**Determinants of Finno-Ugric navigation to northern European coastal regions 3500 years ago. Genes. Stars. Myths.**

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The aim of this presentation to discuss hypothetical factors that could have contributed to the migration of the Finno-Ugric population to the Nordic regions of Europe and Asia during the late Neolithic or the early Bronze Age, i.e. some *3500–2500* years ago.

Primary settlement of the region was possible after the ice had melted in the Finnish Gulf region about 12 000 years ago. Not much is known about those first inhabitants of the region. Migration from the Ural region started much later and the newcomers brought with them the Finno-Ugric language group.

In this short overview, we review and analyse three different but important aspects of this migration. We tackle separate ‘internal’, ‘mental’, and ‘external’ factors. To our understanding, ‘internal’ factors are based on biological/genetic determinants; external factors depict celestial components as possible milestones during the journey and their manifestation in petroglyphs.

Under ‘internal’ or genetic factors, we observe the regional distribution of the Y haplotype in Europe. We discuss the possible role of the ‘cold’ gene and the ‘light skin’ gene in our forefathers’ choice to migrate to a cold and dark environment.

Under ‘external’ factors, we describe geoglyphs with celestial motifs. We do not exactly know if stars guided Finno-Ugric people during their long journey to Nordic regions. Still, they had thorough knowledge of the structures in the sky and engraved those in rocks. We discuss the so-called ‘Cosmic Hunt’ pattern in the rock carvings spread in the Northern Finno-Ugric area, on the shores of Äänisjärv (Lake Onega) and close to Belomorsk. The White Sea Petroglyphs archaeological complex of Old Zalavruga, discovered in 1926 by Aleksandr Linevsky, includes a hunting scene, very similar to a star map.

Myths or ‘mental factors’ are known in all societies. The motifs of myths are classified into fundamental types: cosmogonic myths, which expose the origin of the universe as well as the origin of natural and cultural phenomena, domestication, environment, etc.; and anthropogonic myths, which explain the appearance of mankind and how humanity was divided into different peoples.

Using partly the tools of folklorists and folk tale specialists, such as Thompson’s global motif index (1955–1958) and ethnic legend indexes (Klintberg 2012), and partly information of the classification of incantations/spells, we try to trace myths about the North, Northern sky, Nortern Lights, cold/winter, the end of the world, and other myths. Our aim is to cover less-analysed sources about Finno-Ugric peoples.

Conclusions

1. There is much investigative work to be done to describe the different aspects of the Finno-Ugric genome and special mutations that make it easier to live in the Nordic region.

2. To our understanding, not only spatial aspects, (i.e. invasion of southern territories in the Eastern European region) but also genetic and celestial aspects could have influenced the migration of Finno-Ugric nations to northern areas of Eurasia.

3. Folklore, myths, and mental heritage not only depict the everyday problems of settling in a cold and dark environment but also outline the aim and meaning of the journey to Nordic areas of Eurasia and Scandinavia.

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