

ANALYSIS AND STUDY OF ART AND ARCHITECTURAL ORNAMENTS OF THE TIMES OF MIRZO ULUGBEK

Sidikova Mohira Salohidinovna

Teacher of "Fine Arts" department of SamSU

ABSTRACT: This article is written about the features of patterns and colors in an architectural structure of the period of Mirzo Ulugbek.

Keywords: architectural monuments, calligraphy, arithmetic, muqarnas, madrasah, ornaments, Ulugbek madrasah and etc.

Introduction

The main architectural structures of the Timurid period are difficult to imagine without external and internal decoration. During this period, tile patterns were very developed in the Middle East. In the monuments of the XIV-XV centuries, we can see that the ornaments are laid on flat surfaces and volumes. Although their embossing devices help to understand architectural shapes, their variety enhances the appearance of shapes.

During the Timurid's period, Oriental scientists studied and created a variety of colored ornaments from tiles. The architecture of these period used mainly blue, dark blue and white glazed bricks to decorate flat surfaces. Colors such as cyan, blue, white, yellow and black were widely used in a wall art. Blue and white were widely used to create carved tiles, less often green, yellow and black, and in some places red and gold. They had a new artistic quality, although they were structures in a synthesized form of geometric, epigraphic and plant motifs, even in earlier periods. Marble tiles were sometimes used to decorate buildings. Tiled mosaic ornaments were brought to the Timurid state from Iran and became widespread.

The architectural qualities of Mirzo Ulugbek's time are continued in the architectural embellishments of Amir Temur's time. These structures have a simple

design. They did, however, have certain basic color characteristics. Sharpened bricks and bricks with blue, blue, white, and black patterns on the sides made up the majority of the embellishments. Forms like girix and Kufic inscriptions were derived from them. If we look at mosques and madrasah, khanakas, observatories, baths, gardens, mausoleums created by Mirzo Ulugbek, we will see how the fine arts and painting were developed at that time.

The patterns of these architectural buildings mainly include rare Arabic inscriptions such as star-shaped belts, Islamic ornaments, and sulsi. These ornaments were sometimes embodied in the Baroque style, in interior panels or in the decoration of the altar.

It is well known that architecture is closely related to mathematics. That is, the creation of a perfect architecture is the result of precise mathematical calculations by their builders. In the Middle Ages, the works of advanced mathematicians made a significant contribution to the development of architecture. Under the leadership of Mirzo Ulugbek, a number of scientists lived and worked here, one of whom is the great mathematician Jamshid Kashi, whose work Miftox al-Hisab is the main book in the development of arithmetic. This book, About Measurements, is about measuring geometric dimensions and areas. The last, smaller, ninth chapter of the book is more interesting from the point of view of architectural theory. It is dedicated to measuring buildings and structures, parts of architecture. In science, this section is famous for its ways to measure arches and domes, and to find muqarnas surfaces [1].

Mirzo Ulugbek himself, as an astronomer, traced the formation of star-like patterns on the roofs of architectural monuments of the 1st half of the 15th century. Due to his interest in astronomy, Mirzo Ulugbek used celestial bodies, such as large, small, 5, 10 and polygonal stars, to decorate the roofs of the monuments he built.

The first half of the 15th century was just the time when exact sciences were highly developed in Maverannahr. In the second half of the 15th century, multi-colored architectural patterns also developed into the "kundal" style, in which colors were usually painted on white plaster or clay that took on the color of a local red lump. The embossed decoration on the basis of the red box is decorated with colorful Islamic patterns, creating a wonderful type of decoration. Blue, light blue, red, and

white are followed by blue and green. Or the simpler "kundals" are made on a white or blue base with gold water running and small Islamic patterns. [4]

We can see such decorations in Samarkand - at the entrance to the Mirzo Ulugbek madrasah and the Shahi Zinda complex, in Tashkent - in the mausoleum of Zangi ota, in Shakhrisabz - in the Blue Dome Mosque. The star-shaped ornaments used in the Blue Dome Mosque in the first half of the 15th century can later be found in the Kokaldosh madrassas in Tashkent and the Mir Arab madrassas in Bukhara, built in the 16th century. Only on the roof of these monuments are the star-shaped ornaments of the Blue Dome Mosque turned 90 degrees. Historical star-shaped ornaments used in "muqarnas" before Mirzo Ulugbek were added to the list of stylistic ornaments during this period. It is known that in the Middle Ages, the so-called "golden ratio" law was widely used in the creation of monuments. It is no wonder that constructors used this ratio to determine the monument's width and height in ancient times. A number of geometric patterns have been developed using this ratio. The golden ratio can also be utilized to make 5- and 10-sided star patterns, according to research. Mirzo Ulugbek Madrasah is a two-story rectangular structure with a 56x81 meter footprint. The towering sculpture on the top, which faces the major style square, has a 16.5-meter-high wicker veranda and 32-meter-high flowers on both sides. The starry sky above the porch is one of a kind. The top of the bouquet is decorated with muqarnas, i.e. honors. The roof edge is shaped like a Marine, and the views on the shelves are uniquely styled. The roof and outer walls are decorated with various unique patterns, the light into which enters the room through the grate. With the help of blue-blue tiles and ceramic bricks, the walls of the Ulugbek madrasah in Samarkand are decorated with geometric patterns, merge with the inscriptions and stand out. The interior of the room and some rooms is decorated with ornaments. There are even Kufic and Sula inscriptions among the ornaments. Blue, purple and white are the most common colors used in embroidery. The mysterious carved Islamic ceramics are available in two colors: purple and white. Flat Islamic tile designs come in two to seven colors. By this time, architectural epigraphy, that is, ornaments of Arabic calligraphy, had undergone further improvement. To be read from a distance, the skyscrapers are adorned with large Kufic inscriptions at the level of the flanges supporting huge blue domes. Leaving space for inscriptions at roof level, they can be used in both large Arabic sumptuous suls and linear multi-line naskh calligraphy. Zakhiriddin Muhammad Babur points to the size of the inscription

on the roof of the Temur mosque in Samarkand, suggesting that it could be read from a distance of 2.5 km.

The ruined 2nd floor, a sloping bouquet, and worn-out ornaments on the walls were restored (1936), and the northeastern tower was renovated (1932) by V. Shukhov and M. Mauer. E. Handel restored the sloping tower (1965). As mentioned above, masters such as A. Umarov, Sh. Gafurov, K. Jalilov, I. Shermuhamedov, A. Kuliev took part in the repair. The architectural form of the madrasa is one of the most perfect examples of this type of building in Central Asian architecture. [2] [four] In a word, the Mirzo Ulugbek madrasah in Samarkand, built in the 15th century, is one of the rarest monuments of oriental architecture and is rightfully considered a unique masterpiece of medieval Muslim architecture. Ulugbek Madrasah is the most perfect example of high art in the architecture of Central Asia in terms of architectural form and structure. The inscriptions on the roof of the madrasah emphasize the education of the ideal man. Each person will be blessed if he accepts as his practice the measurement of his worth, the result of his thinking, intellect, manner and knowledge.

Conclusion

As we get more familiar with such historical artifacts, we are once again convinced that the deep concepts and concepts contained in them, the philosophy of life, continue to astonish us. Our sovereign country now has a wide range of chances to preserve, appreciate, and apply the applied decorative arts, which are the result of centuries of creative work by our people, to enhance the aesthetic, to cultivate young people's tastes and interests, and raise them as cultured individuals. Our government's just policy is reflected in modern science, worldview, understanding of national identity, commitment to the Motherland, and historical memory.

Reference

1. Zoxidov P.Sh., Pulatov X.Sh. Mukarnas in the architecture of Uzbekistan (X-XX centuries), rukopis. -T.: 2002, p.15.
2. National encyclopedia of Uzbekistan // www.ziyouz.com library., Volume 7, -79-p
3. Inscriptions on the monuments of Uzbekistan "Samarkand Amir Temur and complexes and shrines in the time of Timurids" III book Tashkent - 2012. 296 p.
4. Uralov A.S. Combining and decorating architectural forms.