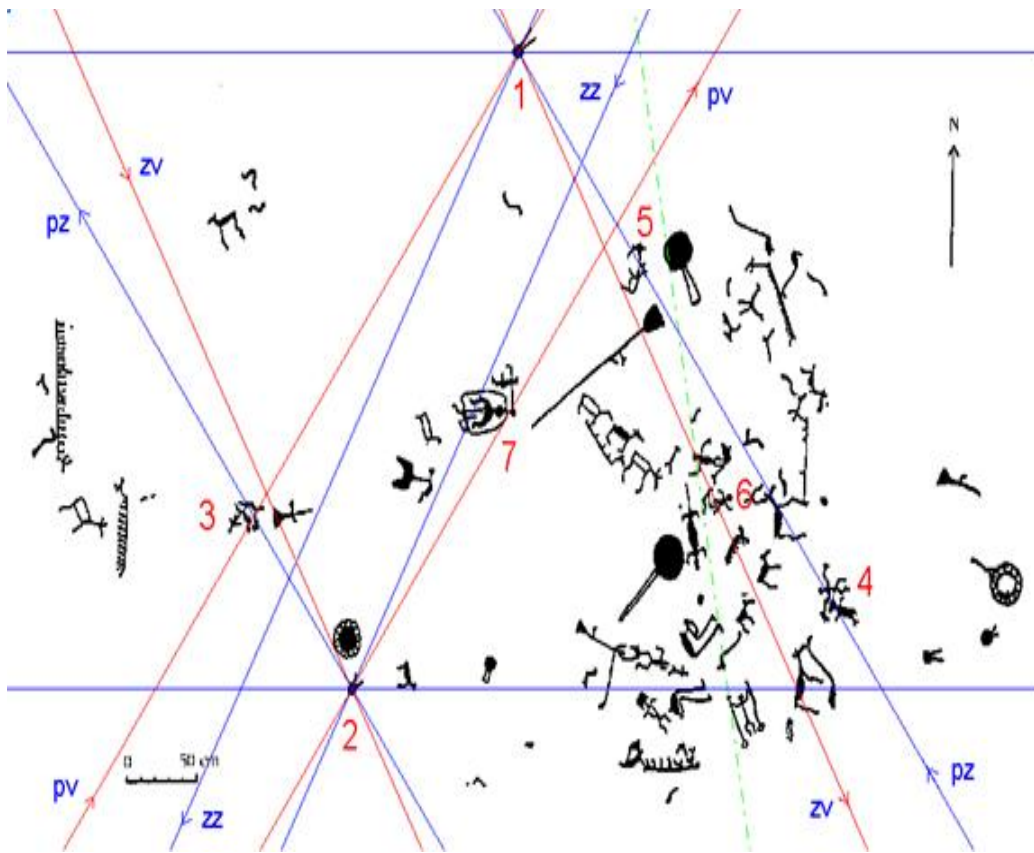


Fig. 18

The directions of the sunrise and the sunset at the solstices, the east-west direction, as seen from the auxiliary points - pz - summer sunset, zv - winter sunrise, pv - summer sunrise, zz - winter sunset.

- 1 - northern auxiliary point,
- 2 - southern auxiliary point,

3 - the father, the mother, the sexual intercourse, and the child - the symbol of life, fertility, and creation - the petroglyph shall be named Creation,

4 - the dead hunter and the beast - the symbol of the death - shall be named Death,

5 - the hunt, the hunter is killing the elk or the deer - the symbol of the killing - the end of life - the nurture to survive - the gift and the price - shall be named Sacrifice,

6 - the artificial defloration - the symbol of the introduction in the grown age - shall be named Initiation; the on the fish dancing pregnant woman, the emerging life, the relation to the fertility, shall be named Fertility,

7 - the mother, giving birth and devouring the child - the symbol of the eternal circle of the life, birth, and death - Uroborus.

The directions of the sunrises and the sunsets as the "tails" of the auxiliary points -

Point 1: The upper direction - the sunset at winter solstice, the lower direction is the normal on the sunrise direction at winter solstice. This points to the symbol of the Initiation (6)- the beginning - the powerless sun start to gain on power. The direction of the sunrise at the summer solstice points to the symbol of the Creation (3) - the sun is in the peak of its power. The direction of the sunset at the summer solstice points to the symbol of the Sacrifice (5)- the sun starts to loose its power - and the symbol of the Death (4).

Point 2: The upper direction is the sunset direction at the winter solstice and points to the (7), the birth - the death and the life; the lower direction is the normal on the direction of the sunrise at winter solstice. The direction of the sunrise at summer solstice points again to the Uroborus (7), the devouring of the child - the life to the death.

The two helper points are not arbitrary selected. The northern point (1) is the most northern petroglyph on the Roof, the southern point (2) is albeit not the most southern petroglyph, but the most southern helper point. The directions of the sunrise and sunset at the solstice point to the petroglyphs, which were marked as symbols of fecundity and life (3) - the direction of the sunrise at the summer solstice -

the sun is in the peak of its power. The symbols of the killing (4) and death (5) – point the direction of the sunset at the summer solstice, the sun sets at the peak of its power. The direction of the sunrise at the winter solstice – the beginning of the sun power growth – points to the petroglyph, the symbol of the initiation in the grown up age (6). The symbol of the eternal life circle (7) is pointed by the directions of the sunset at winter solstice and the sunrise at the summer solstice – the greatest opposite extremes in the sun power, the most weak and the most powerful sun.

All this symbols represent the principal subconscious archetypes.

- The symbol (3), which will be named Creation, is the fecundity and life, already mentioned “erotic” petroglyph. It depicts the father, the mother, the coitus – the insemination and the fruit – the child.
- The symbol (4), which will be named Death is the petroglyph depicting the dead hunter armed with the bow and the beast, which killed him.
- The symbol (5) shows the opposite – the hunt, the hunter is stabbing and killing the reindeer or elk. The hunt with the killing of the animals enables to gain the nurture and so assures the hunters own life base. The animal's life is sacrificed for the preservation of another life. The prey is the gift and the sacrifice at the same time. Therefore, this symbol will be named Sacrifice.
- The petroglyph (6), also from the set of “erotic” petroglyphs, depicts the artificial defloration; it is the initiation in the new life age, from the maiden to the woman. It will be named Initiation.
- The petroglyph (7) depicts the mother, giving birth and swallowing the child – it is Uroborus, the birth and the death and is the symbol of the eternal life circle.

All these symbols have their counterparts in every culture, past or present. To the Uroborus correspond actually in broader sense all present religions.

The symbols were marked with the majuscule in the name to differentiate them from the same words in the general sense in this writing.

With the reenter of the solstice, sunrise and sunset directions in the cross points and the main or characteristic points of the figures the discovery of the rules, with which the locations of the single figures were selected, starts to emerge – pic. 19. An art of the periodicity is apparent. These directions connect repeatedly the most basic symbols. The connections between the figures have a sense remaining unknown due to the unknown background story.

The directions of the sunrises from a figure to a figure probably marked some benefit in the relationship to the first figure, the directions of the sunset probably something bad. The change from the good to bad, or vice versa, probably corresponded to the summer and winter directions. In the picture pic. 20 is evident, that this aim is not fully clear in the solstice directions.

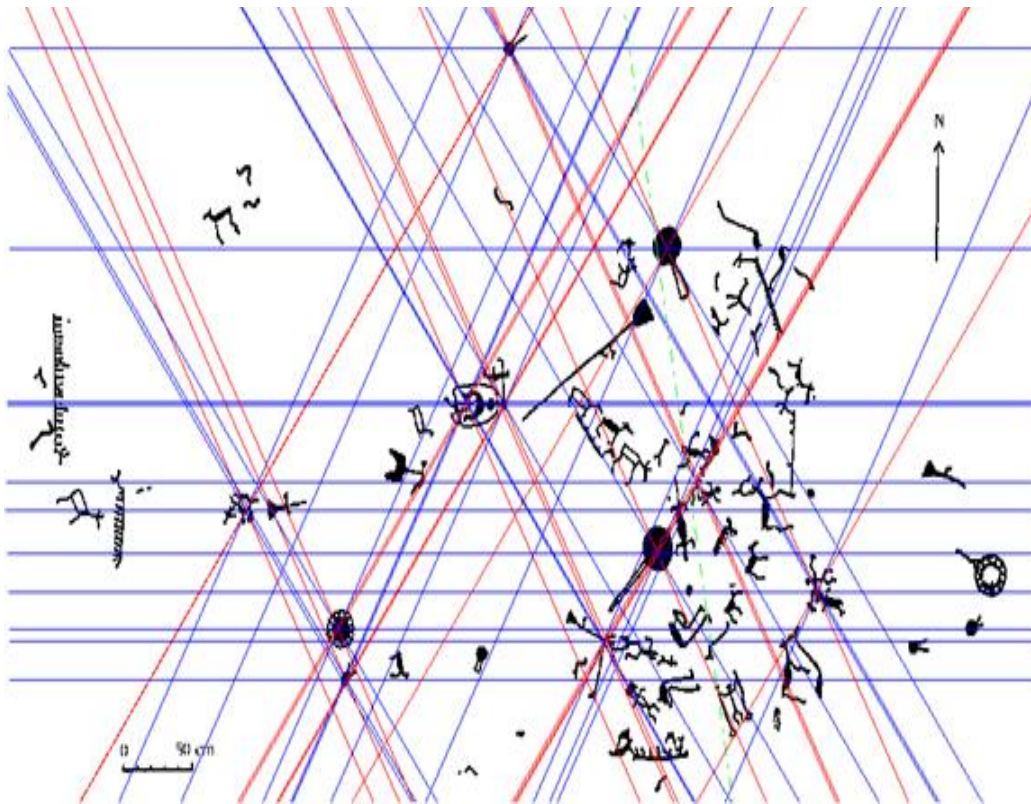


Fig. 19

The directions of the sunrise and the sunset at the solstices and the east-west direction.

The directions are repeatedly inserted in the direction cross points and the characteristic points of the petroglyphs, which then point to other figures. This shows the relationship between the various figures and is probably their connection. The directions of the sunrises from one figure to the other figure was probably something benign in the relation to the first figure, the direction of the sunsets something malign in the relation to the first figure. The transitions from good to bad corresponded probably to the summer and winter directions.

From the cross points by the Uroborus is evident, that also every part of the figure had in the certain combination of the figures a defined meaning, the notion of the good or bad, here the birth - the life and the murder - the death.

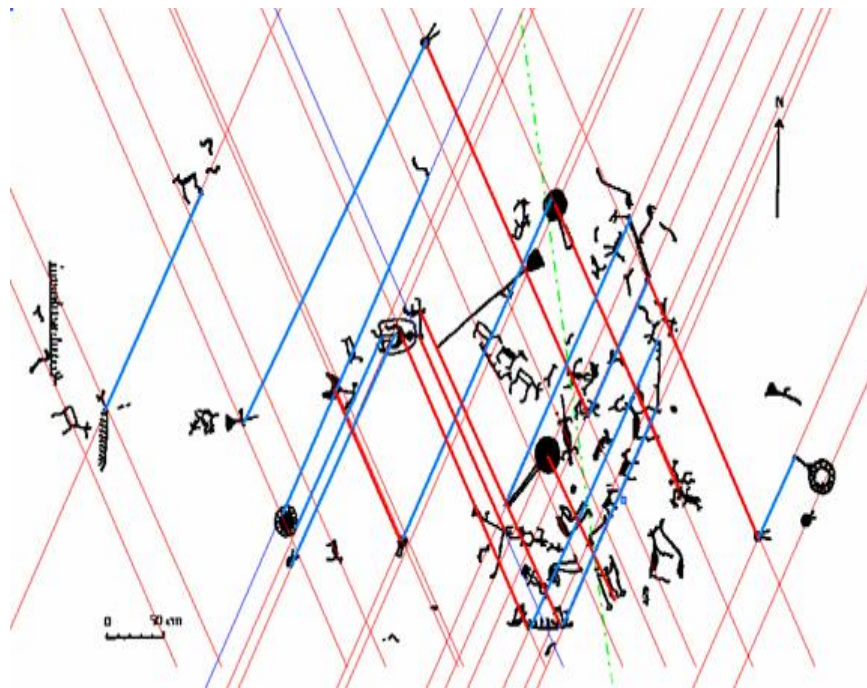
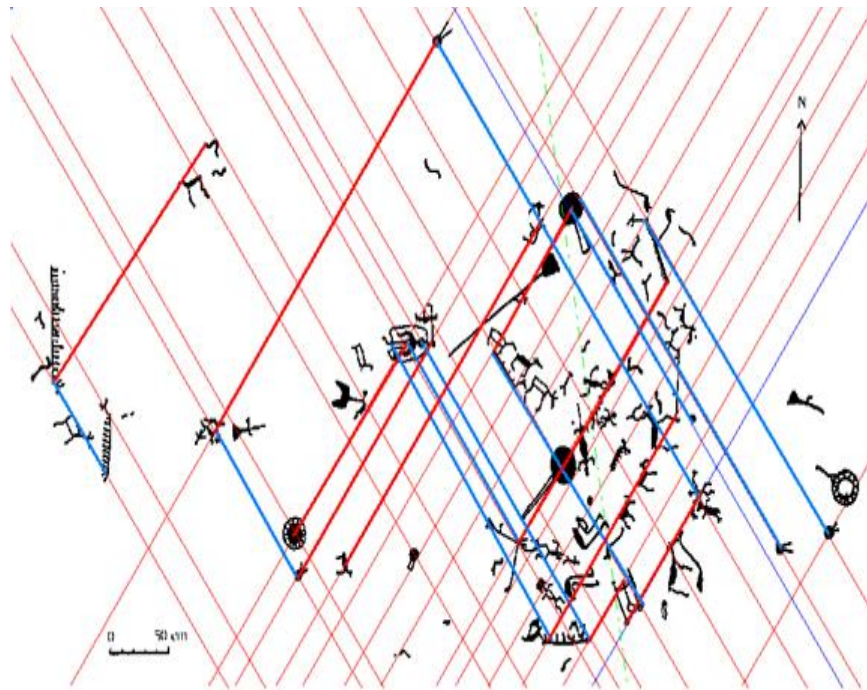


Fig. 20

The analyze of the sunrise and the sunset directions at the summer (above) and the winter solstice. Some connections are emphasized.

Naturally, that the majority of the petroglyphs were very probably not created at the solstices, but the corresponding directions had assured mythical, enchanted sense for the ancient

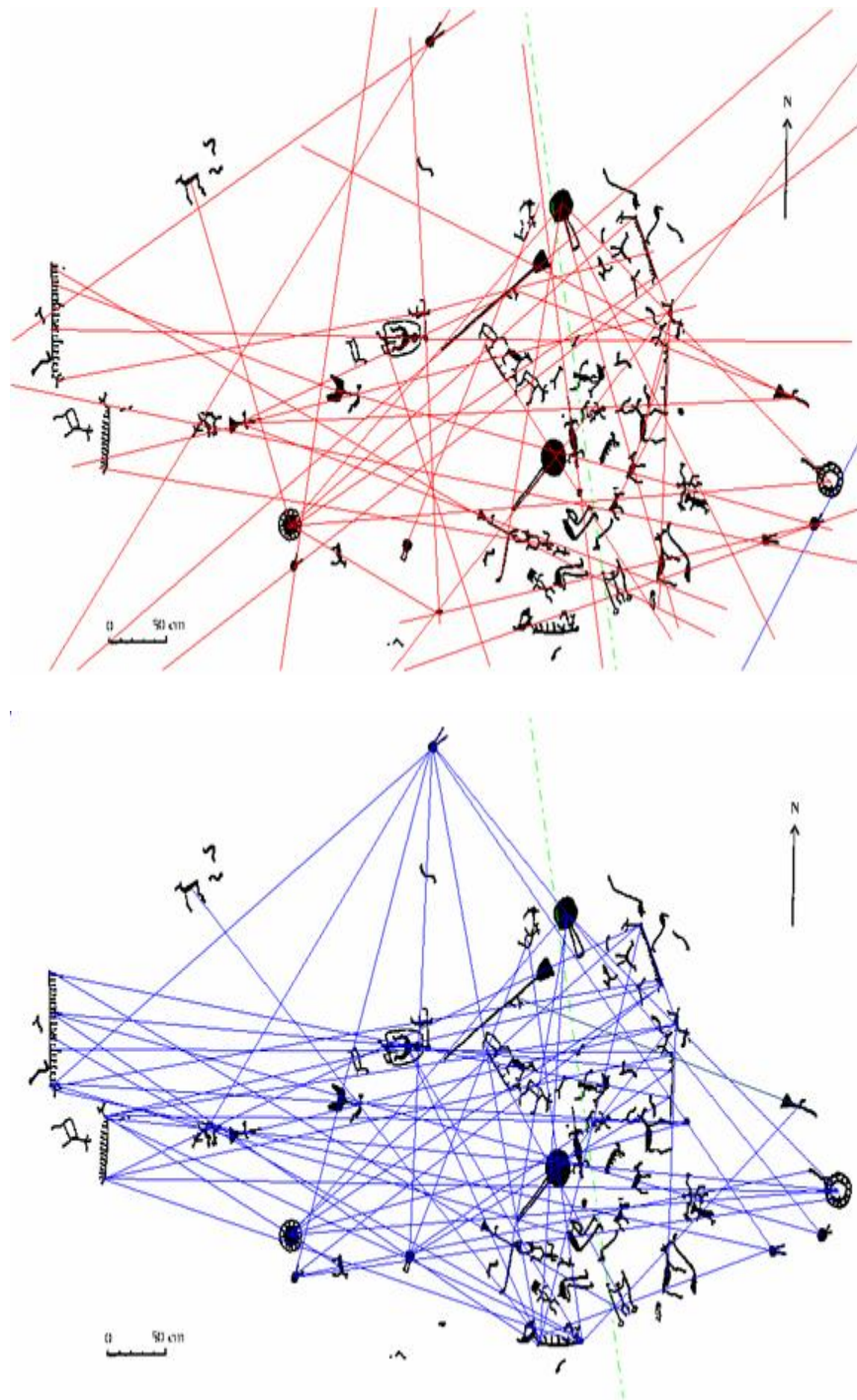


Fig. 21

The figure connections derived from the figures themselves.

Above: These directions are the directions of the auxiliary point "tails", the directions of scepters and the directions of the individual figure layouts of the figures.

Down: To the directions of the figure above are added the directions defined by the connection of the characteristic points of the figure. Overall is evident, that the majority of the lines cross a number of characteristic points.

The confusion is only apparent. A plurality of the lines crosses in the same points. The directions of the lines are then set, according to the geometry, by the common rule.

In the pic. 21 are entered the lines and the distances, which are deduced from the singular figures. These are the “tails” of the helper points, the scepter directions and the locations of the single figures and the interconnections between the main points of the figures. It is evident, that in all cases a multiplicity of the main points is located on the single line.

The confusion of directions is only apparent. There are not just more main points on the single line, but several lines cross in the same point.

From the geometry properties follows the fact, that these directions are determined by some common rule. These directions are the consequence of the rules for the composition of the whole petroglyph complex. They define the relationship and the connections of the figures. Some other unknown rule defines probably the transition from the figure to figure in the given case – the sequence of the figures and symbols narrates a story, a prophecy or determines a date of some festivity.

The pic. 22 shows the samples of the scepter directions and their parallels. All connect the main points of the various figures; they show an art of the repetition and are webbed in the whole stone Roof petroglyph complex. The scepters and their orientations are probably the most abstract set of the Roof figures. Naturally, are here not taken in account the figures, which we cannot interpret.

The depiction of the great scepter is a primeval petroglyph, which possesses some basic notion; the small scepters depict the same or equivalent object as the symbol of some other related content. All scepters are definitively related to the shaman, they are the sign of his position and power in the ancient society, as it is evident from the graves on the island Olenyi [46].



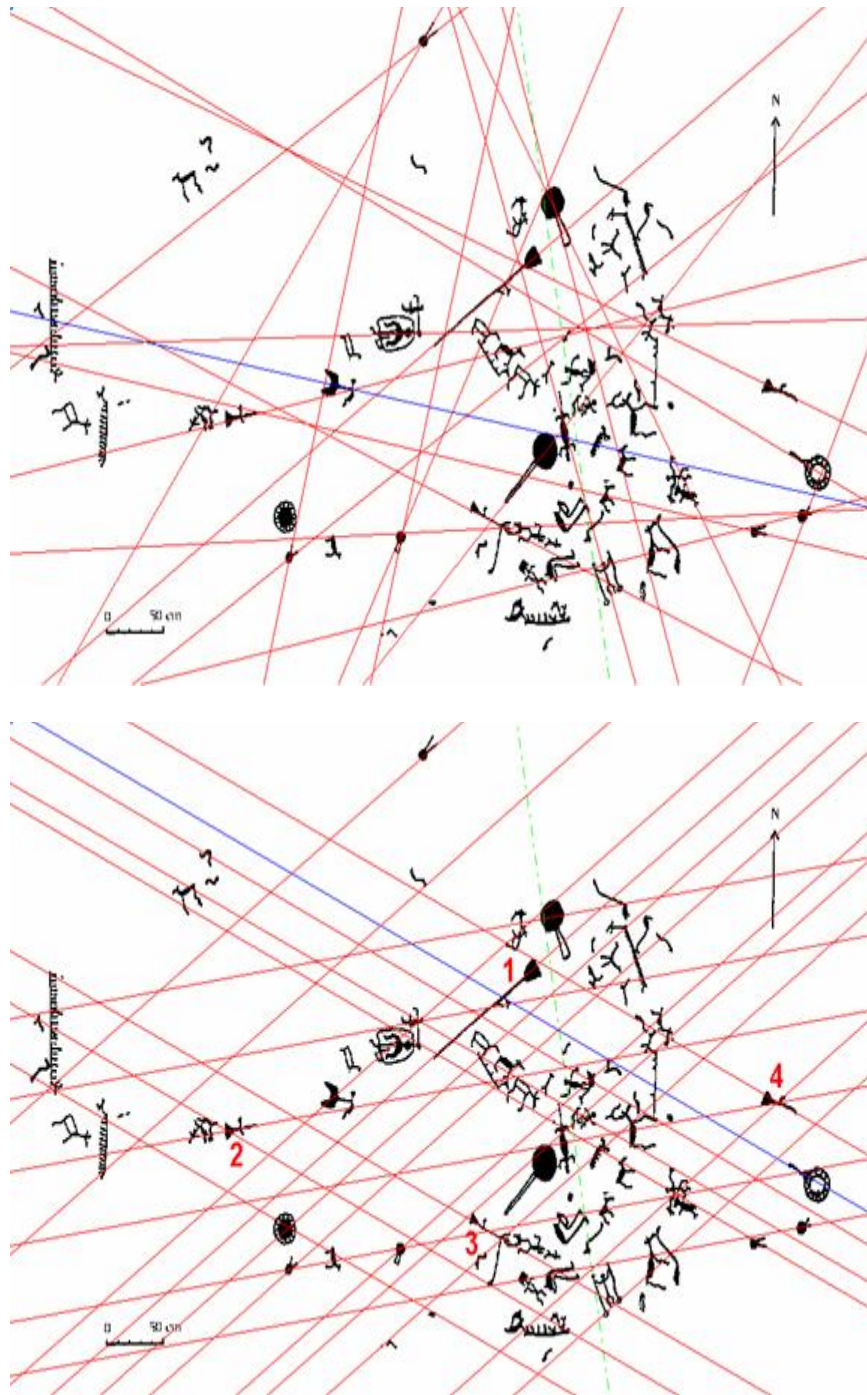


Fig. 22

Above: The characteristic directions derived from the "tails" of the auxiliary points, from the layout of the scepters and from a couple of the figures (Uroborus, Shaman and the Dancer). It is evident, that the lines cross or touch mostly more figures in the characteristic points.

Down: The directions of all lines are derived from the scepter orientations 1,2,3 and 4. The last two scepters are actually parallel. Also all other lines have their parallels through the characteristic points of the figures. This is also one of the rules according to which were distributed the single figures.

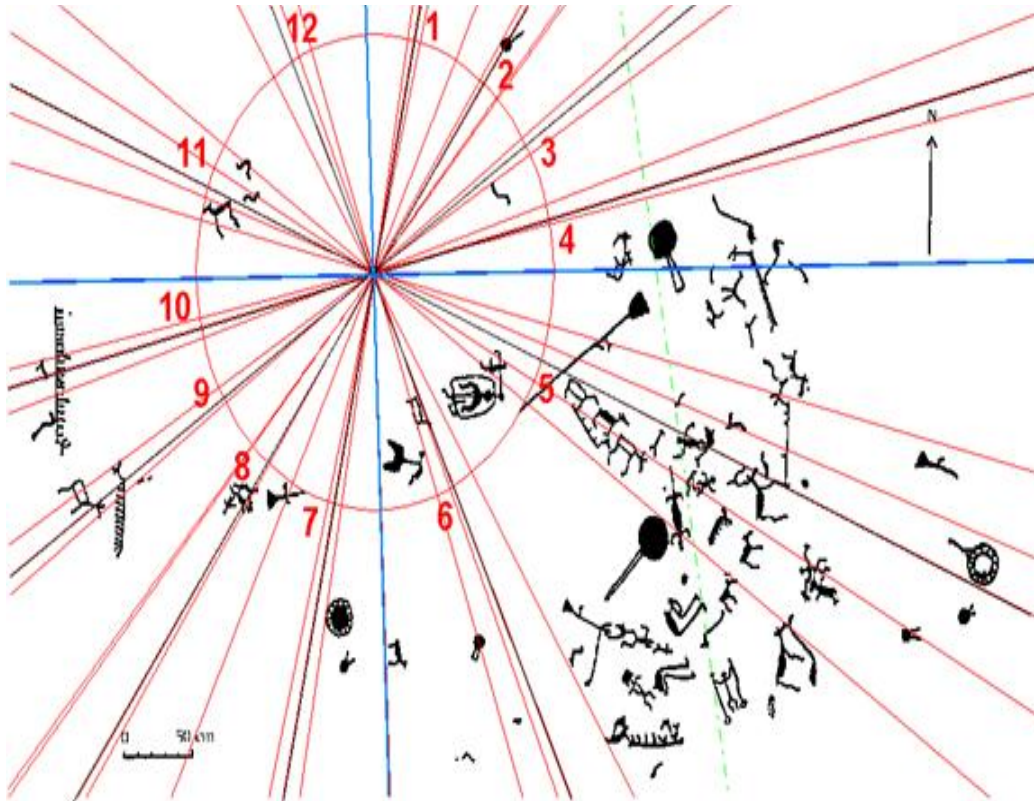


Fig. 23

The directions derived from the scepters, from the "tails" of the main positions and with some figures as Shaman, mask, swan neck etc. The lines of the directions are inserted to cross in the arbitrary selected point outside of any figure. The approximate grouping of the directions is emphasized and it is evident that they accumulate in twelve sets. The directions derived from Uroborus are mutually normal and they run slightly off from the north-south and east-west direction outside of the direction sets.

In the pic. 23 are the directions from the pic. 22, defined by the scepters, by the "tails" of the helper points, by the "tails" of the main locations and by some figures as the shaman, mask, swans necks etc. inserted to cross in an arbitrary point outside of all petroglyphs. The approximate pile-ups of the directions are marked and it is evident that they more or less pile up in the twelve sets. This fact confirms the existence of a common petroglyph distribution and orientation rule.

The directions, derived from the Uroborus, are actually rectangular and they slightly deviate from the north south as the east west direction and lay outside former direction sets.

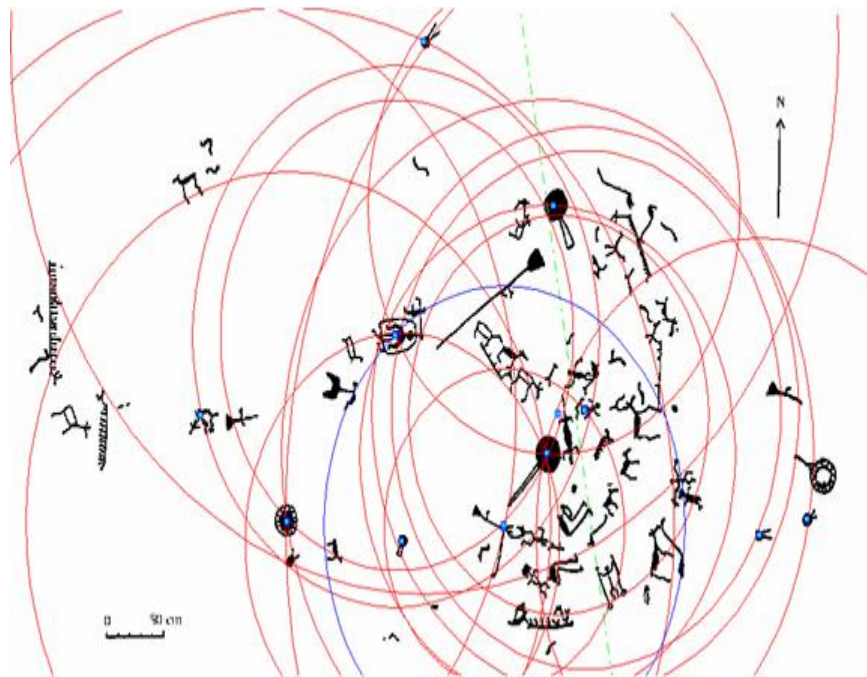


Fig. 24

The distances between the characteristic points of the figures.

The circles are centered in the characteristic points; their radius is determined from the distance between the characteristic points. The selection is arbitrary

It is evident, that the majority of the characteristic points have some other characteristic points in the same distance.

The distance between the figures, actually their main points are the next criterion for the interconnection and the location of the figures. The pic. 24 shows, that the main points of the single figures have in the same distance a multiplicity of the other figure main points. So, have the circles, which connect them an unknown narrative sense. The circles from the pic. 24 are selected arbitrarily. The only condition was, that their centers and radii correspond to the main points and their distances.

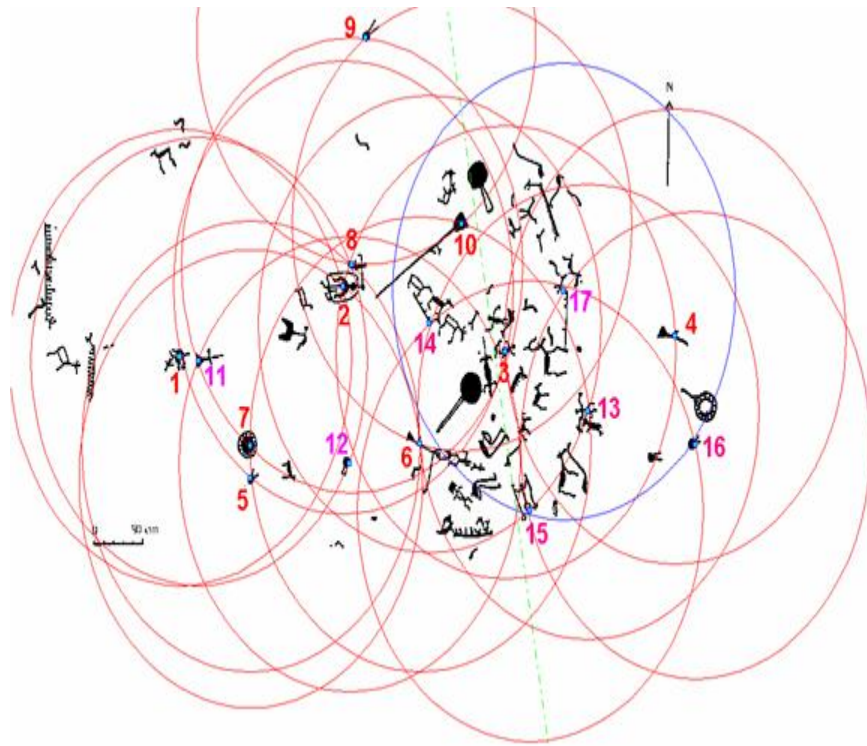


Fig. 25

The analysis of the characteristic points according to mutual distance, derived from the circles of the same radius.

The start is arbitrary chosen – the first center is the symbol of Creation 1, the radius is the distance to the point 2 – the symbol of Uroborus. The circle centered in 2 and of the same radius gives the point 3 the symbol of the Initiation, from here to the scepter 4 – where from none of the characteristic points can be reached anymore. Continuing with the southern auxiliary point 5 the scepter point 6 is reached, from here to the point 7 of the sunset sun symbol, there from to the Uroborus point 8 – the child devoured by the mother, after that the northern auxiliary point 9, then the point 10 of the main scepter, returning then to the point 6. Continuing from the scepter point 11 to the auxiliary point 12, then back, almost to the Initiation point 3. From the point 6 is reached also the point 13 of the death symbol, there from the point 14 of the measuring scale for the determination of the autumn deer migration, the to the Shaman 15, which lead to the auxiliary point 16 and to the first point of the measuring scale 17 for the determination of the spring deer migration. We can continue from the auxiliary point left of 16, which returns us to the point 3 etc.

In the pic. 25 was selected the distance between two main points as the unity. Each main point, lying on the corresponding circle, was then used as the center point for another circle of the same radius. So emerged the complex of the figures connected with the circles of the same radius. Es obvious are again connected directly or over some other figure the symbols of the main archetypes. This is also the connection sense between the figures. Very probably was this an art of the transition from the figure-to-figure, used by the divination and everyday advice.

It is again obvious, that the circles repeatedly cross in the main points or in their proximity, as well in the narrow spaces between the figures.

In all previous cases was not singled out a sole figure or a sole petroglyph, for which all the directions, lines and distances from his characteristic point to an other figure points would be derived.

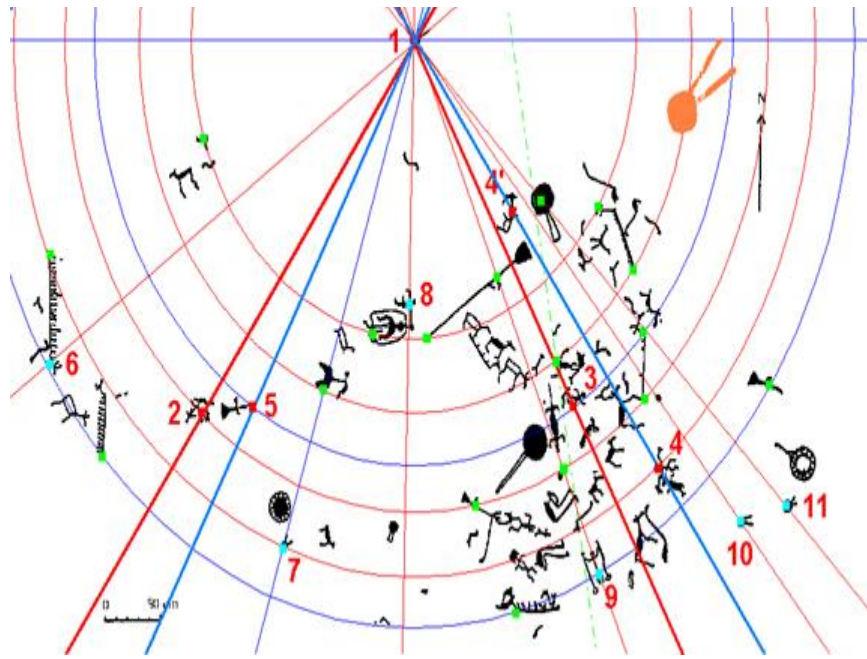


Fig. 26

The directions and the distances from the northern auxiliary point 1:

- 2 - Creation – sunrise at summer solstice,
- 3 – Initiation and Fertility – sunrise at winter solstice,
- 4, 4' – Death and Sacrifice – sunset at summer solstice,
- 5 – scepter – sunset at winter solstice,
- 6 – the direction from the first point "tail",
- 7 – the direction from the second point "tail",
- 8 – the direction north south,
- 9 – the direction of Shaman to the auxiliary point 1,
- 10, 11 the directions to the east auxiliary points,

The circles connect at least three characteristic points equidistant to the point 1. Above right - shown is the enlarged shape of the northern auxiliary point.

In the picture pic. 26 it was this done for the northern helper point. Also here is obvious, that the neither the directions nor the distances are arbitrary. There is multitude of the lines and circles centered in the northern helper point, on which are positioned the main points of the other figures. The same case is with the southern helper point pic. 27 and also for other figures.

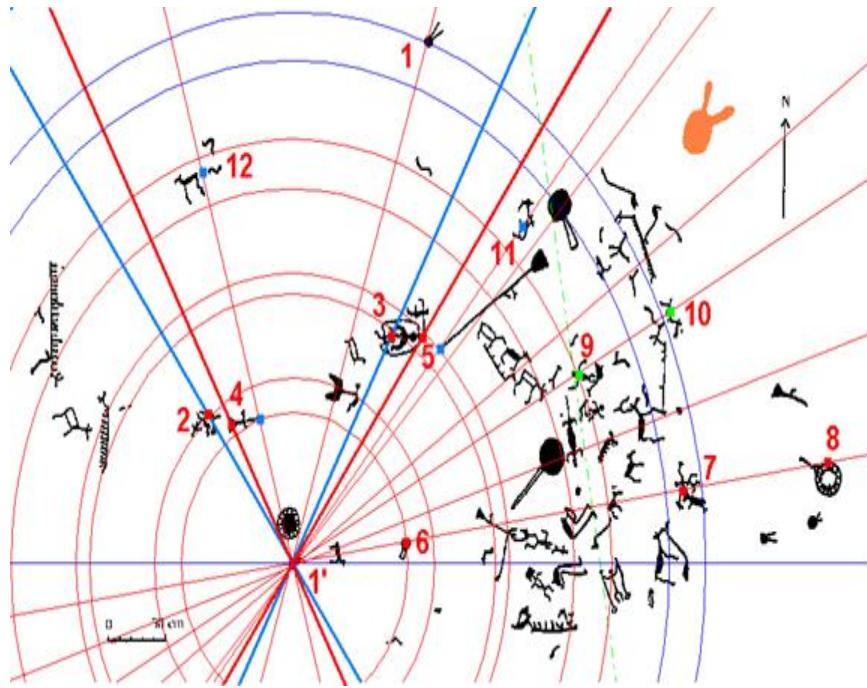


Fig. 27

The directions and the distances from the southern auxiliary point.

- 1 – northern auxiliary point
- 1' – southern auxiliary point
- 2 - Creation – sunset at summer solstice,
- 3 – Uroborus (birth) – sunset at winter solstice,
- 4 – scepter – sunrises at winter solstice,
- 5 – Uroborus (murder) – sunrise at summer solstice,
- 6 – auxiliary point, the connection - scepter, Death, and the rising sun,
- 9, 10 – the connection - the dancing pregnant woman and the pregnant hind,
- 11 – the scepter at 5 with the hunt slaughter,
- 12 – the scepter at 4 with the wild (elk, birds).

The circles connect the equidistant characteristic points, which are not especially marked – Shaman, Initiation, Fertility, wild, Creation etc.

It is evident, that the figures are distributed symmetrically to the northern auxiliary point in relation to the sunrises and sunsets at solstices and some other directions. This duality is all over present. Above right – shown is the enlarged shape of the southern auxiliary point

In the picture pic. 28 are analyzed the Uroborus relations, in the picture pic. 29 the symbols of the Life and Death and the same in the picture pic. 30 for the Initiation symbol.

In the picture pic. 31 are analyzed the two points, which are apparent centers of the whole stone Roof petroglyph complex. In the picture pic. 32 are also analyzed the additional two points, which will show the interesting connection to the points from the picture pic. 31 - on this later.

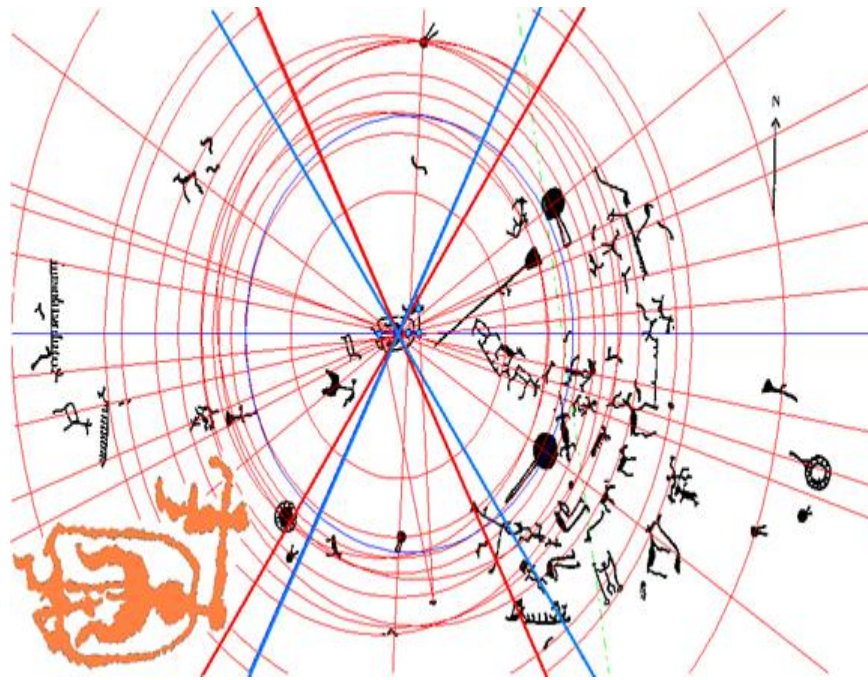


Fig. 28

The directions of the sunrises and the sunsets at the solstices, the directions on the characteristic points of the singular figures and their distances - all in the relation to the characteristic points of Uroborus. Down left - the enlarged shape of the Uroborus.



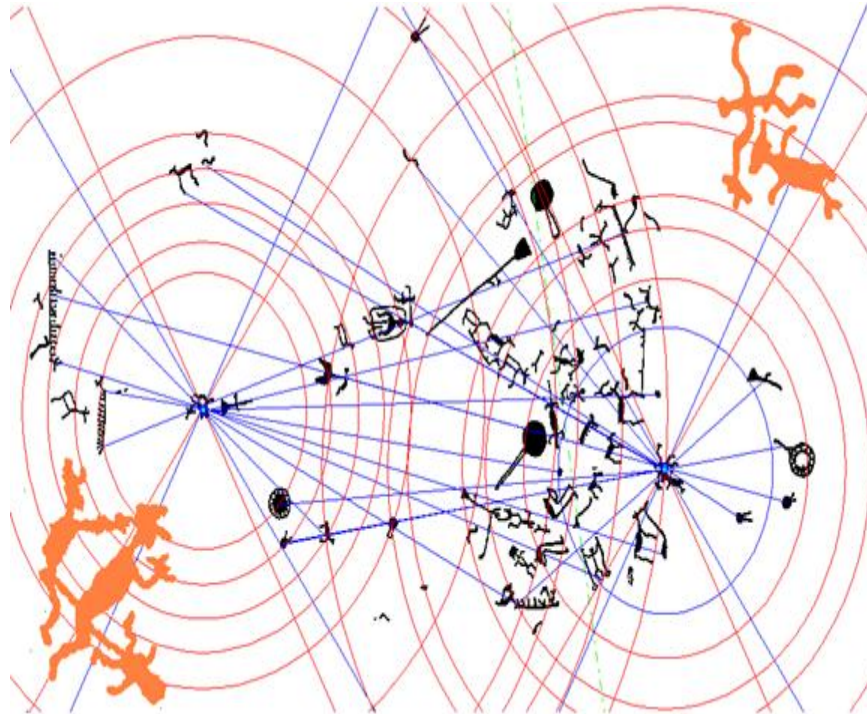


Fig. 29

The relationship between the symbol Creation (enlarged down left) and the symbol Death (enlarged above right). There is no direct connection, but the connections are over the Uroborus and the auxiliary points. The boats are also connected to them, maybe indirect as all the figures are interconnected.

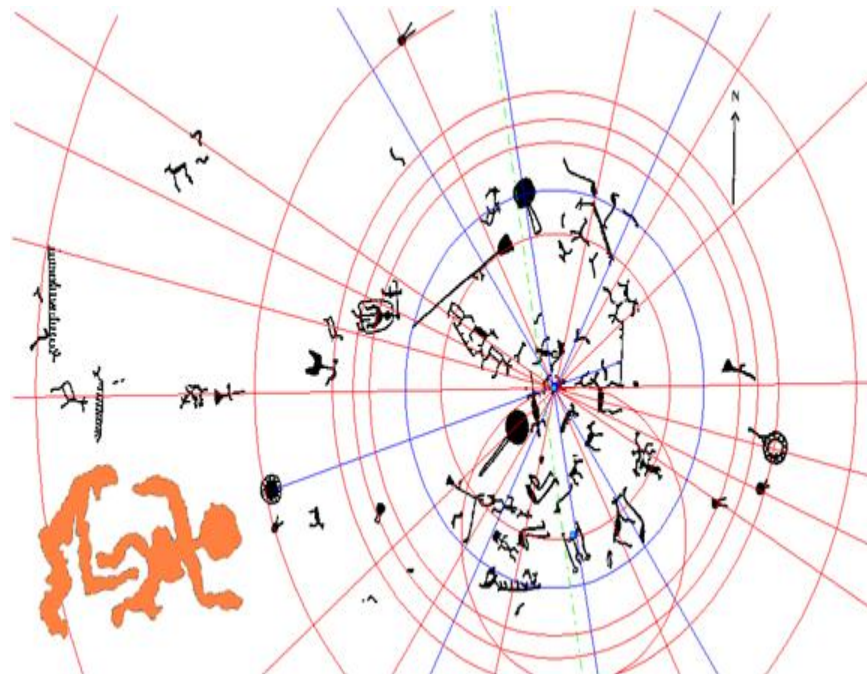


Fig. 30

The relationship of the symbol Initiation - the artificial deflorator - to the other symbol figures. This symbol is in the direct relation with the symbol Creation, with the Uroborus and the base points of the triangle (about that later), the pregnant woman - Fertility symbol and the Shaman symbol. Down left - the enlarged shape of the petroglyph.

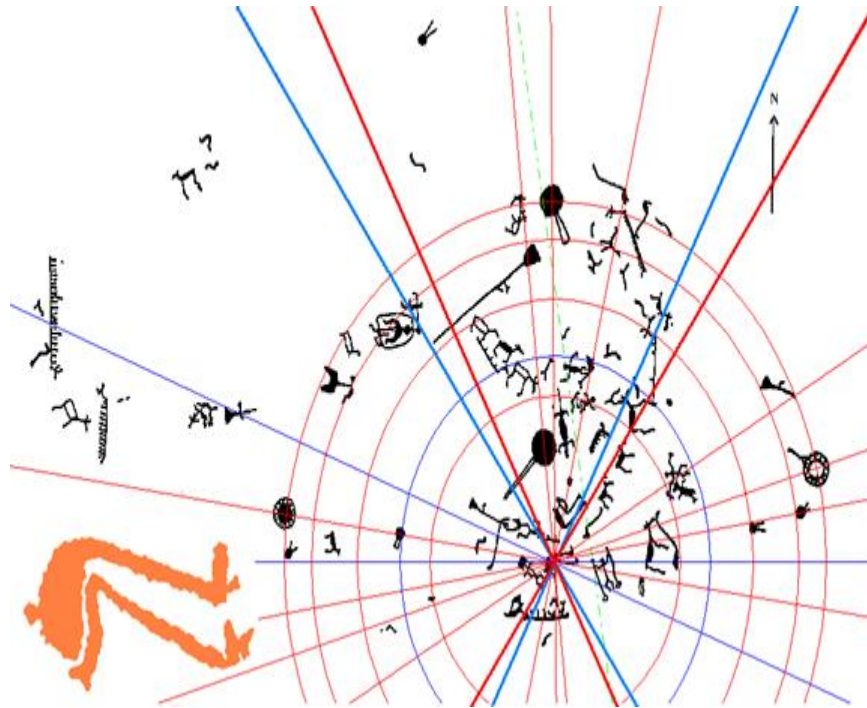
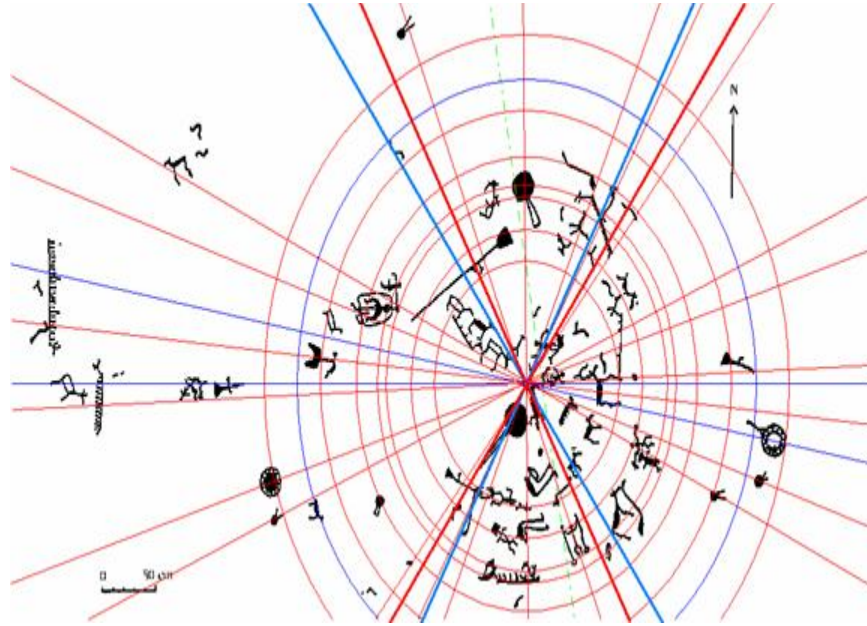


Fig. 31

The probable geometric centers of the petroglyph set. Marked are the directions of the sunrises and the sunsets at solstices. The grebe pair (enlarged down left) is oriented from the sunrise at the winter solstice; the swans over them are oriented from the sunset at summer solstice. Above – (almost) equal distance from the sun symbols, down - the equal distance from the sun symbols and the northern main position.

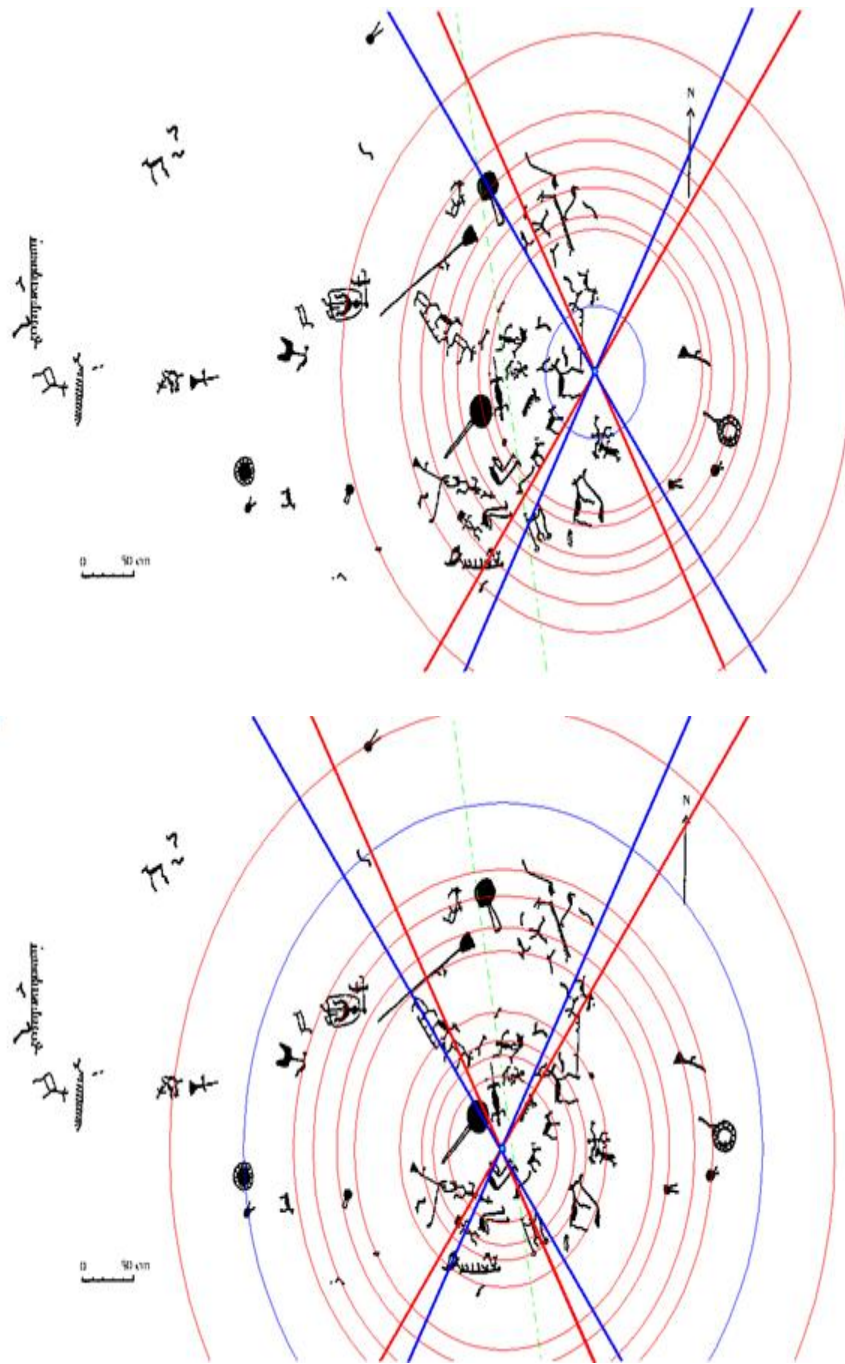


Fig. 32

The directions of the sunrises and the sunsets at the solstices and some distances from the petroglyphs marked as points.

Above is the direction of the sunset at summer solstice to the northern main position, down the direction to the southern main position. Above is the direction of the sunset at winter solstice to the Shaman symbol, down is the direction of the sunrise at winter solstice to the Shaman symbol.

In all cases we find the cross points of the circles and lines as the main points of figures. Very probably, that also the cross points laying off the figures had their significance, this would make a certain relational sense.

On the rules for the sequence of the figures can be only speculated. The directions and the distances are just the single steps in the connection relation of the figures. The first step was –as we already mentioned – determined with the visibility of the petroglyph at the given conditions. Very probably existed among the figures also a certain hierarchy of importance, according to which the sequence ought to be derived.

Naturally, the probable pole or scepter shadow positions should not be forgotten. The poles or scepters were probably placed on the certain points of the Roof and in this way their shadows connected the figures and determined the figure sequence. Very probably, the directions were taken also with the pairs of poles in the relation to the sun position. In this case, there are too many variations to achieve any further new finding. Clear, the location of the shadow is set by the daytime, by the season according to the sun height and the pole or scepter size.





### **The sundial and the calendar**

It was already mentioned, that due to the oval form of the Roof the sun has to rise to the certain height to light the western wing or has to set under the certain height to put the eastern wing in shadow. The slightly oval form of the wings causes the step wise change of the illumination. So was the Roof the sundial and the sun calendar at the same time for the ancient lake Onega inhabitants. Unluckily is it impossible from the data on disposal to recalculate exactly the change of the illumination and so derive the date on which the single petroglyphs started to be illuminated.

From the other side astonishes the almost astronomic precision with which the directions of the sunrises and sunsets at the solstices are determined. A certain deviation in the direction angles can be expected due to the tilt of the Roof wings, but is not recorded on this level of approximation. Understandable is, that due to the generally low height of the sun over the horizon in these latitudes, the observation of the sun position was better with the pole pairs in the direction to the sun. With the exact data would be probably possible to determine the at the time nutation position of the earth axis.



Fig. 33

The petroglyphs of the western boats - the measuring scales - as they remained preserved on the broken Roof part [6]. In spite of the fact, that the rowers are extremely simplified human figures, they exhibit their individual unique shapes, which are not the consequence of the crude workmanship. The boats cannot be the depiction of the real boats due to the unreal number of rowers. Also their form - the extreme long size by the extreme shallow body cannot correspond to reality. The individuality of the rowers enforces the idea, that the each single rower possessed a name - in our interpretation the numbering of the measuring scale.

Let us consider the boats. The rowers, as mentioned, are not of comparable size with the rest of the figures, which depict the human like or the human figures. The boats are extremely shallow, the numbers of rowers impossible for the real log-canoes. These numbers are certainly not arbitrary or casual.

As also already mentioned, were the creators of the petroglyphs primarily not artists, but the individuals with a certain goal. Due to this fact and to the regularity in the rower orientation and rower distances, make the boats on the technically versed observer the impression to be the measuring scales, even nomograms [47] for the whole petroglyph complex.

They cannot be the depiction of the real boats. The number of their rowers, their shallowness and too long size cannot correspond to reality

The figures of the petroglyphs are of the approximately same order of magnitude. The rowers, except of the two western boats, completely different.

At each boat are depicted the animals. The first boat has the birds, the second the reindeer or elk, the third has the herd of three reindeer, elks or both, the fourth just a bird sign, the fifth has two herons or similar birds, one looking to the boat and the other on the other side. All animals are oriented in or opposite to the boat orientations. Around this boat are some other signs, which may be interpreted as flying birds. To the sixth boat follows a herd of elks or deer from the southwest, in front it is a bird sign and a pregnant reindeer looking towards the boat. The rowers' size is not comparable to the animal size, all rowers are essentially smaller – confirming the conjecture, that the boats just symbolize and depict the measuring scales.

The majority of animals are depicted in the immediate vicinity of the boats. The exception are the centrally located bird pairs - the swan with a young or, possible, two geese over the south boat, the elk and the heron, three single elks or reindeers in the west. The reindeer, which is stabbed in the neck with the spear by the hunter is somewhat isolated in the north along the primeval signs.

The hunting was the main and perhaps the only one significant source of nurture for the ancient lake Onega settlers. It was mainly hunt on birds, reindeer and elk. These animals are most frequently depicted in the petroglyphs.

The hunter has to know when, where and which prey to hunt for an efficient and good hunting. This was especially important if the migrating animals were the prey, enabling just the hunting at limited times in the limited area.

Naturally the animals don't migrate always at the same date on the same path. The migrating times and the migrating paths are dependent on weather, the nurture on disposal and on the predator pressure. So is the migration regular just in the certain limited time interval on the certain area.

Each erroneous estimation of the hunting time and area could be fatal for the survival of the whole tribe. Very tiresome and less efficient was to send some single scouts. The area and the time to control were to large and the risk to big to miss the animals, to be to far to deliver the message in time, to be killed by animals or strangers, or to spend the reserve food as a single scout. The longer absence of the hunter group diminished the defense capability of the tribe, the mistakes even more fatal.

The only one intermediate possibility for this estimation is to observe the weather and the behavior of the animals in the immediate and visible surroundings. This was naturally at that time known only to the hunters and pathfinders – today can be their capabilities comparable only to the skill of the !Kung hunters and pygmies in Africa, in the north is there maybe a Siberian, who could give some more information on the subject.

In our limited knowledge and comprehension, only the birds can be discussed. Their flocks are visible from great distances, their migration depends also on weather, some are prey, some are predators, and some are probably directly connected to the big migrating game. Whole mosquito clouds are following the herds of reindeer. These mosquitoes are prey for the birds, which then show when and where are the herds. Perhaps there was just the emergence of the mosquitoes the indicator for the vicinity of herds. Just think of the summer calamity of horse flies near cattle.

However, this is just a speculation. The fact is that the birds of different species migrate at different times. So are the time intervals between the migration as well as their sequence the means to estimate the migration of the big game without an especial immediate risk. These birds were doubtless the swans, geese, herons, cranes, water diving birds, cormorants, and sea-gulls, followed by the predators. All named are depicted also in the lake Onega petroglyphs. Especially is to be mentioned, that the figures of fish are very seldom, the figures of the reindeer and elk are abundant on the stone Roof.

The south boat is oriented to the west and transports 6 very mysterious travelers. According to general opinion are these mythical beings as the chiseling is in no case so crude to make this figures the consequence of a casual outcome. The four are similar to the rovers in other boats, the two are not definable figures. This boat is unmistakably correlated to the midday. The line determined by the rim of

the north and the south principal locations is the line oriented in the north-south direction and crosses the south boat. Very probably was the south boat used for the determination of midday time. Therefore it is interesting, that they had to observe the sun, using two sticks or scepters with the view towards the sun. Such a way to observe is the consequence of the low sun height over the horizon, perhaps more foggy days, when the shadows were not clearly seen. To determine the noon with the shadow should the "stick" be in certain distance from the Roof. Anyways, it fulfilled its task.

The boat is "moving" in the direction of the sun movement and the sun is "located under" the boat. The conjecture is, that the boat orientation defines the movement direction of the corresponding "subject" and that the sun "location under" the boat is of more significance than that "over" the boat.

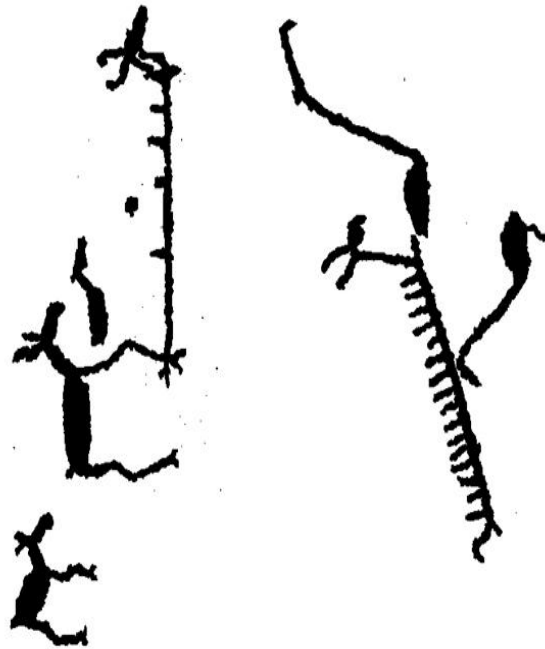


Fig. 34

These two boats are even more similar to the measuring scales. The rowers cannot be individually distinguished. The eastern boat is probably connected with the migration time of the depicted birds; the bird orientation is possibly an indication of the arrival or departure, to the north or the south. For the exact explanation we do not have any proof, but we suppose that it depends also on the bird species. The western boat should be connected to the migration time of the great wild - the elks or reindeer - to the north

The farthest western boat is directed exactly from the north to the south. It has 21 rowers distributed in the groups of 6, 7 and 8 rowers, where the groups are separated by the taller rowers – perhaps standing opposite to the other sitting. The rowers are "upright" in the east-west direction. In the pic. 33 is depicted this petroglyph enlarged. In spite to the fact, that the rowers are extremely simplified or reduced human like figures, exhibits each of them its unique, clear visible trait, which is surely not the consequence of the crude work. All stone Roof figures are well recognizable, except the birds, which are hardly to differentiate or some symbolic petroglyphs having no "living" model, as for example the Uroborus.

The last is valid also for the boats. The shallowness can be explained with the immersion in water and the depiction of the sole over water level part, but this is of no importance for our considerations.

Our conjecture allows the overall validity of the same “moving” rule as in the case of the south boat. The corresponding sun is the sun “under” the boat and this is the western sun. This sun moves to north, opposite to the boat direction. To the south moves the sunset direction - as well as the sunrise – after the summer solstice. So relates this boat to the shift of the sunset towards and over the autumn equinoctial. The animals, depicted in the direct proximity of the boat we interpret as the animals, which are significant for the “use” of the boat as the measuring scale. In the cases in which the boats are the measures for the number of days before and after the equinoctial or possibly also by some other occasion, we interpret how many days before or after the equinoctial the birds, reindeer, and the elk herds migrated to or from the lake. The migration direction – towards south or north - is given with the boat orientation.

The second western boat is directed exactly to north and has 12 (or 13? – with the stern or steersman) rowers; its “upright” is exactly “under” the previous boat. The rowers are tilted in the moving direction and individually marked. Their tilt direction is the direction towards the symbol of the western sun or the southern helper point. According to the rule corresponds the boat to the eastern sun; the movement would be the shift of the sunrise to the north, after the winter solstice. Naturally we cannot decline to boats any probable other task.

The third boat has 4 rowers and is directed towards southeast, the fourth is the already mentioned south boat. The fifth boat is directed to the north-northwest and has 16 (or 17) rowers, which are very densely seated. The opposite is the sixth boat, oriented exactly to the north, with only three rowers with very various mutual distances.

In the picture pic. 34 are depicted the petroglyphs of the north and the east boat. Their rowers as the rowers of all other, except western boats, are not individually recognizable. Both boats are even more similar to the measuring scales as the former ones. They correspond to the migration times of the birds depicted in the immediate proximity. The different bird orientation can be interpreted as related to the arrival or the departure, from the north or the south, to the north or the south. For this interpretation we don't have any proof, but suppose additionally the dependence on the bird species.

In the pic. 35 is described the possible determination of the spring equinox with the boats as measuring scales. The point from which the mutual rower distances are seen as the sight angle of one day sunset shift at equinox may be derived also in an other way, but there is no especial corresponding “rule” (pic. 36) .

By the examination of the petroglyphs emerged one point repeatedly – as the cross point of various circles and lines in completely other relations. On this spot was the rock, already before it was removed, damaged, so it was not possible the eventual petroglyph marking of this spot to preserve.

In addition, the cross points located between the figures were probably significant in certain religious circumstances. Why there were not especially marked is not possible to find out.

How was the equinox found out? For this task an other pair of points is needed. A couple of them are evident. Very probably took Uroborus the main part in this determination. It is oriented in the east west direction, facing the west. The first taller rower of the western boat is located on the line east west , the main Uroborus axis – where also the child is being born. The second taller rower is connected on the parallel line with the child to be swallowed.

This is in accordance with the symbol of the eternity, of the eternal repeating circle as the sun returned to this exceptional position, which divides the seasons.

The boat as the measuring scale enables to determine the number of days before and past the equinox. Therefore cannot be the determination of the equinox the sole task of this scale. From the pic. 36 can be deduced, that between all the boats –scales a meaningful mutual connection exists. Moreover, what is this meaning?

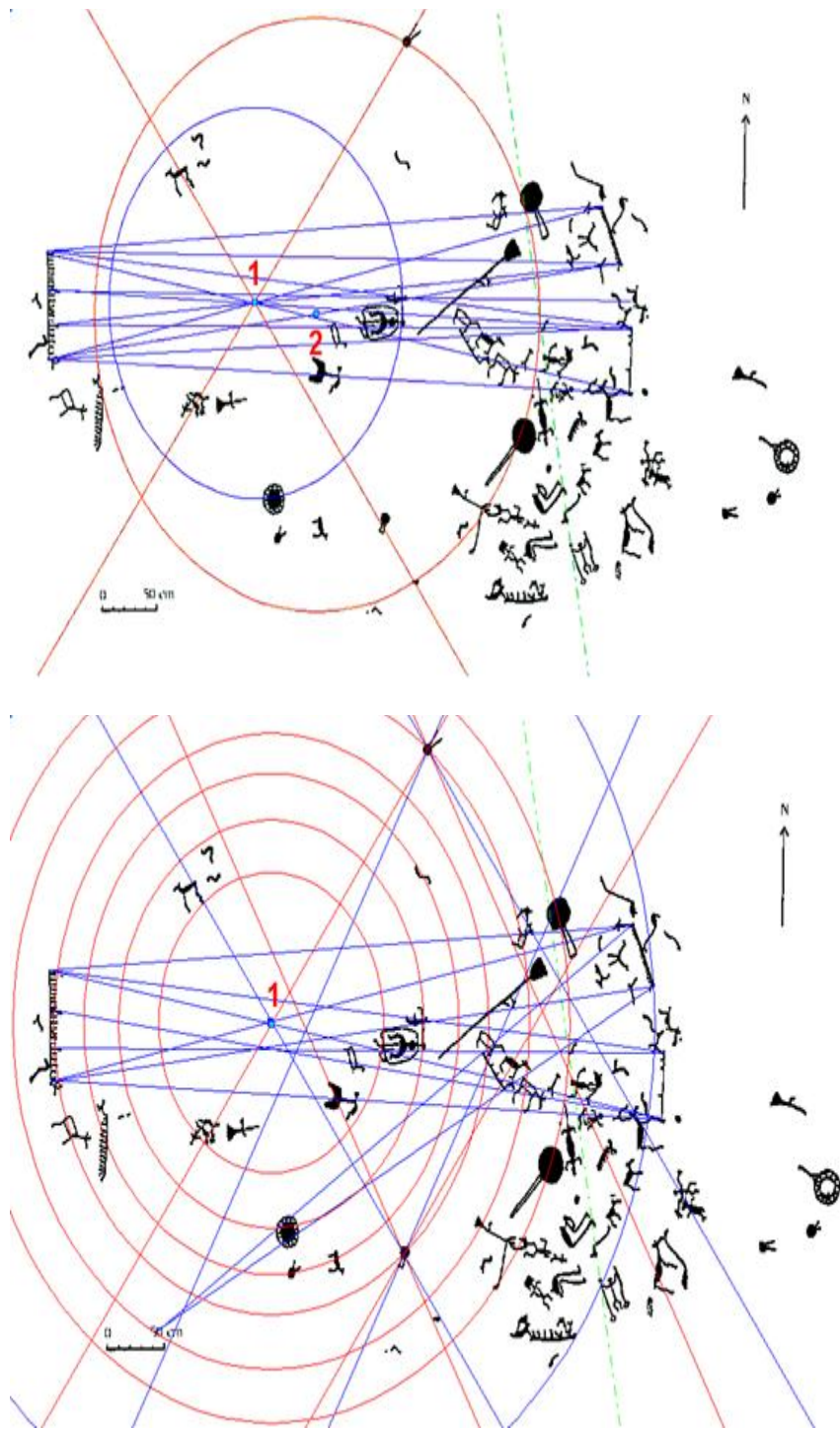


Fig. 35

Above - The determination of the equinoctial with the "boats" - nomogramms. The extremely left boat has 21 rowers – steps grouped in sets of 6, 7 and 8 rowers, remembering on the three weeks. The cross point 1 is the point, where the angle of the day shift of the sunset (or sunrise) changes at the equinoctial is seen as the view angle between the neighbor steps-rowers. There cross also the direction lines (from the auxiliary points) of the sunrise and sunset at the summer solstice. The point 1 is the center of the smaller circle connecting the Uroborus (murder) with the western sun symbol and the Uroborus (birth) with the Creation; the point 2 is the center of the greater circle connecting some other characteristic points. The same is valid for the cross points of the distances. Down - The relations concerning the derivation of the great wild migration time - see also fig. 36.

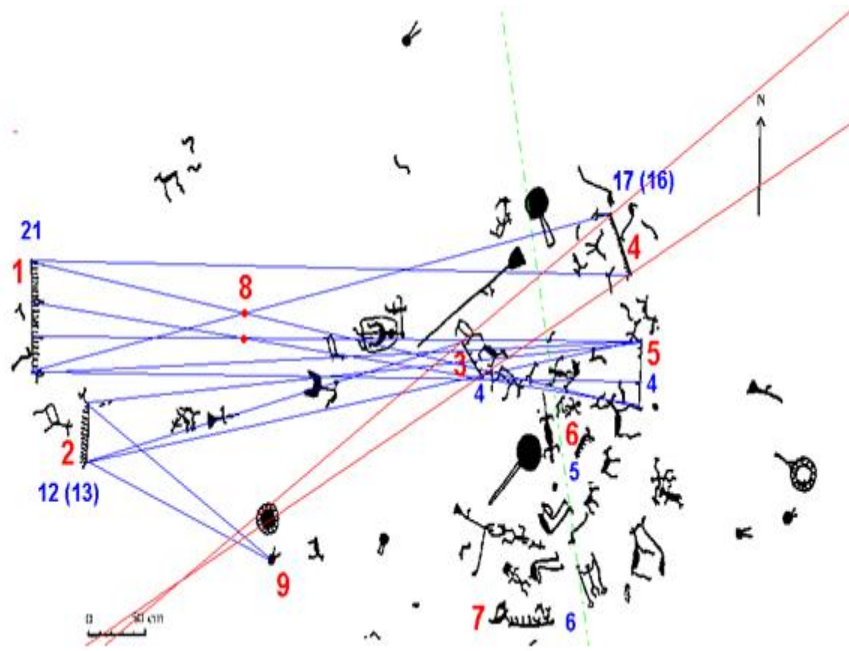


Fig. 36

The boats as measure scales. On the stone Roof are depicted 7 boats - scales. The westernmost boat 1 has 21 rowers grouped in the sets of 6, 7 and 8 rowers, for them is "above" the east, the boat itself is directed to the south. The second western boat 2 has 12 or 13 rowers, depending on the interpretation of the stern. For these rowers is "above" the west, they are inclined to the front of the boat – the direction southeast - northwest and the boat is directed to the north. The third boat 3 has 4 rowers and is directed to the southeast, "above" is northeast. The north boat 4 is to the boat 3 almost parallel and has 17 (16) rowers, "above" is southwest. The boat 5 is as the boat 2 directed exactly to the north, it has 4 rowers, its "above" is the west. The boat 6 is not clear if it is the boat at all. It has 5 rowers, „above“ is on the southeast and is directed to the northeast. Here is the situation as with the majority of the smaller petroglyphs - it is impossible to find out any recognizable meaning. The boat 7, the south boat, is directed to the west, it has 6 extraordinary rowers, its "above" is in the north.

The conjecture is that the boats as the measure scales were used for the calendar purposes - especially for the estimation of the big game - the reindeer and the elk - migration time. At that time was the local climate two or three steps centigrade warmer then up to date and the herds were the wild herds not owned by the herdsmen as nowadays. So the migration paths could be eventually completely different as they are now.

The following interpretation is one of the possible, but there is for none any possibility to be verified. The boats - scales 3 and 4 were probably used to estimate the migration of the main herd body and its distance.

The shadow of the scepter put on the west sun symbol runs over these scales on the most afternoons of the year, so it seems to be this the precise determination. Therefore there has to be another additional rule or measure to estimate the migration time. This second measure had to enable to determine the time in which was the use of the scales 3 and 4 valid. One possibility is the bird migration time connected to the scales 1 and 4 and the connection of the scale 1 to scale 5. It is evident that the last determines the value on the scale 3. In addition, from the scales 2 and 5 is possible to determine the value on the scale 3. The scale 2 was probably essential for the determination of the big game migration time as it is marked with the figure of the deer or elk, the scepter bounds it to the scale 3. A certain role could have also the moon as the bound passes over the dancer with the moon symbol.

The spring big game migration to the north was probably less important than the autumn one to the south for the settlers. Big stocks of meat did not have any sense in the summer and there was enough of the small game. The migration to the north is bound to the scale 5 - the herd is oriented directly to it. The young one accompanies the first animal; the different sizes of the following animals are possibly the indication for the number of the animals along the herd. The last animal has an especial sign on the head. The pair -the elk and the heron - southwards from the scale 5, as well as other smaller signs and birds cannot be interpreted. The same is also valid for the single figures of the reindeer or the elks. The geometric connections to the directions as well as circles to the other figures were probably only the means to precise the estimation of the migration time - perhaps as the consequence of the climate changes and the calendar shifts with the time.



The boats were used as the scales to determine the beginning, the duration, and the end of the reindeer migration. It is possible, that the number of the migrating animals, actually the possible number of the migrating animals at the given time and location as well as the movement of herd main body was estimated.

Each boat-measuring scale – has its type of the accompanying animals. So are the boats 1, 4 in 5 related to birds, the boats 2, 3 and 6 with the big game.

In pic. 37 are shown the relations between the scales, hunt, and the big game migration.

The calendar relationship may be given from the following:

For the Moon month are  $4 \times 7 = 28$  days, the row number product is given in the table:

|              |        | Boat / scale         |                    |                      |                    |                     |
|--------------|--------|----------------------|--------------------|----------------------|--------------------|---------------------|
| Boat / scale | 1 (21) | 2 (12)               | 3 (4)              | 4 (16)               | 5 (4)              | 6 (5)               |
| 1            |        | $21 \times 12 = 252$ | $21 \times 4 = 84$ | $21 \times 16 = 336$ | $21 \times 4 =$    | $21 \times 5 = 105$ |
|              |        | days                 | days               | days                 | 84days             |                     |
|              |        | 9 months             | 3 months           | 12 months            | 3 months           |                     |
| 2            |        |                      | $12 \times 4 = 48$ | $12 \times 16 = 192$ | $12 \times 4 = 48$ | $12 \times 5 = 60$  |
| 3            |        |                      |                    | $16 \times 4 = 64$   | $16 \times 4 = 64$ | $16 \times 5 = 80$  |
| 4            |        |                      |                    |                      | $4 \times 4 = 16$  | $4 \times 5 = 20$   |
| 1            | (6)    |                      |                    | $6 \times 16 = 96$   |                    |                     |
| 1            | (7)    |                      |                    | $7 \times 16 = 112$  |                    |                     |
|              |        |                      |                    | days                 |                    |                     |
|              |        |                      |                    | 4 months             |                    |                     |
| 1            | (8)    |                      |                    | $8 \times 16 = 128$  |                    |                     |

With the stern the scales 1 and 4 give

$$22 \times 16 = 352$$

$$21 \times 17 = 357 (+ 8 = 365 \text{ days})$$

$$22 \times 17 = 374 (- 8 = 366 \text{ days})$$

Naturally, at that time the fraction calculation was not known. Taking, or not taking in account, the stern, probably accomplished the calendar correction.

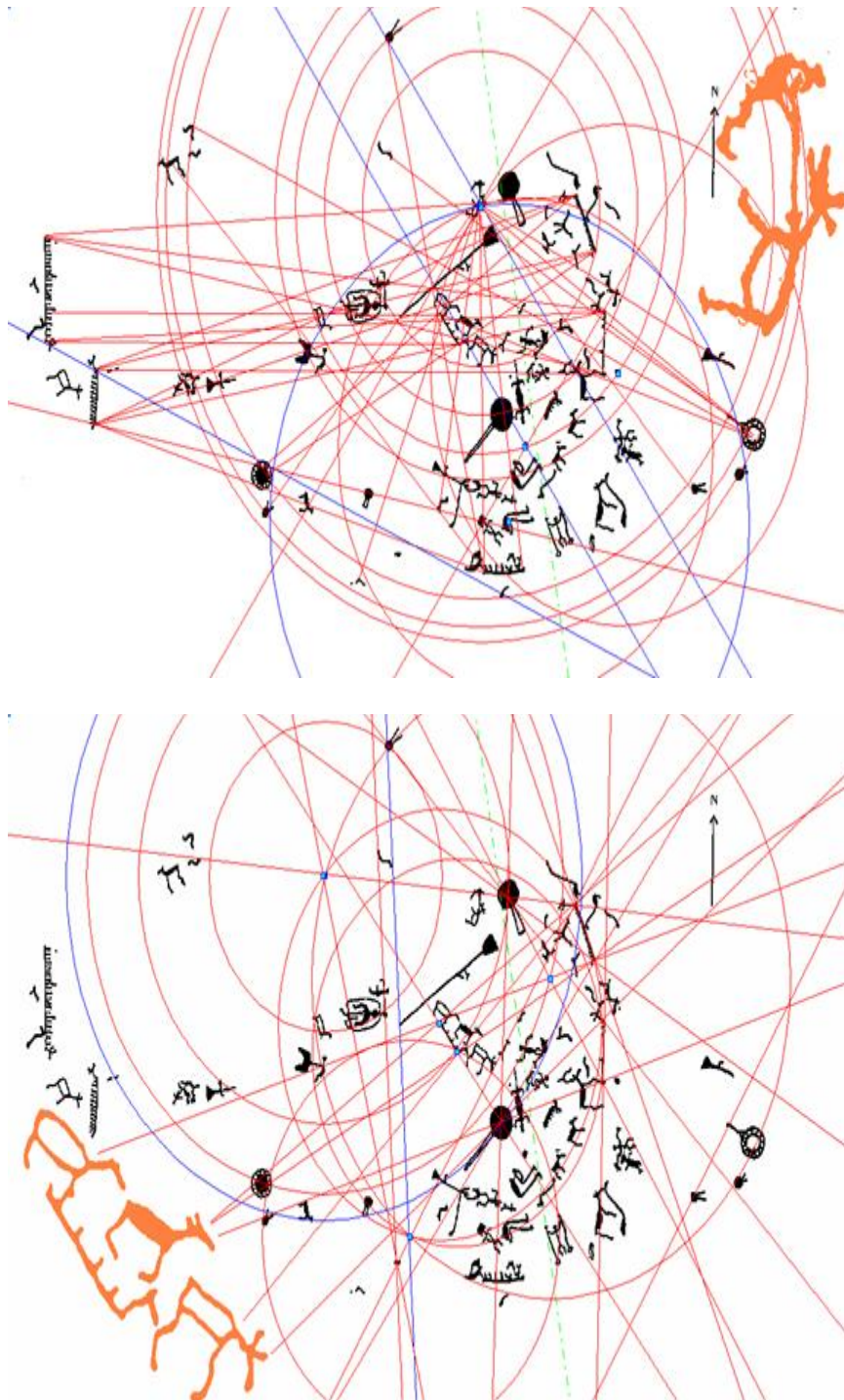


Fig. 37

The relationships of the hunt (enlarged above right) and the big game migration (enlarged down left) compared to other figures.

The starting and the end point of the scale for the migration of the big game (enlarged down left) to the southeast are the centers of the starting circles with the radius equal to distance to the other scales. Other circles were determined from the cross points and other characteristic points of the figures. The connection to the primeval figures - the sun symbols, the north and south main position.

## The shaman

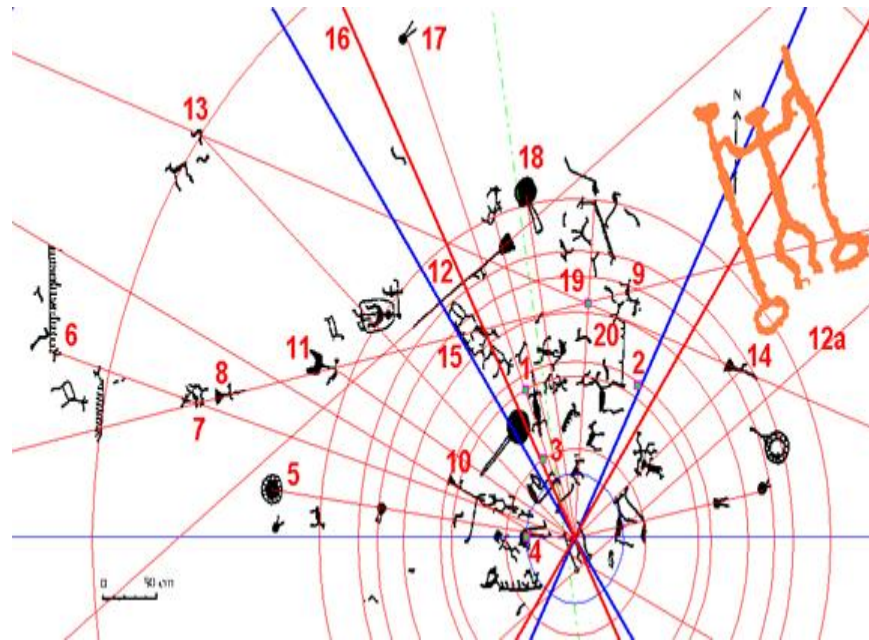


Fig. 38

The relationships of the Shaman figure - enlarged above right. The breast part was selected as the characteristic point of the figure. The Shaman "tools" are scepters; to his tasks belong the hunt time estimation as well as the festivities and the jurisdiction. Depicted are the connections corresponding to these tasks. 1, 2, 3 and 4 are the triangle base points. In the clockwise direction:

- East-west direction crosses towards the west the geometric center 4 and passes close to the southern auxiliary point,
- West sun sign 5 and the second southern auxiliary point are on the same line,
- Start of the westernmost boat-scale 6 and the Creation symbol are on the same line, which crosses the scepter direction 8
- Scepter direction 10 connects the end of the westernmost boat-scale to the Shaman footing, almost through the center point 4,
- Shaman footing, the line on which the Shaman "stands" 12a, is parallel to the great scepter direction 12,
- Direction connecting the double-headed bird 13, crossing the birth Uroborus part, also crosses the direction defined by the east scepter 14,
- Direction of the sunset at summer solstice is the direction of the boat-scale 15
- Direction of the sunrise at winter solstice 16 crosses the base point 3 of the triangle (comp. fig. 39),
- Direction of the Shaman figure and his scepters cross the triangle base point 1 and connect to the northern auxiliary point 17,
- Direction to the north main position 18 connects the symbols Initiation and Fertility with the Shaman,
- Direction to the north connects the north migration and the start of the northern boat-scale over the cross point 19 of the scepter 8 and 14 directions,
- Direction of the sunset at winter solstice points to the triangle base point 2,
- Direction of the sunrise at summer solstice points to the end of the southern boat-scale,
- East scepter 14 is connected over the symbol Death with the Shaman,
- East auxiliary points connect to the figures of the elk and the heron (? by the arrival from the south or the departure to the north)

The distances and the other connections are evident from the circles.

N.N. Gurina mentions in her work on the Neolithic necropolis [10] of the island Olenyi multiply perforated stone and bone discs, which were the burial addition to probably a person of a certain rang.

K.D. Laushkin [48] considers them as the sun symbols, because they could not have any decorative task due to their size.

The petroglyph of Shaman depicts the extremely simplified human figure, with not recognizable gender. The figure holds in each arm a pole or a stick, with a footing similar to the disk. The conjecture is, that the disks found in the graves were these footings of the poles, sticks, or even the scepters.

According to the conjecture were the disks placed on the selected locations on the stone Roof. In their holes were inserted the poles, sticks or scepters. The shadow position, the shadow length, and the direction of the pairs towards the sun were significant for the divination and decisions. Very probably, the shaman possessed also a rope, with which the distances and the angles between the directions were derived. This suggests the practically the always used geodetic surface of the stone Roof.

Naturally, the petroglyph does not show the real size of these poles or scepters in the relation to the humans. The sense had technically only the length of the objects of the same order of magnitude as the figure of the big scepter. Possibly is this figure – it was already shown that the figure depicts some sort of a unit of the longitude – also the base measure for the length of the poles or scepters.

The tasks of the shaman were very probably similar to the tasks of all, also “modern shamans” in primeval as in the so called “advanced” societies: the rites at the birth, marriage, death, the determination of the rites and festivities, the divination and the prophecies on the success, the advice and the decisions in everyday life of the tribe as well as of the individuals.

The main sign of the shaman was probably the scepter – the pole with the carved elk or reindeer head somewhere in the middle (compare pic. 3) and an art of the triangle, or the or an art of funnel on the top [49].

The conjecture is, that the figures of scepters on the stone Roof symbolize the shamans tasks, competence and authority. This should be confirmed by their geometric relationships.

The location of the Shaman figure (pic. 38) was very precisely selected. The directions of the sunrise and sunset at the winter solstice correspond to the base directions of the triangle. The meaning of the sunrise direction at the summer solstice is not clear, but the sunset direction at summer solstice is the direction of the scale for the autumn migration of the reindeer or elks towards the southeast. The main scepter direction corresponds to the “plane” on which the shaman figure stands, his body and both scepters point to the north helper point. This can be interpreted as the task of the shaman to determine the migration time of the big game to the south for the successful hunt. Over the head of the big scepter is the Shaman connected to the symbol of Hunt. All other smaller scepters are related to the measuring scales, nomograms to determine the animal migration times.

This task is confirmed also by the distances of the corresponding figures to the Shaman figure. All corresponding circles pass through the beginnings and ends of almost all scales. Compare also the picture 36.

Other shaman “competences” can be interpreted as follows.

The connection of the extreme western scale with the symbol of Life – the birth and marriage rites, the connection of the Dancer with the moon sign to the “tail” of the south main location the rites of the selected moon phases, the connection of the Uroborus with the two head bird and so with the scepters means probably the competence in general cases. The connection of the Shaman over the first base triangle point and the north helper point is probably the start for the divination interpretations, because the north helper point posses the connections to almost all figures. The connection of the Shaman with the north main location runs over the figures of Initiation and Fecundity – probably the fecundity rites. The shaman had probably also the authority to decide on the life and death of the tribesmen, what is probably indicated with the connection of the Shaman with the eastern scepter over the symbol of Death.

## How did the ancient Onega settlers composed the stone Roof petroglyph complex ?

As already mentioned, it can be only speculated on the myths of the ancient lake Onega settlers. The symbols found are very primeval, they are present in all cultures, and so they cannot be the bases of any deeper interpretation. Besides, the over thousand petroglyphs on the other locations have to be taken in account. They are probably also meaningfully related and have to be considered by any speculation on the local myths.

Primarily is the depth of the relations between the petroglyph figures on the stone Roof as well as their multi layer character surprising. Naturally, it dare not be forgotten, that this for the most expressive figures was found only, the other were not at all considered – even we don't know how.

From the geometric, i.e. mathematical standpoint, the geodetic surface of the Roof is divided according to a rule in the areas, which are in this way interrelated. This rule or rules contain also the relation to the solstice sunrise and sunset directions.

Each rule, especially a geometric one, defines necessarily some periodic property, something that repeats in the space. So there have to be relatively simple numeric relations, which give the meaningful connection of the areas or the groups of points.

From the pic. 39 was found, that the size of the large scepter has a meaning as the distance unit. The points 1, 2, 3 and 4, were found and only the point 4 is a part of the figure. This figure shows a pair of diving birds, discerned only by enlargement. The diving birds swim, dive, and emerge on some other spot. Here is probably hidden the symbol of the world duality – the underworld in water, the other over the water, corresponding to the figure of salamander as the duality of the light and darkness, day and night. The figure of these diving birds is located exactly towards the south envisioned from the north main location, the birds are directed to the northwest, towards the Uroborus. Their feet are visible; they are not in water, perhaps in the nest.

The point 1 is in the north, the point 2 in the east and north, the point 4 in the south, the point 3 between all other points, related to the whole group.

The points 1,2 and 4 depict almost the rectangular triangle with the equal sides. They are oriented in the north-south and east-west direction respectively. The line defined with the points 2 and 3, divides the side 1-4 on the half, the lines defined by the points 1 and 3, as 3 and 4, divide the corresponding sides on the one and two thirds. It si obvious that the circles with the radius equal to the triangle sides or scepter length, with the centers in the points 1 to 4, cross in the common points.



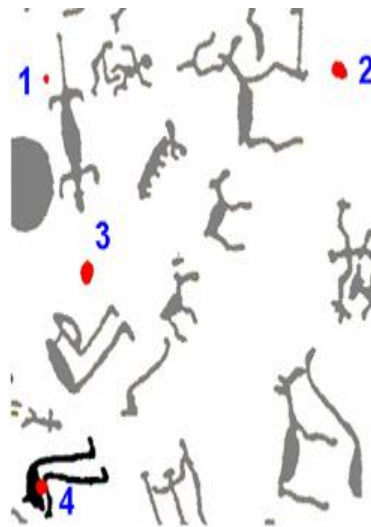
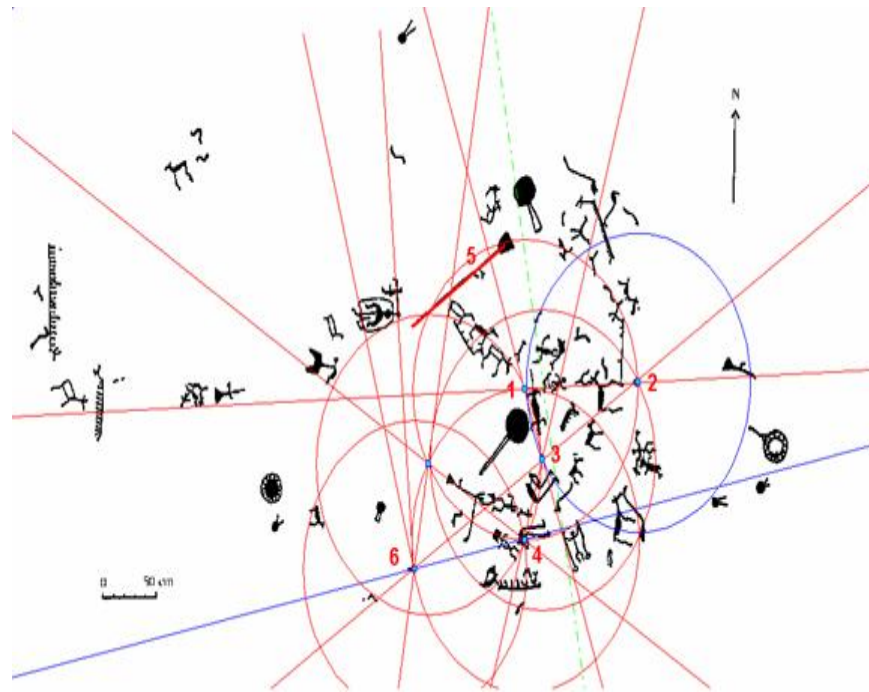


Fig. 39

The possible unit of length.

The points 1, 2 and 3 are marked as the point petroglyphs and are not the part of any figure, the point 4 is the characteristic point of the bird pair and is the center point of the sun signs with the northern main position (comp. fig. 28). Their mutual distances 1-2, 2-3, 1-4 are approximately equal to the length of the big scepter 5. The point 6, which is marked as the simple sign, is also on the same distance from the point 4. The point 6 is the cross point of the Uroborus directions defined with the both children. The direction 2-3-6 is parallel to the big scepter and its parallels connect various characteristic points of the figures (comp. fig. 22). The cross point, which is not numbered, is on the line connecting the point 3 with the east sun sign. Then on the line, which connects the southern auxiliary point, the center of the southern main position and the point 2, then on the line connecting the start of the westernmost boat -scale with the Creation symbol - all these lines are not inserted. The point 3 is on the line defined by the "salamander" axis, which is parallel to the roof ridge. Bottom - the enlarged part of the Roof with the points 1,2,3 and 4.

In the pic. 40 more clearly shown:

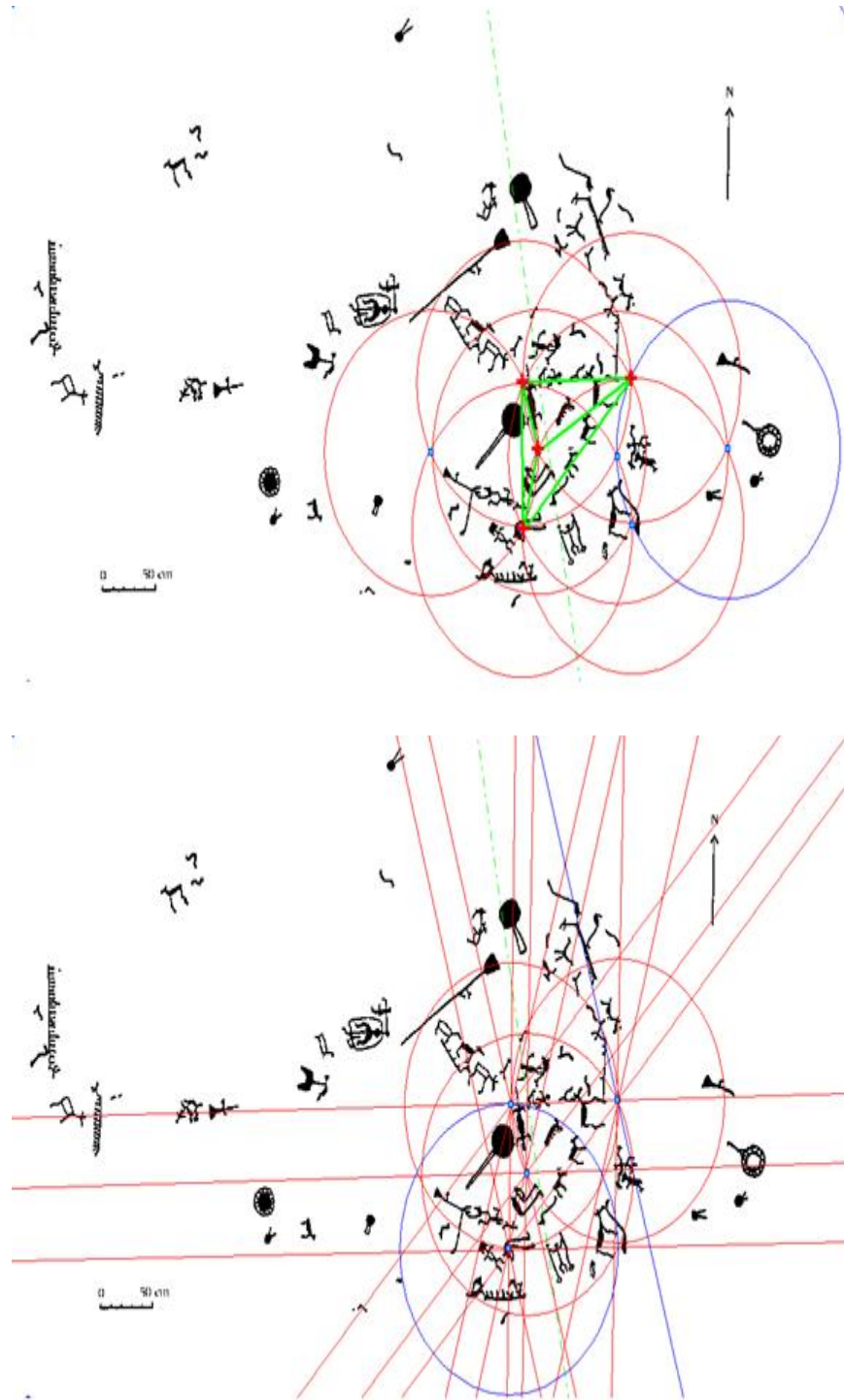


Fig. 40

The triangle from the fig. 39, the unit circles and the lines, defined by the all four points pairing of the triangle. The triangle is "almost" rectangular ( $\sim 92^\circ$ ) on the geodesic Roof surface; its projection on the plane is the equally sided rectangular triangle.

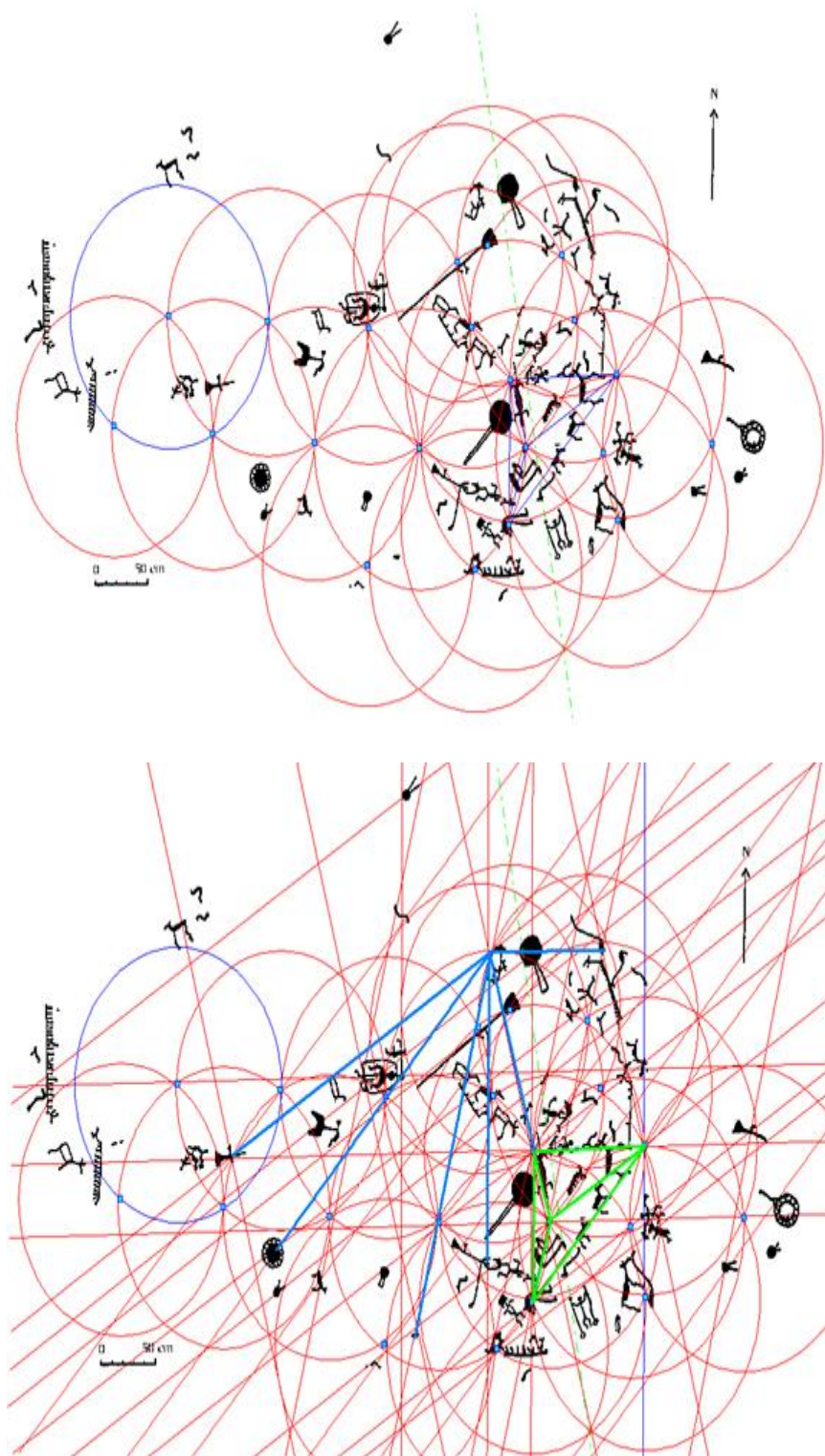


Fig. 41

The repeated insertion of the circles with the unit radius in the cross points of the circles (top) indicate the main criteria for the petroglyph distribution in the stone Roof set. The lines, defined by the pairs of the cross points or the center points are the directions connecting the characteristic points of the figures (bottom). They mostly coincide with the directions of the sunrise and the sunset at winter solstice, which build the angle of  $\sim 60,3^{\circ}$  (in the Julian year – 4000). The emphasized are the parallels to the triangle directions for the Hunt petroglyph.

This propriety is used to insert the circles of the same radius and the center in these cross points over the complete geodetic surface of the stone Roof – pic. 41 above. The parallels to the triangle sides, as well as to the lines, which connect the point 3 with the other points, are in this manner the base directions, which connect the various figures of the whole stone Roof petroglyph complex. The example shows this propriety for the figure of Hunt or Sacrifice (pic. 41 down).

In addition, the directions defined by the pairs of the circle centers are the directions of the lines connecting various figures. Hereof emerge the twelve direction groups. The sequence of the circles and their cross points contains the angle of 60 degrees, which is characteristic for the sunrise and sunset directions at the winter solstice. The slight differences are taken in account by the figures that are located outside of the selected circle groups. The areas are limited and defined by the circles and so is the corresponding rule fulfilled.

This is the base rule, which was used to construct the petroglyph complex of the stone Roof.

Naturally, the reason, why was the selected figure chiseled on the selected location with the selected orientation to the other figures, will remain probably forever unknown. Some slight hope exists for the figures, which are related to the hunt. Perhaps could some expert on the local hunting conditions and animals give some additional information?

From these findings follows the conclusion, that the most petroglyphs on the stone Roof were chiseled in the same age, but they were “used” over the vast time interval – confirmed by the “tails”, which show the adaptation to the change with the time.

The angle of 60 degrees, one sixth of the circle, the twelve direction pile ups, the approximately twelve moon phases, the number of days in the year – these facts were surely known to the ancient lake Onega settlers. Perhaps are the figures, their orientation, and their location also an art of the whole year calendar.



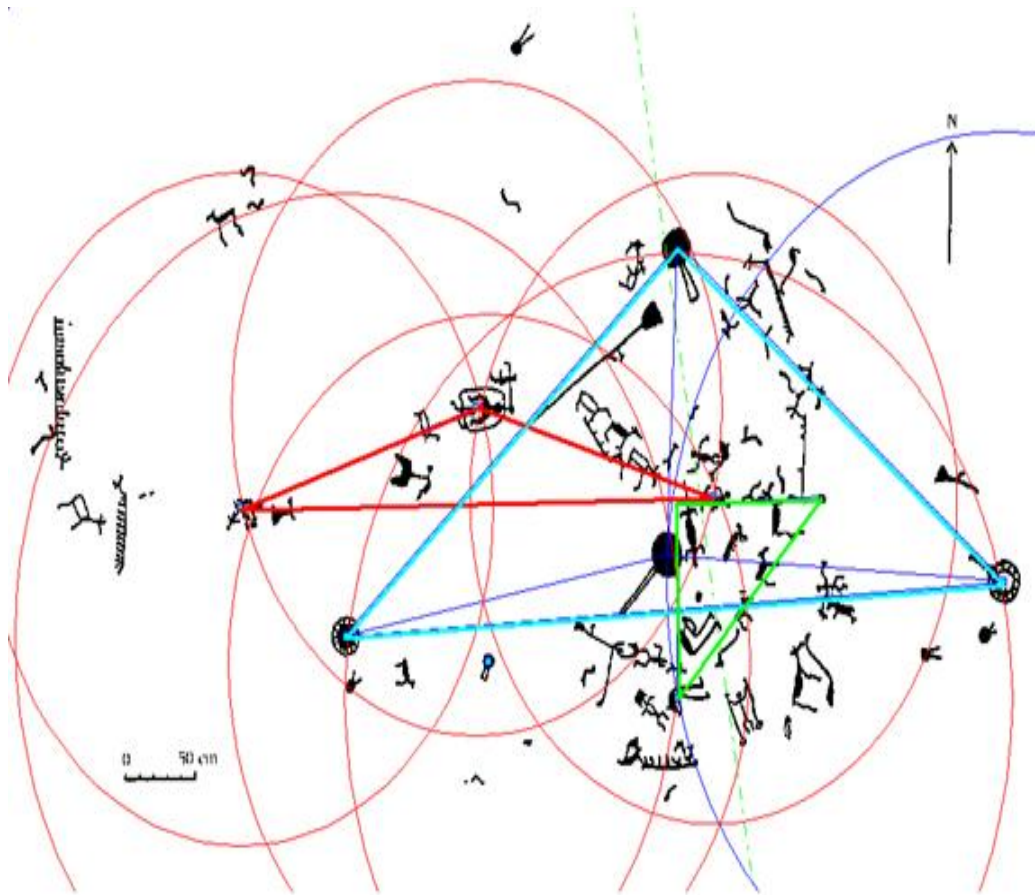


Fig. 42

The probable sequence in the composition and the creation of the stone Roof petroglyphs. The primeval petroglyphs - the northern, the southern main position, the east, and the west sun signs are according to researchers the oldest ones. Their "tasks" are the basic ones - showing the firmament directions. The first of the next petroglyphs were probably the Uroborus, the Creation, and the Initiation, after them then the whole complex based on the triangle 1-2-4.

The pic. 42 shows an additional peculiarity – the three basic, meaningfully closer related petroglyph sets, which show probably in which sequence the petroglyphs were created. The primeval petroglyphs – the north, the south main location, the east and the west sun are according to researchers the oldest. Their “functionality” is also the most basic one – they indicate the firmament directions. The next were Uroborus, Creation, and the Initiation. The whole complex based on the triangle 1-2-4 followed. Very probably are there also more subsets of the meaningfully interrelated petroglyphs.

These three sets represent the economy, the myths, and the rites connecting them in a single complex. Already Ravdonikas interpreted the stone Roof petroglyphs as an economic calendar, but without the closer analysis. Laushkin, as stated, has seen in the petroglyphs sole the myths of Kalevala. This is clearly more controversial as the economic calendar, but the mythic side cannot be rejected. It is just as real as the economic, but much more unknown and complex. Each correlation of a symbol to a petroglyph without the proper real reason cannot be in any case accepted. Actually are the base symbols of this petroglyph complex present in every mythology, religion, or epic tale. This devaluates every interpretation on this base.

## The social order of the lake Onega tribe

The comparison of the lake Onega petroglyphs with the river Vyg (White Sea) petroglyphs shows that the both sets of the petroglyphs were chiseled in the same manner. They were chiseled with the short strokes of the stone “chisel” on the rock – the Stone Age technique, as it is known from all continents. Therefore, the same chiseling technique does not mean the same culture or the same tribe as well as also any mutual contacts.

Both sets of petroglyphs were chiseled approximately in the same era [\*], but they have very different content.

*J.A. Savvatejev [50]: “...Both (White sea and Onega lake petroglyphs) are from the almost same time... On the White Sea is almost double number of figures, which are placed on the islands of the river before the estuary in the sea, the Onega lake ones are mostly on the cap endings ... contrary to the Onega lake figures are the most White Sea figures chiseled deeply over the whole depiction ... As here so also there are the figures concentrated in groups, but they are on the white Sea regularly over the larger area and essentially richer ... White Sea figures seem in common more natural as the Onega lake ones, where the numerous mythical pictures and details are found ... The differences in the content are even more evident ...”*



Fig. 43

Some petroglyphs from the White Sea. The picture is composed from single petroglyph copies.

The contents of the river Vyg petroglyphs (pic. 43) are narrative. The petroglyph fields depict the elk, the reindeer and the whale hunt, the men are armed with the bows, they possess the skins and their “masculinity” is expressed with their nudity and frequently to big penises. There are the petroglyphs, which refer the concrete sites, with the depiction of steps leading the way and direction. Their boats for the whale hunt have high sides and are capable to stand the sea waves. The chiseled reindeer and elk figures depict also male animals – the animals with horns. All this points to the fact that the creators of the river Vyg petroglyphs belonged to a patriarchal hunting society.

The lake Onega petroglyphs depict very seldom – or just in two cases the hunt on the Roof. They show many figures of animals – various birds, reindeer, and elk. The last are depicted always without the horns. Other animals are very seldom shown. There is also a lot of various signs, interpreted as the sun and moon symbols etc. The petroglyphs depict also “erotic” scenes and among the human like figures

are masked figures and the figures with inhuman heads. There is no clearly recognizable mutual narrative relation or connection. Obvious is the orientation of the single petroglyphs or petroglyph groups on the firmament. There exist fully unique groups. Depicted are also the boats with the low sides and the totally impossible rower count.

Previous researchers discovered this fact also. To them all was clear that the lake Onega petroglyphs are symbols, the river Vyg petroglyphs the “illustrations”, it can be said the “hunter tales”. These differences are explained as the differences due to the different religions, accentuated with the geographic distance - 325 km – an so somewhat different living conditions.

*J. A. Savvatejev [51]: „... All these differences ... may be the expression of the dweller site peculiarities , in the difference in their economies, in the difference of the figure importance and at last the decisive changes of the consciousness - as the result of the separation from the individual families and tribes ...In spite of this we may not talk about two mutually independent centers of the petroglyphs. Here exists at all just one closed center of the rock art, in which developed two isolated focal points, which besides the differences show the common dependence and mutual influence ...”*

J. A. Savvatejev [50][51] considers both petroglyph groups to be of the same origin, which were separated due to the differences in their economy.

The conjecture of the same origin of the petroglyphs cannot be accepted. Savvatejev didn't analyse the multi layer relationship of the stone Roof petroglyphs, their mutual distribution according to the solstices and the firmament as well as the rules of their geometric composition. These facts show the essential difference between the lake Onega petroglyphs and the petroglyphs from the river Vyg, including also all other Karelian and Fennoscandian petroglyphs [\*].

The Finnish and Estonian explorers promote the petroglyph popularity, especially of the ones from the river Vyg comparing them to the picture book – the prehistoric “comics strip”. Actually, if we use the same comparison than are the lake Onega petroglyphs the technical blueprint, the technical scheme and the puzzle – less picturesque, but far more abstract and intelligent. To “read” and to interpret them certain knowledge is necessary.

The content of the lake Onega petroglyphs proves that their creators – very probably she-creators – belong to the matriarchal hunting society. This is very exceptional, because the matriarchal societies are regularly the farming societies. Also the isolation of this culture confirms this fact – the matriarchal societies were mostly isolated and standalone societies.

Unique is also the high degree of abstraction and symbolism of the petroglyphs, which show that this was a highly organized society with very differentiated religious notions and views.

*According to J.A. Savvatejev: "... In numerous examples a power of imagination, ingenuity, and live participation is recognized, which has the reality in an own way predominantly transformed. Among them are figures, which are scarcely to be traced in the reality of that age. In them is evident above all the power of mind, the capability something creatively to transform and to symbolize, as well as to make the depictions, which the general view on the world. its driving force and connections as much as possible differently and clearly explain ...”*

The lake Onega culture vanished in the third millennium b. c. This would be the era where the present official history the invasion of the Indo-European tribes assume [\*\*]. In this millennium vanished also the Danube cultures and the famous Egyptian old kingdom [52]. The last one declined due to the climatic change. There were no more Nile flutes, the consequence were the decline of crop and the famine caused the rest. The climate change is never only local, but they come more or less global. Therefore, this climate change - the small ice age – causes the decline of the lake Onega and the Danube cultures.

The mutual influence of the culture from the lake Onega and the one from the White Sea through the history cannot be denied. This is obvious through the fact, that some petroglyphs are similar all the way to the Sweden. They all belong to the later ones [53], what is obvious from the petroglyph group composition.

The worship of the Big Mother with the strong relation to the sun is then understandable. Here is not an evolution of the myths or religion, but the fact is the change, which emerged with the new surroundings and the new living conditions of the first settlers on the lake Onega, which came from the farming Volga area to the hunting north.

## **The natives**

The researchers agree, that Karelian primeval inhabitants were the immigrants from the south, from the Volga area [54]. The settlers followed the receding cold of the northern latitudes. At that time, in the Neolithic, at the colonization time of the lake Onega was the mean summer temperature 2-3 degrees higher than nowadays.

It does not have a lot of sense to discuss on the ethnic origin of these settlers. The Finns and the Estonians count them for their progenitors [22] – the proof should be the ceramic samples found. The ceramic usually just proves that an art of contact existed among the tribes, but not the same “ethnic” group. The décor is the expression of the “fashion” and of the commercial contacts. The old Greek ceramic, which was found in the area of the almost whole European Russia and Ukraine, does not prove that there lived the ancient Greeks.

The Russian scientists take the ancient lake Onega inhabitants for the Samoyed or Lap progenitors. Stolyar conjecture that the previously mentioned differences between Onega area and the White sea area are due to the differences in religions of the Protosamoyed and Protofinns [55], which later fused with Volosovo-Garino immigrants. This should be obvious from the petroglyphs alone. The primeval petroglyphs are essentially bigger the later ones, which are placed between the primeval, as obvious from the Trias and the stone Roof groups. So should be actually the differences between the groups of primeval settlers cultural and in the origin..

To this we have a strong objection. It is very improbable, that these two tribal groups have the same “ethnic” origin. They live at the same time in the almost same area, where they settled at the same time, – they both are hunters and probably cattle-breeders – and they should have such a big difference in culture and in religion. This could have happened only on the larger time scale by the essentially different living habits, what the concurrence excludes.

A.P. Okladnikov [56] accentuated the rock art of the whole northern Eurasia is similar – from the Siberian vastness, from the rivers Tom and Angara to the Scandinavia – overall the symbols of fertility, sun signs, boats, snakes, human steps and human figures are to be found. It should be stated, that this similarity is more valid for the petroglyph from the White Sea as for the ones from the lake Onega. Contrary to Okladnik has V.N. Chernetsov excluded the Karelian petroglyphs from this group, but he agreed with the other statements. He considers the difference to the Karelian petroglyphs as the consequence due to strong difference in the economy, in society, in religious notions, which emerged from the different ethnic environment.

Protoslav tribes were not taken in account by anybody. From the geographic standpoint there cannot be any objection as the Protobaltoslavs [\*\*] already inhabited the Volga area. Due to the climatic conditions, the glaciers left by receding completely uninhabited area, the colonization of Karelia followed at the same time by the Slavic and Finno-Ugric progenitors. Finno-Ugric progenitors and the Samoyed are Ural tribes. They could only immigrate from the east or southeast but not from the south. They probably followed the herds of the migrating reindeer, with the fishing also the seacoast.

Thinly populated – even nowadays – does not exclude any of these tribes, as well as also Slavic ones. The petroglyphs from the lake Onega are essentially different from the petroglyphs of the whole of Finn shield [57, 58, 59], what means also the different culture and the different “ethnic” origin in spite of some similarities.

From this standpoint is worth to mention the similarity of the Onega lake and Bohuslän petroglyphs, a case of interest for A.J. Bryusov and V.I. Ravdonikas [53]. The similarity is between the sun and moon signs. Bryusov declines any connection of Bohuslän to the Onega sites. Ravdonikas but takes over the proven sun and moon signs from Bohuslän to explain the Onega lake ones. Laushkin agrees just conditionally as the Onega lake ones origin from the Neolithic, the Swedish from the bronze age - at least two thousand years younger as the onega lake ones, which were at that time already drowned 2 meters. Later the water level returned to the earlier position as it is still nowadays.

According to Laushkin it is possible, but it is also possible that the signs mean something else what the future research should give.

These similarities are consequence of the strong simplification and reduction of the depicted. As we already said in comparison to the children drawings, are the petroglyphs composed from the smallest number of the basic geometric objects – point, line, open and closed curve. It cannot be further simplified without the loss of meaning or sense. Thus may be explained the similarity of petroglyphs. So leads the simplification to the similarity in content. The symbols of the same objects – the sun or the moon – are then almost equal.

The burial site on the island Olenyi is the largest known Neolithic burial site in Europe. The grave findings prove that the natives were on the similar cultural level as the southern tribes. The dead were covered with the red ochre and then with the soil – similar as this was done, much later –by the Herodotus’ “farming” Scythes east of Dnepr [60]. The buried ones from the island Olenyi were the close relatives of the stone chiseler or the chiseler themselves, what is obvious from the grave additions and the petroglyph figures of scepters. In the forests on the east coast of the lake, especially in the neighborhood of Besov Nos, the rests of the Neolithic dwellings were found.

On the early Slavic inhabitants remembers also the name of the gulf Povenetskaja guba (pic. 5). Finns name Russians Venelainen and this name originates from the name Venets. Naturally was the name of the gulf later taken over by the Russians from the local Ugrofinnic inhabitants. This proves the high age of the name, because the primeval inhabitants of the gulf could only be of the Slavic origin. This is confirmed also by the names of the Russian origin, as also the name of the lake, which are not adapted from Finnic. This naturally does not prove that the names should be from the Neolithic. The names of the settlements as it is Medvezhegorsk, emerged naturally much later..

And where from originates the name Peri Nos ?

Nos is clear- this is just the Russian expression for cap, the origin of the name Peri is still not satisfactory cleared. Interestingly, the researchers consider it as very ancient; the impression is that it is silently pushed back, even in the Stone Age.

Laushkin [17] excluded the first interpretations of Shved – the origin of the name should be the Finn word „pelli“ – the mirror. He cannot accept also the interpretation of Linevsky – the name should come from the Udmurt devil Tol-Peri, which is the spirit of the storms – but Udmurts do not have anything common with the Karelia. The name should originate from Karelians, which name the devil „piru“ or „perkel“. Here from also the name Besov Nos – Devils Cap.

He allows also some other possibility. The name was given by some other nation, which did not consider the petroglyphs for the devils “figures” or work. The most probably were this Protosamoyed, because they have the sun deity with the name „Pejve“. Under the Finn influence it changed to „Peri“, the Russian translation is „Bes“.

All these interpretations with the devil considers author for inadequate, if the name should originate in the prehistoric times. Every interpretation with the devil means that the name originated from already Christian times.

Another version can be considered. It is interesting that the Russian scientists have never taken it in account. The ancient lake Onega settlers were with the greatest probability Protoslavlic origin. In Slavic myths is one of the deities Perun [62, 63, 64, 65], named Perkunas by the Baltoslavs [\*\*], the thunder god and the principal god. He is present in the myths of all Slavs. His Vedic version is Parjanya, related to the rain – the semen, which impregnates the mother earth. He is also connected with the sun, the thunder, and the storm. From this follows also the connection of Perun with the fertility, with the sun, with the field works. To him the captives and the cattle were sacrificed.

The direct connection of the Perkunas with the sun deity is found in the Lithuanian narrative, which should be created through the Finn influence: The heavenly smith Perkunas frees the sun and throws it on the firmament. The hammer, represented by the lightnings, smashes the clouds and liberates the sun. The battle of Perun with the Veles, the underground deity, is narrated in other narrative. Perun is married to the Sun, which each evening goes to Veles, in the morning returns (or is liberated) to Perun. In this tale is the sun worship directly connected with the Perun worship and the fertility rites. So the name “Peri” can be derived from the name “Perun”. Peri Nos would be then “Peruns cap”. Perkunas or Perun is also connected with the fire, and so with the red color [66]. The lake Onega rocks consist from the dark red granite, the dead from the island Olenyi were before the interment coated with the red ochre.

## **Summary**

The old lake Onega settlers selected the east coast part for their "sun" temple due to the geographic position and the peculiarities of the coast. The coast extends northwards; the caps are oriented to the west. The majority of the caps and the neighbor islands have the mutual directions in the direction of at least one of the sunrises or sunsets at the solstices. These directions were considered divine and they were important for the selection of the petroglyph sites.

The island Olenyi was also selected as the burial site according to these criteria. The same rules applied very probably to the mutual position of the petroglyphs sets of the same site.

The trinity (trias) from the cap Besov Nos, the oldest petroglyph set, is the witness for the primeval worship of the Great Mother, the base deity of the farming cultures. The Great Mother has with the large (more than a meter) petroglyph Besika her „altar“. The personified sun, which should be according to Laushkin the center of the lake Onega myths, has no altar in the whole lake Onega petroglyph area. The sun is so very probably just the main „driving force“ without any especially consecrated site. The sun sign petroglyphs are two orders of magnitude smaller than the petroglyph of the Great Mother. They are nowhere as the Great Mother standalone depicted. Mostly are depicted the birds, the deer and the elk – but we do not suppose that these animals were worshiped as the divine beings or deities.



This fact refutes the claim that the old lake Onega settlers were the sun worshipers. They remained faithful to the Great Mother. The sun had no doubt a central and important role in their myths, but it was not worshiped as a personified deity. It is not almighty – it loses almost completely its power in winter. The sun was very probably subordinated to the will of the Great Mother. The proof to this conjecture is the worship of the fertility. It is evident from the complete stone Roof composition. The Great Mother is always present – in the good as well in the bad.

Further, we dealt only with the petroglyphs from the stone Roof. These petroglyphs are mutually distributed in the directions of the sunrises and the sunsets at the solstices. The corresponding geometric rule was set by the equally sided rectangular triangle, defined by the three on the stone Roof point petroglyphs. The rule cuts the geodetic surface of the Roof in the periodic areas enabling the deep stratified sense in the petroglyph relationships.

The symbolism of the sunrises and the sunsets, the winter and the summer solstice as the good and the evil, the light and the darkness, the warm and the cold, the life and the death was used to estimate the figures of the petroglyphs as the archetype symbols. Determined were the symbols, which represent the life and the fertility, the death and the murder, the initiation etc. All these symbols witness the worship of the fertility in the matriarchal culture; its central symbol is the petroglyph named Uroborus depicting the woman bearing and devouring the child.

The petroglyphs depicting the boats are actually the measuring scales. Their geometric relationships show that they were used as the nomograms for the calendar purposes. The old lake Onega settlers determined with them the number of days to and from the equinoctial as the equinoctial itself. They estimated the time of the big game migration and the position of the herds using also the migration time of the birds. Very probably, they determined also the dates for the various rites.

The stone Roof petroglyph set was used also for the divination and the solicitation. The visibility of the petroglyphs depends strongly on the weather conditions and the sun position. The unknown rules connected the visible petroglyphs, the posed questions, and the shamans' interpretation in the prediction, the advice, the judgment or the decision in the current situation. Very probably were used also the petroglyphs from the other sites and not only the ones from the stone Roof.

The old lake Onega settlers were the descendants of southern proto Slavic farming culture immigrants, which adapted to a hunting culture with their arrival to the north, but preserved the essence of their myths and supplemented them according to the new life conditions.

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### [\*] **The afterword**

The results of the DNA genealogy of the Y-chromosome support this conjecture. Citations from

Анатолий А. Клёсов: Миграции ариев от 6000 до 3000 лет назад – как их видит ДНК-генеалогия, археология и лингвистика, Часть 1, Вестник Академии ДНК-генеалогии - Proceedings of the Academy of DNA Genealogy, Moscow-Boston, Volume 9, No. 1, April 2016:

*... The ancient haplogroup R1a (Haak et al., 2015), was dated to 7265±250 years back in Karelia, on the South Olenyi island... It remained unclear, how it came there - from the west, from Europe, or from south, from Anatolia or Caucasus. This haplogroup was found along the haplogroup J, so is actually possible the European variant, as it was recently dug out the haplogroup J2 of the Danube culture Sopot, which is dated on 6049±29 years back.*

...

*Thus the predecessors of the modern archaic haplotypes of the haplogroup R1a may have lived in Europe 7 thousand years or more ago.*

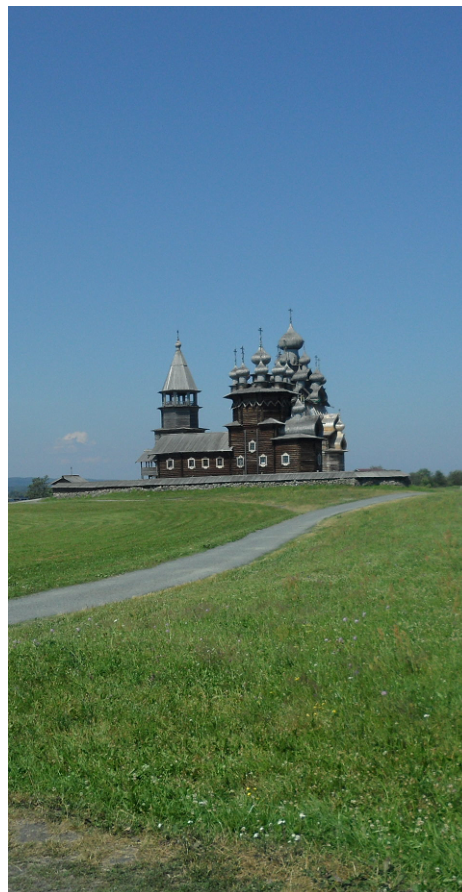
...

*...about 3700±200 years back lived the common predecessor of the Slavic Ugro-Finnic bearer of the haplogroup N1c.*

*The Slavic predecessor of the Eastslavic haplogroup R1a1 lived 4800±500 ago ...this is thousand and more years earlier [than N1c bearers] back. Slavs of the haplogroup R1a1 migrated to the central Russian plane from the west - from Danube, from Balkans, from Carpathians. Ugro-Finnic people, Uralic, already Altaic, migrated on their way from northeast, and earlier from the south Sibir.*

...

[\*\*] Protobaltoslavs and the Indoeuropeans are imaginary nations according to the genealogical research and results. The denominations were created due to the obsolete and erroneous Slavophobic theories on the origin of Slavs and the settlement of European population. They were predominantly Protoslavs.



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