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The Importance of Using Knowledge and Experience in the Field of Applied Art in National Architecture (On the Example of Architecture of the Timurids Period)

M.S. Khamidova *

Associate Professor, National University of Uzbekistan, Tashkent, Uzbekistan

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Abstract: The architectural samples created by the peoples of the world are not only the art of construction, but also works of art created from the combined use of a set of a number of examples of applied art. They reflect the achievements and experience gained in various fields over the centuries and have a special place as a historical source in the exhibition of culture and art of the people of the world.

Keywords: architectural samples, built, fine arts, national handicrafts, calligraphy.

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INTRODUCTION

The architectural samples created by the people of the world are not only the art of construction, but also works of art created from the combined use of a set of a number of examples of applied art. They reflect the achievements and experience gained in various fields over the centuries and have a special place as a historical source in the exhibition of culture and art of the people of the world. Architectural monuments of Uzbekistan, built on the basis of oriental architectural traditions, are also among the examples of cultural heritage, which provide a lot of valuable information about the material culture of the Uzbek people. Historical monuments, built on the basis of ancient architectural traditions, have in the past met the needs of members of society in various fields. Knowledge and experience of national architectural methods and a number of types of folk arts, which have been improved over the centuries, were widely used in their construction. By studying the architectural monuments created in different periods, one can see not only the architectural art, but also the traces of the development and decline of such art forms as fine arts, national handicrafts, calligraphy, sculpture at that time.

THE MAIN RESULTS AND FINDINGS

The article is based on the principles of historical methods - historical, comparative analysis, systematization, content analysis, scientific and objective.

Architectural monuments of different periods are unique and provide detailed information about the unique construction styles and decorations of the architecture of the period, including differences and general similarities from previous periods. From ancient times in architecture the knowledge and experience of the applied arts have been widely used. In particular, examples of folk art have been widely used in the decoration of buildings, both inside and outside, enriching their interiors, presenting them as a unique work of art. The decorations of historical monuments created in different periods on the basis of the schools of national architecture of the people of Central Asia are also different. In particular, in the decorations of ancient historical monuments, mainly living creatures, human figures, hunting scenes are depicted more often, or they have extensive use of sculptural samples on this theme. In the following periods, there will be a withdrawal from this topic. For example, the monuments of Afrosiyob in Samarkand, Dalvarzintepa in Surkhandarya, Varakhsha in Bukhara are clear examples of this. In the Middle Ages, due to the widespread propagation of Islam in most Eastern countries, the development of Islamic culture, the number of architectural ornaments on this subject in

architecture decreased. That is, according to Islamic beliefs, as a result of the ban on the depiction of living beings, including human figures, the types of architectural ornaments depicting living beings have been drastically reduced. Since the ninth century, Islamic culture has been widely used in Eastern countries, especially in the decoration of buildings built by the people of Central Asia more attention is paid to the use of patterns. Zoomorphic (in the image of living things) patterns are rare during this period, but they have not completely disappeared. That is, they began to be expressed in ornaments in the form of depictions of some parts of living beings (head, eyes, beak, wings, hands), less often in full form. In particular, the decorations on the roofs of architectural monuments (Oqsaroy, Mirzo Ulugbek madrasas) built in Samarkand and Bukhara during the reign of Amir Temur and Temurids are evidence of the above opinion [1, 13; 2, 11].

In general, in the history of national architecture is a period of development in which the architecture of Amir Temur and the Temurid period has a special place. During this period, according to the will of the rulers, in architecture, the majestic form and ornaments were used as a means of glorifying the power. Architects and craftsmen who built magnificent buildings received a lot of attention from the Timurid rulers. According to the "Statutes of Timur", in alliance with the astrologers and engineers of the eighth category, he built high-rise buildings and drew the design and history of gardens [4, 66]. During this period, the issue of creativity has risen to the level of state policy, and the degree to which the customer, ie the ruler, is fulfilled, has solved the problem of life and death of those responsible for creative work. For this reason, the monuments of the Timurid period achieved a high level of luxury and grandeur. There is information in historical sources that the architects who built the works of this period, the representatives of the applied arts who participated in their decoration were mature specialists in their field [5, 221]. Therefore, the architecture of the period of Amir Temur and the Temurids rose to a high level of development. According to researchers, "before and after, architecture in Movarounnahr and Khorasan did not reach this level" [6, 173]. During this period, medieval cities were built in the central cities of the country, which were subject to a strict architectural idea. They formed architectural complexes with monumental structures, the existing ones have been enriched with new magnificent buildings. In particular, the capital cities of the Timurid state: The architectural monuments of this period in Samarkand and Herat, as well as in Kesh and Bukhara, which were in the center of attention of the rulers, are a clear example of this. The skills of folk geniuses who created historical monuments were highly valued by experts in various fields who studied them, in particular, the knowledge and experience of local master architects, skilled craftsmen were recognized [3, 5].

During the reign of Amir Temur and the Temurids, the culture of urban planning and architecture was enriched with a new architectural style, majestic appearance and luxurious decorations, continuing the traditions of the previous period. First of all, the stable situation and the creative environment in the state of Amir Temur were important reasons for this. During this period, scientists, artisans and master architects, who were born and raised in different parts of the country and have a unique culture, were relocated to the capital cities, and their knowledge and experience were widely used in creative work. As a result, national architecture, which was originally developed on the basis of knowledge and experience of a number of applied arts, was enriched with architectural traditions of different peoples, leading to the creation of world-famous historical monuments.

According to experts, "the architecture of the Timurid period, in contrast to the construction, which was intended only for profit, was able to give an artistic image to the buildings, which have a purely practical and everyday life. In this sense, the architectural art of this period rose to a new stage of development compared to previous periods. This innovation is reflected in the bold engineering and technical tasks, the development of new solutions, the richness of architectural decorations" [6, 171]. An example of this is the use of new engineering structures at the level of discovery for its time in the construction of facilities in Samarkand. In particular, the structure of the majestic dome is one of the responsible engineering tasks solved by the architects who built the monuments of this period.

The high level of development of the exact sciences in the period of the Temurids is also reflected in architecture, and the study of the monuments that have survived to the present day is the basis for showing the peculiarities of this period. In particular, in the design of Shahi Zinda, Ahmad Yassavi architectural complex, Amir Temur mausoleum, Bibikhanim mosque, front and interior of Ulugbek madrasas, a clear correlation of handicraft structures defining the overall harmony of architectural forms was obtained. Also during this period, special attention was paid to the development of new types of building materials, structures and a high level of organization of the construction process. In this regard, the following story of Sharafuddin Ali Yazdi about the construction of a summer palace in the Garden Dilkusho in 1396 is noteworthy: "As soon as its height was not enough for a gas, the production of tiles and cladding began. Carpenters began carving stones, artists began painting, carpenters began carving wood and making doors. Palos weavers, on the other hand, were instructed to measure the rooms and shawls and weave palos of appropriate size. At night the lamps were lit, and each work had its own commander. The palace, which was so long and

had such a high porch, was completed in sixteen days”[5, 190]. Apparently, the decoration and design work was carried out not after the main volume of the building was completed, but at the same time. The interior and exterior decorations of the buildings located in the main architectural complexes of the central cities are made in harmony with each other. They are very luxurious compared to other periods.

For the architects and craftsmen of this period, the need of the time was to improve the historical traditions of the industry using the experience of their ancestors and to develop innovations based on new cultural ties. This process required the use of new styles and ideas in the construction of buildings and the enrichment of decorative themes. A variety of high-tech architectural decorations play an important role in determining the stage of development of the Samarkand School of Architecture in the Timurid period [7. 150-199].

Ganchchilik is a shining example of Uzbek folk applied art and an integral part of national architecture, as well as a means of demonstrating the traditions and charm of the architectural and decorative arts of Uzbek monuments. Delicate and elegant ganchkori architectural ornaments are used in almost all historical monuments of Uzbekistan. They play a special role in the development of national architecture. The scientist who studied the history of ancient traditions of architectural schools of Uzbekistan S.S. Bulatov's scientific work pays special attention to the plaster decoration of national architectural monuments and the art of plaster making in neighboring countries [8, 13-141]. While studying the importance of Ganch in the decoration of historical buildings, the author noted the following: “Plastering is of great importance in the decoration of national architectural monuments. When decorating any building, it is important to first choose and apply the type of ganch carving that suits its structure. For a small room there is a small flat carving and a corresponding type of make-up, and for large hotels (halls) a large patch and a distinctive plaster carving are used. Ganch carving consists of large carving, deep carving, flat carving, cutting, mirror floor, floor colored carving, drawing decorative grille carving, chain, volumetric carving. In addition, ganch carving is divided into ground and groundless carving and cutting methods”[8, 22]. Historical monuments of Uzbekistan, including the monuments of Amir Temur and the Temurids, use all the listed types of ganch carving. For example, in Central Asia, large-scale ganchkori ornaments (Varakhsha monument in Bukhara) were often used in architectural monuments built before the spread of Islam. Muqarnas and domes were common in the Middle Ages. Architectural monuments using this style are found in all regions of the country. In particular, the Bibikhanum mosque in Samarkand, the mausoleum of Amir Temur, the Shahi Zinda

architectural complex, the Kalon Minaret in Bukhara and others can be cited as examples [1, 13].

The architectural decoration of the buildings is valued not only as an ornament, but also as a means of enhancing their comfort. In particular, great attention is paid to natural conditions in the construction of facilities in different regions of Uzbekistan. Naturally, special attention is paid to their decoration. That is, the buildings are meant to be warm in winter and cool in summer, bright, spacious and beautiful. For example, the hotels of the buildings need to be cool and bright, and the type of decoration is chosen accordingly. For this reason, they are mostly built to the north. The walls of the hotel have windows, shelves, and space for curtains, which are decorated with bright plaster patterns. The architectural decorations of the studied historical monuments are mainly divided into three parts. That is, the lower part of the wall is decorated with izora, the middle part with shelves, takmons, manifestations and dahana, and the upper part with honor. The edges of the rafters, shelves, and windows are often framed at the base of the ganchkori chain [8, 23-24; 14, 239-254].

The knowledge and experience of master architects from neighboring regions, in particular, Iran, Georgia and Armenia, were widely used in the construction and enrichment of national architectural structures. According to the researchers, “Ganchchilik is one of the ancient art forms, which is reflected in the architecture of the world, including Central Asia, Iran, Turkey, Arabia, Afghanistan and other Eastern countries, and this process continues. In particular, the artistic composition and style of development of historical and architectural monuments created in Central Asia are unique”[8, 12-17]. The traces of cultural ties in this area are reflected in the national architectural monuments, which serve to justify their historical and cultural significance.

The art of calligraphy was also widely used in the decoration of historical monuments of the period under study. In the monuments of the Timurid period, epigraphic ornaments were made in six different scripts on the basis of the art of calligraphy in large letters on the roofs, arches, foot domes, walls, towers and other conspicuous parts of specially allocated buildings. In the monuments of Amir Temur and the Temurids, epigraphic inscriptions in Kufic and Suls scripts are often found. These ornaments are painted on the exterior of the building in the form of step patterns in blue, blue, blue and white glazed tiles on a brick floor, and inside the building on the basis of paints on a panel set aside for epigraphic decoration. Experts point out that “the intricate patterns in the handicrafts, ie the “Kufic” script close to the geometric pattern, dominated the patterns surrounding the majestic walls and domes, and the “Devonian” and “suls” letters dominated the roof inscription” [6 174]. The epigraphic ornaments

mainly contain surahs of the Holy Qur'an, words of wisdom, as well as the names of the rulers, master architects and calligraphers who built the buildings. In particular, the Iranian calligrapher Haji Bangir Tabrizi, Yusuf Sherozi, Muhammad Sultan Khanaqo and Madrasah, the master architect Muhammad ibn Mahmud Isfahani and the Mirzo Ulugbek Madrasa in Bukhara were among the finds. Ismail ibn Tahir Isfahani, based on the inscriptions of the mausoleum of Hodja Ahmad Yassavi in Turkestan. In the inscriptions on the historical monuments of Samarkand, in the ratio of the names of some masters, the names of the cities of Movarounnahr are found, while in others it is not, because they are Samarkand masters. For example, the names of Fakhr-Ali in the mausoleum of Khoja Ahmad in Shahi Zinda, Badriddin and Shamsiddin in the mausoleum of Shadimulk aga, as well as the master of decoration Zayniddin Bukhari are among them. The nameless mausoleum in the complex contains the names of masters Ali and Alim Nasafi "[6, 174-175; 9, 51-72; 10, 70].

Another type of decoration widely used in architecture is colored and colorless rivets and tiles designed by local master potters. They also served as the basis for other types of ornaments (Islamic, girih, epigraphic, zoomorphic, astral).

The use of non-ferrous metals and precious stones in the architecture of Amir Temur and the Temurids is also widespread. Non-ferrous metals, mainly gold, copper, brass and iron, are widely used to decorate the interior of domes, doors, grilles, shelves and other interiors. In particular, in the architectural monuments of this period, epigraphic ornaments on special metal plates, reflecting important historical evidence, have been preserved [9, 70-72; 11, 49-62].

Another type of applied art developed in the country during the reign of Amir Temur and the Temurids is fine arts. During this period, the revival in the field of fine arts in the major cultural centers, where science, culture and enlightenment flourished, was noticeable. Especially during the reign of Mirzo Ulugbek various directions of painting and fine arts were developed, and special attention was paid to the use of examples of this type of art in the decoration of architectural monuments created during this period. This type of decoration can be seen in the palaces of madrasas, khanaqahs, observatories and gardens built by Mirzo Ulugbek. In particular, the architectural ornaments with the image of the Twelve Towers (Falak Tower) and the Sun on the roof of the madrasah in Samarkand have survived to the present day. Ornaments in the content of the celestial constellation are also found in the arches of madrasa buildings [10, 115]. Similar decorations on the interior walls and ceilings of the Mirzo Ulugbek Observatory were painted. The gardens built around the observatory also had pavilions decorated with such works of fine art. In particular, there are reports that the

ornaments of the Porcelain Palace built in the garden called "Garden" were polished by Chinese architects and painters with porcelain ornaments [13, 61-67].

Not only local but also master architects from Iran and Khorasan were involved in the construction of buildings in the central cities during the reign of Amir Temur and the Temurids. Representatives of Samarkand, Bukhara, Khorezm scientific schools of local architecture and applied arts have a high reputation, they are invited not only in Movarounnahr, but also to neighboring countries to create rare examples of architecture of the Middle East [14, 14]. As a result, in the XV-XVII centuries, the process of interaction of Central Asian schools of architecture and crafts in the neighboring regions intensified. Undoubtedly, this is due not only to the proximity of these regions, but also to the development of historical and cultural ties between them.

CONCLUSION

In conclusion, it should be noted that the use of knowledge and experience in the field of national crafts and applied arts has played an important role in the development of Central Asian architecture. During the reign of Amir Temur and the Temurids, the contribution of not only local but also master architects and representatives of applied arts to the rise of national architecture and the construction of world-famous architectural monuments during this period is invaluable.

REFERENCES

1. Central Archive of the Republic of Uzbekistan F-2286, list 1, case 189. - 13 sheets.
2. Central Archive of the Republic of Uzbekistan F-2286, list 1, case 195. - 11 sheets.
3. Central Archive of the Republic of Uzbekistan F-2406, list 1, case 347. - 5 sheets.
4. Temur's rules. / Translated from Persian by Alikhon Soguniy and Habibullo Karamatov. - Tashkent: G. Gulom Publishing House of Literature and Art, 1991.
5. Sharafuddin Ali Yazdiy. Zafarnoma / Foreword by Ashraf Ahmad and Haydarbek Bobobekov. - Tashkent: Sharq, 1997.
6. History of Temur and Ulugbek period / Editor-in-chief Amadali Askarov; Editor-in-Chief Oqilxon Odilxon. - Tashkent, 1996.
7. Denike B.P. Architectural ornament of Central Asia. - Moscow-Leningrad, 1939.
8. Bulatov S. Uzbek folk applied decorative art. - Tashkent: Mehnat, 1991.
9. Lapin S. Translation of inscriptions on historical monuments of the city of Samarkand. - Samarkand, 1896. - P. 51-72.
10. Ahmed Tondi. Architectural decor of Central Asia in the Timurid era: Diss. art history. - Moscow, 2003.

11. Semenov A. Inscriptions on the tombstones of Timur and his descendants in Gur-Emir // Epigraphics of the East. Issue. II. Moscow-Leningrad, 1948. - S. 49-62.
12. Notkin, I. I. Stalactites of the XIV century. from the Shakhi-Zinda ensemble / Architecture of Uzbekistan. Issue. II. - Tashkent, 1970. - S. 239-254.
13. Urolov, A., & Khodzhikhanov M. (1994). *Spirituality created by Ulugbek*. Toshkent: A. Qodiri Publishing House.
14. Yusupova M. Bukhara school of architecture of the 15th–17th centuries: Features and dynamics of development: Diss ... of Dr. of Architecture. - Tashkent, 2000.
15. Khamidova, M. S. (2019). Study of architectural monuments of Uzbekistan (The second half of XIX-XX centuries). *International Journal of Scientific and Technology Research*, 8(11), 1353-1358.
16. Odilov, B. A., & Karimov, N. R. (2020). Analysis of Targeted Research in 20-30 Years of the XX Century. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(6), 8887-8893.