

## POTTERY VESSELS IN CENTRAL ASIA FROM THE HISTORY OF

#### **EMERGENCE**

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### Annotation

The article analyzes the emergence and development of pottery in Central Asia. In it, the author focused on the role of pottery in the history of mankind, the methods of pottery making, the decorations on pottery in the Central Asian region, and the archaeological classification of the images on it.

**Key words and phrases:** Central Asia, ceramics, pottery, pottery, discovery, pottery wheel, ornaments, Parthian Empire, scratched pottery, glazed pottery, Kushan Empire.

## ГЕРМЯННЫЕ ПОСУДЫ В ЦЕНТРАЛЬНОЙ АЗИИ ИЗ ИСТОРИИ ВОЗНИКНОВЕНИЯ Аннотация

В статье анализируются процессы возникновения и развития гончарства в Средней Азии. В ней автор сосредоточил внимание на роли гончарства в истории человечества, способах изготовления гончарных изделий, украшениях на гончарных изделиях Среднеазиатского региона, археологической классификации изображений на ней.

**Ключевые слова и фразы:** Средняя Азия, керамика, гончарство, гончарство, находка, гончарный круг, украшения, Парфянская империя, процарапанная керамика, глазурованная керамика, Кушанская империя.

It is known that fire-baked pottery is one of the most important discoveries in human history. Originally used for the primary needs of people related to food, ceramic dishes have improved over time. In particular, there was a layer of potters specializing in the production of ceramic products, pottery wheels were discovered, various decorations began to be drawn on the dishes, sharp changes were observed in the shapes and types of dishes. Also, another innovation in pottery, glazing of dishes, began to be used. Pottery is a type of craft that makes various items (terracotta, earthenware, building materials, etc.) from clay. Humanity has been engaged in pottery since ancient times.



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According to historical sources, women were engaged in this type of craft at first, and after the appearance of the pottery wheel, men began to make various items from clay. In the region of Central Asia, there has always been a great demand for handicraft products such as pottery (pottery), tawak (pottery), tile making, brick making (khumbuzchilar), and tandoori.

Glaze created as a result of covering the surface of ceramic products with a vitreous coating also performed practical and artistic tasks. That is, if the sensitivity of a ceramic pot to moisture is reduced, it gives the pot an aesthetic look.

The use of secret has been known to mankind since ancient times. In the IV millennium BC, two types of secrets were used in Egypt:

1. Alkaline, high in silicon content.

2. Lead, used in ordinary pottery [1. C. 37].

During the Middle Kingdom period (2100 - 1700 BC), potters decorated various vessels with geometric patterns, carved with white paint on a red background or bright red-brown. ¬¬¬¬Later, "Egyptian porcelain" was discovered, and not only pottery, figurines and pictures of animals were also revealed [2. C. 69].

Glazing of dishes began to be used in China in the IV-III centuries BC. It is known that the production of enameled vessels began during the Parthian Empire, and it did not stop until the middle of the 8th century [3. C. 37]. As a result of the excavations in Ayritom (Uzbekistan), pottery vessels with green and yellow glaze, glazed on both sides, from the period of the Kushan kingdom were found. Many glazed products have been found in the western part of the Parthian Empire. According to R. Ettinhausen, the use of glaze in pottery was widely used for the first time since the Parthian Empire [4. C. 147].

Researchers have not yet come to an opinion about when the production of glazed ceramic products began in Central Asia. Some researchers say that the appearance of glazed pottery dates back to the period of the Kushan dynasty, the reason being that at that time part of the Central Asian region was part of the Parthian state and the production of glazed products was widely used in its western regions. He believes that the appearance of the first glazed products in Asia corresponds to the first half of the VI-VIII centuries [5. C. 37].

From the end of the 8th century, the production of glazed ceramics in Samarkand and in Central Asia as a whole began to develop rapidly. I. Karabachek explains the process of appearance and development of mysterious ceramic vessels in the last century with the fact that the use of vessels made of precious metals by pious people among Muslims is prohibited by Islam. F. Zarre believes that this ban was only an impetus for the development of candlestick pottery. According to A. Poob, the same ban



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encouraged the development of all types of glazed pottery products. Today, some scientists are promoting this point of view.

Thus, the mass development of glazed pottery from the end of the 8th century was not based on a religious prohibition. From the middle of the 8th century, after the end of Arab politics, there was an increase in productive forces, which led to the development of feudal crafts. The great demand for durable, cheap and beautiful vessels led to the spread of technically modern glazed ceramics, and people's love for porcelain was the key to its further development. According to V. L. Vyatkina, ready-made glazed vessels came to Samarkand from outside in the 4th-6th centuries AD. I. A. Sukharev, when dating the glazed pottery, says that it corresponds to the 20s of the 8th century and was introduced as a result of the Arab invasion [6. C. 8n-9].

One cannot agree with the above opinion, because many Western scholars who have studied the medieval glazed ceramics of Central Asia argue that there was a separate school of Central Asian glazed ceramics [7 . C. 149]. For example, E. V. Sayko quotes R. Ettinghausen who believed that glazed ceramics were used by the Sasanians in Iran when he saw the reference work [8. C. 8]. In the monograph "Medieval Central Asian City" in the section devoted to pottery production, author O. G. Bolshakov writes that in the second half of the 8th century, the Iraqi production method of pottery entered Central Asia, and the convergence of the production of mysterious ceramics (o 'like') rejects the appearance.

Undoubtedly, it cannot be denied that glazed pottery could have entered Central Asia due to trade relations, but recent excavations have shown that mass production of ceramics was recorded in the late 8th - early 9th centuries. The famous archaeologist Sh. Tashkhojayev points out that the appearance of glazed ceramics in Samarkand dates back to the end of the 8th century, because the production of glazed pottery products was not observed in Central Asia until that time [9. C. 37].

In some places, it has been developed since the 9th century, but there are still places (Tashkent, Fergana, etc.) where the time of the secret's appearance has not yet been determined. However, as a result of archeological research in Ferghana cities of the Middle Ages, mainly in Kuva and Ahsikent, it was clarified that glazed ceramics appeared here in the early 9th century [10. C. 148-151].

G. V. Shishkina, an expert on the history of glazed ceramics of Central Asia, in his book "Glazurovannaya keramika Sogda)" researchers who studied the glazed ceramics of Central Asia, want to clarify when the production of the oldest local products began, as a result of which O' Central Asian potters, based on the materials collected in the last decades, unanimously considered the vessels called "alkaline" to be the first steps for mysterious ceramics [11. C. 31].



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A. Anarbayev, in his book "Akhsikent - stolitsa drevney Fergany", dated the ceramics in the AK-12 complex in the Aksikent monument, according to the analysis of the layers and pottery materials of that period, to the end of the 8th century - the first half (or the last quarter) of the 9th century. fainting. According to the layer, glazed ceramics appeared in the early stage of this period, because in the 12th period (complex) of the lower layers, pale green ceramics were found, and alkaline ceramics were also found in the upper layers of this complex [12. C. 428].

It is known that glass products have been used in various sectors of the national economy since ancient times. This network has been highly effective in giving appearance and beauty to ceramic products, jewelry, giving strength to architectural monuments and protecting them from the external environment. This characteristic of glass has given it another name, that is, glaze of various colors, which is covered on the surface of ceramic objects and building materials.

Vitreous glaze is an extremely fine, thin coating applied to the surface of ceramics and building materials, which is hardened to the ceramic surface by firing at high heat. Vitreous glaze is applied to the surface of ceramic or building materials in two ways: as a mixture - in a dry state and as a solution, i.e. in a wet state. The coating of the glaze on the face of the same thickness and plane ensures that the color will come out evenly across the surface.

Vitreous glaze has a thousand-year history. In Central Asia, the technology of covering with vitreous glaze has been known since the 10th-13th centuries, in which the domes of mausoleums, madrasas, and mosques were mainly covered with blue glaze. The reason for this is that the flag of Islam is of this color, or in Turkic peoples, sky-blue is associated with worshipers.

According to its chemical composition, vitreous glaze is mainly divided into two types: alkaline and lead. The melting temperature of vitreous glaze depends on the nature of its chemical components. Alkaline vitreous glazes melt at 1100-1250 C, and lead vitreous glazes at 900-1100 C. The melting process also takes several hours.

It is important to prepare the glass glaze mixture. Each component included in the composition must be carefully checked and ground, the amount of components must be accurately measured, and these components must be mixed in a special mixing



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device. Water is added to this mixture until it becomes a certain viscosity and mixing is continued. The prepared creamy solution is applied to the surface of a special ceramic object or building material, which has been prepared in advance and has been smeared with angob on its surface. Kaolin, angren clay, ground powder of sand are used as aggregates. Angob is also selected according to the color of the vitreous glaze. Angob also helps to bring out the color of the vitreous glaze and forms a strong bond between the vitreous glaze and the base, binding them together firmly.

The vitreous glaze solution coated on the surface of the material is dried in a drying oven at 1100 C and baked for several hours at high heat depending on its nature. Before removing the baked product from the oven, it is necessary to observe that the oven has cooled down. Uncooled vitreous glaze may crack, flash, or migrate from the coated surface. 20-40% lead oxide, 30-45% white sand, 25-40 alkaline and 0.5-1% coloring oxides are the basis of the vitreous glaze composition [13. C. 262-264].

In foreign literature, this high-silica base is also called faience, due to its appearance in Ancient Egypt and entering science under the term "Egyptian faience". Written sources contain information about the use of various special masses such as "crucible clay", "wisdom clay", "porcelain clay" and others in the production of ceramics in the Middle Ages. There is some confusion in the use of the terms porcelain, earthenware and tile, which differ in terms of content.

Porcelain is divided into two types in terms of quality: fine porcelain (porcelain, Persian, the name of the ancient Chinese province of Fag-fur, where the best porcelain was made) and rough porcelain (faience, the name of the city of Faience, a large Italian center of ceramic production). Coarse porcelain differs from fine porcelain in its softness and water absorption (9-12%), so it is glazed. They are made from the same material. They contain white clay - 45-50% sand or quartz - 35-45%, feldspar - 2-5%, chalk - 1%, fireclay - 10-15%, only their cooking technology is different. The more chalk is added to porcelain, the softer it becomes. The smoothness, water-absorbing properties and glaze of rough porcelain are similar to tiles, but the composition of tiles differs sharply from the composition of coarse porcelain. While the composition of coarse porcelain consists of several components, the composition of tiles consists mainly of two raw materials: sand or quartz (85-98%) and alkali is also used to bind sand particles together. Ancient written sources also provide information about the composition of these two raw materials.

Rom ancient times, all kinds of decorative jewelry were made from tile. One of its other important features was discovered during the reign of Amir Temir, and thus tile began to be widely used as a building material in the architecture of Central Asia in the 14th century. During this period, the art of mosaic and majolica was also



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introduced. It is noteworthy that the tiles used in Eastern architecture, covered with various colored glazes, have been preserved to this day without losing their appearance and integrity. Tile was mainly used to decorate the facades and domes of buildings with mosaics. Colored glazed tiles, mosaics and majolica decorations increased the durability of the buildings, giving them a shine and increased their status. Tile differs from ceramic by its porosity, lightness, and the firmness of the glaze on its surface, that is, its deeper absorption of the glaze.

The content of sand-silica in tile samples made in different regions is different. There are 80-85% in Iranian tile, 72-86% in Azerbaijani tile, 89-93% in Khorezm tile, and in some samples, the amount of silica is even higher. Khorezm masters had a great role in the tile work of that time, and Amir Temir brought the master craftsmen of the Khorezm oasis to Samarkand and created all the conditions for them to create unique masterpieces of the East.

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