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## ON THE ARCHITECTURAL METHODS OF CONSTRUCTION OF THE EARLY MEDIEVAL RURAL AREAS OF USTRUSHNA (ON THE EXAMPLE OF JIZZAKH OASIS)

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### ABSTRACT

*This article analyzes the types, stages of development and methods of architectural construction of rural areas of the Jizzakh oasis in the V-VIII centuries (Pardakultepe, Kingirtepe, Almantepa I, II, Yakubbobotepa). The bricks are mostly laid. The 2 bricks in the lower rows of bricks were pressed from the upper half of the brick, and this “lock-key” rule, spoken in the language of the local masters, was followed in all cases. The cotton walls are raised in two different ways. The first method is to cut the cotton with a fork. The surface of the straw is cut and leveled with a sharp tool. This type of straw is 70 cm long and is cut horizontally at a distance of 80-100 cm (oven) and made of “blocks”. The rooms in the northern part are connected to the southern rooms by an open door from the narrow “bullet” corridor of the 8th room to the 2nd room. Also during this period, another house, 3 rooms, was built on the east side.*

**KEYWORDS:** *Ustrushona, Jizzakh oasis, early Middle Ages, rural settlements, fortresses, Pardakultepe, Kingirtepe, Almantepa, Yakubbobotepa, “bullet corridor”, “comb corridor”, “Bypass”, “construction” walls.*

### INTRODUCTION

Archaeological excavations in the historical and cultural oases of the country of Ustrushna, which took place on the stage of history in the early middle Ages, show that in the IV-VIII centuries AD, political, socio-economic and cultural life in the region became more active than in previous periods. This is due to the influx of large numbers of nomadic pastoralists into Central Asia, including Ustrushna, and, for some reason, the mass settlement of most of them. As

a result, the construction of rural areas has gained momentum, and they have been built around large cities.

Archaeological excavations in the area of these cultural oases since the late 1970s show that sedentary life and agriculture in the Sangzor River basin developed mainly during the Kushan Empire from the Early Inquisition to the early Middle Ages. During this period, the focus was on the construction of castles, rather than cities, as residential buildings.

Almost 70% of the complex of archeological monuments of ancient and medieval history owned by the state of Ustrushna is the monuments of the early middle Ages. The numerical superiority of the monuments of this period is characteristic not only for the Jizzakh oasis, but also for the whole territory of Ustrushna. Indeed, as the medieval authors noted, "Ustrushona is a land of fortresses" [1, p-243). The numerical aspect and the satisfactory preservation of the monuments of this period became the basis for a relatively good study of the early medieval archeology and architectural features of the Jizzakh oasis. The first medieval rural construction, architectural methods and their evolution of northwestern Ustrushna on the example of the discovered architectural complexes of the first feudal period rural settlements Pardakultepe, Komilbobotepe, Kingirtepe, Almantepa I, II we can think about issues.

As in all regions of Central Asia, the construction of the fortress of the Jizzakh oasis used mainly raw bricks, cotton, and very rarely wood and stone materials. The raw bricks here are made of well-baked reddish and yellow clay from pre-construction clay. The bricks are rectangular in shape, size 48x24x10; 46-23x10; 46x23x10; 46x26x12; 46x23x9; 42x52x10; 40x20x10 cm, Ustrushona corresponds to the general shape and size of raw bricks used in the construction of VI-VIII centuries in Sogd, Shosh-Ilak, Fergana regions [2, p-204-206.]. Cotton is mainly made of yellow clay. Wood was mainly used as a "door head" in the roofing of large rooms, in the construction of two-story houses, and in the roofs of flat doors. Although stones were rarely used for the bottom of some walls, they were mainly used to knock down doors that lost their significance over time during the reconstruction.

The construction of the walls of the northwestern Ustrushna fortress is divided into 4 categories. These are walls made of raw brick, straw, alternating rows of cotton and brick, and beating cotton and brick in a mixed state. The bricks are mostly laid. The 2 bricks in the lower rows of bricks were pressed from the upper half of the brick, and this "lock-key" rule, spoken in the language of the local masters, was followed in all cases. The upper part of the rooms, whose roofs are domed, some of the doorways and the repaired walls are bricked horizontally and vertically. Between the rows of bricks is laid well-baked medium-quality clay 1.5-3 cm thick. The door frames, made of raw bricks, are mostly plastered with mud mixed with fine straw. It should be noted that the height of this cotton wall is still 70 cm, which is a unique tradition in the history of Central Asian construction.

The cotton walls are raised in two different ways. The first method is to cut the cotton with a fork. The surface of the straw is cut and leveled with a sharp tool. This type of straw is 70 cm long and is cut horizontally at a distance of 80-100 cm (oven) and made of "blocks". These cotton "blocks" are formed in the form of a checkerboard, and the lower layer is pressed into the upper layer sections in the form of "knots". The second type of cotton, "punched" cotton is often plastered because the surface is slightly rough.

Rotation of rows of cotton and raw bricks is more common in Pardakultepa, i.e. in the early stages of the study period. This method was continued with raw bricks equal to the height of the wall, which was turned into one or two piles. In all cases, the base of the wall tag was struck much wider than the straw. “Although less bricks are added to the prefabricated walls, they are mostly in a checkerboard pattern, that is, they are stacked horizontally and vertically at a certain distance and height from each other, creating a geometric shape. At the same time, this method also served for the aesthetic appearance of the walls. There were also a number of “prefabricated” walls with bricks piled on top of each other, and the method walls were mainly recorded in Komilbobotepa.

The "platform", which was the basement of the building, was one of the main components of the architecture of the early Middle Ages before the Arab conquest. Although such “bottom tables” were used in antiquity, their widespread use dates back to the early Middle Ages.

According to S.P.Tolstov, the use of platforms in the construction of castles and palaces in the VI-VIII centuries improved their defense capabilities. Therefore, for such buildings, the stone wall did not pose a threat of firearms and lahm [3. P-1948]. According to Y.Yakubov, “the forts on the platform have served not only as a defensive point, but also as a checkpoint. From there, the surroundings looked good, and as soon as the enemy appeared, everyone took their places at the signal of the observer, and the fighters took the defensive line. In peacetime, the governor observed the lives of his citizens in the city and in the countryside”[4. P-100].

According to experts, high platforms were used mainly in the Khorezm, Sogd and Bukhara regions of the Central Asian plains. V.A. Nielsen describes the platform as “a key component of individual buildings built in a particular area” [2, p-215]. Based on these ideas, the platform can be considered as the most important and integral part of the architecture of the early feudal period. Therefore, trenches were dug at Pardaqultepa, Komilbobotepa, Rasulboyqultepa and Yakubbobotepa monuments of Jizzakh oasis to determine the characteristics of the platform. All of these trenches were removed by cutting through the defensive walls of the fort, and it was discovered that all of the fort walls were not on the platform, but on the mainland layer. On the inside of these walls, additional, parallel walls were built to form the circular corridors of the castle. The central buildings of the fortresses, especially Pardakultepa and Komilbobotepa, are built on platforms 1.5-1.8 m high. Of course, this may seem unnatural, but there is a factor that makes up for this architectural “shortcoming”. It is known that the fortresses around the monument Kaliyatepa are interpreted as structures that form a common defense chain of the city. Therefore, in the early Middle Ages, the defense of each fortress and *rabotdid* not have to be individual. In our opinion, we are talking about large-scale defense activities in the Jizzakh oasis, as well as the borders of Ustrushna and Sogd.

Logically, this event was organized and carried out under the leadership of the governor of Kaliatepa (Dizak). So, first of all, the warriors of the city and all the forts resisted the looting of the desert peoples on one battlefield. Second, when a military situation arose, all the defenders (including the inhabitants of the fortresses) continued to resist behind the high defensive walls of the city of Kaliatepa. Thirdly, these raids, which were organized mainly for the purpose of looting, did not envisage a long siege of a certain city or fortress. Immigrants who seized valuables, household items, and livestock returned to the desert. Fourth, it should be noted that in the Middle Ages, the Jizzakh oasis served as a “repeater zone” for economic and cultural

“communication” for nomads and settlers. As a result, the ancient towns and villages of Jizzakh have become areas of active military activity for a relatively small number of migrants. The correctness of this idea can be seen in the well-preserved aspects of architectural monuments. According to the results of the research, these are the main reasons why the “bottom table” of the Jizzakh monuments is not complete. The fact that the central buildings were built on the platform can be seen from the current appearance of the monument, the relief. All such monuments have two stages [5, p-144-145].

The interior surfaces of the rooms of Pardaqultepa and Komilbobotepa buildings are mostly thinly plastered with fine straw mud. The floor has a multi-storey appearance due to the fact that the leveling of the house is repeated at certain times. Directly from the mainland land was used for the floor of these castles, farms and rooms around the defensive wall. In some cases, especially in the central building of Pardaqultepa, the 3rd room was made of compacted silt. In only one case was it noted that the floor of Room 10 of the monument was made of raw bricks in the shape of a rectangle.

Although it served as a “window” in the modern sense, it was installed in a different way, as well as in a different place, in terms of the fact that the defensive capabilities of the building and even a separate room will not be less powerful. According to V.A. Nielsen, the roofs, which were covered with flat beams, were illuminated by holes in the ceiling, regardless of whether the village castle was a city dwelling. The rooms of the village forts also have rectangular holes in the walls in the form of “embrasures”. However, less light falls on them [2. p. 232]. In Pardaqultepa rooms the same type of tire replica holes were recorded. In our opinion, such holes were used to change the air in the rooms, as well as to shoot arrows. In the winter, these holes could be filled with a single brick or covered with old rags to keep out the cold.

In the early medieval architecture of Central Asia, the door and its roof were made in almost the same arched style. Although Pardaqultepa and Komilbobotepa fortresses are not excluded from such methods, they also have some differences. The interior doors of the castles were almost never replaced by layered wooden doors. The doors of the monumental houses and hotels were mostly covered with carpets, and the doors of ordinary rooms were open. Sturdy wooden doors are installed in the entrance and exit complexes, lobbies. V.A. Voronina points out in the example of Panjikent that such rooms are often equipped with double doors.

The wooden doors were very simple to build. In most cases, the wooden “bullets” carved on the bottom and top of the door sills are attached to the stone hinges mounted on the door sill and roof. Such stone lovers are mentioned in both monuments that we have discovered. These layers are mounted on arched doors. Instead of the flat doors, which were built with the help of a wooden door head, door frames were installed in the “square straw” between the frame and the roof. There are several types of door frames:

1. Bricks raised on both sides are hit on the floor in a “ponasimon” manner, using bricks that gradually take an upright position;
2. In the same way but in the case where the two side slopes of the arch are raised from the stalk;
3. Doors made of wood with the help of a “door head”, the original appearance of which has a flat ceiling, plastered with straw clay at the bottom, and in the form of a dome made of this clay;

4. As a place for flat, flat doors made of wood using a “door head”;

5. Overlapping first and second floor doors. These doors are mounted on a transverse wall on one side of the roof. The bottom door has two rows of bricks and the top is covered with cotton wool. This cotton, in turn, served as the threshold of the upper floor door.

Along with the literal doors, there are also small windows. These arched windows are more common in the rooms of the courtyard of Pardaqultepa, but also in the central buildings of Komilbobotepani.

The rooms of these complexes are mainly covered with two types of domes and flat roofs with the help of horizontal beams. The first method is mainly used for roofs in narrow corridors and small rooms, while the second method is more commonly used for large houses and two-story rooms. The builders of the Jizzakh oasis have mastered both methods of architecture. Due to the large number of houses with *bolor* roofs, it is clear that the timber problem was well solved in those days, and the nearby forests of Turkestan, Morguzar, Nurata ridges were widely used in this regard.

According to our observations, Pardaqultepa has gone through three stages of construction. The core of the first building was rooms 1,2,4,6,7. In our opinion, rooms 1,2,4 were one large room at that time. There was a doorway on the east-west walls of this room, room 6.7 was integral and connected to the courtyard through a door on the south wall [6. P-140].

During the 2nd construction period, construction work continued on the north-eastern wings of the central complex. Although only one room has been opened in the northern wing of the bullet corridor, which has been divided into two by the unequal construction complex through the northern bullet corridor, the micro-relief shows that these buildings are still there. The rooms in the northern part are connected to the southern rooms by an open door from the narrow "bullet" corridor of the 8th room to the 2nd room. Also during this period, another house, 3 rooms, was built on the east side. Although the room is connected to the central 2nd room through a previously existing western door, another door leading to the castle courtyard has been built on the south wall. In Building 3, an additional south wall was built inside the large room, which was the core of the first building, and three rooms were formed from one large room.

## CONCLUSION

Thus, the analysis of the methods of architectural construction of rural areas discovered in the north-west of Ustrushan can be concluded as follows: 1) the periodic date of architectural construction of the castles is determined by the IV-VIII centuries; 2) In these fortresses the peculiar traditions of architecture and planning evolution are observed; 3) In the IV-VI centuries the

“arrow” corridor passing through the center was widely used, in the VII-VIII centuries “circular corridor” buildings were included in the picture.

In the VII-VIII centuries, the planning method typical of Sughd and Ustrushan, consisting of a complex of “comb corridors”, will be implemented.

## REFERENCES

1. N.N. Negmatov. (1953) Historical and geographical outline of Ustrushana from ancient times to the 10th century A.D. No. 37 M-L. (Н.Н.Негматов. Историко - географический очерк Уструшаны с древнейших времен по Хв.н.э. //№37 М-Л., 1953.)
2. V.A. Nielsen. (1966) Formation of feudal architecture in Central Asia (V-VIII centuries). – Tashkent. “Fan”. (В.А.Нильсен. Становление феодальной архитектуры Средней Азии (V-VIII вв.). Т., “Фан”, 1966.)
3. S.P. Tolstov. (1948) In the footsteps of the ancient Khorezm civilization. M. Ed. Academy of Sciences of the USSR. (С.П.Толстов. Последадревнехорезмскойцивилизации. М. Изд. АН СССР, 1948.)
4. Y. Yakubov. (1988) Early medieval rural settlements of mountainous Sogd. Dushanbe, Donish. (Ю.Якубов. Раннесредневековые сельские поселения горного Согда. Душанбе, “Дониш”, 1988.)
5. M.H.Pardayev. (1997) Some features of the early medieval architecture of northwestern Ustrushna. 28th edition. – Samarkand. Sogdiana. (М.Н.Пардаев. Shimoli-g’arbiy Ustrushona qishloq qurilishi me’orchiligining ilk o’rta asrlardagi ayrim xususiyatlari. O’MMT. 28-nashri. Samarqand, “Sug’diyona”, 1997.)
6. M.H.Pardayev., J.I. Gofurov. (2016) Early medieval rural areas of Ustrushna (based on written and archeological sources). – Tashkent. (М.Н.Пардаев., J.I. G’ofurov. Ustrushonaning ilk o’rta asr qishloq makonlari (yozma va arxeologik manbalar asosida). Toshkent, 2016.
7. A.E. Berdimurodov, M.Kh. Paradaev. (1988) Kingirtepa castle. History of the material culture of Uzbekistan. Issue 21. – Tashkent. “Fan”. (А.Э.Бердимуродов, М.Х.Пардаев. Замок Кингиртепа. //ИМКУ. Вып. 21. Т., “Фан”, 1988.)
8. A.E. Berdimurodov, M.Kh. Paradaev. (1990) Excavation of the upper building of Almantepa. History of the material culture of Uzbekistan. Issue 23. – Tashkent. “Fan”. (А.Э.Бердимуродов, М.Х.Пардаев. Раскопки верхнего здания Алмантепа.//ИМКУ. Вып. 23. Т., “Фан”, 1990.)
9. M.H.Pardayev. (1992) Early and medieval fortresses of the Sangzor basin. Uzbekistan in ancient and medieval times. Proceedings of the Republican Conference of Young Historians. March 16-17. Samarkand. (М.Н.Пардаев. Sangzor havzasining ilk va o’rta asrlar qal’a – rabotlari. O’zbekiston qadimda va o’rta asrlarda. Respublika yosh tarixchi olimlari anjumani ma’ruza bayonlari. 16-17 mart. Samarqand, 1992.)
10. V.A. Voronin. (1950) Study of the architecture of ancient Penjikent. MIA. Issue 15. – Moscow. –L. Ed. Academy of Sciences of the USSR. (В.А.Воронина. Изучение архитектуры древнего Пенджикента. //МИА. Вып.15. –М. –Л. Изд. АН СССР, 1950.)