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RECONSTRUCTION AND CONTEMPORARY USE OF MONUMENTS OF ARCHITECTURE IN UZBEKISTAN

Abstract: *One of the ancient centers of world civilization, where unique architectural monuments have been preserved, is the Ichan Kala historical and architectural reserve in the city of Khiva, Uzbekistan. Of particular interest for world tourism are medieval architectural monuments with fancy facing decoration. For the successful solution of the problem of not only preservation, but also the development of historical cities, the question of the modern use of architectural monuments is one of the most important. Therefore, one of the ways in which the monument acquires the right to an active life and at the same time retains its historical and artistic significance is the method of scientifically-based adaptation. The longevity of the monuments depends on the rational use of the monuments, which means the longevity of the historical region and the uniqueness of the originality of our cities. When considering the issues of adaptation, the determining condition is the planning structure of the structure, the safety of the interior and exterior, the external architectural appearance. From the point of view of maintaining the planning structure of the monuments, it is important that their use for new functions does not contradict the existing structure of buildings. At the same time, the preservation of the original appearance of the monument is of paramount importance, because the change made to the monument reduces its architectural and artistic value.*

Key words: *architectural monuments, caravanserai, new modern function, madrasah, mosque, minaret, protected area-Ichan Kala, restoration, reconstruction, regeneration, restoration, use.*

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Introduction

In Uzbekistan complexes of architectural monuments from the era of Bactrian kingdom until present time have been preserved. The culmination of ancient culture evolution is at the end of XIV-XV centuries, and is expressed in the monuments brilliant in artistic quality and erected in the capital of the Temurids' state - Samarkand.

In the twentieth century, until 1990, most of the architectural monuments were in general in desolation. This situation is triggered not only by lack of public funds for their restoration and maintenance, but also by the fact that, as a rule, the use of the buildings damaged their safety as there were warehouses, garages, manufacturing facilities and others.

As it is known, in Europe the principles of reconstruction, restoration and conservation of architectural monuments are developed thoroughly enough. Scientific development of principles of the use of buildings on a large scale has not been carried out as a result of which adaptation of monuments for utilitarian and other functions was, as a rule, accidental. The issue of rational use and recovery of the architectural heritage in the conditions available in the republic has become one of the most urgent one: it is regeneration and use of buildings for a variety of functions that can extend the lifetime of the building.

The whole history of architecture shows that items retained are only those that serve a person all the time and what are the subject of their care and maintenance.

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Materials And Methods

Using monuments to satisfy modern needs is a daunting challenge in restoration, which has been considered multiple times at different levels. However, there are positive examples, and examples of loss or partial destruction of monuments as a result of their wrong adaptation. Only at first sight it is easy

and simple to find a suitable function for the constructions that have existed for many years. In fact, adaptation of a monument requires a thorough, detailed study of archival materials, architectural - archaeological measurements of buildings, identifying their planning, construction, decorative features, and assessment of town-planning situation.

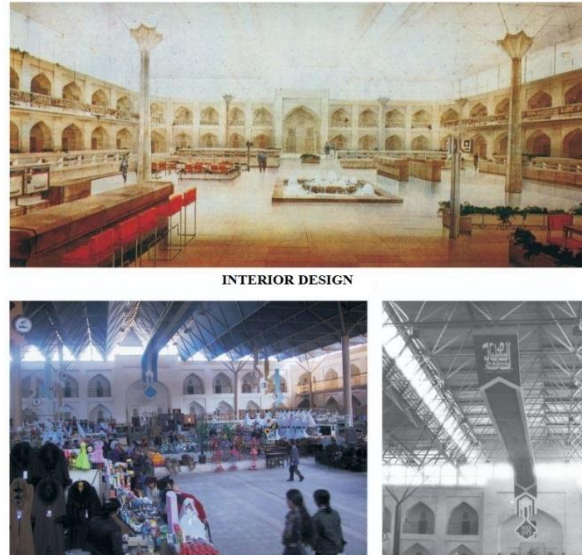


Figure 1-A. Modern look of the trade fair (caravanserai Alla-Kulikhan)

In the years of independence in Uzbekistan a lot of experience on creation of restoration projects and adaptation of architectural monuments has been accumulated and applied.

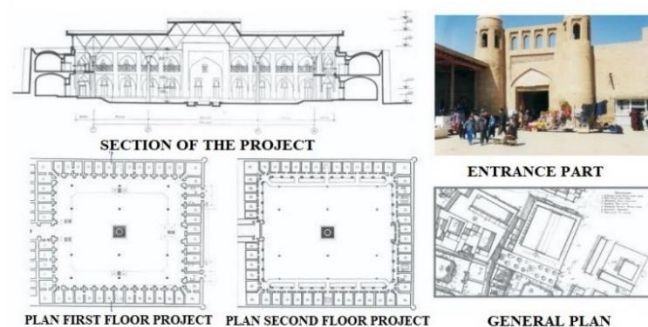


Figure 1-B. The use of the Caravanserai Alla Kulikhan in Khiva under the trade

These works were carried out at the madrasah of Matniyaz Divan Begi, madrasah of Muhammad Aminkhan, caravanserai of Alla Kulihana, and madrasah of Qutlugh Murad Inac in Khiva city, on the monuments in Bukhara, Samarqand, Kokand, and many other historical cities of Uzbekistan.

In the architectural reserve of Khiva city, one of the most visited places by local and foreign tourists, the madrasah of Muhammad Amin khan was most consistent to be used as a hotel and one of the largest and most significant buildings of Ichan Kala reserve. It was also decided to reconstruct and adapt the

madrasah of Matniyaz Divan Begi located nearby as a restaurant. Adaptation and reconstruction of the madrasah under the hotel and a restaurant with technology and equipment that comply with modern standards and requirements in the construction practice of Uzbekistan were applied for the first time. Monumental architecture of Khiva of the end of XVIII - the middle of XIX centuries was newly rebuilt city, which has become a landmark to the works of skilled craftsmen. The city was built in a very short period of time and is an ensemble of similarly planned

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facilities, constructed in unusually picturesque style in specific historical and natural conditions.

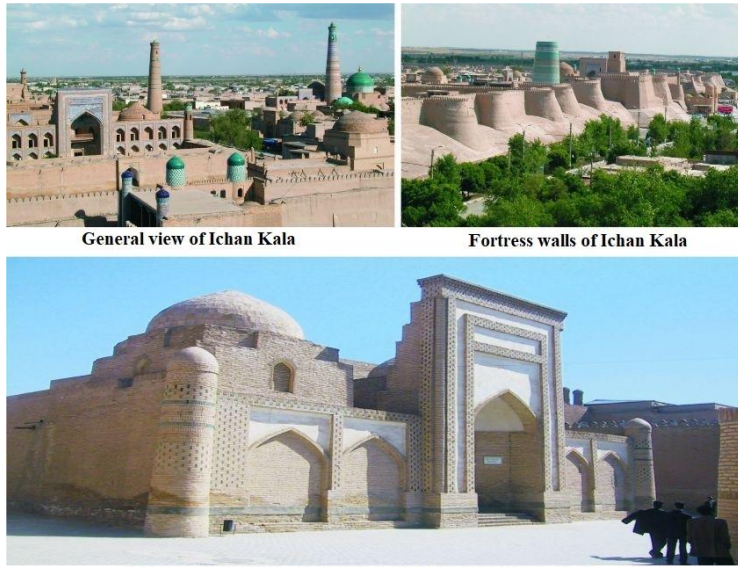


Figure 2-A. Protected part of Ichan Kala

One of the most significant buildings in the protected part of Ichan Kala, opposite the Kunya Arch, is a large two-storied madrasah of Muhammad Aminkhan erected in 1852-1855. It is significant for its immense size, a beautiful portal and a large minaret, known as the Kalta Minar, unfinished

minaret. The minaret was conceived to be the highest construction not only in Central Asia but also in the entire Muslim East. Its height in its present form is 26 meters and a diameter at the base is 14.2 meters, instead of the usual 7-8 meters.

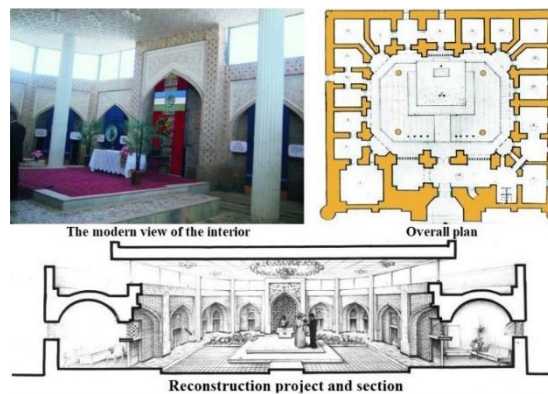


Figure 2-B. Adaptation of the Muhammad-Amin Inak madrasah in the city of Khiva. Under the house of marriage

In Khiva there is a popular legend about the creation of a minaret Bukhara Emir. Having learned about the unusual construction, he agreed with the master that he would build the same one in Bukhara. Having heard about this Khan Muhammad Aminkhan of Khiva ordered to throw the master off the minaret. Thus, the minaret was left unfinished. The madrasah itself in the side facade of the second floor is animated by an arcade of lodges. In the corners of the facades are located towers typical for Khiva with openings at the top, belts of green glazed bricks and domes, tiled with the same brick.

Near the madrasahs of Muhammad Aminkhan around the same time was built Matniyaz Divan Begi madrasah, which by its size and architectural design in many ways is inferior to the building standing next to it. Nevertheless, plastically solved building facades with emphatic pishtak - entrance, facing the side facade of the Muhammad Aminkhan madrasah, can serve as an example of progressive art of Khiva's architects in a decisive turn in the religious architecture motives prompted by folk architecture. The architectural decoration national temperance and restraint are manifested, whereby the brightness of the

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decoration has disappeared. There is something in tune with modernity in this purification of architectural forms from relief ornaments and in purely graphic interpretation of the pattern, lying in a slightly sunk mirror of tympanum, partitions, and so on.

The cultural layers in some places reached 2.5 m. Ground waters under normal conditions are found at a depth of 6-8 meters, while the depth of standing groundwater standing during flood reaches up to 4 meters above the ground's surface. The depth of laying the foundation of existing buildings subject to restoration, is located at a depth of 3-3.5 m.

Results And Discussion

Adaptation of madrasahs of Muhammad Aminkhan and Matniyaz Divan Begi in Khiva city to a hotel and restaurant. The complex consists of the hotel intended for 230 seats in the reconstructed building of Muhammad Aminkhan madrasah, and a restaurant with a housing capacity of 220 seats in Matniyaz Divan Begi madrasah. Reorganization and reconstruction are to be done mainly in the madrasah's interior.

Architectural and construction part of Matniyaz Divan Begi madrasah in its size and dimensions is much smaller than madrasah of Muhammad Aminkhan. In terms of architecture and planning the restaurant is arranged with existing facilities of madrasah. The courtyard of madrasah is used as a trading hall, which is covered with steel structures on eight columns. In hujras there are housed hot shop, manufactory, which is directly linked to the extension of the building, storage not related to consumption of water, wardrobe of the staff, and a banquet hall.

In a partition on the basis of decision by technical council are arranged all other facilities necessary for the restaurant: refrigerators, billet plants, dishwasher and so on, which is associated with the consumption of large quantities of water. This solution guarantees the protection of the old part of the building from moisture. Vestibule group with a wardrobe and a bathroom is resolved in the main part of the madrasah portal. Exterior finish of all add-ons and extensions is carried out in the same setting and the same material as that of the madrasah.

The entire perimeter of the building is faced with polished granite "gabbro" up to the height of 50 cm. The walls are dug into a depth of 1.5 m and coated with the bitumen. The facade on the north side of the building has an advertisement from copper coinage fastened to it.

In the superstructure over the court, which covers the portals (pishtaki) for lighting and natural ventilation, windows opening through one leaf, 1200 mm in height along the perimeter are built in. The extension from the west side is adjacent to the playground with summer seats, which is linked by its planned design with a decorative pool with illumination of water surface.

In front of the outlets spots such as a buffet, samovar, barbecue and ice cream cafes, there is a pergola resting on pylons. The rest of the summer seats are shadowed by grapes on the fence of metal pipes. The interior of the restaurant in its decoration and finishing solutions and expression of calisthenics of the wall surface largely corresponds to the interior of the hotel. The floor of vestibule group is identical in pattern and implementation to that of a trading hall and ends with a dandana.

The middle part of the floor was laid with bricks flatwise with wide strips between them from colored cement forming a modern pattern. The combination forms of the old architecture with new finishing materials, lighting carcass and others is the basic principle of the solution of the interiors of the restaurant. The ceiling of the restaurant - suspended from vasa, where in caissons and in a staggered order are arranged fluorescent lamps, closed with a decorative grate.

On the elevated part of the floor low tables with seats around the mare placed and the central part of the trading hall is represented by a typical commercial equipment. The walls of the trading hall remain largely unchanged, but some parts are subject to restoration. The elements of artistic decoration – embossed lyapas, decorative grilles of cast glass etc. complement the interior and make it festive and solemn.

The construction part of the ceiling of the trading hall is made of uncut, intersecting and based on eight locations on columns metal forms that are tied along the contour by beams. Overlapping is made from metal profiled sheets on the metal girders, which in turn are fixed to ceiling structure made of aluminum profiled sheets. Maintenance of lighting equipment is done from below by means of a telescopic stand-alone installation.

Attached part of the restaurant is solved in a monolithic frame a fencing from brick walls. Partitions - reinforced walls and a brick. Overlapping - precast concrete for the current series. Foundations are monolithic, reinforced concrete. Window openings are individual and door match the standards.

Architectural and construction part. The architectural appearance of the madrasah is upheld and subject to only minor restoration with its decoration with small architectural forms and elements of building structures. Destroyed part of the balcony railings and galleries are rebuilt on the respective mark.

Handrails of fences are made of white marble of 60 mm thickness. Small windows are sealed with decorative lattice, drawn from a semi-dry concrete on the basis of white cement with a white marble crumb fines. Doors and all the openings facing the facade are made of fine wood and glazed openings are separated by inlaid wooden grating - pandjara. The entrance carved door is restored and hangs up on the metal

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thrust bearings on ball bearing. Bronze, cast, and further embossing door handles enhance the colouring and plastic of the facade. Cap facades around the perimeter to the height of 50 cm are lined with polished black granite "gabbro" which protects the wall from moisture and damage. The internal layout of the hotel is solved according to the existing structure of the madrasah of Muhammad Aminkhan. The composition of the premises and the area also meet the standards.

The best option plan and technological communication were chosen for premises taking into account the smallest volume of construction works. In extreme cases, for the convenience of interconnection rooms were hit with bricks. In planning the hotel can be related to a gallery-type bellhop. This is especially reflected in the vaults on the 2nd floor. Entrance group of the 1st and 2nd floors of madrasah is reserved for service and support rooms of the hotel.

Interconnection of service and manufacturing facilities is convenient, which contributes to normal living of tourists in a hotel. Galleries are resolved without glazing to preserve the integrity of the facade of ancient architectural monument. The radius of accessibility to places of public use is within the norms. Evacuation routes of the residents and their number are also within acceptable norms.

Natural lighting of rooms and office space on the area of glazing to the floor area refers to 1:10. According to the architectural forms, all the rooms, without exception, remained unchanged, and differ from each other depending on the purpose of decoration.

Vestibule group somewhat different from other rooms in size, height and plastic of the walls' surfaces is resolved solemnly and majestically. This is achieved thanks to the understated lighting, soft colors and high quality of finishing of the walls' surface, against which the equipment is successfully entered, polished by the dark tones of fine wood. Everything is laconic and strict and nothing is excessive, and artistic integrity is achieved by reflected light from 8 bronze chased lamps, located on circle of lobby's domes.

In some cases, there is a forced deviation from repeated administration, including when the size or purpose of the premises are different from previous ones. Thus, the registry hall is illuminated by light falling from chandeliers in the form of sunlight as the room height is 10m that allows a free access to this reception.

In another case, the dome of the bar is illuminated from four chased cups on the corners of the room on consoles, in which lamps are recruited from the spotlights. Four powerful beams of light aimed at the dome as if push the fencing structures increasing the space that will undeniably produce effect, delighting by their craftsmanship and grandeur of ancient architects.

The floors in the vestibule group and the trading floor of the bar are solved in soft pastel tones from high quality bricks with their subsequent coating with epoxy paint, which in its physical and chemical qualities serves as a reliable coating against moisture destroying bricks. The trading hall of the bar is settled in form of a hotel with sofas, and several sunken tables, in some ways echoing the ancient utilitarian devices, sandals, without which no Uzbek house could do without. The walls of the bar to a height of 2.20 m are faced with plywood with marquetry on the subject of tales and legends of the ancient Uzbek epic. This is undoubtedly an attractive element.

The whole interior as if takes the visitors into the space and time that past a long time ago and are mysterious. The lounge is resolved in accordance with modern requirements and standards. It can also be used for holding youth parties, debates, sports competitions on chess and checkers, and a place of interesting meetings.

Openwork grille before entrance in style and pattern is aligned with the entrance into the rooms. Double glazing from the window glass prevents the spread of noise and cold air in the winter season. All living rooms are comfortably settled, corresponding to modern hotels.

On the ground floor the rooms are equipped with showers and toilets, while on the second - washbasins; and almost every room has a terrace overlooking the old town of Khiva.

Ventilation in all the rooms is natural. Thick walls at any time of the year will keep the normal temperature mode comfort zone. The floors in all the rooms are of oak parquet. Walls are of high-quality stucco with PVA paint. The bathrooms are tiled with glass tile of "marblit" type in blue and white colors, and floors are covered with glass tile, laid out in the national ornament. Door slopes are laid with brick with a glazed surface concaved in the horizontal position.

Conclusion

Lighting in the rooms such as embossed copper sconces are positioned at the head of each bed. A portable hammered lamp serves as general light. Existing niches in each room are used as bedside tables. Low beds are covered by national fabric - khan atlas. Each room has a painted ornamented in "giri" style a small polished table. Wardrobe is prefabricated. The desk is made according to the drawings for the equipment of modern hotels. The interior is complemented by a soft carpet made of camel fur.

In the courtyard of the madrasah there is a summer teahouse for 50-seats under a decorative bowl of shaped pool, which absorbs radiation and radiation heat from the walls and the ground and helps to preserve coolness even in the hottest days.

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