Introduction

The research area for this study is the southern part of continental Russian Far East, or Maritime region, neighbouring the Korean peninsula, north-east China and the Japanese archipelago (Figure 1). The Palaeometal period in the Maritime region is dated from around the end of the 2nd millennium BC to the beginning of the 1st millennium AD, when first bronze and then iron appeared in the cultural assemblages. In this period, we see the development of a complex economy including hunting-gathering and agriculture, population growth as well as an increasingly complex society. During the 1st millennium BC, similar technological, social and economic changes are characteristic of the prehistoric communities of the Korean peninsula and the Japanese archipelago (Aikens et al. 2010; Bale and Ko 2006).

The most important archaeological cultures representing this period in the Maritime region are the Yankovskaya and Krounovskaya. The cultural assemblage of the Yankovskaya sites dating from the 9th to the 3rd centuries BC yield evidence of iron tools. The subsistence economy of these settlements was based on marine and terrestrial gathering activities, whereas agricultural practice was restricted. The sites were mainly concentrated along the south-western Maritime region coasts, in the area of Peter the Great Bay. The Krounovskaya culture sites were located in river valleys of the southern Maritime region and are dated to around 4th century BC to the 3rd-4th centuries AD (Figure 2). In this culture agriculture and metalworking were more developed than in the Yankovskaya groups.

The most representative artefacts of these two cultures are ceramics. Their pottery assemblages consist of complete vessels and many potsherds, including different shapes and decorations, but similar technological features (Zhushchikhovskaya 2005: 44-50, 55, 73, 77-78). The pots were manufactured using sand temper, and similar methods of construction and surface treatments (coiling, smoothing and polishing), and they were fired in simple kilns at low temperatures, not exceeding 800°C (Figure 3; Zhushchikhovskaya 2005: 77-78, figure 3.51; Nikitin and Jung 2008: 227-239).

In both assemblages, everyday and ‘нарядный’ ware were found (naryadn’iy - this term can be broadly translated with ‘fine’). This article focuses on naryadn’iy ware excavated in the southern Russian Far East.

The naryadn’iy ware of the Yankovskaya culture

The naryadn’iy ware is particularly abundant along the south-western coast of Peter the Great Bay in the vicinity of the Korean peninsula. It represents around 10 to 25% of the ceramic assemblage at sites such as Chapaevo, Peschanny, Slavyanka-1, Slavyanka-2, and Stark (Figure 2). Their shapes, which include bowls, footed bowls and pots (Figure 4), were made both as everyday as well as naryadn’iy vessels.

Ceramic bowls of small and medium sizes are present in large numbers at any site (Figure 4: 1-4), as naryadn’iy and ordinary ware. The bowls have a flat bottom, unrestricted aperture, direct plain or folded inside rim; deep and shallow bowls can be distinguished depending on the degree of wall divergence. The main type of footed vessels present on the south-western coast has the reservoir appearing as a strongly flattened and wide bowl or plate on a low conical-shaped hollow foot (Figure 4: 5). The characteristic trait is a narrow band-like thickening along the inside of the rim. Rare types of
Figure 2. Map of the southern part of the Maritime region with areas of highest concentration of Yankovskaya (light-grey) and Krounovskaya culture sites (dark-grey). Sites referenced in the text: 1 - Slavyanka-1, Slavyanka-2; 2 - Poshanov; 3 - Stark; 4 - Chapaevo; 5 - Korsakovskoe-2, Krounovka-1; 6 - Chernyatino-2.

Figure 3. Reconstruction model of a pottery kiln excavated at Chernyatino-2, Krounovskaya culture, in the Primorye region (drawing by Y. Nikitin).

footed vessels have a bowl-like reservoir on a high cylindrical foot.

Other types are a small- or medium-sized pot with a neck-like restriction between the body and aperture, the rim is folded abruptly outwards with high shoulders (Figure 4: 6), and a medium-sized pot with a wide neck, high shoulders and rounded body. Naryadny bowls and footed bowls are the most recurrent shapes in the assemblages.

More attention was given to the manufacture of naryadny ware than ordinary ware. The grain size of sand or rock inclusions, naturally or artificially occurring in the ordinary ware fabrics is between 0.5 and 1.5 mm, whereas in naryadny ware the inclusions are around 0.5 mm. The finer fabrics were used to manufacture relatively thin walls (ca. 4-6 mm thickness), in contrast to the thick walls of ordinary ware (ca. 8-10 mm).
The surface treatment of naryadn’iy ware included clay-water coating, coloured slipping and polishing. Coloured slipping was practiced namely at the sites of Peter the Great Bay area, whereas at sites east and north-east of this area, this technique was rarely found. Natural pigments used in the treatment for coloured slipping was ochre with various shades of red. Ochre is widespread in southern Russian Far East as in many other regions of the world. Experiments show that the simplest method of preparing these coloured slips is mixing powdered ochre with water (Zhushchikhovskaya unpublished).

Ochre slip was mainly applied over the external surfaces (Figures 4 - 6). On shallow bowls, ochre slip was applied to the internal surfaces and a narrow zone along the outside rim (Figure 5: 1). On deep bowls it was applied to the external surface and narrow zone along the inner part of the rim. In a few cases the slip covers the internal and external surfaces of the bowls. On footed bowls this slip was applied to the fully visible inner surface, and sometimes to the outer surface of the conical-shaped foot. On other pots ochre was applied to the outer surface and sometimes to a narrow zone along the inner rim (Figure 5: 2).

A common feature of the pottery-making of the Yankovskaya culture was the application of an ochre slip over a coating layer. In some cases, the ochre slip layer is dense and even, more frequently it is unevenly mixed with the underlying coating layer. The quality of the ochre covering depended on the
preparation conditions of the clay-water coat, in particular on the degree of drying. It may be supposed that ochre slip was applied with an instrument, such as a brush, as traces of brushing, thin and horizontal strokes, are visible - in particular in areas touching uncolored surfaces. A few potsherds have the ochre slip over uncoated surfaces. In many cases, but not always, the surface of the ochre-slipped ware was finished by glossy burnishing. The burnishing was obtained using a stone or any other smooth and hard instrument, and it was common in the Yankovskaya culture. However, less attention was paid to the polishing of ordinary ware, producing a matte and rough surface. In many cases, glossy polishing of naryadn'iy ware was applied to surface areas covered by ochre slip, while non-slipped zones were treated by matte polishing. Glossy polishing provided a high density surface layer and this greatly decreased its water permeability. Simple tests were carried out to demonstrate this: a drop of water on a glossy polished surface covered by ochre slip or clay-water coating remains in place for about 20 -25 minutes. By comparison, a drop of water on a weakly polished surface rests in place for 5 - 7 minutes, or less. Most examples of naryadn'yi ware are decorated (Figure 4, pots 1 - 4, and 6; Figure 7).

Ornamental motifs are organized in band-like designs comprising horizontal straight lines, zig-zag, meander, triangle, and rhomboid figures. Incision, relief application, dotting and rolling are the main techniques of decoration. The decoration of naryadn'yi ware is more elaborated than that of everyday pottery.

Potters of Yankovskaya culture settlements used local clays with a high content of ferric oxide (Zhushchikhovskaya 2005: 37-39). After firing in oxidizing conditions, the ware’s surfaces that were covered by the clay-water coat acquired a “warm” chromatic colour in orange, yellowish-red and yellow shades. Cherry-red and crimson colours of fired ochre slip produced an especially luxurious appearance of the ceramics. Polishing treatment strengthened the colour intensity, giving them a glossy look.

A special firing effect was partial blackening used sometimes for the refinement of bowls and footed bowls. More frequently the blackened zone is a narrow band along the rim, sometimes on the interior surface. The combination of black rim and light-coloured red, orange and yellow walls looks elegant. Partial blackening of pottery is known in archaeological and ethnographical cases. For instance, the blackening of vessels’ upper part and inner surface was used in pottery-making of the Badarian culture in Egypt during the 5th millennium BC. It was thought that after oxidizing firing, the vessels were placed in an inverted position into a smudging sphere (Spencer 1997). According to the data on traditional pottery-making of Nigeria, partial blackening is produced after the completed oxidizing firing when red-hot pots are plucked from the fire and covered in certain areas by wet leaves for several minutes. Carbonized matter penetrates into the fabric pores and gives the black colour to the surface (Slye 1968). It seems likely that a similar method was applied to the production of partially blackened ware of the Yankovskaya culture.

Naryadn'yi ware of the Krounovskaya culture

The category of naryadn'yi ware includes mainly footed bowls and in a few cases - pots. Specific traits are black or dark-grey colours, often with polished surfaces (Figures 8 and 9). Naryadn'yi ware is more frequent at agricultural sites with long phases of occupation. The most important are Korsakovskoe-2, Krounovka-1 and Chernyatino-2 in the Razdol'naya river valley, and a group of sites in the

Figure 6. Ochre-slipped naryadn'yi ware of the Yankovskaya culture: 1) interior of a bowl; 2) exterior of the small-sized pot.

Figure 7. Ochre-slipped naryadn'yi ware of the Yankovskaya culture: exterior of two decorated pots.
Partizanskaya river valley in the south-east (Figure 2). However, in the pottery assemblage of these sites, the amount of *naryadn’yi* ware is relatively small if compared with different types of ordinary ware, such as storage and cooking containers, bowls and cups.

![Image](image1.png)

**Figure 8.** Black-polished ware of the Krounovskaya culture.

The footed bowls are represented by several morphological variants, with different proportions and contour of the reservoir and foot (Figures 8 and 9: 2). Blackened and polished pots have an elegant vase-like shape and a small size of 18 - 19 cm height (Figure 9: 1).

Also in the Krounovskaya culture, the fabric of *naryadn’yi* ware has a finer and carefully processed texture than the fabric of ordinary ware. In ordinary ware the fabric average grain size is around 1 - 2.5 mm and maximum grain size is up to 3 - 5 mm, but in the fabric of *naryadn’yi* ware they are around 0.5 - 1 mm and 2 mm respectively.

![Image](image2.png)

**Figure 9.** Black-polished ware of the Krounovskaya culture.

Blackened surfaces were the result of intended smudging. Re-firing tests of ceramic samples show that the black or dark-grey colour disappears after short thermal processing at 500-550°C in an electric muffle furnace. This suggests a carbonizing origin of the black colour (Shepard 1985: 220). In many cases the black colour is not intensive or evenly distributed over the surfaces, reflecting insufficient smudging time and incomplete carbonization. The effect of blackening was strengthened by pre-firing polishing produced by a hard instrument. In many cases the polishing quality varies from glossy to matte on the same vessel. In contrast to the Yankovskaya culture, Krounovskaya *naryadn’yi* ware was never ornamented, as decoration was uncommon also in ordinary ware.

**Discussion and conclusion**

Production technology of *naryadn’yi* ware is more complicated and labour-intensive than the technology of ordinary ware of the Yankovskaya and Krounovskaya cultures. This is concerned with the operations of ceramic fabric processing, surface treatment and firing. At the same time, the technological quality of these operations does not indicate a standard high skill level. It may be said that craft specialization was at an initial stage of its development in the pottery-making of the Palaeometal period of the Maritime region.

It is important to note that pottery shapes associated specifically with *naryadn’yi* ware are footed bowls. This kind of pottery appeared firstly in the southern Russian Far East within the Yankovskaya culture and continued during later periods. Certain types of Yankovskaya and Krounovskaya ceramic footed bowls are similar to the shapes of “*dou*”, “*gu*”, “*pan*” ritual bronze vessels that were popular in China during the Shang and early Zhou periods. This phenomenon seems to be the result of long-distanced spread of cultural influences from the core area of Chinese civilization toward distant territories (Rawson 1993; Zhushchikhovskaya 2005).

Surface colour appears as a principal marker of the *naryadn’yi* ware and its special functions. Colour preferences - the red in the Yankovskaya culture’s and the black in the Krounovskaya - may be interpreted as the reflections of cultural differences.

It must be noted that in the neighbouring Korean peninsula coloured ware for ritual and other non-utilitarian functions were produced widely in the 1st millennium BC. Red-polished ware was characteristic of the Bronze Age cultural communities, while black-
polished ware was preferred later, in the Early Iron Age - this dynamic is the same as in the Maritime region (Bale and Ko 2006; Rha 2006: 20-23).

What could we say about functional patterns of naryadn’iy ware? Two aspects should be considered - the contexts of these finds in archaeological sites and the traces of use on pottery surfaces. The functions of the Yankovskaya naryadn’iy ware are not clear from its archaeological context. Seacoast sites of the Yankovskaya culture do not offer clear evidence of “closed” dwelling complexes, ritual places, and workshops. Excavated burial grounds do not contain any samples of naryadn’iy ware connected with grave-good assemblages. Taking into account the shapes of the main types of naryadn’iy ware (bowls and footed bowls) and their appearance, one can suppose that their functions were linked with eating and drinking during feasting. Unfortunately, no traces of residues have been found so far but we can suggest that these carefully manufactured bowls, footed bowls and pots were used for serving or as display containers, but not for cooking. Judging from the frequent occurrence of small-sized bowls, this ware was widely used for individual portions.

The interpretations of unearthed naryadn’iy vessels as special ware for special purposes like festivity or rituals are well known in archaeology (Bale and Ko 2006; Gebauer 1995; Manson 1995). There is ethnographical evidence that festival or ritual events arranged with special or prestige drinks and meals are popular in traditional communities of the world (Hayden 1995). The assumption that in our case naryadn’iy ware was used in hunting/fishing feasts looks probable, as the economy of coastal Yankovskaya culture’s settlements was mainly based on the abundant local marine resources (Aikens et al. 2010).

Sites of the Krounovskaya culture contain well-preserved remains of pit-dwellings and household products. An important recurrence is the presence of 1 - 3 examples of footed black-polished bowls in pottery assemblages of any pit-dwelling. There is no evidence of concentrations of large amounts of naryadn’iy ware in well-defined restricted areas or in burials. As for the Yankovskaya culture, the surfaces of naryadn’iy vessels have no traces of food processing and their shapes are associated mainly with display functions. Supposedly the functional use of this special ware was connected with private family’s rituals or ceremonies rather than communal ones. In general, production and usage of naryadn’iy ware in the cultures of the Palaeometal period in the Maritime region may be considered as the indicator of development of social complexity in the 1st millennium BC.

References


