

ARCHITECTURE OF THE MEDRESE OF KHOREZM AND THEIR PLANNING FEATURES

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Abstract

This article examines specific design solutions (from the Middle Ages) of the Khorezm school of madrasas in the architectural context. It studies the typology and varieties of madrasas that have been preserved and are still used in the construction of modern Islamic cultural centers, as well as the differences and features of local architectural schools. The article identifies the patterns of formation and development of the Khorezm architectural school. It also examines the influence of the natural conditions of the region and urban planning concepts on the development of Khorezm religious architecture in Uzbekistan.

Annotatsiya

Ushbu maqolada Xorazm maktabi (o'rta asrlar davriga mansub) madrasalarining arxitektura kontekstidagi aniq loyiha yechimlari ko'rib chiqilgan. Unda zamonaviy Islom madaniy markazlarini qurishda hanuzgacha saqlanib qolgan va qo'llanilayotgan madrasalarning tipologiyasi va turlarini, shuningdek, mahalliy arxitektura maktablarining farqlari va xususiyatlari o'rganib chiqqan. Maqolada Xorazm arxitektura maktabining shakllanishi va rivojlanishi qonuniyatlari aniqlangan. Shuningdek, mintaqaning tabiiy sharoitlari va shaharsozlik konsepsiyalarining O'zbekistonda Xorazm diniy arxitekturasini rivojlantirishga ta'siri ko'rib chiqilgan.

Аннотация

В данной статье рассматриваются конкретные проектные решения (периода средневековья) медресе хорезмской школы в архитектурном контексте. В ней изучены типология и разновидности медресе, которые сохранились и до сих пор используются при строительстве современных исламских культурных центров, а также различия и особенности местных архитектурных школ. В статье выявлены закономерности становления и развития хорезмской архитектурной школы. А также рассмотрено влияние природных условий региона и градостроительных концепций на развитие хорезмской религиозной архитектуры в Узбекистане.

Keywords: local architectural schools, Khorezm school, religious construction, madrasahs, religious architecture, typology, project solutions.

Kalit so'zlar: mahalliy arxitektura maktablari, Xorazm maktabi, diniy qurilish, madrasa, diniy arxitektura, tipologiya, loyihaviy yechimlar.

Ключевые слова: местные архитектурные школы, хорезмская школа, культовое строительство, медресе, культовая архитектура, типология, проектные решения.

Introduction

Education is the foundation of society's progress, the cornerstone of spirituality, the flourishing of culture, and the development of a well-rounded young generation. The creation of centers for religious education and culture has received some attention from researchers, and knowledge has been gained about the design of special buildings for these centers, which are known as "Madrasas," or places of learning. Historically, in Uzbekistan, madrasas were not so much centers of Muslim theology as cultural centers.

Material and Methods

At the present stage, the problems of creating centers of religious education and culture are relevant, knowledge on the design of such buildings is expanding. An analysis of the typology, design and construction features of madrasahs built in the countries of Central Asia testifies to their relevance as centers of modern spiritual and cultural development of modern society. Of particular relevance and undoubted theoretical and practical significance are still occupied by the issues of the peculiarities of the organization and construction of madrassas in Central Asia, which have attracted the attention of researchers in different eras. We can also state the fact that the architecture of madrasahs still remains poorly understood.

The goal is to determine the specifics of the madrasas in the Central Asian region (using Khorezm as an example) in the general architectural context. To study the patterns of formation and development of local architectural schools in the countries of Central Asia.

The methodology of this article uses methods of analysis and synthesis, scientific abstraction, generalization, and comparative theoretical interpretation. In addition, the scientific basis of the article is made up of international standards, information from research by scientists in domestic and foreign scientific publications.

Madrasas played an important role in the training of scholars and creative individuals who made significant contributions to the development of culture, science, and art. For example, the Madrasa of Khorezm served as a kind of academy for scholars of that era. From the history of the development of Central Asian architecture, it is known that madrasas were included among the main types of religious buildings. The common spatial layout was followed, with a closed courtyard surrounded by residential quarters, an entrance dome group, and symmetrically arranged mosque and educational rooms on either side, also covered with domes.

Discussion

Local architects took the traditional layout as a basis and added features of local architecture, resulting in the Khiva school, which developed its own types and variations of madrasas, which have been preserved and are still used in the construction of modern madrasas and Islamic cultural centers.

The earliest of these centers was the Arab-Muhammad-khan Madrasah, dating back to 1616, which was built in memory of the transfer of the capital from Kun (Urgench) to Khiva. The largest number of architectural monuments in Ichan-Kale make up the architectural image of the city, whose unique charm has survived to this day [Маньковская Л., 2].

This is where the large public buildings are located, with madrasas being the predominant type. Higher Muslim schools were, in general, spatial entities that included public spaces and student dormitories, which were grouped around an open courtyard. Despite the fact that educational institutions, due to the presence of mosques in them, did not have a specific orientation to the cardinal directions, and their placement on the city plan was dictated in each specific case by the urban planning concept or the existing building situation. It is the madrasas, which vary in size and configuration, that shape the public area of Ichan-Kala.

The architecture of the madrasah can only be understood in relation to the development of the search for a correspondence between the purpose of the building and its spatial structure. This is where the architectural phenomenon mentioned above comes in - the universality of certain space organization schemes, in this case, the courtyard scheme. It is equally suitable for various functions: it can be used as a dwelling (hauki, palace), a fortified fort for the ghazis, the fighters for the faith and the missionaries of Islam during the early years of Islam (rabat), a monastery for Buddhist and later Muslim hermits (zaviya), a place for wandering dervish monks (khanaka), and a caravanserai along the road, which eventually evolved into these religious complexes that adopted a new function without changing the structure of the building. The courtyard organization turned out to be convenient and acceptable for urban market caravanserais, and for urban cathedral mosques-juma, as one of their solutions, and for complex religious and memorial complexes (mashad, khazira), and for the higher Muslim school – madrasah [Пугаченкова Г., 3].

In the first half of the 14th century, Urgench was the main center of Muslim theology, from which the Golden Horde received personnel for its madrasas. Since the end of the 10th century, Central Asian madrasas have been built on a single principle: a longitudinal-axial courtyard complex with a main public entrance façade [Гулямов Г., 4]. However, the similarities are limited; these are different types of buildings, distinguished by the way they solve the main planning issues typical of madrasas: the design of the entrance hall, the location of the “dars-xona” and mosque, the shape and

layout of the courtyard corners, and the number and location of the “ayvans” and passageways to the streets. During the development of the madrasa type in the 10th century, a clear scheme of a closed longitudinal-axial courtyard complex was developed, with the rooms of the lobby, corner “dars-xonas”, and mosque strung on a transverse axis, with a two- or four-aisled two-storey courtyard, usually surrounded by an arcade of niches with entrances to the residential khujras, with beveled corners, and semi-octagonal niches on the bevels, from which the entrances to the corner khujras are located. Adapting to different economic conditions, architects simplified the traditional layout of the madrasah, retaining only two floors for the sake of representation in the entrance area, and constructing single-story hujras around the courtyard. By incorporating the madrasah into the dense residential areas, they also modified the basic layout. Against this backdrop, the architecture of the medieval Khorezm madrasas stands out for its monumentality and, in general, its adherence to good traditions. Among them are several typological groups that differ in their attitude to the strict prototype of the 15th and 16th centuries [Пугаченкова Г., 1]:

- I - development based on the canonical longitudinal-axial scheme;
- II - transverse-axial (frontal) compositions;
- III - free design - adaptation of the general scheme to the existing building site.

In the case of a typical stamping scheme, there was no copying. These are small, simplified madrasas that do not add anything to the basic scheme, except for changes in the overall plan configuration (moving the main entrance to the center of the long side), which was probably caused by the urban planning situation. Once a transverse-axial madrasa was created, it was varied under similar conditions. During the reconstruction in 1835, the transverse-axial madrasah of Khodzhamberdy-bay's (18th century) was cut in half by a passage to the Khan madrasah of Alla-Kuli-Khan; creating two small courtyards on either side of the vestibule and corridor. However, when Abdurasul-bay's madrasah was built on a narrow, wedge-shaped plot, this two-courtyard technique was legalized and used in its own interpretation.

By adapting the traditional courtyard layout to the specific conditions of a particular site, local architects usually sacrificed the correctness of the overall building outline, but the courtyard retained a certain geometric shape, reflecting the orderly organization of space and facilitating orientation within it. In Khiva, the 10th to 19th centuries, the Arab-Muhammad-khan Madrasah was built on a wedge-shaped plot and took on a trapezoidal shape. A similar case is the Talib-Maksum madrasah, which has a square courtyard and an asymmetrical layout.

Let's take a look at a few madrasas, starting with the Arab-Muhammad Khan Madrasah (1616, 1838). The original madrasah was built in 1616 by Arab-Muhammad Khan to commemorate the transfer of the capital of Khorezm from Kun (Urgench) to Khiva. It was a modest one-story frame building with wooden carved columns and set

ceilings (fragments of which are preserved in the historical museum of Khiva, in the Tashkhauli Palace). The modern building was constructed in 1838 under Alla-Kuli Khan in the spirit of a typical late Khiva madrasah. It is modest in scale and architectural quality.

The irregular configuration of the site dictated a trapezoidal plan with a reduction in the direction of the main facade and a simplification of the entrance group of public rooms: the “myon-saray” consists of three domed compartments on a transverse axis, opening directly into the courtyard. In the northwestern corner, there is a winter mosque that is offset from the axis of the “myon-saray”. The north-eastern corner, which is symmetrical to the main building, is occupied not by a “dars-xona”, as is usually the case, but by small khujras with entrances from the courtyard and from the street. The only small “dars-xona” is located on the second floor above the lobby group. The square two-bay courtyard of the madrasah is built on one floor around the perimeter with small khujras covered with vaults. At the end of the courtyard's longitudinal axis, there is a domed room of the summer mosque: a cubic volume of a quadrangle and an octagonal arched skylight on it.

However, the main facade is very representative, with a massive portal with a faceted entrance niche flanked by lower wings divided by a two-tiered blind arcade and a “guldesta” with arched lanterns at the corners. The other facades are blind and also undecorated, with a polished brick texture.

Another example is the Khojamberdi-bay's Madrasah, which was built in 1688. In 1835, due to the construction of the Alla-Kuli-Khan Madrasah, the Khojamberdi-bay's Madrasah was completely rebuilt. It was divided into two parts. The madrasah is also a one-storey building with a trapezoidal plan, consisting of two unequal courtyards with a “darvaza-xona” separating them on the axis. The larger, northern courtyard, contains ten rectangular hujras, while the southern courtyard contains six hujras and a domed square room, which can be interpreted as the only “dars-xona” in this madrasah, located in a random spot in the southeastern corner of the courtyard. The architecture of the facades is not organized by any rhythm of divisions or openings. The khujras, which are covered with “balxi” vaults, are located both at the ends of the courtyards, as is typical for madrasahs, and along the walls of the courtyard. The unbuilt facades, the south and the west, are not parallel to the axes of the courtyards. The “dars-xona” was also used as a mosque, as evidenced by the mihrab. The entrance group of rooms and the “dars-xona” are covered with single domes of ring masonry on cellular-console brick sails (in the “dars-xona” - five-row, in the domed rooms at the “dars-xona” - two-row). The only decorative element is an ancient wooden door with fine, skillfully carved, installed at the entrance to the domed room of the vestibule group.

The building, the Shirgazi-khan Madrasah (1718-1720), is a common type of late two-storey Khiva madrasah, with a courtyard of vestibules with four “ayvan"s, and

"dars-xona" on the transverse axis of the entrance group. This type of architecture can be seen in the Kutlug-Murad-Inak Madrasah (1809), Alla-Kuli-Khan Madrasah (1835), and Muhammad Rahim-Khan Madrasah (1876), as well as in the Amir Madrasah (1870).

The Alla-Kuli-Kha'na Madrasah (1834-1835), one of the largest in Khiva, has a traditional layout, but without strict geometricity, which may have been due to the difficult construction conditions: the courtyard is slightly trapezoidal, and the transitions from the main to the side facades are asymmetrical. The southern facade is curved. In general plan, the madrasah is a large rectangle with a longitudinal-axial composition with a four-ayvan two-storey courtyard, and slanted corners. Three ayvans are decorative and lead to a pair of ordinary khujras.

However, the architecture of the Alla-Kuli-Khan Madrasah makes a strong impression with its decoration, which adorns the main and courtyard facades. The main feature is the Khorezm-style majolica, which is characterized by its blue, white, and light blue colors, as well as the black outlines of the designs in the tympanums, portal frames of the two-tiered arcade, and three-quarter columns of the portal. The rear structures of the main portal are decorated with majolica (the only case in Khiva). The successful choice of the pattern, the richness of the colors, the soft, blurred outlines in the tympanums, and the contrasting combination of white geometric ornamentation and intense blue background in the darkened niches all contribute to the monument's high artistic value. The rear structures of the main portal are decorated with majolica (the only case in Khiva). The successful choice of the pattern, the richness of the colors, the soft, blurred outlines in the tympanums, and the contrasting combination of white geometric ornamentation and intense blue background in the darkened niches all contribute to the monument's high artistic value.

Results

It should be noted that the architecture of local schools clearly demonstrated their own characteristics. In particular, the Khorezm school, by adapting the traditional layout of the courtyard to the specific conditions of the area, usually sacrificed the established general shape of the building, while maintaining the specific geometric shape of the courtyard, which reflected the architectural style. Thus, the third group of madrasahs, identified by G. Pugachenkova [Пугаченкова Г., 1], is a loose structure that probably required less strict rules. Therefore, we can conclude that:

1) A special feature was that there was a group of buildings that served as dormitories for Quran reciters, and their architectural organization resembled a combination of a residential building and a small Khiva madrasah.

2) In Khiva, the spatial solutions of religious complexes are diverse. These complexes, which combine different functions in each case, are interesting for their variety and freedom of volumetric and spatial compositions, in contrast to the typical

buildings of the Middle Ages. It absorbed the techniques of mass folk architecture, where the most direct manifestation of form-building occurred as a response to the urgent needs of the people of Khorezm. In fact, there was free design, free combination, and transformation of well-known types of buildings, with an abundance of imagination in the interpretation of traditional forms, a rejection of the geometric rigidity of classical compositions, and free architectural variations on the same familiar theme.

3) The artist's personality was even more freely expressed in the decorative design of the buildings. It was created in the spirit of the Khiva art school, which is characterized by its strict and consistent style. Khorezm is famous for its ornate carved wood and distinctive painted majolica, which features a very restrained color scheme (white ornamentation in black outlines on a purple-blue background with blue accents).

Therefore, Khiva is considered a unique phenomenon for Central Asia, or a preserved monument of urban planning. The historical layout of the street network and buildings within the double ring of the city walls, Ichan-Kala and Dishan-Kala, has remained largely unchanged to this day.

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