

Use of Ceramic and Brick Decorations in Cultural Heritage Objects in Samarkand

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Abstract

The article describes the use of natural stone in the cladding of buildings new to the period in question, along with clay ceramics and faience products, in which the stone surface is marked with girih patterns, cut along these pattern lines and treated with ribbon-shaped glazed ceramics.

Keywords: *Ceramics, decoration, mausoleum, tiles, cut pattern, vinegar, mosaic, ganch, mold, terracotta, mosque, epigraphic, bow, ribbon, veneer.*

Amir Temur's mosque in Samarkand, known as Bibihanim, the White Palace complex in Shahrisabz and the mausoleum of Jahongir (Hazrat Imam), the tombs of Khoja Ahmad Yassavi in Turkestan still amaze everyone with their size and rich, various ceramic ornaments.

The smaller buildings - the mausoleum of Amir Temur in Samarkand, the mausoleum and khanaqah of Amir Temur's wife - Shaman of Tuman aga - in the dungeon, and the mausoleum of Zangi-ota in Tashkent also belong to that period.

In the first half of the 15th century, the ruler of Samarkand, the famous astronomer Mirzo Ulugbek built a number of large ceramic-covered buildings in Bukhara, Samarkand, Gijduvan and Shakhrisabz, close to the types of decorative coatings of the XIV-XV centuries. Naturally, large-sized buildings with a large number of rooms need to update the shape and types of architectural decorative coatings designed for relatively small, often single-room buildings, which have become a tradition in earlier times. Although the new constructions retain the previously known types and styles of architectural ceramics, new decorations are added to them and they blend into each other.

In the cladding of buildings that are new for the period under consideration, along with products made of clay ceramics and faience, a method of using cut natural stone (marble) was also created. In this case, draw a pattern of girih marked on the stone surface, giving it a thickness of 1.5-2.0 cm, cut and dig along the lines of this pattern, and install in the excavated pits a mysterious ceramic in the form of a ribbon using a mixture of ganch. This method is called "inlay". This method has been used in many monuments in Uzbekistan, in particular, in the design of the lower part of the walls of the Ulugbek madrasah in Samarkand. The roof arches, the arches at the entrance, the ornate displays on the roofs, the izora of the outer walls are lined

side by side with mosaic terraces and multi-colored rivets, cut-and-paste stones of various shapes.

The large surface of the walls, the ceilings, the body of the towers are decorated with girih patterns, written ornaments and tiled patterns that are visible from a long distance and are enlarged.

Mosaic made of vinegar tiles - blue, sapphire, white, sometimes green nasvai tiles, laid on the floor of unglazed terracotta tiles the same size as those vinegar tiles. A seam of about 1 cm is left between the tiles. They are glued to the wall with a plaster mixture. A network of modular squares was often used to draw the tile pattern. The size of the patterned wall surface, the long-distance view of the pattern or inscription is taken into account. As the modulus of the pattern, the size of a single net in a square net was taken, which was the same as the size of the tile to be dialed.

The larger tiles used in the 14th and 15th centuries ranged in size from 19.8 to 21 x 5.5 to 6 cm, while the smaller ones ranged from 17.5 to 18.5 x 4.5 to 5.3 cm. Various forms of finely patterned faience mosaic terrace in the style of tile are combined with tile terracotta or cut stone. Multi-colored rivet boards of various shapes are also placed on the terracotta floor. Examples are the side towers of the main building of the Bibikhanum Mosque in Samarkand or the entrance towers of the White Palace in Shahrisabz. This method was also used at the entrance to the Ulugbek Madrasah in Samarkand (1420) (Figure 1)

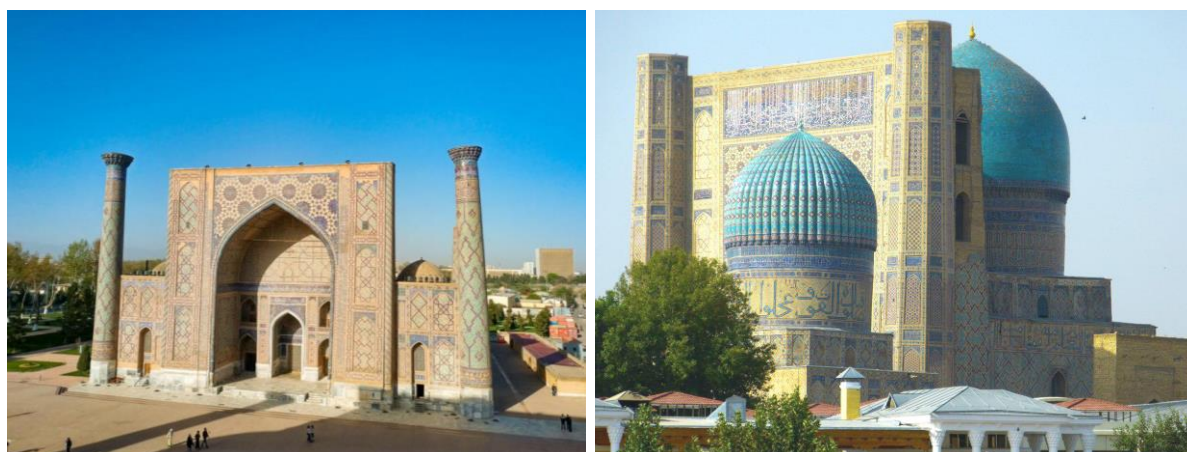


Figure 1. Ulugbek madrasah and Bibihanim mosque in Samarkand.

Mud ceramic-based rivets were widely used during this period. Although their shapes retain the appearance of previous centuries, their dimensions are enlarged. The size of some ceramic parts (muqarnas, sharafs) is so large that special devices are made on the back to fasten them to the wall. On the back of the rivets, which are not large in size, special grooves with a diameter of 1-2 and a depth of 1-1.5 cm are made so that they are well connected with the ceramic tile mixture.

The path of epigraphic and decorative patterns is covered with large square, rectangular and hexagonal shaped ceramic tiles. The towers, sometimes the views, the arches of the arches (tympanums) and the arched shelves were covered with mysterious patterns and hexagonal rivets with a gold solution to the ceramic paint.

An important feature of the architectural decorations used from the end of the XIV century to the end of the first half of the XV century is the huge surfaces covered with various ceramic tiles, the light color of the polished glazes, the many used gold cases. Even in the ceramic cladding of small buildings, cross-section ceramics are not involved. Only in the pavilion built by Ulugbek in the Garden Square outside the city of Samarkand, finely crafted terracotta (mosaic) patterns were created, and a white glazed cobalt pattern was used. This pattern was used in conjunction with Chinese porcelain hexagonal patterns. Tea with a national mosaic was also used in the

interiors of buildings. Hexagonal blue and bright green tiles are surrounded by ribbons of elegant plant-like borders.

In the second half of the XV century in public buildings built in Samarkand there is a use of ceramic ornaments of a new order. An example of this is the monument "Shrine" (Figure 2).



Figure 2. Ceramic ornaments used in historical monuments of Samarkand.

Thus, of the various ceramic ornaments used in the fourteenth century, only the cross-sectional ceramic mosaic or tile-cutting style, multi-colored rivets on a clay base, and hexagonal rivets of the same color used in izora go back to the 15th century. Vinegar cut ceramics disappear completely. In some cases, cut terracotta and multi-colored rivets based on embossed tiles slightly raised above the wall surface. Fifteenth-century ornaments include simpler, clearer glazed faience-based embroidered perfectly crafted rivets. During the 15th century, terracotta with a polished surface played an important role in laying the groundwork for mysterious ceramic patterns.

This was the only method of ceramic coatings in the first half of the XIV century, and from the second half of this century in Uzbekistan was a period of their high level of development.

The ceramic coatings of this period are distinguished, first of all, by the fact that they fully accepted the experience and traditions of cross-section terracotta of the XII century, and the surface of cross-section terracotta is completely glazed. They are so close to each other that even looking at some of the terracotta elements found in the Shahi-zinda excavations, one can imagine that they were the raw material for the production of 14th century vinegar ceramic tiles.

That is why, although the main role in the decoration of several mausoleums in Shahi-Zinda is played by cross-glazed ceramics (mosaics), in addition to it, in the XIV century the second appearance of this decoration - clay-based ceramic rivets appeared.

The mausoleum of Amir Burunduk (second half of the 14th century), the mausoleum of Tuglu-Tekin (1375-76), the mausoleum of Amirzoda (1386) are among them. Yellow, green and yellow-green dyes were also added to the ceramic vinegar paints in the patterns. Red was used in very limited sizes.

From about the middle of the 14th century, faience was used in the decoration of buildings, along with cut glazed ceramics and clay-based multi-colored rivets: first in slightly raised embossed square slabs (Khoja Ahmad Mausoleum in Shahizin), and then in the form of larger tiled parts of folded panels. These include the main style of the tomb of Shadi-mulk (1372) in Shahi-zinda and the panels in the interior. Later, the tiles appear to be limited to cross-section ceramics and the clay is transferred to rivet-based tiles on a ceramic base. For example, the unnamed mausoleum №2 in Shahizinda or the mausoleum of the Great Sultan Beg. In their

decoration there is a panel made of small faience elements. Between the blue ceramic grille are installed tiles of various shapes, and on the roof parts are installed large tiles with multi-colored patterns. On the surface of all the patterns on the tiles, gold-striped ribbons pass. The next development of the 14th century faience veneers is reflected in the cross-sectional ceramic mosaic, ie koshinburr, with six types of vinegar paint. The mausoleum of Shirinbeka ako (1385) in Shahi-zinda and the mausoleum of Tuman ako and khanaqohi are clear examples of this. The richly patterned cladding of the Tuman ako mausoleum and room, which dates back to the beginning of the 15th century, is a logical continuation of the development of mosaic cladding. In particular, for Central Asia, the decoration of the Tuman Aqa mausoleum is a turning point in the development of ceramic mosaics. Because in the constructions of the XV-XVI centuries and later, the novelty and rise in the art of this tile is almost imperceptible (Fig. 3).

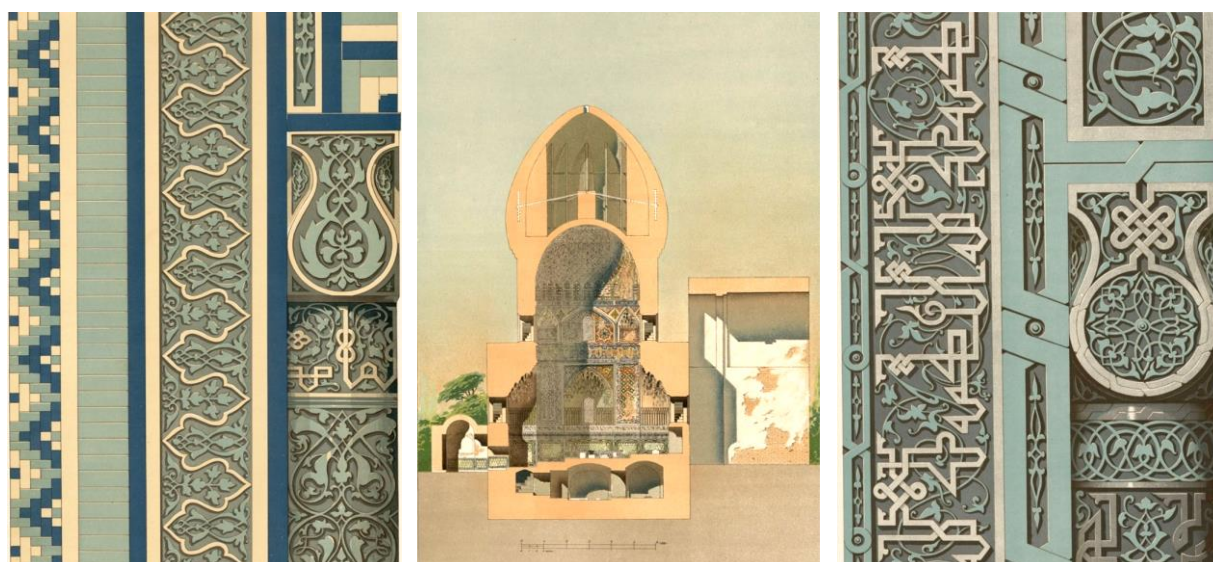


Figure 3. Patterns of the Oqsaroy and Gori Amir monuments.

Drawings by E.N. Semyonov.

A ceramic column mounted on the outer corners of the mausoleums, i.e., the various styles of ornaments of the bouquets, are in harmony with the patterned styles of the roofs. On the roof of the mausoleums decorated with cross-linked ceramics (mausoleums of the 1360s in Shahi-zinda) or in a columnar vase of the same ceramics decorated with faience-based rivets (Shahi-zinda Khoja Ahmad mausoleum, mid-XIV century). The artistic pattern of this type of bouquet is covered with vinegar tiles of different colors. This type of bouquet is known in the form of brick terracotta from the tombs of the XII century in Uzgent. In the 14th century, only a secret was given to the face of the tiles. This type of bouquet is found in the decoration of the tomb of Tuglu Tekin in the combination of cross-linked vinegar ceramics and multi-colored rivets on a clay base. The surface of the madoxil-shaped rivets on the flower-handle is decorated with a golden solution of multi-colored vinegar patterns.

The third type of bouquets of the 14th century is cylindrical, the surface of which is covered with terracotta terracotta (Shadi property mausoleum in Shahi-zinda) or ceramic paint (Mausoleum of Usta Ali in Shahi-zinda), which corresponds to the pattern of the roof. .

Considering the generalized decorative coverings of the 14th century monuments, during this period the main part of the buildings was mostly decorated. The rest of the styles, depending on the location of the monument, are either not decorated at all or are decorated in a simpler way with a pair of bricks or terracotta tiles with "bow" tiles. Sometimes, for this purpose, the surface of the brick was cut longitudinally with a seam in the middle (Shahi - the mausoleum of 1360 in the dungeon and the mausoleum of Master Ali. XIV century). The domes are covered with blue tiles according to old traditions. In some cases, the domes on the terracotta floor are decorated with patterns made of large blue and laurel tiles.

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