Sphero-conical vessels of Aktobe medieval ancient settlement

Madiyar Yeleuv1, Yeraly Shardarbekuly Akymbek1, Claudia Chang2

1Al-Farabi Kazakh National University, Al-Farabi, 71, Almaty, 050040, Republic of Kazakhstan
2Sweet Briar College, USA, 1054, Virginia, 24595-1054
E-mail: eraly_a@mail.ru, 87015707240

Abstract. Aktobe medieval settlement is situated to the south of the Aksu village of Shumsky district in Zhambyl region. The settlement is surrounded by two long walls. Over 40 years the settlement is a subject of archaeological research. Several construction horizons were discovered during the archaeological excavations. The foundation of the minaret, dated back to the XI-XII centuries, is one of the most attractive monuments. Considerable number of sphero-conical vessels were found there. Such archeological finds were discovered in the monuments of cultic architecture for the first time. Earlier the similar number of such artefacts were found at the excavation of bath situated in Otrar and dated back to the XI-XII centuries. The purpose of this study is to identify the relationship between the sphero-conical vessels and the minaret.


Keywords: Aktobe, minaret, foundation, sphero-conical vessel

Introduction

Sphero-conical vessels made of clay and burned at high temperature are the most unusual and rare archaeological finds from medieval villages and settlements. The name "sphero-conical vessel" is associated with an unusual pottery shape. The name is composed of two words: "sphere" and "cone". Crockery mouth is like a "sphere" (above the lateral wall) (in Greek, «sphaira» means ball), while the lower part of the crockery resembles the "cone" (in Latin «conus», or «konos» in Greek, meanings geometric figure). The major number of sphero-conical vessels have thin aperture, round body, the neck is narrow and long, upper part of the head is like a mushroom. The most sphero-conical vessels are dark gray or light gray. The external part of the vessels is made in a different style, decorated with unusual stripes, multiple stamps and stamped by various characters.

Galiyev Z.S. in her article, "Sphero-conical vessels of Central Asia: their typology and chronology", published in 2000, divided all sphero-conical vessels, found in medieval ancient settlements of Central Asia, into two groups according to their development during 4 periods. [1]. Lunina B.V., in her article, notes that in Central Asia spheco-conical vessel was called "simab-kuzacha"; "simab" means silver water, i.e. mercury, and "kuzacha" means narrow-necked clay crockery [2]. Persian name for the vessel used to store mercury, named "Kuzey-simab", is described by archaeologist G.A. Giddy, who noted that such crockery was used as far back as in the XII century [3]. According to M.E. Masson, during the excavations of Fergana settlement, named Sokh, in 1920, three sphero-conical vessels with liquid were found [4]. In the work "Burana", M.E. Masson and V.D. Gorioncheva consider sphero-conical vessels as "simab-kuzacha" (for mercury storage) [5]. Even now, many researchers call these vessels in Kazakh language as "synapkoze" that is "simab-kuzacha". There are many opinions concerning the use of sphero-conical vessels.

2. Main part

In medieval written sources, particularly, in the work of Mahmud Kashkary, the crockery for liquid storage is called "kiz". "Kiz" is tableware for keeping musk, kind of carryon [6] (bag, vessel for keeping musk). The word "musk" is given there as "jípar" [7]. "Musk" (in Latin "muscus") is a substance with a pleasant smell, which is taken from the ovum of some animals [8]. So, today "musk" is translated into the Kazakh language as "pleasant smell", "fragrant water", like in medieval times. However, latter does not mean that "fragrant water" was stored in "sphero-conical vessels". This can be explained by the fact that "kiz" was used for transferring liquids. As a narrow-necked vessel it is called also "jasíman" [9]. It is not known for what purpose it was used. But it should be mentioned that the sphero-conical vessels also are narrow-necked.

First, it is obvious that sphero-conical vessels were extraordinarily beautiful and were used to keep very pleasant-smelling liquid. Secondly, looking at vessel sculpting (short and narrow neck), one can easily recognize that it was used by travelers to transport liquids along. Very narrow neck, round shaped body, wedge-shaped bottom, and a cap of the sphero-conical vessels made it very convenient to...
carry them in vertical position not spilling liquid. However caps of sphero-conical vessels were not found. We can just assume that the cap was made of wood.

As already noted, there are guesses that these vessels were used for transporting liquids, because the narrow neck was convenient for binding. Also, found artifacts have visible scratches at the bottom, as if the vessel was hanging. Despite the fact that not many sphero-conical vessels were found in medieval settlements and ancient towns of Shu-Talas valley, they were used very often.

Sphero-conical vessels, found in the foothills of the Shuya valley, are attributed by A.N. Bernstamm [10] to Karakhanid times (XI-XII centuries).

Sphero-conical vessels, which belong to the IX-X centuries and are very rare in the occupation layers of Shuya Valley, P.N. Kozhemyako relates to the imported goods. He notes that most sphero-conical vessels are very common in occupational layers of the X-XII centuries. According to him, gray solid clay, which was used to make sphero-conical vessels and other similar vessels, were found in Zhetisu region just in the XII-XIII centuries [11].

However, we know that during excavations of ancient Taraz in 1940, G.I. Patsevich discovered pottery kilns (made of clay), relating to the XI-XII centuries. They were intended for the manufacture and firing at a high temperature of small objects or sphero-conical vessels [12]. Sphero-conical vessels from the ancient city of Taraz are related by T.N. Senigova to the X-XII centuries. She divides them according to their size into two groups: small and large [13]. According to T.V. Savelyeva, sphero-conical vessels found among other medieval items in the northern part of the Ili Alatau, are dated back to the period from X to early XIII centuries [14].

Thus, we can assume that sphero-conical vessels were brought to the Shu-Talas Valley in the X century. Note that these vessels are often found in the upper cultural layer of medieval Aktobe ancient settlement in Shuya Valley [15; 16; 17; 18].

In 2009, at the excavations site, situated 50 m away to the west of the central part of the town (citadel), the remains of the minaret dated back to the XI-XII centuries, have been found and identified. Minaret consisted of two parts: the stylobate and the upper part of the pediment. The height of the remaining walls was 3.6 m. Size of the stylobate of quadrangular minaret is 8.65 x 8.5 m, and height 2.6 m [19].

The rectangular shape of the construction and the preserved walls of equal length appear quite similar to the minarets found at Burana [20] and Uzgen dating back to XI-XII centuries [21]. Basically the four-sided walls and the octagonal part’s projects look much like the Burana [22], Termez [23] minarets dating to XI century.

After clearance of the stylobate of the minaret, it was revealed that the bulk of crockery consisted of the pieces of broken sphero-conical vessels. Total number of sphero-conical vessels reached about 240; 26 of them represented the fragments of the vessel ring, and 52 pieces were bottom fragments. The question, why such a great number of sphero-conical vessels were found near the minaret, is quite challenging.

Analysis of the sphero-conical vessels dated back to the XI-XII centuries has shown that among many pieces, just one unbroken sphero-conical vessel was left (Fig. 1. 9). Shapes and volumes, as well as dark gray ornaments applied are different. According to the shape, all sphero-conical vessels can be divided into three groups: 1) vessels with round flanks, like...
hemisphere; 2) vessels with the cylindrical walls (Fig. 1: 7, 21); and 3) vessels with the bottom or lower part like a fish tail (Fig. 1: 15). The overwhelming majority of the vessels have narrow neck, round body and sharp bottom. Some vessels have molding, resembling a mane (Fig. 1: 8, 15). Diameter of the mouth is 2.5-3 cm, hole diameter is 0.6-0.8 cm. In terms of their volume, the vessels can be divided into two groups: large and small. Just one unbroken sphero-conical vessel and bottom pieces of another vessel were found (Fig. 1: 17). Height of whole sphero-conical vessel is 16.5 cm, while body diameter is 11.5 cm. Large vessels are quite rare. Body diameter of small round hemispherical vessels is 7.2-9 cm, whereas that of cylindrical-wall vessels is 6-6.2. They have various ornaments. Sigillate circles, made by solid object, often appear at the bottom, sides and shoulders of the vessel (Fig. 1: IV group). Drawn circles, having different thickness and depth, are very common; their number varies from one to five. The stamp is another common form of design: it consists of circles on the walls and sides of the sphero-conical vessels, which can be arranged symmetrically on both sides in two rows, having a different diameter, thickness and depth (Fig. 1: IV group). The thickness of the lines that are arranged from top to bottom of one of the cylinder-type sphero-conical vessels is 0.5 cm, and a depth is 0.1-0.15 cm. There are stamped patterns around the vessel as well (Figure 1. 7). These are triangular lines situated around the vessel wall along with several inclined parallel lines, drawn between the ends by solid object (as if they were drawn by comb) (Fig. 1: 6, 8-9); some have mane-type molding, which also includes oblique strips (Fig. 1: 8). Such lines are scratched in two rows on the shoulder of a large sphero-conical vessel, similar to the sun rays, drawn from short circular (punctiform) lines (0.3 cm in diameter), extending in different directions; over the upper lines and between them there are circular lines as well (Fig. 1: 9).

The following patterns of common type are those on the lateral and the top part of the vessels, whose lower part is similar to a fish tail (Fig. 1: 15). One of these vessels has circular punctiform lines (0.7 - 0.9 cm in diameter), drawn along the wall (Fig. 1: 10-11, 13-14) by special solid item (Fig. 3. 12, 15). Straight or oblique circular lines are arranged from top to bottom; at that oblique lines are drawn also between them in one or two rows (Fig. 1: 10-12, 14), as well as lines drawn in parallel (Fig. 1: 13). The sphero-conical vessel with such a pattern was found in the layers dated back to the X-XII centuries during excavations of shakhristan in Aktobe ancient settlement in 1978 [24]. Sphero-conical vessel having circular lines on its walls, with oblique lines drawn in between, was found in the layers dated back to the X-XIII centuries in Talgar ancient settlements [25]. The wall of the fragment of a vessel with the bottom like fish tail, is decorated by circular rings and oblique lines, spaced from top to bottom and drawn at particular location (Fig. 1: 15). The walls and shoulders of both vessel pieces have depressed prints of a thumb (Fig. 1: 22-23). One of them has bottom diameter deeper by 0.5 cm (Fig. 1: 23). Between the finger prints there is oblique line, made by a solid object (Fig. 1: 22). Sphero-conical vessel with the finger prints and the oblique lines between them, as well as patterned tableware, were found in the layers dated back to the X-XII centuries on the site of Lower Barskhan (Tortkul) [26] (Fig. 1: 3).

More frequently found sphero-conical vessels have circular rings usually from two or four sides. Circular lines of different diameters and thicknesses have one to four line rows (Fig. 1: group VI). At the bottom of two vessels, there are two vertical lines (Fig. 1: 25, 34). The bottom of the one vessel is uniformly cut by special solid object (Fig. 1: 29). Large number of sphero-conical vessels were found when carrying out clearance of the bath in Otrar ancient settlement, which is dated back to the XI-XII centuries [27].

3. Conclusions

Thus, at an Aktobe ancient settlement and in the territory of a minaret, a large number of sphero-conical vessels were found for the first time. Previously, similar quantity of vessels were found during excavations of bath in Otrar, dating back to the XI-XII centuries [28]. Based on existing hypothesis, there were sanitary and hygienic facilities near minarets, where ritual baths with fragrant water were executed before committing the prayer.

Corresponding Author:
Dr. Yeleuv Madiyar
Al-Farabi Kazakh National University
Al-Farabi, 71, Almaty, 050040, Republic of Kazakhstan
E-mail: eraly_a@mail.ru, 87015707240

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