A general overview of the chronology of Pit-Comb Ware technocomplex in the basin of Lake Onega

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Abstract

The chronology of the Pit-Comb Ware can be subdivided into two stages: early stage (end of 5th – end of 4th millennia BPE) and late stage (end of 4th millennium – the beginning of 3rd millennium BPE). And the early stage consists of two phases. The first phase is represented by thin-walled vessels of semi-ovate shape with a rounded or rounded-conical bottom; the clay of these vessels has a moderate admixture of sand/grus; ornaments are mainly formed by horizontal patterns of pits. In the second phase vessels retain forms of the previous phase; appears an undetermined organic admixture; ornaments are mainly made by prints of rope. Late stage differs seriously from the preceding one: pottery of the late stage is represented by large thick-walled pots made of rough, badly mixed clay with an abundant admixture of grus/sand. Forms of vessels are more diverse, there are sharpened bottoms and more variable ornamentation.

Keywords: Pit-Comb Ware; Pit-Comb Ware periodization; Neolithic pottery of Karelia

The Pit-Comb Ware technocomplex is spread in the Northeast part of European plain (pic. 1) from around 4200 BPE to around 2000 BPE. The technocomplex was named after the characteristic feature of its ceramics, that looks like the prints of the crests (see pic. 3, pic. 4). The bearers of the Pit-Comb Ware technocomplex mostly practiced hunter-gatherer lifestyle. Also the bearers of this technocomplex are supposed to be the people who created substrate (Pre-Finno-Ugric) toponymy (Krainov 1986: 8). In this paper we are going to give a brief sketch of the chronology of the Pit-Comb technocomplex.

G. A. Pankrushev has singled out several stages of development of the Pit-Comb Ware on the base of study of materials from the site of Viganayvalok I (pic. 2). He states that early stages correlate with more primitive ornamental techniques, i.e.: with the ornament that was made simply by pits filled the whole surface of a pot. On the other hand, rhomb stamp appeared upon the very late stage of the development of the ceramics; rhomb stamp appeared along with other more elaborated and more complicated patterns. Thus, it is possible to consider the Rhomb-Pit Ware as a development and as a type of the Pit-Comb Ware (Pankrushev, Zhuravlev 1966). According to Pankrushev in the territory of Finland and Karelia the Pit-Comb technocomplex was replaced by the Asbestos-ceramic technocomplex that actually appeared inside the Pit-Comb technocomplex (Pankrushev 1973: 66 – 70; 1978: 49; 1988: 84).

1 In the current text the term technocomplex is used instead of widely used term archaeological culture. Technocomplex can be determined as a regularly repeated system of artifacts connected with a certain region. It is much more correct to avoid using term culture for there would be no associations with cultures which are subject of cultural anthropology, it is important to keep in mind that not every technocomplex is a culture, or, in other words, not every technocomplex assumes its own ethnic component.
N. V. Lobanova points on the fact that sites with the Pit-Comb Ware can be attributed to the second half of the Atlantic period, to the border between the Atlantic period and the Subboreal (the end of 5th millennium BPE – 3rd millennium BPE, according to uncalibrated data) (Lobanova 1986; 2004). Lobanova supposes that ornamental traditions of the Pit-Comb Ware are rather close to those of the Ljalovo的技术 complex, and that ornamental traditions of the Pit-Comb Ware were formed in the Southwestern part of Karelia and on the East coast of Lake Onega, and later were spread northward (Lobanova 2009: 56).

It is possible to single out two stages of development of the Pit-Comb Ware: early stage (the end of 5th millennium BPE to the last quarter of 4th millennium BPE) and late stage (4th millennium – beginning of 3rd millennium BPE).

The early stage in its turn can be subdivided into two phases. The first phase (Chernaya Rechka the Ljalovo technocomplex was a Neolithic technocomplex that existed in 4th millennium BPE; its sites were first discovered near the modern village of Ljalovo (pic. 1).  

2 See pic. 2.

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Pic. 1. The region of the spread of Pit-Comb Ware and the location of Ljalovo (the map has been made of a screenshot of Google maps)
Vessels are decorated by regular horizontal patterns of pits and imprint of the end face of a tool (probably a bone). Pits are the most often used elements. Sometimes pits form simple geometric motifs – rosettes, festoons, etc.

On the second phase vessels retain forms of the previous phase; in the clay there is an undetermined organic admixture – this feature was not fixed at the earlier time. Ornaments were made by prints of rope, receding and drawn stamps, and rarely – prints of fish vertebrae. The Kargopol pottery was found in Southeastern Karelia and in some other regions in similar complexes. The ornament is characterized by a multi-row linear zigzag of pits and comb lines (or receding rope and end face imprints) covering whole bodies of vessels.

Pic. 2. The map of Karelia and neighbor areas (the map has been made of a screenshot of Wikimedia maps)
The late stage of the Pit-Comb Ware (border of 4\textsuperscript{th} – 3\textsuperscript{rd} millennia BPE – the beginning of 3\textsuperscript{rd} millennium BPE) is represented by numerous materials of the Comb-Pit Ware and the Rhomb-Pit Ware originated from sites located in the basin of Lake Onega and in the lower flow of Vyg river (pic. 5). Pottery of this stage differs from that of the preceding stage. Pottery of this stage is represented by large thick-walled pots made of rough, badly mixed clay with an abundant admixture of grus or sand. Their form is more diverse, there are sharpened bottoms, variable ornamentation. Characteristic features are the following: traces of combs upon the inner surface of vessels; sometimes an organic admixture is added into the clay. Corollas are thickened, tilted inward, decorated with a neckline, sometimes with fingerprints. Comb stamps are long and broad. Meanwhile, the question of the final of the Pit-Comb Ware remains open, although in the third stage of its development, vessels decorated with wide and long imprints of comb-shaped stamps, as well as rhombic pits.

Pic. 3. Some samples of the Pit-Comb Ware of the early and the middle stages: 1 – Chernaya Rechka II; 2, 3 – Chenaya Rechka I; 4 – Chernaya Rechka IIa; 5 – Vigainavolok I (image source: Lobanova 1996: 90)
It is possible to state that in the West coast of Lake Onega complexes with the Rhomb-Pit Ware demonstrate continuation with complexes with the Pit-Comb Ware (Khoroshun 2013). The process of changing of ornament of the Pit-Comb Ware of Karelia from one stage to another is still a matter of discussion. As it is shown by the materials of the settlements on the Western coast of Lake Onega, the earliest samples of the Pit-Comb pottery are close to those of the Ljalovo pottery (pic. 7). However, the ornamentation and manufacturing technology developed on a local basis, reflecting the adaptation to local natural conditions and the economic needs of the population.

Pic. 4. Some samples of the Pit-Comb pottery of the late stage (image source: Lobanova 1996: 91)

According to the comparative-typological analysis of the considered ceramic complexes, it is possible to assume a succession of their development on the basis of the Pit-Comb pottery. It passes several major stages during development: from the Pit-Comb Ware to the Comb-Pit Ware, then to the Rhomb-Pit Ware and then possibly to the Asbestos-ceramic. Each of these stages is usually considered as a special technocomplex.

It is possible to conclude about step by step development of the Pit-Comb Ware; its bearers could appear on the West coast of the Lake Onega in the end of 5th millennium BPE. Further development was determined by inner processes which took place in the corresponding culture, and it was reflected in changes in material culture. This process was most vividly reflected in the changing of the ornamentation of ceramics (the predominance of comb-shaped stamps, oval and rhombic pits, along with preserving the technological tradition of making vessels and ways of
their ornamentation) for a long period of time until the appearance of sites with the Asbestos-ceramic.

Pic. 5. The basin of the Vyg river (the map has been made of a screenshot of Wikimedia maps)
Pic. 6. Some samples of Kargopol pottery (image source: Oshibkina 1996: 223)

Pic. 7. Some samples of Ljalovo pottery (image source: Gurina, Krainov 1996: 176)
Pic. 8 Some samples of the Rhomb-Pit pottery (image source: Tarasov, Nordqvist, Mökkönen, Khoroshun 2017: 107)

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