



The Importance of Landscape Design in the Formation of The Architecture of the Medieval City of Khiva

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In the article, the laws of landscape design used in the development of art in medieval Khiva (Khorazm) architecture were researched, and scientific recommendations and conclusions were given regarding its application. Also, the opinions of Khiva architecture and foreign landscape specialists about green areas in the country are given. Considerations are given about the importance of gardens in the formation of castles.

Keywords:

farsakh, anchors, attraction, ancient fortress, ancient monuments, defence wall, central city.

Introduction

It is of great importance to study the history of world architecture, to get acquainted with the laws of its development, and to preserve and repair rare monuments. It undoubtedly helps a person to enrich life experiences, and to approach life in a wider and more comprehensive way. Studying the history of architecture is one of the important factors, especially in today's development. The history of architecture is studied from the earliest periods of human development. It is in this area that huge amounts of information, material and written monuments related to the culture of ancient urban planning and early statehood in Uzbekistan have been collected, and their deep and coherent study is one of the most urgent scientific problems [1-4]. Also, the revival of our values, the roots of our cultural heritage and the study of regional schools are of great importance [3-7].

We use seasonal annual and perennial flowers, in addition to local, introductory ornamental trees and shrubs, in the creation of parks, in the entrance and public areas of the park, to create a beautiful composition and colourful

landscape. These ornamental flowers and grass plants are planted in large areas, and they need to be constantly cared for and watered. In this case, it is appropriate to use the "smart gardens" technology, which allows efficient and economical use of manpower and water resources. That is, watering the plants, lighting the park, operating the pumps in the fountains, the fire safety system, and the like are all automated, computerized and controlled from the main server. For example, let's take the daily watering of decorative flower plants, we have an automated system that drips water every morning through special hoses placed along the rows of plants. In this, very low-power mini-pumps run at the same time every day with the help of an automated server. The fountains system is similar, they automatically turn on in the morning and turn off the fountain pumps in the evening [8-11]. The lighting system is also one of the important functional service systems of our park, and we should use modern technical achievements in their organization. We need to install special energy-efficient types of park lights that collect energy from sunlight and emit light when there

is no light (in the evening). The lighting system of the park is also connected to the main server, and in order to save energy when not needed, some of the lights are turned off. A lot of energy is required for the operation of pumps, fire safety systems, and various security cameras, even if they are made based on energy-efficient technologies. The most effective way to solve the problem of providing electric current to the park for island regions is to use solar and wind energy [12-19]. In parks with a large area for the use of solar and wind energy, a separate area is allocated for solar batteries and wind turbines, and a building with energy collection and distribution devices is designed near the area. This area should be organized in the form of an open environment, and trees should be planted at such a distance that they do not cast a shadow. The building where the devices are located is sheltered from the eyes of park visitors by overhanging plants or green fences [17-21]. It is better to design such energy storage areas as part of the quiet recreation area of the park because a large part of the total area of the park is reserved for the quiet recreation area. It is not necessary to design a separate area for solar cells or wind turbines when designing small parks or recreation areas. We can design solar energy collecting devices such as roofs of buildings in the park, various gazebos, and sun protection awnings. We should design wind turbines that collect electricity through the wind as a decorative landscape device for a quiet recreation area of the park, but it would be desirable to place the walkways near the device, conversation booths (gazebo) at a distance of twice the height of the device from it.

In a word, the intended measure will help us to achieve effective results in the implementation of activities, landscape organization and greening of the territory of the island. In particular, modernization of its material and technical base, using energy-saving techniques and technologies, construction of various parks, amusement parks, boulevards, and playgrounds, improving the ecological situation of the area, creating a comfortable microclimate, and helping residents spend

their holidays and vacations in a pleasant and fulfilling way.

Khazorasp, Shikhlar, Pishkanak, and Rafanak in the south, and Badrkhan gates in the west. The neighbourhoods in Dishan-kala were called Or, Kaptarkhana, Mevaston, Mekhtar, New Arik, Bolochoviz, Nanemozor, Nurullaboy, Bogcha, and Rafinak. Ichan writes that it is possible to enter the palace of Arkchakhan by passing through the closed market of the castle, and the Ark is well fortified with two rows of high walls, like the palaces of all the rulers of Central Asia [19-21].

Vamberi writes that Khan has a garden in Ghandimion. There were also several palaces. The main palace, Ark, is located in the middle of the fortress. It consists of a large rectangle and consists of several rooms. At the entrance to the arch, there is a guardhouse, inside are the rooms of the Khan and his siblings, the harem (women's section) and the armoury (arsenal). On the east side of the castle, there is another palace built by Muhammad Rahim Khan. Khazorasp and Khiva, the American McGahan describe in his work: "The next day at sunrise we came close to Khazorasp. This stronghold is said to be located on an island in the middle of a large lake, with only one road leading to it.

The main part

From among the tall trees around the castle, the castle looked like Windsor Castle to us. Its high luxurious curved walls are covered with thick sundials and constellations.

High minarets, domes of mosques, madrasas, and mausoleums can be seen among the trees. In the middle (in the centre) of these, we saw a circular, blue-coloured, glittering minaret. It was shining in the sun.

The city is surrounded by a moat twenty feet wide. The water-filled part of the trench looks like a big canal, and some parts are dry.

I mentioned above the Khazorasp and Ghazovot gates of Khiva, the fortress has five other gates besides them [1,8,22].

As can be seen from the information given above, brief geographical and historical reports about Khorezm and Kat, Gurganj, Vazir, Khiva, and Khazorasp in the works of authors of the X-

XVII centuries are noteworthy as valuable sources. It should be recognized that the information in the sources of the XV-XVI centuries refers to fortresses such as Gurganj, Vazir-Devkeskan, and Khiva.

Ibn Battuta wrote: "We arrived at the fortress of Kat after a 4-day journey. Kat is a small and beautiful city. We stood by a pond outside the city" [2]. It is clear from this that the author did not see any people after walking for 4 days from Gurganj to Kat.

Know that Khorezm in the east is like Sidjilmas in the west. The behaviour and customs of the Khorezm people are similar to Berbers. The land area of Khorezm is 80x80 farsakhs, villages and fortresses are located close to each other, there are many canals, canals, and sheep. Khorezm trades with the Turks. Their capital is called Kas" [13-18].

"On October 7, 1558, we arrived at the castle called Sellijure." The fortress of Sellijur (city) is located on a high hill; The southern part of the castle is low-lying, but very fertile land, where many different crops are grown, one of which is the melon, which is notable for its size and juice. People eat it instead of water after meals. Here is another fruit called watermelon, the size of which is as yellow as a large cucumber and sweet as sugar. It also grows a grain crop called iyegur (jugari), whose stem and height are very similar to sugar cane, the grain is like rice, and it hangs at the top of the stem like grape heads. The water used by the whole country is taken by canals from the Oxus River, which is very depleted. That is why its water does not flow into the Caspian Sea as before. Shortly, this country will be destroyed due to the lack of water from the Oxus River and will turn into a desert. Its size is two miles. The buildings inside are also made of clay, many of them are in ruins. The streets are crooked. Only one street is closed, even if it is a market..."

At the end of the 18th century, Russian ophthalmologist Blankennagel, who visited the Khiva Khan's palace at the Khan's request, wrote down in his memoirs the economic and political situation in the Khanate and what he knew about the ancient history of the country as follows: "On both sides of the Amudarya In the past, people lived, they lived in four times

more area than now, there were fields and gardens, the castles and villages in these places were well fortified compared to now, now they have become ruins and are divided [19-22].

Brief information about Khiva and Khazorasp can be found in the diary of M. N. Chernyshevsky, the son of the famous Russian writer N. G. Chernyshevsky. In 1899, an expedition was organized to check the route of railway construction planned by the Russian state from Alexandrov-Gay to Charjoi on the Caspian Sea. Chernoshevsky took part in this expedition group and visited Ustyurt-Kungirod and Petro-Aleksandrovsky (now Tortkul fortress), Khiva, and Khazorasp before going from Caspian-Chardjoy. He took a picture of the ruins and the tower. He also took pictures of some monuments in Khiva.

Khazorasp's main attraction is its castle, which is located on an island, or rather a peninsula. The reason is that the water has dried up on the north side and a peninsula has formed. I only looked at the fortress. When I entered the castle, I saw its walls. Along the base of the wall and inside the city are filled with bazaars and other buildings. Most of them are ancient buildings and are of archaeological importance. Khazorasp is undoubtedly the oldest fortress in the Khiva Khanate. Life has never stopped here. People are still living there. This situation is of great importance for the preservation of ancient monuments. Even though the last arrivals did some damage, they were better preserved than the completely abandoned castles and villages [21-25].

Khazorasp fortress is located in the middle of the lake. In my opinion, the soil must have been taken from this lake when Khazorasp's fortress was built. There is only one way to enter the fortress, through the gate in the middle of the southern wall of the fortress. The road leading up to the gate is made of loose earth. Both sides of the gate are reinforced with towers. Market stalls were built on the inner side of the defensive wall. An earthen path gathered from the outside leads to the gate of Mirshab or Pashab (both mean the same thing). The fortress is 200 steps wide and 400 steps long. Inside the gate is a newly built madrasah. So, in some periods of the history of Khorezm, the

name of the central city meant an entire country.

Based on it, it can be observed that the city expanded from east to west and that the second defensive wall (Dishan Castle) was built. The old east-west main street of Ichan Castle has been preserved

Conclusion

The topic of "The importance of landscape in the formation of Khiva architecture" - even though several scientists have conducted extensive scientific research in the study of the cultural heritage and architectural monuments of Khorezm, traditional harmony in the architectural heritage of Khorezm in the Middle Ages The patterns of pollination and the effects of the landscape are particularly understudied in the problems of artificial landscape creation. The role of landscape design in architecture and urban planning, the influence of landscape on the transformation of Khorezm architecture during the Khiva Khanate, and the importance of climatic conditions in Khiva architecture are also covered.

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