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AVANT-GARDE TENDENCIES IN THE DESIGN AND CONSTRUCTION OF CONTEMPORARY ISLAMIC COMPLEX BUILDINGS IN KAZAKHSTAN

AWANGARDOWE KIERUNKI W PROJEKTOWANIU I BUDOWANIU WSPÓŁCZESNYCH OBIEKTÓW KULTURY ISLAMSKIEJ W KAZACHSTANIE

Abstract

This article considers the current problems of modern tendencies in the formation of the architecture of new mosques in Kazakhstan. The boldest inclinations in the architectural designs of contemporary Islamic cultural buildings by Sh. Yusupov, T.S. Abilda, Zh.N. Sharapiyev and N.S. Tokayev are described. Pioneering trends are defined on the basis of the architectural image and a planning analysis.

Keywords: architecture, architecture of new mosque

Streszczenie

W niniejszym artykule przedstawiono bieżące problemy współczesnych kierunków tworzenia architektury nowych meczetów w Kazachstanie. Opisano w nim najodważniejsze tendencje w projektach współczesnych budynków kultury islamskiej autorstwa takich architektów jak Sh. Yusupov, T.S. Abilda, Zh.N. Sharapiyev czy N.S. Tokayev. Pionierskie trendy oparto na wizerunku architektonicznym oraz na analizie planistycznej.

Słowa kluczowe: architektura, architektura nowego meczetu

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The architecture of contemporary mosques of Kazakhstan is evolving in a strong competition of extraordinary tendencies. These mostly follow different historical styles. Influenced by the objective processes of social development and the progressive dissemination of ideas, pioneering tendencies appear in the architecture. Constantly changing construction structures reveal an inexhaustible potential of perspective development and emotional richness of the mosques' architecture. Traditional techniques of the decoration of religious structures are no longer applied. Having persisted through the struggle with eclecticism and traditionalism, new tectonic principles have arrived. Rational forms of the architecture of religious buildings based on the artistic understanding of new constructive systems, express those principles.

The objects of such famous architects of Kazakhstan as S. Zhusupov, T.S. Abilda, Z.N. Sharapayiev, N.S. Tokarev represent the boldest tendencies in contemporary Islamic architecture.

The Mashkur Zhusip mosque in Pavlodar [5], designed to serve 1500 visitors at a time and built in 2001, demonstrates an interesting, avant-garde approach. The authors of the mosques's project are architects T.S. Abilda, S. Zhusupov, M.Z. Kabdualiev; the chief engineers were B.K. Musurgaliev, as well as ASO-3 and "Almatygiprogor" Ltd companies. The customer was Pavlodar Head Mosque and a branch of the religious association "Ecclesiastic management of the Muslims of Kazakhstan" (Ill. 1).



Ill. 1. The Mashkur Zhusip mosque in Pavlodar (source: [5])

Ill. 2. Tastak micro district mosque in Almaty (source: [6])

The mosque has an octagonal layout and consists of three growig narrow parts, holding the plicate conical roof and crowned with a dome. The roofing of the mosque is the building's aesthetic focus. In the four corners the building are four minaret towers, crowned with pointed tops in the Ottoman style. The building of the mosque has three floors and one underground. The main volume of the mosque's layout is taken up by the space under the circular dome, 31 meters in diameter and 41 meters high. Sixty-four meter high octagonal minarets can be inscribed into a 5 meters in diameter circle at +0.000 level. The height of the minaret towers was not taken occasionally and symbolizes the prophet Mohammed's age.

The mosque is an example of a multi-functional building, which makes it stand out among the new religious buildings of Kazakhstan. The ground floor of the mosque has an area of 2850 square meters and houses the following rooms: madrash for 25 people, consisting of four blocks, female prayer hall, a bathroom, a hall for wedding ceremonies with a lobby, wardrobe room and toilets. The first floor of 1810 square meters includes the main prayer hall, imam's rooms, reception hall, a room for reading the Koran, donation giving room, the Museum of Islamic culture, the library, a video – conference hall, the mihrab and utility rooms. The second floor is a circular gallery of 660 square meters housing the male prayer hall. The project of Pavlodar mosque is distinguished for its extraordinary constructive resolution and applied innovative construction technologies. The mosque is built with the partial inclusion of a system of frameworks. The pillars of the framework are placed at the intersection of the inner ring and radial axes. Exterior walls are concrete bellow 0.000 level and brick above the ground level. The bearing walls hold the metallic and ferroconcrete radial beams. The framework's overall stability is provided by the radial and circular placement of the bearing frames. The transfer of the horizontal wind load upon the framework is maintained throughout the construction of the hard discs, ferroconcrete floors, the anchored connection between ferroconcrete pillars of the framework with building's foundation and the construction of a central supporting ferroconcrete beam at the base of the metallic structures of the dome. The floors of the mosque are made of assembled ferroconcrete 12 centimetersthick plain slabs. The dome is made of metallic structures. The external surface of the dome is made of 3 millimeters-thick metal plates with a covering and a layer of "ISOVER" heatinsulation on the inner side and covered with plaster on the interior part. The roofing is made of 4 millimeters-thick steel plates and is supported on metal pillars and wells. The external surface of the mosque's walls and dome is faced with aluminum composite panels.

The Pavlodar Mosque is an overall positive example of the new Islamic cultural building formation in present day Kazakhstan. It does not imitate traditional mosque shapes, but it is rather a contemporary interpretation of them. The authors have created a bold, pioneering and unique aesthetic image of the mosque, using national traditions.

Another project showing the new tendencies in the mosque's image is a mosque in Tastak micro distrist in Almaty [6], designed for 100 visitors at a time. The author of the project is architect Zh.N. Sharapiev, the chief engineer was V.V. Grebenev (also "Almatygiprogor" Ltd. and "ASO-4" companies).

The mosque has a square layout of 16.8 meters on each side. The mosque's overall area is 327.72 square meters. By its volumetric composition, the mosque relates to the centralized dome building. The mosque includes the following venues: the prayer hall (131.97 square meters at 0.000 mm.level), bathrooms (25.13 square meters) and utility rooms (64.42 square meters at -3.000 mm. level) (III. 2).

The volumetric composition of the mosque is quite laconic and embodies a cubic structure of a prayer hall covered with a hipped roof, which is the main outstanding element of the building. The mosque also includes a four-tier single minaret tower, which paired with the hipped roof of the mosque, demonstrates the new approach in mosque's design. The design approach here is analogous to one in King Feisal's mosque in Islamabad (1970–1986, arch. Vedat Dalokoi).

All entrances to the mosque including the main one are designed in the form of overhanging sheds in the image of an arrow. The light in the prayer hall is provided by windows of rectangular shaoe located in the roof. The mosque wall structure is a ferroconcrete framework with a filling of bricks. The basement walls are made of monolith concrete.

The roofing structure is metal framework covered with green seismic-resistant tiles. The walls of the minaret tower are made of monolith concrete, and the tower is crowned by a small spherical dome sitting on a metal framework. The architecture of the Tastak micro district mosque in Almaty represents one of the few examples of the new approach to traditional, canonic architecture. The new approach was reflected in the unusual resolution of the roofing and facade.

The new Islamic cultural center "Nurdaulet" in Aktobe, is an example of the harmonic synthesis of traditional and new approaches in mosque designing. The Islamic center is an asymmetrical composition of rectangular shapes of the prayer hall and utility part of the building. The mosque has added the grandeur and dynamism by its volumetric composition, consisting of several growing tiers of shapes. Such structure is characteristic of middle-age Ottoman mosque models (e.g., middle-age mosques in Sianna, Turkey). Two large semi-spherical domes on top of the building are the focus of the mosque. Their dominating role in the mosque's composition is accentuated by the sx small domes on the tops of short towers. The mosque has large windows with a large area of glazing, giving the mosque a modern look (Ill. 3).



Ill. 3, 4. Islamic cultural centre "Nurdaulet" in Aktobe (source: [7])

The four-tier minaret room form reminding the ones of middle-age Egyptian mosques is a contrast against to the building's modern fasdes and domes' design. Thus, the image of "Nurdaulet" Islamic cultural center in Aktobe combines traditional and modern approaches to mosque designing, giving the mosque an overall contemprorary look. Another example of the modern approach to mosque design is the Vainachs' community mosque, built in 2001 in Almaty's Ryskulov avenue. The mosque was designed for 600 visitors at a time by the architects T.S. Abilda and Sh.Z. Yusupov. The engeneer in chief was A.P. Martynov. Construction of the mosque was initiated by the Vainach's community of Almaty. The mosque's architecture is an example of the synthesis of the new and historic architecture. The seven domes of the mosque recall the middle-age Ottoman mosque's images and cogged eaves of the mosque architecture. In the latter, architects did not aspire much to symmetry, locating the entrance in one of the building's corners and not marking the portal to the planes of the facades.

The interior design of the Vainach's community mosque includes a system of some of the historic symbols, yet it looks modern. The mosque's contemprorary look was intensified



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Ill. 5, 6. Vainach's national community mosque in Almaty (source: [8])

by the modern plasticity of the facades' few elements, the form of the minaret and by the contemporary finishing agents applied (Ill. 4).

A new and a positive element in providing comfort to the mosque's visitors is the floor heating of the main and female prayer halls as well as the bathrooms. The bathrooms in the mosque perform an important role in fullfilling Muslim rituals and the floor heating facilitates their use in the climatic conditions of Kazakhstan. Modern video eqipment is used in the mosque's female prayer hall for broadcasting Friday and other feasts' prayers there in.

The landscape of the mosque's territory is well organized. The pathways are paved, and some rare tree breeds and flowerbeds are planted on the site. In front of the mosque's main entrance, a traditional octagonal fountain is located. A small summerhouse for the visitors' recreation is one of the garden's focal points. The Vainach's community mosque relates to the modern type by its design despite of the precence of traditional symbols of the mosque's architecture, such as the domes and the minaret. The building overall represents the pioneering approach in the mosque's new architectural development in Kazakhstan. The architecture of the considered mosques demonstrates a general positive shift in search of the mosques' new architecture in Kazakhstan; although, the search process is complex and varied.

Conclusions

An analysis of the architecture of new mosques' in Kazakhstan indicates two main tendencies in the choice of the religious building's new image:

- The stylization based on the contemprorary interpretation of the system of Islam's historic symbols represented by domes, the roofing and decorative elements.
- The revision of the mosque's architectural, constructive and volumetric composition features in modern conditions, taking into consideration the style of established regional architecture.

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