

ANCIENT ARCHITECTURE OF THE FERGHANA VALLEY - FEATURES OF FORMATION AND DEVELOPMENT (ON THE EXAMPLE OF CIVIL ARCHITECTURE AND URBAN PLANNING)

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Abstract. *The authors of this article gradually reveal the formation of ancient architecture on the territory of the Ferghana Valley - from the Bronze Age to the first centuries of our era. On the example of the development of urban planning and civil architecture, the characteristic features that distinguish the architecture of this region from other historical and cultural regions of Central Asia of the considered period of time are revealed.*

Keywords: *city, citadel, fortification, craft quarter, configuration, dugout, estate, castle, hall, avian.*

ДРЕВНЕЕ ЗОДЧЕСТВО ФЕРГАНСКОЙ ДОЛИНЫ – ОСОБЕННОСТИ ФОРМИРОВАНИЯ И РАЗВИТИЯ (НА ПРИМЕРЕ ГРАЖДАНСКОЙ АРХИТЕКТУРЫ И ГРАДОСТРОИТЕЛЬСТВА)

Аннотация. *Авторы данной статьи поэтапно раскрывают формирование древнего зодчества на территории Ферганской долины - от эпохи бронзы до первых веков нашей эры. На примере развития градостроительства и гражданской архитектуры выявляются характерные черты, отличающие архитектуру этого региона от других историко-культурных регионов Средней Азии рассматриваемого периода времени.*

Ключевые слова: *город, цитадель, укрепление, ремесленный квартал, конфигурация, землянка, усадьба, замок, зал, птичий двор.*

INTRODUCTION

The Ferghana Valley is one of the oldest agricultural regions located in the north-eastern part of Central Asia. Almost from all sides the valley is bordered by mountain ranges, isolated from each other, forming small microdistricts. Along with Bactria, Khorezm, Sogd, Chach and Ustrushana, Fergana in ancient times was one of the special historical and cultural regions of Central Asia, in which an important role belonged to the nomadic component [1]. The first information about this area appears in Chinese sources from the II-I centuries. BC, since Ferghana "played the role of a bridge between the Chinese Empire and the Central Asian possessions[2].

MATERIALS AND METHODS

Possessing favorable hydrographic and soil-ecological conditions, already in the Bronze Age, the territory of the Ferghana Valley was developed for irrigated agriculture. Along the banks of the main water arteries (Gavasay, Kasansay, Karadarya, Aravanserai, etc.), farmers were located in oases. And in the first centuries of our era, when the entire territory of the Fergana Valley was being developed, this process was even more activated due to the "development of experience and skills in irrigation work, as well as an increase in the

population, when a large number of new settlements appeared (in South Fergana - the creation of the city of Margilan with the cult center and the Kerkidon settlements - Maydatepa, Myktykurgan, Zor-tepa, Chuntepa) [3].

In this historical and cultural area, one can observe the development of urban planning, residential and religious architecture, dating back to the Bronze Age. Among the main factors that contributed to this development, one can name such as the geographical location of this region - the valley is surrounded on all sides by mountains, being in an intermountain basin, which to a certain extent influenced the somewhat belated and original development of urban planning; since the Bronze Age, the agricultural oasis was surrounded by pastoral tribes, on whose territory large movements of tribes took place [4] (the appearance of a new wave of nomads who assimilated with the local population affected the development of funerary architecture); close ties with the ancient agricultural centers of Central Asia (for example, from the 2nd century BC to the 3rd century AD, Fergana is in close cultural relations with Kangyui) and the ancient Ferghana people were familiar with the building skills and techniques of Shash, about as evidenced by the burial structures of Western Fergana)[5]; the presence of broad cultural ties with the countries that were part of the Kushan state, East Turkestan, China, India and Iran (in the II century BC) [6]. The active growth of Davan (Fergana) was facilitated by the trade route, the so-called. The northern route of the Great Silk Road is one of the most ancient and important routes, actively functioning already in the Late Bronze Age, where representatives of different religions and artistic cultures met, which was also the basis for the development of ancient cities and their environs.

RESULTS

Based on the work of numerous archaeological expeditions, today there is the possibility of a phased and comprehensive study of the architecture of ancient Ferghana - in Chust (XII-VII centuries BC), Eilatan (VII-III centuries BC), Shurabashat (IV-I centuries BC) and Markhamat (I-IV centuries AD) periods.

Urban planning. The development of the ancient settlements of Ferghana and the beginning of urbanization processes in this area dates back to the Late Bronze Age and Early Iron Age, which was facilitated by favorable geomorphological-hydrographic and soil-ecological conditions, as well as the demographic growth of settlement[7]. Ferghana of the **late Bronze Age**, among other simultaneous monuments of Central Asia, is distinguished by its originality not only in the types of settlements, but also in the nature of the fortifications and the arrangement of dugouts. Monuments of this period were discovered on the territory of Eastern and Northern Fergana, where favorable conditions for agriculture developed (without complex artificial irrigation systems). So, only in the eastern part of Ferghana were concentrated more than 80 Chust settlements[8]. The first stage of urban development is evidenced by such settlements as Dalverzin - the largest and fortified, as well as Chust, Osh (2 hectares), Ashkaltepa, Khozhambag and others, located in relatively different geographical zones of Fergana. According to the occupied area, they could be large (Dalverzin - 25 ha, Ashkaltepa - 13 ha), medium (Chust - 4 ha) and small (up to 1 ha). Characteristics inherent in early cities - large size, the presence of developed fortification and the allocation of a citadel, can be observed at Dalverzin - the main political, administrative, commercial and cultural center of the Chust culture[9]. This first city-state was 3 private and consisted of a rounded citadel (2.2 hectares), a residential area (approx. 18 hectares), a cattle corral and shelters (5 ha) surrounded by

independent defensive walls. The citadel, reminiscent of the traditions of building structures among the nomads[10], according to researchers, is considered the earliest not only in Uzbekistan, but throughout Central Asia[11].

urban culture continues to develop actively in the *Eilatan period* due to the rise of the economy, the increase in population and the functioning of the trade route (from China to the West). This period is distinguished by the rapid growth of settled settlements and the appearance of the first "cities", which can be observed in the example of such settlements as Eylatan and Sarvontepa (VI-III centuries BC), which had signs of oasis states. One of these cities of the Ferghana Valley is the subrectangular shape of Eylatan, which indicates that the settlement was built according to a certain plan. And, if the size of ancient settlements was mainly 10-20 hectares, then Eilatan, "who played an active role in the subsequent stage of urbanization of the valley"[12], differs from them not only in its huge size (200 hectares along the outer ramparts and 20 hectares inland), but also by the configuration of the walls (irregular quadrangular shape)[13] and the absence of a citadel. It was a 2-part settlement consisting of a fortified settlement without a citadel (with residential buildings) and a large undeveloped area (cattle corral) [14]. According to researchers, "the types of urban settlements in Ferghana changed slowly, and these changes were more quantitative than qualitative"[15]. And the Eilatan period is an important stage in the development of the architecture of ancient Ferghana, after which the urban culture rises to a new level and many new cities appear[16].

In *the Shurabashat period*, there is a sharp increase in the number of settlements. The main city-forming factors - the presence of citadels and a developed system of fortifications can be observed on the example of such settlements as Shurabashat (70 hectares)[17], Osh, Sultanabad-I (50x30 m)[18], Sym-tepa (urbanized settlement), Chontepa, Devatepa, Kerkidon group (Maida-tepe) and Karadarya (10 ha). One of the large urban (even religious and religious) centers of Ferghana of the Davan kingdom - Shurabashat[19], which consisted of 3 parts, was distinguished not only by the presence of a citadel (in the north-west corner) with an autonomous fortification, but also by its size (1400x500 m), as well as powerful fortifications (on three sides it was surrounded by a single rampart 3 km long and 6 m high) and a high level of material culture.

At *Markhamat period* there is a development of new lands and the number of settlements also continues to increase - in each irrigation area, urbanized zones appeared with leading centers - cities[20]. During this period, Uzen, Kasan and Kara-Darya[21] were formed, as well as Margilan, Kuba, Balandtepa and others developed. The significance of the city increased not only from an economic point of view, but also from a cult and political point of view (the power of the Kushan rulers was strengthened). For example, Kuba in the beginning. AD It was 2 private and the area of the arch and shakhristan was 12 hectares, which doubled in the period of the early Middle Ages. Balandtepa in the 4th century. AD consisted of a fortified citadel (in the form of a castle with a settlement) with an area of 2.5 hectares and an inner city - the most ancient parts, as well as a suburb and a necropolis[22]. The Kara-Darya ancient settlement, one of the largest craft and trade centers of the oasis, consisted of a citadel, a religious complex and a craft quarter. In the middle of the 1st millennium AD. in Ferghana, as well as throughout Central Asia, due to a radical restructuring of the economic and social structure, many large cities cease to exist (for example, Markhamat, the settlements of the Kerkidon oasis), entire oases become empty, and rural settlements become a common type of settlement [23].

Residential architecture. The residential architecture of Central Asia "grew" initially from a primitive structure sunk into the ground, which served as the first building experience, later improved. The development of residential architecture of ancient Ferghana also dates back to *the Bronze Age*, where several types of these structures were discovered in settlements such as Chust, Dalverzin, Osh, Khozhambag, Boztepa. These include *dugouts* (semi-dugouts), *adobe houses* (made of brick and pakhsa), *ground-type frame dwellings* and *dwellings with recessed floors and supporting pillars*. So, *dugouts* differed from each other, for example, in shape (in Chust cup-shaped, round and oval in terms of shape, in Dalverzin irregular quadrangular shape, and in Osh[24] - round-oval shape), functional purpose (residential, religious and economic and industrial), as well as designs and dimensions.

The next type - *frame buildings* with a pillar structure (such as a hut), like dugouts, were genetically associated with the house-building traditions of the steppe tribes[25]. Racks were located in a certain order around the perimeter of the building. These buildings were seasonal in nature and were used in the warm season (Chusti Dalverzin). The plan could be round or oval with an area of 40-160 square meters. m (Chust), where patriarchal families lived[26]. Differed in size and functionality.

Along with houses with a pillar structure, *adobe ground* structures are also being built from raw bricks[27]. Discovered in Dalverzin, Chust and Ashkaltepa[28], they could also be subrectangular (72 sq. m.) and oval, free-standing (5x8 m in size) or in the form of a complex of several rooms. Each complex consisted of 3 and 4 rooms with a total area of 140 sq. m (on Khozhabag, Koshoktepa, Boztepa, Sasyk-Buka).

If for the residential architecture of Ferghana *of the Eilatan period* one can assume the presence of ground buildings with long and narrow rooms built of adobe pakhsa (Eilatan)[29], then later, in the *Shurabashat period*, construction of detached houses and estates is observed[30]. Fortified houses give an idea of them - the rural estates of Khozham Bagtepa (750 sq. m.) and Mirzalimtepa (more than 400 sq. m.), which belonged to an ordinary communal landowner and differed in their layout[31]. Among the rooms for residential and household purposes, a mehmonkhona room stood out in them (for example, on Khozhambagtepa with an area of 20 sq. m, on Mirzalimtepa 8.2x8.2 m), as well as a cult room of 4 petal shape and a 2-column open to the east ivan (on Mirzalimtepa).

In *the Markhamat period*, which was distinguished by economic growth and a sharp increase in settlements (according to Yu.A. Zadneprovsky - at least 1000 settlements), "the bulk of the population lived in separate manor houses and in small rural settlements"[32]. For example, residential buildings with pakhs walls appear on Shurabashat[55]. These could be fortified and unfortified detached multi-room houses[33]. Among several of their types for the rural settlements of B. Abdulgazieva, separate houses-massifs of rounded or rectangular shape (a square of 0.2-0.5 ha) and detached houses of various shapes and sizes in the form of fortified estates (a square of 0.01 -0.2 ha), as well as a fortress-shelter in case of a siege (0.5-2 ha) [35]. Western Ferghana monuments Tudai Khurd and Tudai Kalon give an idea of fortified estates. The two-tier Tudai Khurd castle with an adjacent manor, located on a 6-meter artificial platform, had reception ceremonial halls (located diagonally), divided by 8 wooden columns into 3 naves[36]. In the Tudai Kalon settlement adjacent to Tudai Khurd, a small fortified estate had corner 2-storey towers and arrow-shaped loopholes.

DISCUSSION

And so, initially, starting from the Bronze Age, in residential architecture one can observe the stability of traditions and variability (dugouts differed in shapes, sizes and designs). In subsequent periods, due to the increased skills in building houses, progress can be observed - from ground buildings with long and narrow rooms (VII-IV centuries BC) to the construction of detached houses and estates (rural estates of Khozhambag tepa and Mirzalim tepa IV-I centuries BC) with central rooms in the form of halls with wooden columns. In the Kushan period, the number of individual houses doubled due to a sharp increase in the settlements themselves, "the further disintegration of the clan-communal settlements" [37] and the separation of patriarchal families. In the V-VIII centuries AD like other Central Asian regions (for example, Sogd [38]), changes in housing architecture were natural for Fergana - the emergence of new types of settlements in the form of fortified castles and rural-type estates (Khalpa estate) [39], due to the new feudal ownership of land [40].

CONCLUSIONS

Thus, this small step-by-step review of the formation of cities in the Ferghana Valley and the housing architecture of the ancient period indicates an active process of their development associated with social, political and economic changes in this state. It can be assumed that there was a succession between the architecture of Fergana of the ancient and subsequent medieval periods, which is observed not only in urban planning, but also in castle and fortress architecture.

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