

MEDIEVAL MOLDED CERAMICS OF THE PERM CIS-URALS

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Abstract: The archeological heritage of the Perm Cis-Urals includes a wide range of clay pottery. However, there are still no comprehensive surveys studying its distinctive features. This article aims to thoroughly analyse medieval molded ceramics of the Perm Cis-Urals. The overall study is conducted in conformity with the system theoretic approach. The article represents the first stage of analysing medieval molded ceramics, and provides morphological, technological and functional definitions.

Keywords: Archeology, the Middle Ages, the Perm Cis-Urals, the Lomovatovskaya archeological culture, the Rodanovskaya archeological culture, ceramics.

INTRODUCTION

Producing pottery is one of the oldest human crafts. An attitude towards ceramics and the role of pottery in social life were drastically changing during the human evolution. At first, pottery was seen as something magical (Tsetlin, 2012), but later it became just items of everyday life, and the production of ceramics seriously grew in numbers. As households were developing, pottery became functionally distinguished (vessels for storage, vessels for individual meals, etc.) (Krylasova, 2007).

At the modern state of science, the analysis of ceramics complexes as sources of historic data helps to restore the technology of manufacturing pottery and learn more about traditions, intercultural contacts and the development level of various crafts.

METHODS

Medieval ceramics of the Perm Cis-Urals is characterised in accordance with three distinctive features: vessel shape, manufacturing technology and ornamental patterns.

In order to define manufacturing technology scientists analyse exterior characteristics of handmade pottery. When they need to study the shape of vessels, they have to deal with pieces and fragments, so it is quite hard to fully recreate the initial form.

Group defining features include such morphological characteristics as body shape, neck shape, lip shape and their proportions. Vessels are grouped into several classes in accordance with the form of their top.

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Vessels are measured with the help of the following parameters: D1 – lip diameter, D2 – the narrowest neck diameter, D3 – the widest body diameter, H – total body height. The shape of vessels is characterised through comparison of their total height (H) and the widest body diameter (D3), and their lip diameter (D1) and the widest body diameter (D3). In addition, scientists analyse the correlation of neck height (H1) and total height (H). These characteristics can be applied only to wholly preserved vessels (Belavin, & Krylasova, 2012).

While classifying pottery in accordance with a group of features, scientists have found out that body shape, neck shape and ornamental patterns are permanent group defining features. Besides ornamental patterns, all these characteristics are crucial for forming a separate class and seldom change, while decorations are often temporary.

In order to analyse medieval molded ceramics of the Perm Cis-Urals we use Gening's classification (Gening, 1973).

Khlebnikova made a great contribution into studying medieval ceramics and distinguished ethnocultural features for creating their typology. In this article, we use the 7th group of her typology as it represents the distinctive features of the molded ceramics found in the Perm Cis-Urals. When Khlebnikova analyses this kind of pottery she points out that it was the molded ceramics with a circular bottom made of clay and shell pieces and decorated with pectinated or corded ornamental patterns (pots and bowls). This pottery became widespread in the beginning of the 10th century. It is mostly found in such settlements of Volga Bulgaria as Rozhdestvenskoe, Dzhuketau and Alekseevskoe (Kokorina, 2002).

While describing ways of surface treatment, we use Glushkov's methods (Glushkov, 1996). The study of imitative decoration enables scientists to pinpoint the presence of ornamental patterns on medieval molded ceramics found in the Perm Cis-Urals (Glushkov, 1996).

The analysis of the pottery exterior, its ornamental patterns and decorated parts is conducted through examination and further description. The cultural tradition of decorating clay pottery comprises three basic components: (a) decoration technology, (b) ornamental stylistics or its appearance, and (c) ornamental semantics or its meaning. The latter has not been scientifically proved yet. Thus, we pay most attention to decoration technology and ornamental stylistics (Tsetlin, 2012).

RESULTS

Archeological molded ceramics is a handmade product whose final form depends on manufacturing technology. Techniques are shaped in accordance with individual skill, group and family norms, social and tribal traditions.

When ceramics is being analysed, scientists often deal with fragments that are not enough to recreate the initial form of some vessel. However, these remains

were used to make a typology of pottery taking into consideration the following group defining morphological features: body shape, neck shape, lip shape and proportions. Subclasses of clay vessels are distinguished based on the decoration of their tops (Yurkova, 2014).

The medieval ceramics under survey includes distinctive features of both Lomovatovsky and Rodanovsky archeological cultures.

Chronological and Territorial Features of the Survey

The Lomovatovskaya archeological culture was named after the Lomovatovka River where the corresponding monuments were discovered in the end of the 19th century. These culture bearers had been living in the area from the 6th or 7th century to the second half of the 11th century. Later, the Lomovatovskaya archeological culture was moved to central and northern regions of Perm Krai, from the sources of the Kama and Kolva Rivers and up to the middle reaches of the Vishera River (Fodor *et. al.*, 2015). The Lomovatovskaya archeological monuments form local affined groups, including towns, villages and burial sites. The list of the best-known monuments comprises the Agafonovsky II, Ogurdinsky, Rozhdestvensky, Bayanovsky, Demenkovsky, Kanevskoy burial grounds and the Telyachy Brod burial ground.

The Rodanovskaya archeological culture was distinguished by Talitskiy after excavations of Rodanov settlement and the monuments of the 11th and 14th centuries found along the Inva and Chusovaya Rivers. This culture had existed from the 12th to the 15th centuries. The Rodanovskaya archeological monuments are located in Northeastern Europe, namely the Middle Cis-Urals. This region is restricted by tundra of the northern Cis-Urals from the north, the foothill of the Urals from the east, the Vyatsky Mountains from the south-west, mingled woods and wooded steppes from the south. The Kama River is the main waterway in this area, from its source and up to the mouth of the Chusovaya River (Belavin, 2002). The Rodanovskaya archeological monuments include Rodanovo, Rozhdestvenskoe I and Salamatovskoe settlements, the Telyachy Brod burial ground and the settlement of the same name, the Plotnitsky burial ground, etc. (Belavin, & Krylasova, 2016).

While analysing medieval ceramics of the Perm Cis-Urals, we have traced gradual replacement of the Lomovatovskaya ceramics (squat vessels with a circular or flat bottom, decorated with corded ornamental patterns (Goldina, 1985)) with the Rodanovskaya pottery (larger vessels with a circular or protruded bottom whose body forms a slightly bent neck and then a short lip (Sedov, 1987)).

Technological Description of Molded Ceramics

The colour scheme of vessels varies from dark brown, grayish and blackish to light gray and almost chalky. Dark yellow and reddish pottery can also be found.

The vessel surface was treated in several ways: (a) the surface was carefully polished (perhaps with a piece of leather), (b) the surface was scratched with a splinter or bone, (c) the surface was touched upon with a wad of grass or twigs. The latter technique left the so-called scratches on pottery. Some of them were actually made with the help of pectinate stamps, which is quite evident from the imprints of combs.

If you take a look at some fragments of clay vessels, you will see that the surface could be treated as a part of the overall decoration. For example, craftsmen could paint ornamental patterns and then polish the surface with some solid tool leaving scratches. Some vessels are covered with furrows as a kind of embellishments. The top of vessels was often polished vertically, while the lower part was treated horizontally in order to create a special texture. The procedure was made the other way around from the inside. The upper part was polished horizontally, while the bottom was smooth and polished with a wet palm (Yurkova, 2014). This technique enables scientists to learn more about the skin covering of the master who worked on this vessel. He used the tips of his fingers to polish the surface, with his palm facing the vessel (Bobrinskiy, 1978).

Functional Classification of Pottery

At this stage of studying medieval ceramics of the Perm Cis-Urals, we have distinguished the following functional groups of pottery: packing crockery (for storage and transportation), kitchenware (for cooking food), and dinnerware (individual vessels for meals). This classification is based on the functional typology of crockery suggested by Krylasova (Krylasova, 2007).

Packing crockery is mostly represented by large thick-walled pots with a 65 cm lip. These vessels often had holes in their walls that helped to keep food fresh for a longer period. Such pottery could be found in underground storerooms, with grain still scattering around (for instance, Zapolesie settlement). Besides, many of these vessels had additional holes near their lip that were likely used for attaching a cap.

Unlike packing crockery, kitchenware was much smaller. These vessels were used for cooking food (pots, bowls, and pan-like vessels). As it was of a smaller size, kitchenware was more convenient to use in daily life. For example, bellied pots were great for boiling food. Due to their wide body, food was equally heated from all the sides. A spherical shape guaranteed the best correlation between useful storage and the vessel surface, which saved materials, reduced weight and kept food warm for a long time. A narrow neck seriously limited evaporation area and enabled cooks to stew, steam and roast food (Krylasova, 2007).

Vessels with holes in the centre of their body are no less interesting. Their surface is often cracked due to the effects of acid environment. There is a viewpoint that these vessels were used for straining out whey, and then store cheese and cottage cheese (Lavryatskoe, Zapolesie, Rodanovo settlements, etc.). Talitskiy believed that

milk had been already cooked at that time. He thought that vessels of such a shape and equipped with special holes were used for straining out whey and preparing cheese (Talitskiy, 1951).

Kitchenware often bears scorches as it was used in everyday life (for cooking food). Scorches on the inner side show that these vessels were used in the kitchen for preparing meals. However, this suggestion is still unproved as scorches have not been studied. There is a chance that kitchenware could be used for both cooking food and producing some materials. At this moment, there are no special surveys of scorches and pieces of food stuck to the vessel surface.

Dinnerware (cups, bowls, plates, and mugs) does not bear any scorches and is made for individual meals (Oborin, 1970). These vessels are of the smallest sizes. Their functional use includes mixing dishes (bowls and plates) and drinking liquor (cups and mugs).

Bowl- and pan-like vessels can be put into the group of their own. However, their class is small in numbers (Rozhdestvenskoe and Salamatovo I settlements) and it is hard to define its functions. They look like a flat disc of a small size. Its border often forms a side fence (Yurkova, 2012). In Krylasova's opinion, these vessels were not common of the Perm Cis-Urals (Krylasova, 2007).

Such additional kitchenware as roller supporters was widespread in the area (Krylasova, 2010). This class of ceramics is represented by circular clay rollers whose walls go thinner and turn into a ring-shaped lip or cylindrical neck with a thick lip on the top. These elements were attached to a flat surface (table or oven) thanks to their wide foot. These were used as supporters for bigger vessels (for example, storage vessels) or liquor holders.

Caps of molded ceramics are of particular interest. Many of them can be found on large archeological excavations, including Rozhdestvenskoe, Salamatovskoe and Anyushkar settlements. They were produced in the form of flat discs whose rims were decorated with handmade or rectangular imprints (Belavin, & Krylasova, 2008). The cap surface was often embellished, while their inner side had a rough texture. There were also holes in caps, so that the content of vessels would not go bad. Besides, additional holes made in the vessel body were used to attach a cap to the lip.

Ornamental Patterns used on Ceramics

The analysis of ornamental patterns used on ceramics is the most important and challenging part. Tsetlin distinguishes five hierarchical levels of ornamental stylistics: elements, ornament, motive, image and composition (Tsetlin, 2012). Ornamental patterns of ceramics differ depending on their size, shape and cultural identity. As a rule, large vessels were decorated in a simple way. Craftsmen did not use any complex instruments except for their bare hands and tools found nearby

(Krylasova *et. al.*, 2014). Small vessels (dinnerware and bowls for individual meals) have intricate ornamental patters. Among elements (imprints on the vessel surface created at once (Tsetlin, 2012)), the imprints of pectinated stamps and traces of cords are the most popular ones. These ornamental elements form a bigger part of decorations. Medieval ceramics of the Perm Cis-Urals is also rich in ornamental motives, with the most intricate ones found in large settlements (for instance, Salamatovo I settlement, Rozhdestvenskoe settlement, Anyushkar settlement). Ornamental patterns used on ceramics are often so complex that they need special attention (Figure 1).

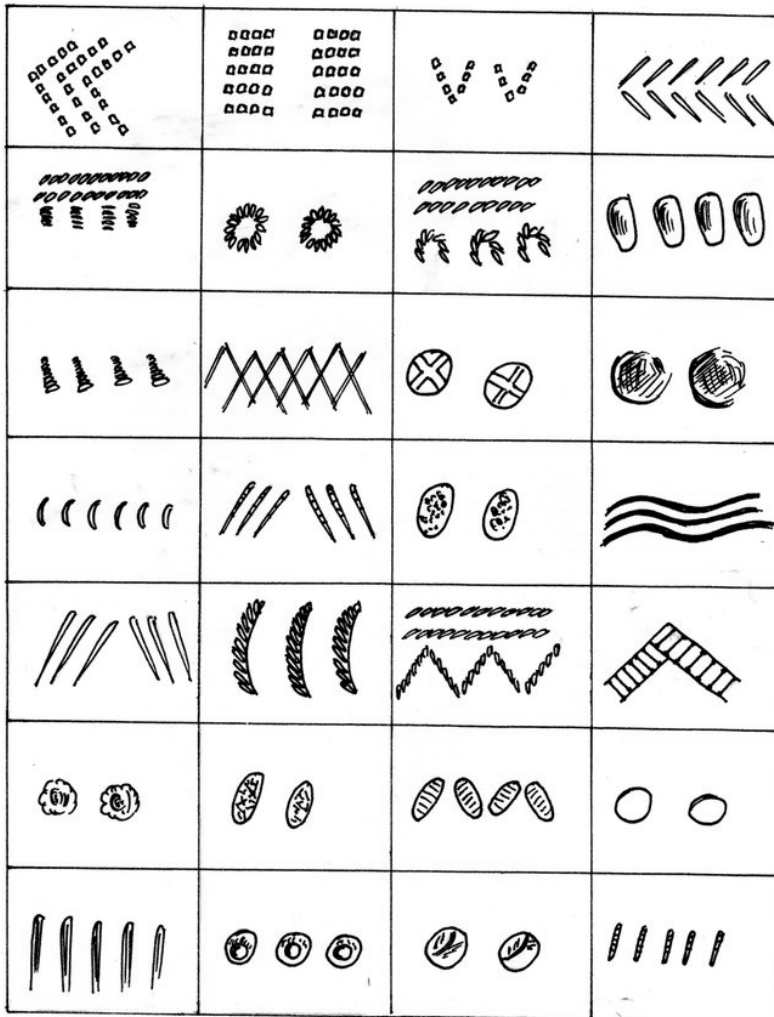


Figure 1: Various ornamental patterns

DISCUSSION

Studying ceramics is a labour-intensive and time-consuming process. Despite these obstacles, the ceramics analysis can answer the questions connected with characteristics of the archeological sources under survey and pinpoint important social changes. Since the study object is quite complex and large-scale, a comprehensive study of this archeological source has not been conducted yet. Ceramics represents the traditions of the Lomovatovskaya and Rodanovskaya archeological cultures and enables scientists to trace the evolution of the pottery produced in the Upper Kama River region. This kind of evolution takes certain time, which is evident from some transitional form of ceramics. In other words, the Lomovatovskaya pottery (the period from the 8th to the 9th centuries) coexisted with the Rodanovskaya vessels (the period from the 11th to the 12th centuries) that had different sizes and manufacturing technologies. Ceramics also differed in various settlements. For instance, ceramics manufacturing methods in villages and towns had their own distinctive features. The difference is mostly seen in the shapes of vessels and their diversity. Some special vessels revealed housekeeping methods of this population and their ways of cooking food. At this moment, we continue studying the molded ceramics of the Perm Cis-Urals to stress out local characteristics, compare them and later form a classification of vessels.

CONCLUSION

Therefore, medieval molded ceramics of the Perm Cis-Urals is regarded as a vast material source. Summarising the above mentioned data, we have concluded that the ceramics complex of the Perm Cis-Urals provides plenty of useful information for analysing the life of locals in the Middle Ages. The study of the molded ceramics found in the Perm Cis-Urals enables us to examine its elements and make sure that the complex belongs to the Lomovatovskaya and Rodanovskaya cultures. Ceramics manufacturing methods in villages and towns had their own distinctive features. The difference is mostly seen in the shapes of vessels and their diversity. The pottery within one particular settlement can also be characterised by distinctive features (for example, a vessel for making cheese and cottage cheese in Zapolesie I settlement). These special vessels show that the local population chose one or another way of housekeeping.

However, the further analysis of medieval ceramics found in the Perm Cis-Urals is still quite urgent. There is a need to study scorches in a more detailed way, and this kind of exploration calls for certain conditions and finances. Computer devices can also be used for statistical data processing. Pottery found in settlements and burial sites should be distinguished and compared. Manufacturing methods and usage frequency of burial pottery are also to be surveyed.

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