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**ARCHEOLOGY, HISTORY AND ARCHITECTURE
OF MEDIEVAL USTRUSHANA**

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The monograph makes the first step to generalize numerous materials on archaeology, history and architecture of Ustrushana, a medieval possession located in the geographical centre, between Sogd and Bactria, on the one hand, and Chach and Fergana, on the other. Note that this possession played a significant part in the social-economic and ethno-cultural transit between these regions, in particular, and the entire northern part of the Central Asia, as a whole.

Not only did long-term archaeological explorations provide a great volume of historical data but also highlighted Ustrushana's essential role in the process. Note that at present Ustrushana as a part of Uzbekistan and Tajikistan made its peculiar contribution to the treasury of Central Asian and the world civilization as a whole.

The monograph is of interest not only to specialists, archaeologists and historians but also those who show interest in the past of Central Asian peoples.



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INTRODUCTION

An unusual surge of interest in the native history in Central Asian republics, after they gained independence, is quite appropriate. People not only want to know general history and its separate facts but also to have a real comprehension of its underlying processes, that mighty layer or fundament laid by our ancestors and their great representatives, from which modern culture of a certain nation took its origin. This needs a thorough study and comprehension of the history of each settlement, town, or historical-cultural region. It is no coincidence that great importance is currently attached to the study of heritage and separate scientists, figures of science and culture, spirituality and education, and history of separate settlements. The territory of ancient and medieval Ustrushana is exactly a region requiring great attention.

Ustrushana - one of Central Asian countries - was for a long time paid inadequately little attention compared with its "eminent" neighbors: it bordered Sogd in the west, Chach in the north, and Fergana in the east. From the southern part its estates were lost in hardly accessible mountains, of which even ancient and medieval sources were poorly aware. Though it was located at a crossing of most important trans-continental trade ways where the very Ustrushana settlements played an important role, it was attached the significance of a "transit" country of no particular interest for a researcher. In this respect, there is a typical thesis of V. V. Bartold that "the urban life in Ustrushana was poorly developed" (Bartold, 1963, p. 224).

The role and importance of Ustrushana at various historical periods and peculiar features of its culture started being displayed due to a work of a N. N. Negmatov-led North-Tajik Archeological Complex Expedition (NTACE) and latest discoveries by Uzbek colleagues (Gritsina, 1992; Ancient Zaamin, 1994; Buryakov, Gritsina, 2006). The contribution of Ustrushana residents to the treasury of Central Asian and world culture was no longer disputable. In this connection, it became urgent to study that considerable, most urbanized part of Ustrushana, which joins the composition of Uzbekistan without which it is no possible to comprehend the full historical picture of the very Ustrushana, the importance of the influence it provided upon the development of neighboring regions.

Candidate's dissertations of several past years (Gritsina, 1990; Sverchkov, 1991, Pardayev, 1995; and Suyunov, 1999) shed light to some important aspects of this part of Ustrushana but did not resolve the whole problem. This is because remaining in shade was Zaamin, Ustrushana's second biggest and important town and its densely-populated, minerals and mineral sources-rich rustak. All this made it necessary to sum up the accumulated historical-archeological material, link it with the materials of Tajik colleagues.

In ancient and medieval times when technical capabilities of a man were limited, the environment substantially influenced on settling, defined economic potential of a certain region. The territory of Ustrushana can be subdivided into three historical-geographic zones whose peculiarities were predetermined by the character of landscape and natural-climatic conditions. In the south this was a wide mountainous populated universe that included the dividing lines of the Turkestan ridge and its prongs. The second - medium, comparatively narrow mountainous part - had the form of a cone formed by a river and, finally, in the north there were boundless spaces of the Hunger steppe. All the three zones within the shaped boundaries were not similar in terms of landscape and irrigation and drainage conditions. With its height marks reaching 2,500 meters and higher above the sea level, the mountainous part, divided by deep gorges and canyons made of hard and conglomerate rocks, is rather well supplied

with water resources but can hardly serve as a place of permanent residence. Relatively wide, cultivable portions at river valleys are alternated with typical terraces. The lower a terrace is the more favorable climatic conditions are. An example is the Pshagar terrace located in the middle stream of Pshagarsay with its fertile kettle occupied by a compact, densely-populated rustak Bushagar (Shagar). There is a well known spacious alpine terrace called Sufa (Supa) in the upper streams of Zaaminsu (Alibekov, 1985, p. 32-33; the National Preserve of the Uzbek SSR, 1985; Oga Burgutli, 1992, p. 23; MacLeod and Mayhew, 1997, p. 109-110). Though the latter's area is much larger than Pshagar's, it was settled to a smaller extent.

The medium mountainous zone stretches a varied-width strip along the northern extremity of the Turkestan ridge and its prongs. This is the most inhabited part of the medieval Ustrushana. The soils vary from chestnut ones (under dry steppe verdure), pebbles to yellow-gray loess, which is formed by sediments of mud torrents and is located at the various-attitude (sometimes up to 100 meters) pebble-stone-based layer. Subterranean waters are located at a depth of 10 to 50 meters. On the whole, water supply is provided at the expense of rivers. The most intensive flow - that occurs in May-June - usually constitutes up to 50% of annual water spending (Schultz, Sayidov, 1975, p. 59). One of the largest rivers of the studied region - Zaaminsu - is the most full-flowing from April to September, contributes to equal water supply to vast portions of the cultivated land for a long period of time.

It has long been noticed that in Central Asian region most favorable conditions for the use of subterranean waters are created at places where massifs transit to foothills and enter gravel-pebble rock plains, a typical feature of Ustrushana waterways. In ancient and medieval times all this provided opportunities of a complex development of irrigated and dry farming, as well as cattle-raising (Bilalov, 1980; Ancient Zaamin, 1994, p. 3).

Finally, the third northern vast zone is the Hunger steppe, which played a great role in the history of Ustrushana and it-adjacent countries either as a habitat of nomads' centuries-old inflow in the Maveranahr or a conductor of caravan ways or an arena of many grandiose battles. The steppe's ancient name - Marzechul or "Edge of a steppe" - reflects its geographical location and nature as best as possible. Indeed, it is the edge of the Kyzylkums that drives a wide wedge between the Syrdarya and the Nurata ridge. A toponym of "Hunger steppe" was introduced later, in a step-by-step manner starting from the 1860s.

The Hunger steppe represents a sloping wavy plain going down from the south northwestward. Earliest researchers, particularly, Smirnov (1884, p. 90-91) noticed that "its general shape resembles a triangle whose top is located at the mouth of River Aksu (lower than the town Khodjent)." Total area of the steppe is less than 10,000 square meters. It is locked by a wide valley of River Syrdarya from the east, restricted by prongs of the Turkestan and Nurata ridges from the south and west, and by sands of the Kyzylkums in the northwest. Within the northern part of the Jizak region there stretches an Arnasay declivity's flooded area, which covers Aydar and Arnasay floods, as well as Lake Tuzkan. The plain character of the steppe is broken by two watershed hills: the Central One and the Syrdarya one over whose tops there currently pass the left and right branches of the Kirov canal.

In the central part of the Hunger steppe there are several hollows - Sardoba, Jetysay, Karoy and the aforesaid Arnasay accumulating subterranean waters, having no natural drainage (Igamberdiyev, 1965, p. 12). Relief height reaches 230 m in the north, 400-460 m in the central part, and 600-650 m in the south and southwest; it is made of Mesozoic-Cainozoic sedimentary rocks whose surface consists of loess rocks. They are underlaid by pebbles. At the Hunger steppe plateau there are well-developed quaternary sediments that emerged as a consequence of permanent and temporary water flows. Similar sediments compose relatively young terraces of River Syrdarya as well. The southern, submontane zone represents

sections having the form of conglomerate and loess ridges-adyrs stretching from the Turkestan ridge and its prongs (Neyman, 1925, p. 51.)

Hunger steppe soils are considered desert gray soils. They are loamy and sandy-loamy, contain a substantial quantity of nutrients and turn to be highly fertile when irrigated, something that was valued yet in the ancient times. This is proved by remains of numerous riverbeds, channels and ditches (Mirzarabat, Karoy, Oguz, Urumbay, and Eski Tuyatartar are best known examples), as well as hills of ancient settlements. It is not a mere coincidence that legends collected by P. P. Shubinskiy at the end of the 19 century describe the Hunger steppe as one of the most “cultural, fertile oases of Central Asia since the oldest times” (Shubinskiy, 1897, p. 572.) However, as a disputable area between Bukhara, on the one hand, and Tashkent and Kokand, on the other hand, it was always subjected to devastating raids that ruined the irrigation and the whole economy of the region, as written so impressively by Ahmad Donish (Donish, 1976).

The climate of the Hunger steppe is strongly continental, dry, with insignificant cloudiness. Garmsili - hot winds that dry up the verdure and soils - are frequent in summer. Precipitation averages 250-266 mm per annum, occurs mostly in winter and spring. In the beginning of our century the steppe represented a “lifeless, sun-burnt dry grass-caused yellowish-gray space with saline soils in the spotlight, and rarely having little bushes of steppe plants enmeshed by the dried interlacements of turf (Karavayev, 1914). The steppe is revived in spring (April, May) when rich herbage has since ancient times been attracting a huge mass of cattle-raising population from various regions of Central Asia, as proved by a significant number of mounds across the whole steppe.

The hydrographic network of the Hunger steppe is distributed quite unevenly. Natural water flows are concentrated primarily in peripheral regions. E. Smirnov correctly defined their importance in irrigation of desert. He wrote that as regarding “the whole southern strip, it is possible to assume that here the desert was of smaller sizes and that in the culture’s early periods the population settled the lower reaches of rivers and streams, which currently go down the slopes of the Turkestan ridge and, probably, stretched deep into the steppe at the time. Perhaps, within a very long period of time the population gradually moved closer towards mountains and finally occupied the present-day line of settlements representing the Jizak, Uratubinsk and northwestern Khojent regions. “As the length of rivers reduced, humidity’s impact on the soil decreased, so a desert appeared behind the settlements (Smirnov, 1884, p. 91). Archeological studies have demonstrated that this observation is generally correct but regarding not all water flows.

All these water flows were an irrigation base for formation of towns and settlements, along which there were laid ancient and medieval roads, and there was being established the economic and cultural potential of separate principalities, settlements and the whole state. Breach of the water balance, destruction of the irrigation system led to desolation or shift of settlements, change of the route of main ways and, as a result, of the region’s historical landscape.

A brilliant pleiad of Arab- and Persian-speaking historians and geographers of the 9-10th centuries collected, conserved and passed to us so much historical-geographical, political, economic and cultural information about Moslem world countries, including Ustrushana that similar references of neither a previous nor a later period taken together could be compared with it. However, collected together, it yields consistent historical picture full of gaps, though.

A limited circle of antique written sources to various extents pertaining to the territory of the latest Ustrushana has long been used actively in scientific literature (Tomaschek, 1877, p. 57; Grigoryev, 1881, p. 34, Schwartz, 1893, p. 53; Castanier, 1915, p. 48-52; Bartold, 1965, p. 216; Bartold, 1927, p. 3; Bernshtam, 1951, p. 12; Tarn, 1951, p. 102; Smirnova, 1953, p. 189; Negmatov, 1953, p. 232-234; 1957, p. 7-8,

51-52; Pyankov, 1982, p. 25-26; 1986, p. 74-78, etc.) Most trustworthy, valuable information about the Central Asia region was collected by participants of raids of Alexander the Macedonian who either described or informed about these events. Regretfully, all these works created on “hot traces” were passed to us by later authors in, as a rule, a strongly cut form. Of the latter there should be emphasized Polybius (the end of the 3rd century BC), Strabo (1st century BC - 1st century AD), Pompey Trog (1st century BC - 1st century AD) whose work is known as interpreted by Justin (2nd-3rd centuries AD), Diodor the Sicilian (1st century BC - 1st century AD), Pliny Sr. (1st century AD), Quint Rufus (1st century BC - 1st century AD), Arrian (2nd century AD), and Dionysius of Halicarnassus (2nd century AD). As for the history of Ustrushana lands, of most value are the works by Quint Rufus and, especially, Flavius Arrian. Though a work of Arrian titled “Anabasis of Alexander” is a later compilation, it describes events in a consistent manner through using original sources of contemporaries of events (Sokolov, 1963, p. 9-10). It is generally viewed that Arrian is the trustworthiest author of works about Alexander’s raids to Central Asia and, hence, of information regarding to-be Ustrushana lands (Pyankov, 1986, p. 73-80.) As for a work of Quint Rufus “The History of Alexander the Macedonian”, it should be noted that despite lots of “moralistic maxims”, “rhetoric exercises” and just “fantastic details” (The History of Uzbekistan in Sources, 1984, p. 110), it contains rather trustworthy, interesting information, particularly, about ancient residents of Ustrushana, not mentioned by other authors (Pyankov, 1982, p. 25-26).

Regretfully, all ancient sources above almost do not touch upon events, fail to provide new information about Ustrushana lands after the Alexander’s raid. These reports are followed by a long gap: the next information about Ustrushana appears only in works of Chinese authors of the early medieval period (Bei Shi, Sui Shu and Tan Shu). These works give a rather exact name of the singled out estate (Shuaidushin, Sudushin, Suduishana, Sutulisena), demarcate boundaries, and indicate distances from neighboring regions (Bichurin, 1950, p. 312-313; Malyavkin, 1989, p. 78, 256-257; Borovkova, 1989, p. 56, 139). Particularly, Suan-dzan (the 8th century AD) sorts out in the country’s north a large sandy desert having no water and grass, which is undoubtedly the present-day Hunger steppe, and the Bosi Mountains in the south (the Turkestan ridge), at which southern slope its owner lived (Gafurov, 1972, p. 290.) Also, the Chinese narrators emphasized such an unusual natural phenomenon as a cave regularly producing poisonous smoke that was later described so illustratively by Arab sources (Materials on the Kyrgyz history, 1973, p. 21, 27, 49). This cave, more exactly, caves had been subjects of worshipping since ancient times. This place is located in the lower reaches of Yagnoba opposite settlement Ravat (Masson, 1934, p. 60, Khashimov, 1990, p. 15-17). Like other regions of Central Asia, Ustrushana was under the power of Turks. There is mentioned its young, frankly speaking, unnamed ruler (618-626) who, together with Kan (Samarqand), sent the embassy to China (Bichurin, 1950, II, p. 138.)

Arab geographers and historians give the fullest, detailed information about pre-Mongol Ustrushana that, according to Ahmad al-Qatib, is “an extensive, important country that includes...400 fortresses and some major towns.” (Castanier, 1915, p. 49.) However, of a great number of authors who to various extents wrote about Ustrushana it is possible to sort out those whose reports contain important, sometimes unique information of historical-geographic or political character. As a rule, they collected this information during their travels or got it from informers and reliable sources: al-Yakubi (the 9th century), Belazuri (the 9th century), at-Tabari (the 10th century), Qudama (the 10th century), al-Istahri (the 10th century), Ibn Haukal (the 10th century), al-Muqaddasi (al-Makdisi) (the 10th century), an unidentified author of “Hudud al-Alam” (the 10th century), Bayhaki (the 11th century), Nizam al-Mulk (the 11th century), Gardizi (the 11th century), as-Samani (the 12th century), Isfandiyar (the 13th century), Yakut (the 13th century), Khamavi (the 13th century), Ibn al-Asir (the 13th century) et al.

Taken together, all these written sources give a general understanding of ancient and medieval Ustrushana. Archeological discoveries in some recent years have made it possible not only to specify the known facts but also to add substantially to the historical information including that regarding the medieval period.

No excavations were carried on in the territory of Ustrushana before the Revolution. Archeological monuments were mentioned by various researchers, including members of the Turkestan Archeology Study Group (TASG) incidentally or for another reason (Karavayev, 1914, see the map; Castanier, 1915, p. 44; Likoshin, 1896, p. 9, Skvarskiy, 1896, p. 44). Of most frequent attention were Hunger steppe sardoba, i.e. baked-brick constructions for water collection and storage. M. E. Masson, who devoted a special work to sardoba, gives detailed information about it and describes the history of their study (Masson, 1935, p. 16-21.)

The real archeological studies that included archeological excavations of the site of ancient settlement Munchaktepa and a burial mound near Shirinsay were undertaken by a Farhad archeological expedition in 1943-1944. The results of these works were reflected in a series of publications that greatly mattered for the comprehension of historical processes in the indigenous Ustrushana lands in late ancient and medieval periods (Haydukevich, 1947; 1949; 1952; Kabanov, 1948). An important material regarding the culture of farming and cattle-raising population, which hasn't lost its importance up to now, was pioneered in the scientific turnover.

A systematic archeological study of Ustrushana's antiquities started with a work of the inter-republican Sogdian-Tajik archeological expedition established in 1946. One of the expedition's teams headed by O. I. Smirnova pioneered broad exploration works in the territories of both Tajikistan and Uzbekistan (Smirnova, 1950). In 1950, there were studied trade ways from Zaamin to Hujand via Kurkat and Gulyakandoz (medieval Guluk) and singled out two directions of ways across the valleys of rivers Basmandasu and Aksu (Smirnova, 1953, p. 228-230.)

The exact localization of the capital center of Ustrushana - town Bunjikat - at the cite of ancient settlement Kahkaha and later stationary excavations caused a surge of interest in this mysterious country and, as a consequence, broad archeological excavations throughout the territory of Ustrushana (Ancient Zaamin, 1994, Buryakov, Gritsina, 2006.).

CHAPTER I

NORTHWESTERN USTRUSHANA IN MEDIEVAL PERIOD (4th-13th CENTURIES)

Part 1. Early medieval period

Historical silhouettes. Relating to the early medieval period is the most important stage of establishment of the statehood of Ustrushana. Though written sources are rather scanty, fragmentary, this period of the history of Ustrushana is studied, perhaps, better than others thanks to the efforts of either Tajik or Uzbek colleagues. It is characterized by development of the so-called “castle culture” when the core of life was concentrated in fortified castles and settlements while urban areas were restricted (Belenitskiy, Bentovich, Bolshakov, 1973, p. 6). This is quite true for Ustrushana as well. For instance, the area of the capital center, town Bunjikat hardly exceeded 10 hectares at the time. Occupying approximately the same area were Sabat, Jizak, the site of ancient settlement Kosh-tepa and the cite of ancient settlement Kattakyrtepa (Gritsina, 1992, p. 61). That was the period when sources for the first time mentioned Ustrushana under its own name; either the name of the very land (Shuaydushana, Suduyshana, Sudushina, and Sutulisena) or its geographical peculiarity was rather strictly defined at the time. For instance, Suandzan sorts out in the country’s north a large sandy desert with no water and grass, which is beyond any doubts the present-day Hunger steppe, and Mountain Bosi in the south (the Turkestan ridge) with its ruler residing at the mountain’s southern slope (Malyavkin, 1989, p. 68). Besides, the Chinese chroniclers laid an emphasis on such an unusual natural phenomenon as a huge closed cave regularly producing smoke. It was located near town Echa. In the cave “they sacrifice twice a year. People stand with their faces turned toward the cave that produces smoke, and he who touches it first dies” (Malyavkin, 1989, 78-79). According to M. E. Masson, the town Echa and the very cult cave were located near Mountain Kantaga at River Yagnob (Masson, 1934, p. 60). Indeed, opposite settlement Ravat there has been observed a unique natural phenomenon: underground fire has been raging under this mountain (its local name is Kukhi Malik) for millennia. Gases, smoke, and gleams of fire are gushing from 203 caves. This resulted from inflammation of coal bed at the depth of 1 kilometer (Khashimov, 1990, p. 15-17; 2001, p. 178-179; Bubnova, 2002, p. 109). Arab sources also seem to have meant these caves through describing the way of production of ammonium chloride. However, al-Istahri (Istahri, 1973, p. 119), Ibn Haukal (Betger, 1957, p. 21) and Ibn Bekran (Materials on Kyrgyz history, 1973, p. 49) inform that there was only one cave in one of the rocks. The same figure is reported by Chinese sources. In both cases smoke that is a threat to life gushes from the cave. Perhaps, the point is really about one and the same cave, as it was already assumed in literature (Masson, 1934, p. 50). Within the mountain’s neighborhood there is no any site of large ancient settlement comparable with the settlement Echa mentioned by Chinese sources. Suggesting another version was a Zaamin researcher Oga Burgutli (Sattar Karabayev). In his view, the cave mentioned by Chinese sources is comparable with a cave near settlement Beshpshagar where he found several hearths, while Echa is comparable with one of this settlement’s monuments (Oga Burgutli, 1992, p. 21-22.) His view was shared by L. M. Sverchkov

who, however, located Echa at a site of the group of hills Myktepa I-III in the lower reaches of River Pshagarsay near settlement Khatab (Sverchkov, 1999, p. 79–80). However, a prospecting hole laid in the case by the Uzbek-Russian Paleolithic expedition and risen till the mainland (base of a rock) revealed no anthropogenic layer; just several fragments of irrigation ethnographic vessels were found in its upper part (A. I. Krivoschapkin, B. K. Sayfullayev). Perhaps, hearths above also date back to this period. Though being attractive, suggestions above remain poorly substantiated.

It has to be kept in mind that in the territory of mountainous Ustrushana there are dozens of various caves with early medieval monuments located nearby. Particularly, of interest is the so-called Mashkevat cave near Lake Iskandarkul where there was discovered a mummy (Khashimov, 1990, p. 9). Thus, only comprehensive archeological explorations, primarily, excavations can bring the solution of this question closer.

But let's return to early medieval sources. At the time, Ustrushana was ruled by Turks. The language of Ustrushana residents was close to the Sogdian language, as proved by wooden planks with Ustrushana inscriptions from Chilkhujra (Pulatov, 1968, p. 20–21; 1975, p. 81–85, fig. 44–45). Or it was a dialect of a common language spread over a vast territory from Amudarya to Syrdarya. According to Chinese chroniclers, though there was a great difference in dialects from Davani westwards to the state of Ansi, the language is very similar, so people understand one another's talk (Bichurin, 1950, p. 188; Negmatov, 1957, p. 63).

Owing to the results of works of Tajik colleagues, not only the whereabouts but also the very residence of the early Ustrushana kings is currently identifiable. Indeed, it was located at the northern slope of Mountains Bosi of the Turkestan ridge at the site of ancient settlements Kalai and Kakhaha in settlement Shahrstan in North Tajikistan. Arab geographers called the capital of Ustrushana Bunjikat (Muqaddasi, 1995, p. 240; Hudud al-Alam, 1970, p. 115 Materials on Kyrgyz history, 1973, p. 18; Betger, 1957, p. 20, etc.); however, it was called Penjikent in the early medieval period.

A palace of Ustrushana kings represented a complex with a reliable system of fortifications. Apart from a spacious "throne" hall, it was also a place for a "small" hall, a palace temple, bedrooms and living rooms, utility rooms, and an arsenal of adjacent premises and corridors storing thousands of pebblestones and balls. Under the floor, along the central corridor there was a storehouse where dry foods and other foods were stored in big capacities (up to 9–10 tons) (Negmatov, 1973, p. 97–99; Voronina, Negmatov, 1974; p. 52–58). Though the palace was robbed and latter destructed and burnt down, invaluable monuments of culture and art were found in it. Particularly, in the floor's clay filling there was found a treasure of bronze coins, thanks to which the names of early Ustrushana kings were identified. From the debris of the palace's rooms there were extracted approx. 200 fragments of carbonized carved wood, several sculptures, as well as a frieze and a panel depicting people and animals, birds, and fantastic and mythological scenes. Of course, there were found the remains of monumental painting that decorated practically all main rooms and corridors of the palace. The most impressive discovery was a 6-meter depiction of the emblem of "eternal" town-Rome (Negmatov, 1968, p. 22–32; 1973, p. 99; Voronina, Negmatov, 1974, p. 68; Negmatov, Sokolovskiy, 1975, p. 443–453). It seemed that Ustrushana kings were under strong influence of the Byzantine Christianity. Such a huge panel that apparently had relation to a Western influence could not help being unnoticed. Probably, like the image of an equilateral Christian cross at coins of freedom-loving, willful Ustrushana kings, it represented a kind of action of reconciliation between Western Christianity and totemistic ideas of Turks who deeply respected their foremother- she-wolf (Nesterov, 1990, p. 98–99). Furthermore, both symbols - the cross and the she-wolf could be interpreted in two ways. We'll return to the cross

symbol later. And we'd like to detail about a "symbolical she-wolf" for it leads us to a complex early medieval world of equivalent opportunities when a newly born state was strongly influenced by various religious systems of the world.

According to written sources, Ustrushana kings were subordinated to Turks. The middle of the 1st millennium AD is a period of substantial changes in Eurasian steppes. These changes were occurring under the sign of gradual removal of Eastern Iranian tribes - ancestors of Scythes, Saks and Sarmatians - by Turkic-speaking tribes. A rapid assault led to impressive results. Sources inform about the appearance of a whole Pleiad of largest Turkic state formations, such as the Great Turkic kaganat, the Eastern and West-Turkic kaganats, the Great Bulgaria, the Uigur kaganat, etc. Turkic kagans (rulers) were the creators of the first Eurasian Empire that provided a substantial influence on the history of Central Asia and South-Eastern Europe. This period is truly called an ancient Turkic epoch (Klyashtorniy, Savinov, 1994, p.8).

Under kagan Istemi (died in 575), Turks reached the peak of their military strength in the Western lands. Considerable territories of Kazakhstan and Central Asia fell under their power. The strength and mightiness of Turks were recognized by the then greatest powers: Byzantine and Iran. In Central Asia Turks were forced to face with the Eftalits. Having concluded a military alliance with the Sasanids, they defeated the power of the Eftalits that ceased to exist as a result. However, a conflict between the former allies gradually flared up. Several raids of Turks against Iran and vice versa resulted in nothing, as a consequence of which the border between Turks' Central Asia estates and the Sasanid Iran for a long time remained unchanged (along the Amudarya) until the Sasanids were crushed by the Arabs.

Al-Yakubi (the 9th century) described Turks in Central Asia in a figurative manner brief though. Turks have "no houses and fortresses, they live in ribbed marquees where instead of nails there are horse-skin and cow-skin belts covered by felt. They are skilled most of all in making felt because it is their cloth. Their meals consist only of mare milk and meat, mostly game. They have too little of iron, make arrows of bones. They're surrounding Khorasan, fighting, and making raids. Of Khorasan regions there is no single region that would not have fought Turks and that the Turks would not have fought against." (Volin, 1959, p. 295).

Turks brought their notions of the world deep into Central Asia regions. A parable about origin of Turks became widely known exactly at this period. Sources inform us about several variants of the ancient Turkic genealogy legend. According to it, ancestors of Turks with the kindred name of Ashina lived near a large bog where they were soon exterminated by a neighboring tribe. Staying alive was only one 10-year-old boy who was maimed and thrown into the bog by the enemies. However, a she-wolf found and breast-fed him. "There he was growing communicating with the she-wolf who became pregnant from him". Nevertheless, enemies found and killed the boy while the she-wolf was hiding in the mountains of Gaochan (Turfan). Here in a cave she gave birth to ten sons who then grew up and married local women. Each descendant was named after the family, and one of them was named Ashina. He raised a banner with the wolf head at a place where he was. The kindred gradually widened into several hundreds of families. A descendant of Ashina - Asyanshad - became a vassal of the Jujan kagan.

Another variant of the legend reads that the kindred of Ashina comprising 500 families subordinated to the Jujans resettled in the Altay region in the middle of the 5th century AD. Family people started working out iron, paying tributes to the Avars. Here they for the first time ever started being called Turks, allegedly due to the form of the Altay Mountains resembling a helmet (Nesterov, 1990, p. 99).

Thus, the legend links the origin of ancient Turks with the Eastern Turkestan. This is confirmed by Chinese sources as well. A group of the Gunn tribes at the end of the 3rd century-beginning of the 4th century was driven out from northwestern China to the region of Turfan where it stayed till 460. That year they were attacked by Jujans (Avars) and thus were forced to resettle to Altay. Among those who resettled there also was a tribe of Ashins led by Asyanshad. Naturally, while residing in the Eastern Turkestan the Ashins were in active communication with local Iranian and Tokhar population, something that enriched their culture and initiated longtime Turkic-Sogdian ties.

Having resettled, in the 5th century the nobility of the Afshin family managed to head an alliance of local tribes, and the toponym «Turk» was introduced on the arena of world history in the middle of the 6th century. The name of the Ashina tribe henceforth became the name of a dynasty of rulers of the Eastern and Western kaganats. At this time, the word «Turk» was for the first time mentioned in written sources. It was interpreted as «strong». It should be noted that the word «Ashina» is mentioned solely in Chinese sources and has not still been identified at ancient Turkic monuments. It still remains a problem to give an exact interpretation of this word. The word's being interpreted as «blue» or «deep blue» seems to be most appropriate. Possibly, the Chinese borrowed the Iranian form of interpretation of the ancient Turkic word “kek” - “blue” or “deep blue” as Turks-Ashina might have called them (Klyashtorniy, Savinov, 1994, p. 14).

Supposedly, before the family of Ashina appeared the Altay Turks had totemist survivals pertaining to the image of the deer (Nesterov, 1990, p. 96-97). As the Ashina family ruled the Turkic kaganat, its totem “wolf” became all-Turkic one. Surrounding nations were aware of this totem. Chinese chronicles called Turkic warriors wolves. Yet-the only found iconographic illustration of the origin of Turks was discovered in 1968 in Mongolia where there was found the so-called Bugut stele with a Sogdian-language inscription depicting the image of a she-wolf and a man with cut feet and a hand under it (Klyashtorniy, Livschitz, p. 121-146).

Beyond any doubts, Ustrushana rulers also knew well about the totem of Turks due to dependence on the latter and due to frequent kindred links with them. It seems that we will never know who of the Ustrushana kings and what for “blessed” a topic with the she-wolf in a throne hall. Was it just a tribute to the fashion? Probably, this was a demonstration of a true feeling of someone of the kings, a Christian belief, or a natural reflection of the then images stemming from various religious confessions. Or was there another reason? Anyway, either Christians or Turks or Zoroastrians or Buddhists (the painting traces the influence of all these religions) might percept this image positively, in own interpretation. On the other hand, wasn't it embodiment of the idea of reconciliation (there's only one God!) of all major religions of the world?

But let's return to the sources of Ustrushana medieval statehood. As noted above, Ustrushana was sorted out as an independent estate in the 4th-5th centuries AD. As shown above, Chinese early medieval chronicles rather exactly inform about either the name or boundaries of a new state. With information by Moslem sources in mind, it is now possible to draw them on the modern map, as done once by N. N. Negmatov (Negmatov, 1957, see the map). We still don't know what the word “Ustrushana” means; however, it resembles the name of one of Buddhist deities-Sudurshana. It is not denied to be a loanword, with close ties with India in consideration. Let's just refer to coins of one of the Ustrushana rulers Satachari the III with the coins' averse depicting an elephant. Besides, its very name ascends to the Sanskrit Sadacharya, which means a “teacher” (Smirnova, 1981, p. 33)

Turks and later on Arabs identified Ustrushana within the boundaries previously indicated by Chinese sources. Later on, Arab historians and geographers of the 9th-10th centuries would give a more

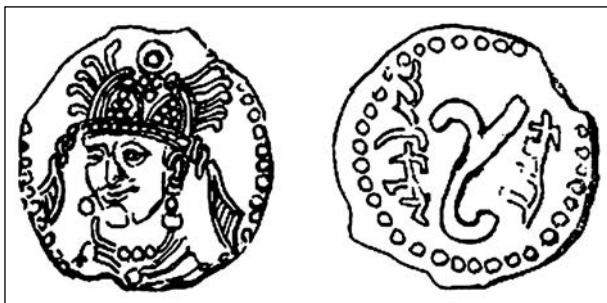


Fig. 1. Coin Chirdmish.

Kahkaha in Shahrستان and continue to add to the collection (Avzalov, 1983, p. 251-252; 1984, p. 353-355) where the capital center is located made it possible to speak of their origin. According to O. I. Smirnova, one of the earliest rulers or afshins (as they were called at the time) we're aware of was Chirdmish. Coins depict him smiling (fig.1). The name of the king is interpreted from the Sogdian language as "the one taking origin from Mitra", a Zoroastrian deity pertaining to the sun worshipping (Smirnova, 1981, p. 32-33, Dhavalikar, 1971, p. 332-336). The "Avesta" devotes to Mitra a special chapter titled "Mihr-yasht" where He is "victorious, mighty, cannot be deceived, praise-worthy, and whose pastures are spacious." ("Avesta", 1990, p. 54 and next). Like the rest Ustrushana afshins, coins depict Chirdmish in a winged crown that descends to the images of royal crowns of the Sasanid Iran. At the same time, the character of depiction of the head is undoubtedly borrowed from the Buddhist iconography. There are large earrings-pendants in the ears. There is a ten-kopeck coin with three large stones or beads on the neck. Features of the face are depicted rather realistically. The reverse of the coins depicts family signs and inscriptions (Smirnova, 1981, p. 32). Of interest are the coins of afshin Satachari, type III, "a teacher" or "a tutor" who removes his image from the averse and substitutes it for an elephant (fig. 2). As is known, elephant is an Indian emblem of wisdom; an elephant-like God Ganesh was the patron of trade (Smirnova, 1981, p. 32).

A question arises: why did Satachari the III prefer exactly this symbol? Trading was always a pious business in the East. In the period of rule of the early afshins there was observed an unprecedented prosperity of this kind of business due to numerous branchy ways of the Great Silk Road. It is not a mere coincidence that yet-the only, earliest pre-Arab caravansary Azlyartepa that had been operating in the 7th-early 8th centuries AD was discovered exactly in Ustrushana, near Zaamin (Ancient Zaamin, 1984, p. 22-25). The Turkic Kaganat controlled ways in the east. In the west there were being explored ways that circumvented the Sasanid Iran, which started foisting unacceptable demands on traders. The main trade way henceforth started passing through Khorezm north of the Caspian Sea towards the Caucasus and Byzantine. Roads toward Volga were created as well. Dominating in land roads are Central Asian traders who play the key role in trading with China (Ierusalimskaya, 1967, p. 55-78). The most important thing for us is that main ways from Sogd pass through Ustrushana (Smirnova, 1953, p. 189; Buryakov, 1994, p. 12-14). Particularly, proceeding from

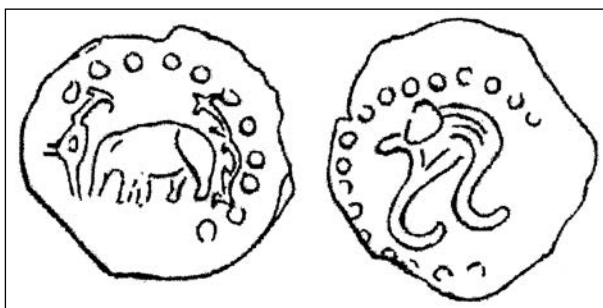


Fig. 2. Coin Satachar.

detailed description of it but fail to inform us of the names of the earliest Ustrushana rulers. We've been informed about their names by coins that were so brilliantly identified and read by O. I. Smirnova (Smirnova, 1981, p. 31, 34, 35, 230,234, 428, 484). These rarest coins were initially referred to as late Kushan coins of local Central Asia mint. Other assumptions existed as well. And only the fact that such coins were found steadily at the site of ancient settlement Kalai

numismatic material T. S. Ernazarova and B. D. Kochnev emphasize close links with Chach where there were found coins of afshins Rakhanch and Satachari (Ernazarova, Kochnev, 1978, p. 145, 148-149). Trade contributes to a rapid growth of towns and settlements, enrichment of local residents. A significant part of trade incomes is transferred to the treasury of a state whose ruler makes every effort to encourage this business. And his coins apparently were designed to testify this. There should also be noted coins of Rakhanch, type III whose reverse depicts the image of the Christian equilateral cross that very much resembles the Georgian cross (fig. 3). Such crosses are also observable at coins of other Central Asia rulers. This is considered a result of influence of the Byzantine-minted coins (Rtveladze, Tashkhodzhayev, 1973, p. 232; Smirnova, 1981, p. 32; Ivanitskiy, 1994, p. 64-66). On the other hand, the cross is an ancient pre-Christian symbol of fire-the savior and sun, a sign of eternal life and blessing. It is no coincidence that it is widely spread in the East's symbols (Neuhardt, 1956, p. 5-14, Rapoport, 1971, p. 50, Gritsina, 1984, p. 85-88). In depicting the cross near a family emblem or a dynasty sign, rulers as if joined the sun deity that should have stressed legality and majesty of their power.

It is now hard to say why of all Ustrushana rulers only Rakhanch the III, the last one enjoyed a "support" of such a symbol. Probably, this was connected with the struggle among dynasties for power because the names of rulers above were no longer mentioned starting from the beginning of the 8th century; these rulers were substituted for kings of another ruling dynasty. On the other hand, the depiction of the Christian cross at coins of this king maybe answers the question who of the afshins "blessed" the image of a she-wolf in a throne hall.

Evidently, Ustrushana coins bear the symbols of three world religions: Buddhism, Zoroastrianism, and Christianity. This does not mean that all the afshins were Buddhists (Ivanitskiy, 1994, p. 65). However, it is possible to assume that all these three religions were recognized in the state and that its kings were notable for their religious tolerance.

Rituals and cults. In the early medieval period when a ceramic cell (ossuary) burial rite was widely spread over Central Asia the core mass of population of mountainous regions and a separated Fergana remained devoted to the ancient vessel burial rite (Gritsina, 1998, p. 89-94). Same is true, particularly, for Tokharistan where the ossuary rite was not spread widely (Rtveladze, 1986, p. 207-208.) The first ossuary was found here quite recently.

An ossuary from the sepulchre Koshtepa located near Zaamin had for a long time been the only finding in the territory of Ustrushana located within Uzbekistan. Over some latest years the number of such discoveries has increased substantially, nears twenty. Several bone ossuaries were found in the neighborhood of Zaamin. An ossuary mound was discovered near Gallyaaral (the Jizak region). Here ossuaries are typical, have the form of boxes where a "firry" ornament prevails. The most interesting thing is that an ossuary of a child was for the first time discovered here.

Let's return to an ossuary from Koshtepa (fig. 4). It is decorated with the most spread "firry" drawing detectable at ossuaries of nearly all regions of Central Asia (Ivanitskiy, 1989, p. 59). This ornament is particularly popular at Sogdian and Chach bone ossuaries and is interpreted primarily in two ways. The first way assumes that it is a Tree of life, "a long centuries-old chain...



Fig. 3. Coin Rahancha.

that stretched in the art of all nations of the world from the deep Eneolithic to the peasants' art of the 19-20th centuries" (Rempel, 1987, p. 98). The second way is that it is the branches of "holy haoma", a highly respected plant in Zoroastrianism (Yagodin, Khojayov, 1970, p. 133). At early Parthian ossuaries images of the tree, in the authors' view, depict the surrounding landscape or embody paradise (Koshelenko, Orazov, 1965, p. 52, 55).

It should be noted that branches at our ossuary are depicted in the twisted, as if "sleeping" form, though Sogdian ossuaries often depict blossomed out branches. Paintings of Penjikent (the northern wall of room 10, object 1) depict the image of two sitting men with cups in hands and hats decorated with splendid branches. Also, they hold a blossomed out branch in hands (Belenitskiy, 1953, table IV). According to A. M. Belenitskiy, "the scene represents a ritual feast accompanied by sacrifice" (Belenitskiy, 1953, p. 104). Anyway, the "sleeping" branches as a symbol of death or the blossomed out branches as a symbol of paradise depict a concept of the afterlife.

Supposedly, branches at the ossuary we're studying not accidentally are depicted as ones striving for the common center, the tallest part of the arch crowned by a spherical handle that symbolizes, according to V. N. Yagodin, the sun (Yagodin, Khojayov, 1970, p. 74, 76). Four branches at an ossuary from Sayiltepa are placed in a similar way (Ivanitskiy, 1989, p. 54, fig. 1, 2). Aren't these branches ("firs") embodiment of the human soul striving for the sun? It seems to us that this version is quite true with the consideration of the great role played by the sun-related deities of the Zoroastrian pantheon.

There is a single hole or several holes at many ossuaries. Such holes were made in the vessels specially designated for the burial rite. In some cases holes were drilled in domestic vessels if the latter served for the burial. It is firmly substantiated in scientific references that these holes were designated for letting light in. However, this prescription indicated in one of the Pehlevi texts (Staviskiy, Bolshakov, Monchadskaya, p. 90) not always was followed or was observed in a manner that made it not always possible for light to penetrate a vessel (an ossuary). For example, holes at some vessels of the necropolis Mizdakhhan were made at the bottom (Yagodin, Khojayov, 1970, p. 74, 76) or most often were not made at all, like in the case of our vessel from Koshtepa. Another thing bewilders: vessels and ossuaries were dug into the earth where no light naturally could penetrate. Interpretation of a bone collector as an ossuary in "Dadistan-i Dinik" is far from being indisputable (Staviskiy, 1952, p. 50). It most likely means a naus-bone collector (Rapoport, 1971, p. 14, 17).

What semantic meaning of these holes could be? It seems to us that the answer is a concept of conserving bones, the sense of which is that Zoroastrians believed that the dead bodies would be resurrected from bones. Were these holes designated for the one "who will resurrect the owners of the bones", last prophet Saoshyant? (Staviskiy, 1952, p. 49-50). If so, it does not matter in what part and how a hole would be made in a burial vessel or ossuary, as a crack, a chink or not tightly closed cover (for this purpose it was possible to use small vessels, their breaks, or simply bricks).

As for the form of ossuaries, the most verisimilar thought is that it was a recurrence of various sorts of cult or burial constructions typical for a certain region (Pugachenkova, 1950, p. 44-45, Rapoport, 1971, p. 20). As for our case, the form of a Koshtepa ossuary (and of other similar ones) resembles a burial construction depicted at a scene at a Penjikent painting (the so-called "scene of mourning") (Belenitskiy, 1954, p. 33-34.) A triple arcade of the upper tier resembles the one often detectable at Sogdian ossuaries (Pavchinskaya, Rostovtsev, 1988, p. 92, 100; Ivanitskiy, 1989, p. 59). A special concept of G. I. Bogomolov suggests that the form of ossuaries embodied the form of mountains (1992, p. 91-95).

That our ossuary had been used for ritual purposes for a short period of time after burial is to conclude from vertical holes in handles, which are evidently designated for rods. The latter, as it becomes known from early medieval images, were used in a little ritual canopy (Rapoport, 1962, p. 50 and next; 1971, p.93, 112-113).

As noted above, the finding from Koshtepa is notable for being actually the first ossuary discovered at the site of ancient part of Ustrushana located in the territory of Uzbekistan. Just a few of them were found in the rest part of Ustrushana located within the territories of Tajikistan and Kyrgyzstan. Yet a smaller number of ossuaries were found in the neighboring Fergana: three unbroken ones and fragments of some others (Matbabayev, 1993, p. 43-47). At the same time, several thousands of unbroken or fragmented ossuaries are known from Sogd. A catalogue of unbroken ossuaries and biggest fragments alone includes 272 specimens (Pavchinskaya, 1990, p. 5, 8). A great number was found in Chach (Minasyants, 1990, p. 71-76; 2002, p. 168-172), Khorezm, Semirechye (Kozenkova, 1961, p. 252-259; Yagodin, Khojayov, 1970; p. 6-168). It is no possible to explain this by insufficient study of Ustrushana and Fergana because planned archeological studies have been underway in both regions for many decades already. In turn, the ossuary rite assuming burial in vessels (hums) is widely spread here. How can this be explained? To answer this question, we'll have to refer to the sources of the ossuary rite in Ustrushana and Central Asia on the whole.

It is believed that the ossuary rite assuming burial in hums foreran burials in the very ossuaries (Rapoport, 1971, p.92). Both kinds started being put into practice in Khorezm where the earliest specimens have been found. It is interesting to note that here there was registered a grave in a wooden or a wicker vessel (Weinberg, 1979, p. 29). Kuyusai culture's earliest large-vessel graves dated back to the boundary of the 5th-4th centuries BC are of interest for representing a source of the hum graves (p. 39). As is known, the latter continued being used in Central Asia, including Ustrushana till the 13th century (Kozenkova, 1961, p. 259; Gritsina, 1999, p. 224-225). Some elements of the rite and form of vessels - digging grave vessels into the earth and covering them (with lids or smaller vessels), smearing the vessels from inside (rarer, from outside) with alabaster, the existence of holes and handles-ears, etc. - were conserved at later periods as well. By the way, having similar handles-ears is also our ossuary from Koshtepa; besides, they were often detectable in the very Khorezm, at a later period though (Yagodin, Khojayov, 1970, p. 62, 76).

Evidently, the tradition of hum burials had deep roots in Ustrushana and in other regions of Central Asia and continued to exist in later epochs until the invasion of the Mongols (Gritsina, 1999, p. 224-225). However, while in Sogd and Chach ossuary burial's being "in fashion" substantially pressed the ancient custom in the early medieval period, they in Ustrushana and so in the neighboring Fergana continued to firmly observe the previous ritual of vessel burial. In this connection, it is interesting to note attempts to interconnect, as if "reconcile" the both kinds of burial. Particularly, a burial hum from the Bukhara oasis contains arrow-shaped loopholes typical for ossuaries (Obelchenko, 1959, p. 98). In Tashkent, a grave box is attached the forms of either a vessel or an ossuary (Filanovich, 1990, p. 86-88).

As for the very ossuaries, no peculiar style of their external appearance was created in Ustrushana and Fergana. All the discovered ossuaries and their fragments prove that they were either borrowed from neighboring regions (Sogd and Chach) or made to imitate the latter. Thus, a question seems to be appropriate: weren't only natives of Sogd buried in ossuaries here? The sepulchre Koshtepa and a caravansary of the same name in Kyzylsay were located near Ustrushana's largest urban point, Zaamin, at a large trade way that linked Sogd with Fergana and Chach. Naturally, there were always many

Sogdian residents there. It is thus assumable that at Koshtepa sepulchre local Ustrushana residents were buried in vessels while Sogdian natives-in ossuaries (Gritsina, 1999, p. 224).

As for Zaamin, in the early medieval period it played an important role in the political and especially economic life of Ustrushana as the largest settlement. This is testified by remains of a strong citadel (the site of ancient settlement Aktepa at the Right Bank of River Zaaminsu). This was promoted by an appropriate economic base relating to the mining industry, metallurgic handicraft and agriculture. Thus, it is no coincidence that around Zaamin there are concentrated mass graves in hums and ossuaries (according to the Mazdeist ritual) while graves in hums prevail in Ustrushana like anywhere else. For this reason, a discovery of a sarcophagus-shaped ossuary grave seems to be unique. The ossuary has two “working” surfaces: it was put in reclining position in the earth but could also be put vertically. Perhaps, this was done for a special reason because it is believed that once the burial is over, an ossuary was exhibited by relatives for the making of rite addressing the spirit of ancestors.

The ossuary is formed by a ribbon method of qualitatively baked clay, evenly baked and from the averse is decorated with modeled ribbons having finger impressions. In its upper part there is a round inlet hole carved by a knife upon the completion of modeling. It is interesting to note that a transversal hollow is made on the side of the inlet hole. Perhaps, a master first made a through hole and then carved a cover. A part of the carving remained on the cover, another part-on the vessel. From rear side there is detectable a hardly noticeable mark by the master in the form of a finger-made circle. In the center of the circle there is a thumbprint, i.e. he used his hand as a kind of compass. The sizes of the mark practically coincide with that of the inlet hole. Probably, the master had erroneously intended to make an inlet hole on the contrary side. As defined by anthropologist E. L. Usmanova, the ossuary was a grave of a mature man, aged approx. 60-65.

In 1981, in the locality Uchtepa northeast of Jizak there was excavated a burial mound where, as the author suggests, there was found a part of sarcophagus. The mound is dated back to the 2nd-4th centuries AD (Alimov, 1982). Most likely, this mound contained not a sarcophagus but a sarcophagus-shaped ossuary similar to ours.

Another discovery of no less interest is a grave in hum (fig.9, left). It appears from the form and quality of this vessel that it may be dated back to the 6th-8th centuries. Apart from strongly split human bones, the vessel contained some bronze implements and a coin. The coin is minted to imitate drahm coins of the Sasanid ruler Peroz (459-484). No averse depiction has been conserved. The coin's reverse depicts two human figures standing near a high altar (oshtodan) with clearly expressed flames of fire. Left of the flames there is depicted a five-point star (the coin was defined by Etienne de la Vaissiere) (fig. 9a).

Given that a bracelet was found in the hum, the grave was supposedly of a woman. The bracelet was made of bronze, round-section rod with bulges at the edges, 0.4-diameter (fig. 10). The sides of the edges are flat. Such bracelets were also found in Penjikent (Raspopova, 1980, 1999).

Bronze pendants in the form of an animal (a goat), a bell, and a little figure of a human (fig. 11) are also known due to findings in Penjikent (Belenitskiy, Bentovich, Bolshakov, 1973, p. 92, fig. 58.). It appears from clearly expressed attributes that the little figure is connected with the phallic cult. As a rule, such bronze little idols were found in graves, were discovered in various regions of Central Asia and were dated back to a period from the second half of the 1st century to the 6th-8th centuries AD (Levina, 1968, p. 170-172, Musakayeva, 2003, p. 112-113).

The most interesting discovery is a cruciform pendant depicting a little figure of a man with outstretched arms. His feet are put together. Hands are bent upwards. Below hands there are dress folds

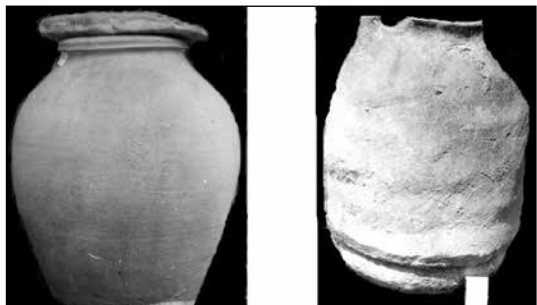


Fig. 9. Hums-ossuaries from burial grounds near Zaamin.

or a plumage. Above the figure there is loophole. The pendant is 3-centimeter high; the hands span is 1.5 centimeters; the loophole is 0.5 diameter (fig. 12). Most likely this is the image of a winged man (genius), angel the savior that was widely spread in the art of ancient and medieval world (Rempel, 1987, p. 54-57). According to Avestan tradition, angels the saviors in Central Asia were called fravashs. In this case, the winged angel is most likely borrowed from the Old world.

Supposedly, the construction that was demolished in the Old Zaamin had initially been a temple of Zoroastrian deity - Zam - that the Arabs later rebuilt into a mosque. If this is added by mass findings by hum graves and now ossuary graves, it'd be appropriate to suggest that in the early medieval period Zaamin was also a large ideological center (Gristina, 2007, p. 34-36).

Idolatry. Sufficient attention was paid to cult and ideological aspects of Ustrushana (Negmatov, 1957, Smirnova, 1953, p. 190; 1971, p. 101-105). All historical reconstructions were built upon the data of written and archeological sources. Practically all the latter were found in the territory of Tajikistan. Thus, of special interest are little terra-cotta idols from Zaamin (fig. 13-15).

One of them was found at Mazartepa in the settlement Segasari 3 kilometers east of Zaamin. It is to conclude from the excavated material and findings delivered to a local museum, as well as minor cleaning works by the author that Mazartepa is basically an early medieval settlement that gradually became inhabited in the 10th-12th and 16th-17th centuries.

The statuette is molded in matrix: the original specimen was made by a master at such a high professional level that it may be referred to as a work of art of Ustrushana. The found statuette is made of well-baked clay. Traces of an engobe have remained on the surface. The figure's lower half is broken. The conserved height is 6.5 cm. (fig. 15).

The figure is depicted frontally. Its head is inclined forward. The hairs are smooth, straight, combed back. The face is narrow; its right half is slightly formed. Eyebrows are almost straight, at an angle with one another. The eyes are almond-shaped, with relief pupils, lowered a little. The nose is broken. The moustaches have the form of a single bending line, are unusually long and reach the ears. The chin is oval, hairless. The neck is short. The shoulders are narrow, sloping. The left shoulder is higher than the right one. The hands are crossed on the breast, the right hand is under the left one. There are clearly depicted all five fingers of the left hand whose wrist is decorated by two bracelets. The wrist of the right hand stretches to the armpit. Two similar bracelets are on each arm. Shown rather expressively are the clothes that represented apparently a caftan. Strict horizontal and vertical folds of the clothes are visible at sleeves lower than elbow. The neck is decorated by a 10-kopeck coin with nine voluminous identical pendants.

The statuette clearly depicts attributes of the body and clothes, including minor elements of the face and hands. The head's being inclined, the eyes being lowered, and the hands being crossed on the breast express the state of calmness, grief, and "service."

Let's try to find analogies. We have to stress that the hands are crossed on the breast, a pose that is not observed often though it appears at the dawn of making "terra cotta" ancient deities starting from the Eneolithic and Bronze Age (Antonova, 1977, table XLVI, 11). The images of human figures

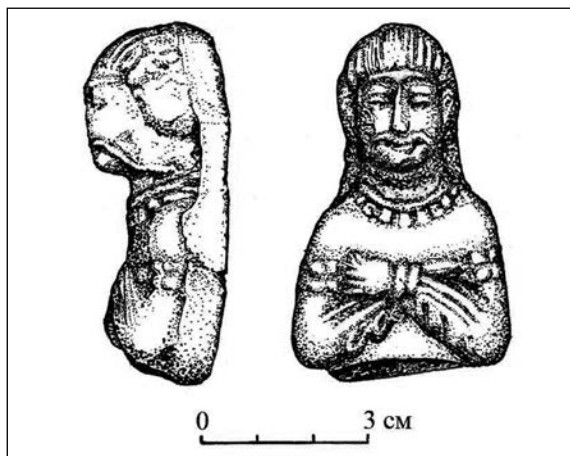


Fig. 13. Zaamin. Figurine of idol with crossed arms, 7-8th centuries.

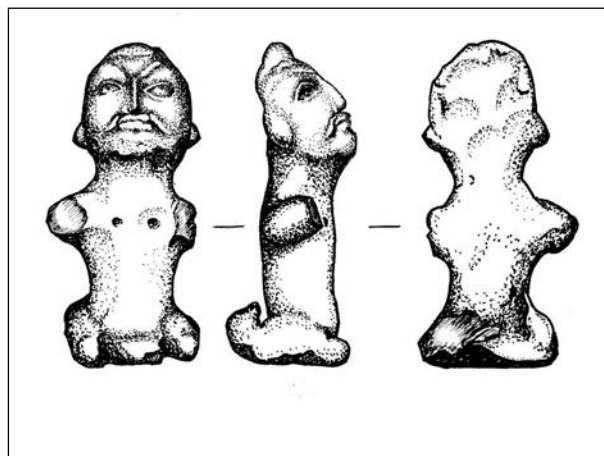


Fig. 15. Zaamin. Idol, detail.

with crossed hands are typical for Iranian Parthian art, especially, of the Sasanid era. Such are the stone relief figures of Tong-i-Sarvak and Bishapur (Ghirshman, 1962, fig. 68; 1971, fig. 10). There are known Sasanid vessels depicting noblemen standing before the king in a respectful pose: with their hands crossed (Orbeli, Trever, 1935, table 13, 16). Particularly, one of the vessels depicts Hosrov I Anushirvan among four noblemen standing in front of him with their hands crossed. B. G. Lukonin once noticed that a Sasanid period's work titled "Hosrov, the Son of Kavad, and His Servant" as it describes one of such scenes: "An Iranian by origin, from the dynasty of Kavianids, a young man, vaspukhr stands before a shahanshah with his hands crossed on the breast, stretching to the armpits" (Trever, Lukonin, 1987, p. 81). The latter remark that "hands are under the armpits" explains why hands are not visible at vessels, as well as some terra cotta figures. On contrary, other statuettes depict hands rather clearly. Whether it matters is hard to say proceeding from available material. Anyway, a Sasanid plate depicting a king sitting on the sofa shows servants standing in the pose of "respect" with their hands crossed; however, the hands of one of them (the lower figure) are "hidden" under the armpit, while the hands of another one (the upper figure) are shown very strictly. By the way, this difference is explainable by the static nature of the lower figure reflecting a "long" respect, at a time when the upper figure just made an action - passed a cup to the king - and will retake the pose of "common" respect after a couple of minutes (Trever, Lukonin, 1987, fig. 33/16).

It should be noted that many details of depiction of personalities at Sasanid plates are similar to that at our statuette: style of clothes, ten-kopeck coins and bracelets, type of the face, and hairless body. A search of analogies brings us primarily to a medieval Sogd. Here, there is a group of modeled figures with hands crossed on the breast referred to by V. A. Meshkeris as grotesque ones. All they are stored at the Hermitage. One of them has been conserved in unbroken state. Its left hand passes under the right one. Over the shoulders there is triangular carved ledge meaning wings or flames of fire (Meshkeris, 1977, p. 46, table XXIX, 67). This group also contains figures with no flame or wings designated, and hands crossed in another manner: the right hand passes under the left one. (p. 46).

In Penjikent there was found a fragment of a woman's statuette with crossed hands. Supposedly, the statuette's lower part, i.e. feet belonged to not a human but an animal, i.e. terra cotta depicts a hybrid being like sphinx (Belenitskiy, 1961, p. 95, fig. 20, 2). The upper part of a figure with hands

crossed on the breast was available among terra cotta findings collected from the site of ancient settlement Varakhsh and its outskirts (Shishkin, 1963, p. 49, fig. 12, 4).

Figures with crossed hands are also detectable on the images of Sogd ossuaries; both male and female personages were noticed (Pavchinskaya, 1990, p. 264-265, 105; p. 255-256; 92; p. 318-319; 181; p. 383, 261, etc., Pavchinskaya, 1994, p. 216). A. A. Potapov believed that such a pose of figures at ossuaries related to the scene of mourning (Potapov, 1938, p. 130). His view is shared by F. Grenet, who notes that the faces of figures from ossuaries of the site of ancient settlement Krasnorechensk are speckled with deep cuts. He refers to a known scene of mourning in the Penjikent painting (Grenet, 1984, pp. 180-181, p 1. XLVI, c). In stressing that they are not caryatids, G. Pugachenkova also views them as mourning spirits-saviors (Pugachenkova, 1994, p. 239). Those who found this ossuary date it back to the 7th-9th centuries, view the figures as persons “of a Kushan-Sogdian style with attributes of Turkic clothes.” (Goryacheva, Berenaliyev, 1979, p. 590-591; *Monuments of Culture and Art of Kyrgyzia*, 1983, p. 57-58). K. M. Baipakov views them as Fravashs (Baipakov, 1986, p. 52). Besides, he links two terra cotta woman’s statuettes from Kuiruktube to Fravashs as well. L. I. Rempel, in noting that depicted in the pose of “serving” in some Oriental artworks of the 6th-8th centuries were servants of kings and angels the saviors at thrones of deities, backed the assumption of K. A. Inostrantsev that figures with crossed hands at ossuaries were the Fravashs. In his opinion, figures with crossed hands at an ossuary from Taraz were servants-guards (Rempel, 1957, p. 104). A. M. Belenitskiy called a winged personage with crossed hands at an ossuary from Penjikent a winged genius (Belenitskiy, 1995, p.8, fig. 36, I). In the opinion of G. I. Bogomolov, these personages represented “Fravashs or other minor deities of the Avesta pantheon.” (Bogomolov, 1987, p. 101). L. V. Pavchinskaya and O. M. Rostovtsev, in analyzing a subject with three figures of humans depicted on an ossuary from Sarytep, interpret it as a scene of praying, describe the very personages as priestesses or priests (sex of the figures is hard to identify). And proceeding from broad analogies, they regard a pose with hands crossed on the breast as a pose of respect, “something like a ritual sign of a prayer” (Pavchinskaya, Rostovtsev, 1988, p. 95). It seems to us that the latter assumption is closest to the truth.

One of the scenes of a Penjikent painting (object XXV, room 28) depicts, as they believe, a couple of gods together with several minor personages. One of the personages sits on his knees in a pose of “respect” with hands crossed on the breast (Belenitskiy, Marshak, Raspopova, 1993, p. 157, fig. 9). This scene has something in common with the above-described scene at a Sasanid plate (Lukonin, Trever, 1987, fig. 33, 16): the difference is that minor personages serve and respect gods on this scene and the king on the Sasanid plate.

In the Indian iconography depicted as arms’ folded (a pose of khunkara) was the deity Vajrahunkara. A bronze figure of this deity dated back to the 8th century was found in Kyrgyzstan’s Chuy valley to where it had been delivered from Kashmere (*Monuments of Culture and Art of Kyrgyzstan*, 1983, p. 62-63, 248). One of the six personages of the relief of southern wall of temple Vishnu Dasavatara (the 5th-6th centuries) located under Vishnu laid on the Eternity Dragon in Deogarch is depicted with arms folded (*Art masters about the art*, 1965, fig. 6, Tyulyayev, 1988, p. 218-219, fig. 230-231). Right of the entrance of temple Gal-Vikhara (Ceylon, the 12th century) there is a statue of Buddha plunged into nirvana. At head of the bed there is a figure of Ananda, the favorite of pupil of Buddha, depicted in the pose of “respect” with arms folded and eyes lowered (*General History of Arts*, 1961, p. 256-257, fig. 157). The two latter elements of modeling are available at our statuette as well. Sometimes, the very Buddha was depicted with his arm folded, in the so-called pose of “thinking” (Pugachenkova, 1979, p. 182, fig. 220).

Thus, it is to conclude from comparisons above that the pose of “respect” or “service” in each specific case had its specific content depending on who (or what) they served or respected. By the way, the pose of respect in the form of arms folded on the stomach has been conserved up to nowadays. Shown in the pose of respect at Central Asia miniatures of the 15th-17th centuries were persons standing in front of rulers, prominent dignitaries, at funeral rites, etc. (Pugachenkova, Galerkina, 1979, p. 90, 19; p. 96, 22; p. 104, 26; p. 116, 32; p. 134, 40, etc.; Richard, 1997, p. 121, 123). All analogies above and the statuette under study have only one thing in common: a pose of folded arms. As for all the rest, differences prevail over similarities.

Now let's refer to other materials. An insignificant number of minor plastic items has been found in Ustrushana. They can be subdivided into two groups: modeled, rough primitive figures, and high-quality statuettes made in matrix.

Three modeled statuettes, the so-called little idols were found in North Tajikistan and referred to the 7th-8th centuries AD (Kabanov, 1948, p. 75, fig. 3; Ranov, Saltovskaya, 1961, p. 121, fig. 102; Negmatov, 1979, p. 332-333, fig. 1). They have direct parallels with the Fergana little idols and are related to the funeral cult (Davidovich, Litvinskiy, 1955, p. 51-62, fig. 24-26, Litvinskiy, 1961, p. 69, fig. 6, p. 71, fig. 7), the cult of ancestors, as well as with some other aspects of world outlooks of Fergana and Ustrushana residents (Brykina, 1982, p. 84-113; 1982a, p. 74-76). It should be noted that two alabaster modeled figures found in settlement Gardani Khisor (Yakubov, 1988, p. 143-144, fig. 43) apparently performed security functions.

Figures of the second group are undoubtedly of a higher quality in terms of either the manner of making (clay baking, engobe) or details of face, body and clothes. One of such statuettes was found at the site of ancient settlement Kalai Kahkaha I and is interpreted as one of the deities of local pantheon (Malayeva, 1986, p. 399, fig. 1, p. 401). This opinion can be agreed with, for a pantheon of Sogdian and, probably, Ustrushana deities was wide enough.

It follows from sources that every family or even every man could have his own idol (Brykina, 1982, p. 101). Probably, our discovery refers to this group of statuettes and can also join the number of depictions of local Ustrushana deities. In this connection, it should be noted that our terra cotta statuette very much resembles, in terms of type of face, form of brows and eyes, length of moustaches, and a hairstyle, a wooden idol found in the upper reaches of Zarafshan (a territory of medieval Ustrushana. See: Negmatov N. N., 1957, map). Proceeding from discovering accompanying the idol (remains of a wooden sheath, a sword and a poniard, little bells, mirrors, etc.) it'd be appropriate to refer it to the Avesta deity Mitry (Mukhtarov, 1982, p. 16-20, *Antiquities of Tajikistan*, 1985, p. 172, 248, 595, Yakubov, 1997, p. 50). A bronze figure of a woman with her arms folded on the breast found at Kalai-Nofin also in the upper reaches of Zarafshan is also referred to a type of little home idols (Staviskiy, 1961, p. 106-107, fig. 6).

Certain parallels of our statuette with the Indian one have already been noted above. It is linked with the Indian iconography by the existence of bracelets at wrists. Some elements of the Indian culture were loaned by the Ustrushana painting (Negmatov, 1984, p. 157-158; p. 161-162; 1985, p. 238; Belenitskiy, Marshak, 1976, p. 79-80); having particular links with the Indian culture are coins of Ustrushana rulers (Smirnova, 1981, p. 31-34; p. 324-335). Coins of afshin Satachari (type III) depict an elephant - the Indian emblem of wisdom - Ganesh, a Shiva elephant-like god, a patron of trade. Besides, the very name of the afshin takes its origin from the Sanskrit “sadacharya”, which means a “teacher” or a “tutor” (p. 32).

A terra cotta statuette of quite another sort was found in the very Zaamin, at an early medieval layer of the site of ancient settlement Aktepa (Ancient Zaamin, 1994, p. 26-28). The sculpture depicts a male figure. In contrary to the statuette above, the head of this statuette “looks” not downwards but upwards (fig. 14-15). It has conserved traces of ochreous-red engobe, best of all on the back. The clay is of medium quality with a mixture of fine sand, is dark brown at the place of fracture. The arms were broken in ancient time, a part of the left leg was broke recently. The statuette is 8.5 centimeters high.

The head is molded in matrix while the lower part is hand-made. Hence, in terms of manner of making, it keeps an intermediary position between potter’s statuettes and hand-made ones. Ears are shown as protruded appendixes. Back of the head is cut. Traces of smoothing are clearly detectable at a junction of the head and the body. The figure is disproportionate: the height of the head (without the neck) is 3.7 cm, of the body - 4.8 cm, while the body’s width is 4.2 cm.

The figure seems to sit on knees. Three ledges in the frontal lower part apparently depict knees and phallus. The lower surface is flat. The right forefoot is bent in an unnatural way. On the whole, it resembles a pointed shoe that is “put on” back to front. The nipples are shown as two hollows. A stomach is slightly pointed out. The neck is thick, almost as wide as the body is. The face is oval. The nose is relief, straight. The lips are thick, as if “smile”, well shaped. The chin is oval, massive. The eyebrows are high, at an angle with one another. The eyes are widely shaped. Like the whole face, the pupils are turned upwards, toward the sky. The moustaches are long, traditionally bent. Hairs (or, probably, a headband) are strictly separated from the retreating forehead. The hairs are tousled a bit from the left side.

It seems to us that the face expresses the state of tranquility, quietness, praying. The statuette shows no any attributes that could have proved that it is loaned from outside. In front of us there is a face of a representative of Central Asia Mesopotamia, whose prototype was a local Ustrushana type.

Thus, the statuettes can be interpreted as home little idols depicting local Ustrushana deities in the poses of respect, “service”, and praying, with some artistic elements borrowed from neighboring countries.

Archeological complexes and architecture. Archeological monuments, primarily, their main part - sites of ancient settlements - are the fullest, trustworthiest sources of information about the material culture of that period, during which cultural layers acquired most objective criteria of topographic situation of a certain period of time. Certain assumptions anyway remain subjective if they are not confirmed by information provided by narrative sources. Suffice it to recall numerous efforts of Russian Orientalists and Soviet-era scientists to identify whereabouts of a certain historical region, certain settlement, or ancient ore mine, hydronym, etc. proceeding from information of written sources and respective titles on the topographic map. These attempts often turned to be successful due to insight of scientists. However, this came true only many years or decades later, after archeological works were carried on directly at the site of settlements. Most often, such works either confirm or deny these data. The same is true for many objects of historical research located within our region. For example, one of the largest settlements of Ustrushana - Sabat - known due to many historical-geographical works, due to its being consonant with the modern settlement Eski-Savat was placed 10-12 kilometers north of another settlement Savat, which beyond any doubts is of a later origin. This point of view expressed in 1896 by P. S. Skvarskiy was agreed with by many scientists (Skvarskiy, 1896, p. 50; Castanier, 1915, p. 50-51). Given that this settlement was one of key points at a large trade way leading from Sogd to Fergana, Chach and Bunjikat, they proceeded from it in identifying the latter’s whereabouts. Having compared data of written sources about a distance from Sabat to

Bunjikat and considering that the capital was located southeast of Sabat, it was initially erroneously placed at the site of ancient settlement Mugtepa in town Uratube (Negmatov, 1953, p. 30-34, Beletnitskiy, Bentovich, Bolshakov, 1973, p. 191). Archeological works carried on at the locality and at the ancient settlement have demonstrated that the medieval Sabat was really located not north of the modern settlement Savat but in the opposite southern part, near settlement Kultepa. This turned to be another solid argument favoring Bunjikat's localization at not Uratube but settlement Shahristan of the ancient town Kalai Kahkaha I-III. And "everything became correct" (Gritsina, 1992, p. 29-30)

In the early medieval period (the 4th-8th centuries AD) Ustrushana, like other regions of Central Asia, saw an unprecedented rise of vital activity. A rapid growth of population encouraged exploration of not only plain but also mountainous areas while an extreme revival of trade across international ways crossing Ustrushana lands accelerated the urbanistic tendencies. This period is archeologically studied best of all. Hence, formal and substantive (upon the results of excavations) classification of archeological monuments of this period is most comprehensive (Berdimuradov, 1985, p. 7-11, Gritsina, 1990, p. 7-8, Pardayev, 1995, p. 8-9). Not going in for details of a well-known formal classification, let's recall that the substantive classification includes the following types of monuments: castles (of two types), guard and cult constructions, and manors. Proceeding from our materials, it is possible to add coaching inns of castles, the predecessors of later Moslem caravansaries (Azlyartepa), as well as ossuary mounds located, as a rule, near settlements at natural loess hills (Koshtepa and a series of hills in the neighborhood of Zaamin and Pshagar), ancient settlement Kaliyatepa (Jizak) and ancient settlement Kurgantepa (Gallyaara) to this number.

To demonstrate the role and importance of the early medieval component in the buildup of Ustrushana statehood, let's examine an aspect such as population and try to trace how the territory under study was changing chronologically. The obtained archeological materials are illustrative of the following.

Out of the identified archeological monuments, approx. 1.5% are materials of ancient Ustrushana, approx. 1.5% - of ancient period, 61.1% - of early medieval period, and some 35% of the pre-Mongol period. Evidently, monuments with early medieval materials prevail. While the prevalence of early medieval monuments over ancient and antique ones may be a direct indication of a substantial difference in the degree of this territory's being settled, the prevalence of the former over pre-Mongol monuments means just a quantitative difference, not the difference in the degree of this territory's being populated. The latter is usually explained as a consequence of an increase of the areas of both urban and rural settlements in the pre-Mongol period (Negmatov, 1953, p. 232-236).

Also, the fact should be stressed that an intensive settlement of a mountainous locality begins exactly in the early medieval period, as already noted in references (Ranov, Saltovskaya, 1973, p. 122; Negmatov, Saltovskaya, 1962, p. 71-77). According to data we're aware of, there are only three settlements with ancient and antique materials located in a mountainous locality: the site of ancient town Nurtepa and settlements Khtaytepa and Kurpatepa.

A natural question arises: to what extent do the obtained results correspond to the historical truth? We think that they are maximally close to it. First, there is a code of archeological monuments obtained as a result of a throughout study of the locality. Second, excavations of monuments having different chronological frames and functional designation in both Uzbek and Tajik parts of Ustrushana demonstrate common appropriateness: early medieval monuments, especially those in the mountainous and submontane territories have no antique or ancient roots. Materials relating to the latter periods are registered only in the steppe area, at monuments linked, to various extents, to important trade

ways. This peculiarity of development of the agricultural and urban cultures of Ustrushana strikes one's eyes at once compared with the neighboring regions: Sogd, Chach and Fergana where, on contrary, monuments having ancient and especially antique roots are detected rather often.

Beyond any doubts, as time lapses the code of archeological monuments of the studied region will be expanding slowly though. However, new monuments unlikely will impact substantially on present-day general conclusions.

ZAAMIN OASIS. In saying Zaamin oasis we mean Zaamin and its neighborhood. Within the modern administrative boundaries there were located four medieval rustaks (settlements): Zaamin, Beskun, Pshagar (Bushagar), Vakr and Sabat. Settlements Zaamin and Sabat were localized long ago. A thorough study of the territory of the Zaamin region made it possible to localize settlement Beskun in the neighborhood of settlement Beshkube at the basin of River Achisay and identify the whereabouts of settlement Bushagar in the area of settlement Beshpshagar (Buryakov, Gritsina, 2006.)

As noted above, early medieval monuments turned to be studied best of all, in the territories of both Tajik and Uzbek parts of Ustrushana. Two dissertations (Berdymuradov, 1985; Pardayev, 1995) are fully devoted to monuments of this period. Our works also paid lot of attention to them (Gritsina, 1990 "a"; Ancient Zaamin, 1994, p. 22-28, 42-45.) A most complete stratigraphic study regarding this region was carried on at the site of ancient settlement Kultepa-ruins of medieval town Sabat.

Ancient settlement Kultepa. The monument is located near a settlement of the same name, at the Left Bank of River Hojamushkentsay, identified as Sabat, one of the largest settlements of Ustrushana (fig. 16).

The ancient settlement was studied during four field seasons (1985, 1987-1989). There are eight excavated areas at its various parts (fig. 17). Two of these areas produced early medieval materials. Given that the settlement revealed the most saturated, detailed early medieval earthenware complex linked to fragments of architectural constructions that served as a certain standard for other monuments of the studied period, let's consider it in details.

The stratigraphic excavated area at the settlement's citadel (P-1) revealed five residential horizons, of which three lower horizons are dated back to early medieval period.

The first (lower) horizon located 9-6.5 m from the level of ancient surface is linked with the operation of adobe-brick constructions (56/28-29/9-10 cm) and a subsoil tile construction. The earthenware complex is not notable for a great diversity of forms, consists of hums and humchas, cauldrons, pots, jugs, and hearths. The vessels were made either by hand or by wheel. Of distinctive nature are jugs with an outlet, upper edge of which is either connected with the orifice or closely approaches it. On the opposite side there was fastened a handle divided into two parts by a deep hollow (fig. 18, 17, 20.) Such vessels from the lower layer of Chilkhujra are dated back to the 4th-6th centuries (Pulatov, 1975, fig. 28). They are also known from the materials of Kaunchi culture (Levina, 1971, p. 102, fig. 29; p. 117, fig. 34, 15). There appear hearth supports - "braziers" of the Kaunchi type. The vessels were often decorated with a simple scratched ornament and stains.

In the second residential horizon (6.5-4 m of original ground) the walls are also made of tile and adobe brick of rectangular format; however, the size of adobe brick has changed into 48/24/9, 58/28/9 cm. There appear different-size tile blocks: 100/70, 80/70 cm. Construction of an outwall is also related to this horizon.

A set of the horizon's earthenware forms, compared with the previous horizon, is notable for more diverse forms, a better quality of making. Apart from forms above, the complex sees the appearance of tagora, earthenware pots, cups, mugs, censers (fig. 19), though small-sized pots disappear. Sepa-



Fig. 16. Site Kultepa. Citadel.

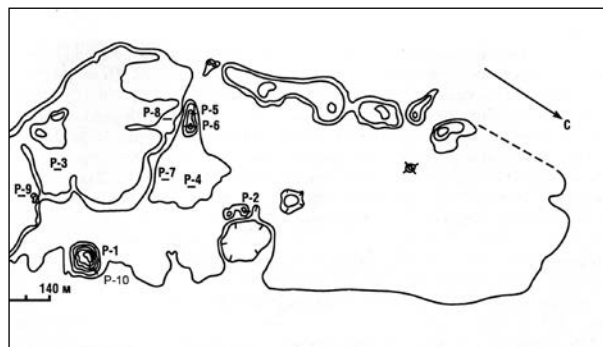


Fig. 17. Site Kultepa. Plan.

rate vessels are marked by signs scratched on natural clay. A scratched ornament becomes more diverse. Painting (fig. 71, 1, 3) and modeled ribbons with notches are used to decorate the earthenware works. The latter method of decoration is undoubtedly a tribute to an ancient Ustrushana tradition that, by the way, is also traced in the materials of the ancient settlement Mugtepa in Uratube (Istaravshan) up to the medieval period (Rahimov, 1989, p. 13). Distaffs are acquiring spherical and discal forms in contrast to biconical distaffs of the lower horizon.

Architectural constructions of the third residential horizon (3.5-2.5 m of original ground) are made of tile and large-format rectangular brick (52/26/9 cm) with a mark on the reverse. Adjoining the eastern wall of room 1 was a rectangular platform. Near to it there were a hearth and a small pebblestone work. Of unique nature is a treasure found in the wall that divides room 1 and room 2. The treasure included two golden pendants, beads made of different materials, and more than 40 drachmas of the Sasanid king Peroz (Gritsina, 1992, p. 26, fig. 12; 2000, p. 60-62, 65; Rtveladze, 1998, p. 10; Rtveladze, Gritsina, 2001, p. 98). This was the second case of discovery of Peroz's coins in Ustrushana. The first treasure was found in 1909 in one of the gardens of Jizak (Masson, 1971, p. 229; 1974, p. 148).

Earthenware vessels of the third residential horizon were formed largely by wheel, though hand-made vessels continued to enjoy a certain popularity. Great attention was paid to their external appearance. The edges of packer earthenware (fig. 20, 1-13) were decorated by pinches or hollows, which was typical for Ustrushana monuments (Negmatov, Khmel'nitskiy, 1966, table XI, Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 72, fig. 38, Pulatov, 1975, fig. 30). Pots (fig. 20, 22) were equipped with peculiar horseshoe-shaped handles with or without digital impressions (Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 84, fig. 44; Bentovich, 1953, table 8, 5; Isakov, 1977, p. 143, fig. 49; Rahimov, 1989, p. 10; Pardayev, 1995, p. 15). Tagoras are modeled and potter's pots (fig. 14-16); the latter have a strictly shaped crown and a hollow under it (fig. 20, 15-16). Pots were formed by wheel, equipped with a pair of ring-shaped handles (fig. 20, 23-28); they were known well from materials of the upper layer of Penjikent (Bentovich, 1964, fig. 37). Among numerous fragments of jugs there are detectable vessels with a hollowed orifice (fig. 20, 30, 33-34). There are rather often found cups with a wavy ledge made of heat-resistant clay (fig. 20, 31; fig. 21), which are also typical for the upper layer of Penjikent (Bentovich, 1964, p. 139, fig. 6) and castles of the North-Western Ustrushana (Berdymuradov, Pardayev, 1988, p. 70, fig. 2; 1990, p. 143, fig. 49; Pardayev, 1995, p. 15). Another type of cups is notable for oval crown slightly bent inwards (fig. 20, 29). Mugs with ring-shaped and loop-shaped handles are typical for Penjikent as well (Bentovich, 1964, p. 282; Belenitskiy, Bentovich, Bolshakov, 1973, p. 57, fig. 26; Isakov, 1977, p. 143, fig. 49). Distaff - either cylindrical or biconical - was decorated with pointed and scratched ornament (fig. 20, 35-36).

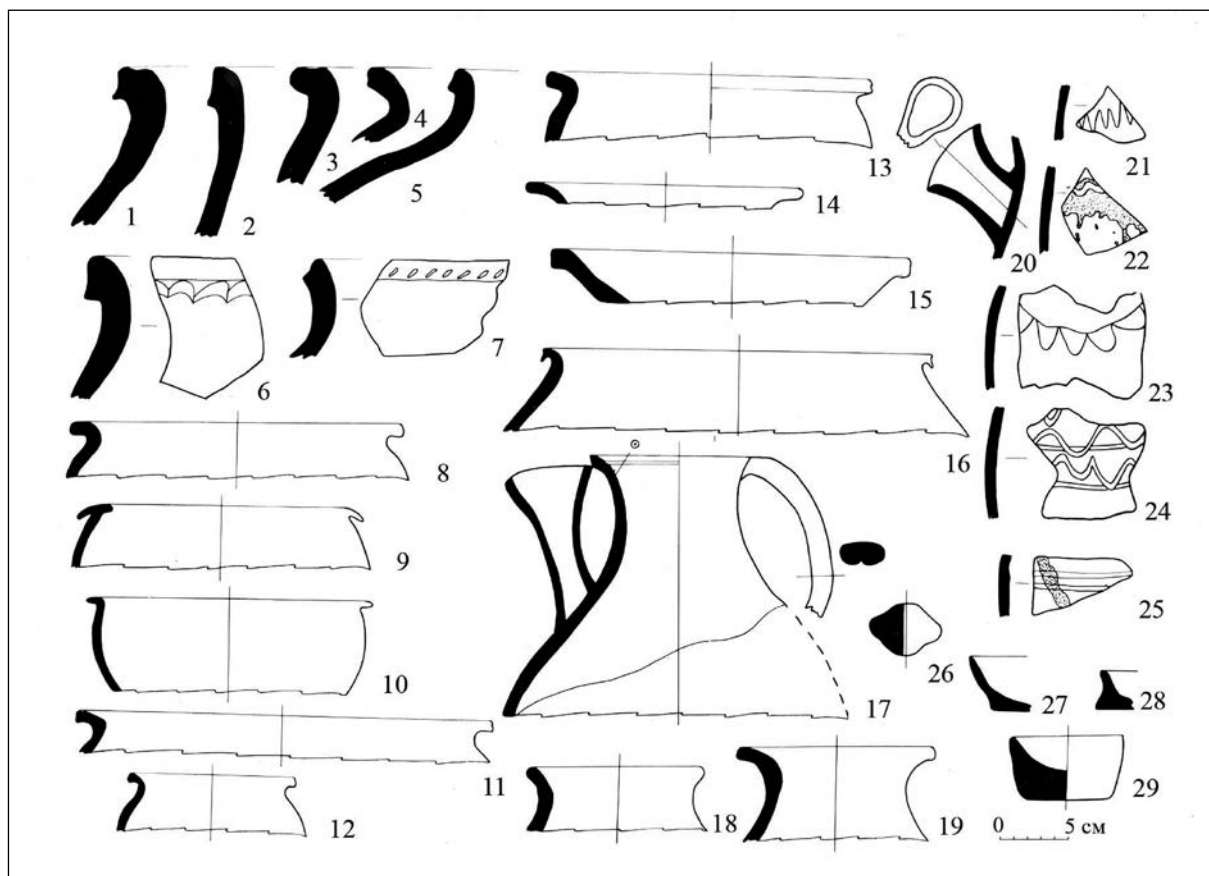


Fig. 18. Site Kultepa. Early medieval ceramics. Lower horizon.

Thus, owing to a relatively rich archeological material and strict stratigraphy, in the citadel of ancient settlement Kultepa it became possible to identify three chronological stages of material culture development in the early medieval period. The first residential horizon is dated back by us to the end of the 4th-beginning of the 5th century. This dating is confirmed by latest researches in North-Western Ustrushana (Pardayev, 1992, p. 112-113; 1995, p. 10-12; Pardayev M., Pardayev A., 1998, p. 58-68). Zoomorphic hearth supports discovered in the upper part of the horizon were also found in other localities in Ustrushana (Pardayev, 1995, p. 16-17), are indicative of manifestation of signs of influence of the Kaunchi culture (Ancient Zaamin, 1994, p. 42).

The second residential horizon is apparently indicative of the Kaunchi influence that is expressed in the appearance of moulded mugs, cauldrons and pots with vertical loop-shaped handles, hearth supports, etc. A similar phenomenon is observed in appropriate layers of early medieval monuments of the basin of Sangzar (Pardayev, 1995; p. 11-12, Pardayev M., Pardayev A., 1998, p. 68). A particularly great similarity is with the materials of a building in the upper horizon of Dunchatepa in the North-Eastern Ustrushana dated back to the 5th century-the early 7th century (Saltovskaya, 1988, p. 238-248). Our materials are also dated back to this period.

Materials of the third residential horizon apparently illustrative of the Sogdian influence are rather confidently dated back to the end of the 7th century-beginning of the 8th century (Ancient Zaamin, 1994, p. 47).

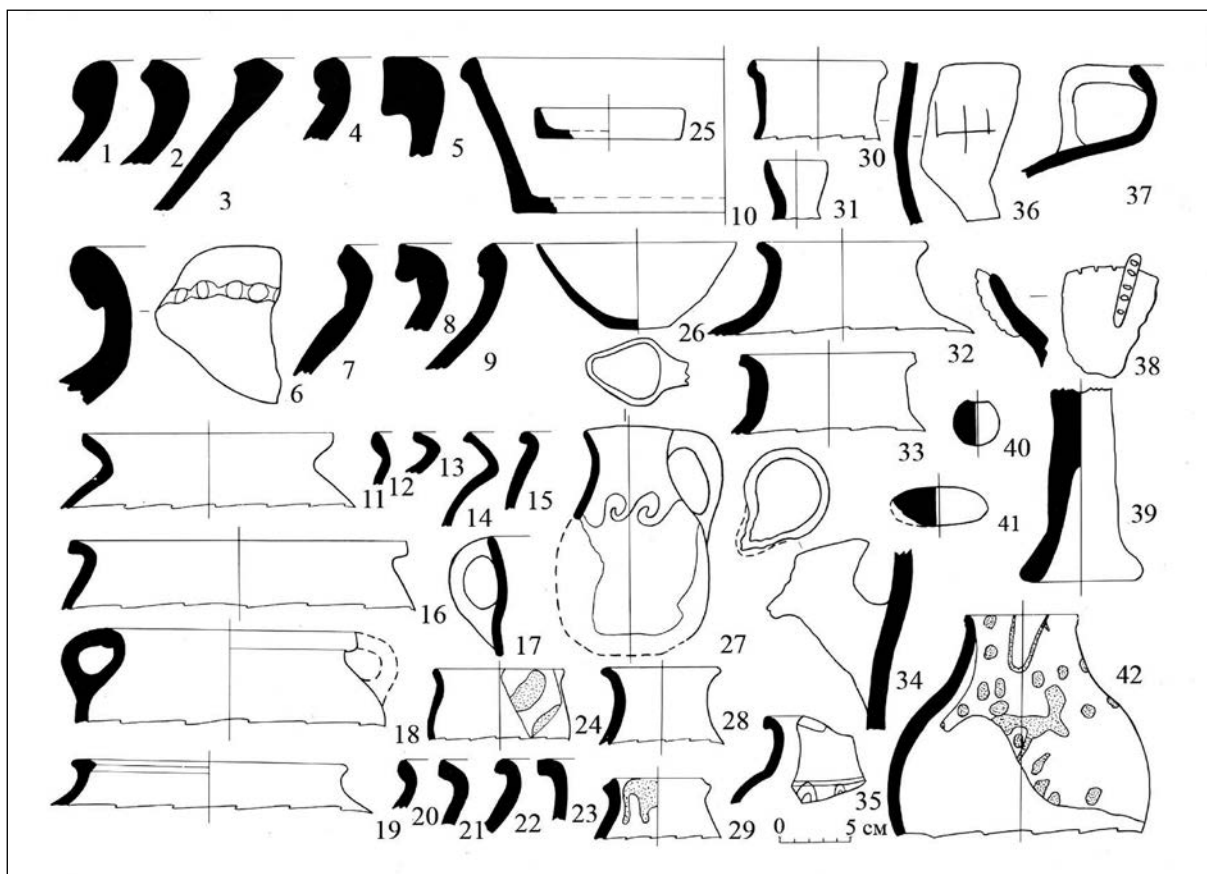


Fig. 19. Site Kultepa. Early medieval ceramics. Middle horizon.

Apart from earthenware works, there were found iron (fig. 22, 1-6, 8-9) and bronze (fig. 21, 7) implements. Of random discoveries at the ancient settlement we'd like to accentuate a silver cover depicting a warrior with a sword and a shield (fig. 23), a bronze pendant in the form of a goat (fig. 24), a bronze ring depicting a four-handed being, and a bronze amulet.

Mykkurgan. This settlement is located near the settlement Hojamushkent, at the Right Bank of River Hojamushkentsay and was one of the key points at the ancient caravan way leading from Sabat to the capital of Ustrushana-the town of Bunjikat (Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 106, Gritsina, 1992, p. 29-30; Gritsina, 2010, p. 184-190). Exactly this circumstance made us carry on excavations at this site in 1986.

The excavated area at the citadel cut through the fortress wall (fig. 26), led to the subsoil. The excavations revealed two major residential horizons. The lower horizon is linked with the erection of a strong, more than 5-meter wide tile fortification outwall, which is directly at the subsoil. It was filled in with ashy-organical accumulations included ashes, humus interlayers, burnt land, coal, stones, bones of animals, and earthenware.

In the second residential horizon there was found a premise made of rectangular bricks (54/25/9-10 cm; 54/27/12 cm) not too firm due to an abundant admixture of slag. Walls of the premise are erected on a large-boulder-based fundament underlaid by a backup overlapping the lower horizon. The upper horizon represented mixed layers of the Karakhanid and late medieval periods.

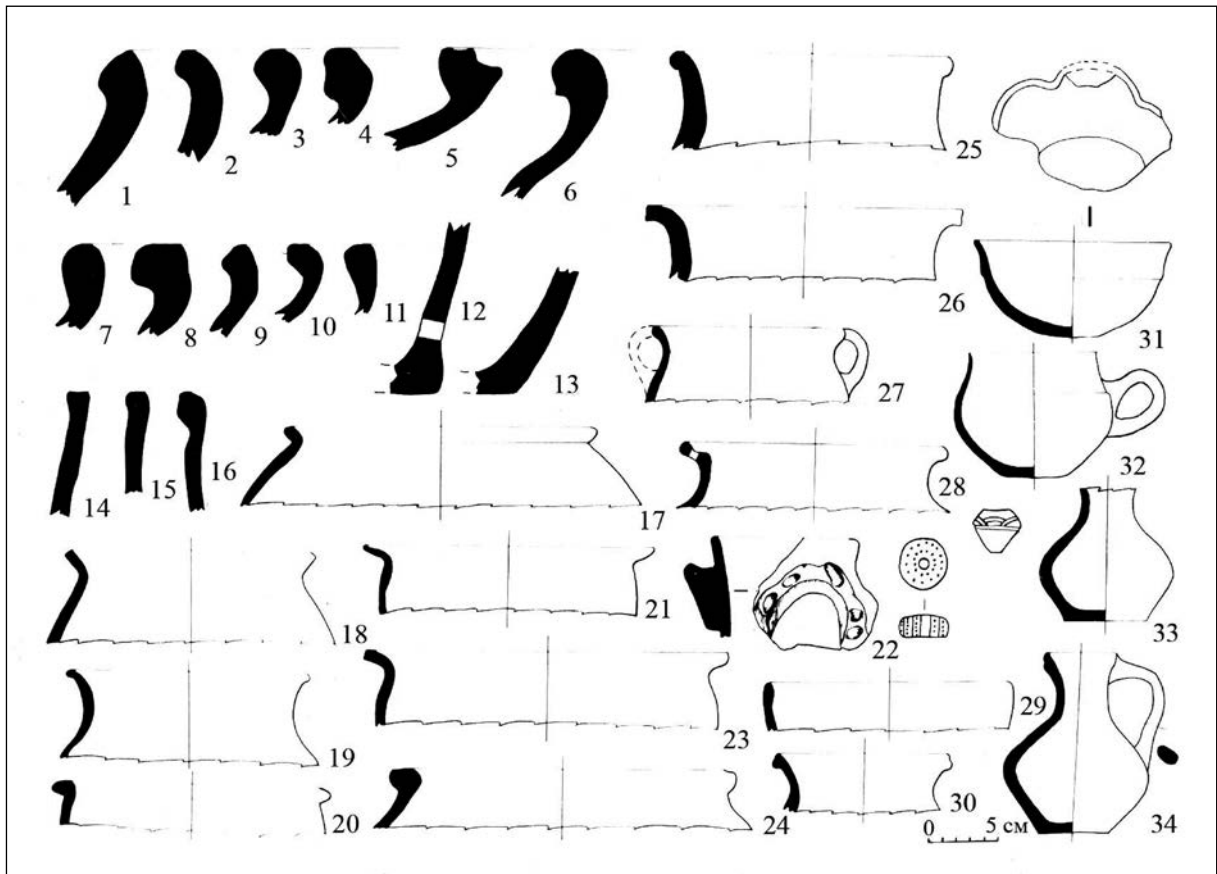


Fig. 20. Site Kultepa. Early medieval ceramics. Upper horizon.

An earthenware complex of the lower residential horizon consists of hums and humchas, cauldrons, pots, jugs, mugs, and glasses. Like usually, the vessels were formed by wheel and by hand. In terms of form and quality of items, this complex is most of all comparable with the complex of the second residential horizon of the ancient settlement Kultepa. Worthy of a note is almost the full absence of a scratched ornament. A distinctive peculiarity of the Mykkurgan complex is the availability of narrow-reserve glasses. Here they are apparently not accidental for they were detected in the excavated material as well. This type of items is also attributable to other early medieval monuments of Ustrushana (ancient settlements Kultepa, Aktepa Shurbulaksay). Hence, the existence of glasses



Fig. 21. Kultepa. Early medieval bowl with wavy edge.

is explainable by their longer use (up to the 5th century AD), or complexes containing such glasses should be dated back to an earlier period. A similar situation is noted by S. K. Kabanov in Kashkadarya where a single-layer monument Neguztepa (in the earthenware complex of the 3rd-4th centuries) revealed glasses, as a consequence of which the monument was dated back to an earlier period (Kabanov, 1977, p. 31-32, fig. 18). As for our complex, it should be dated back to the end of the 4th century-beginning of the 5th century.

The earthenware works of the second residential horizon were also formed by wheel and by hand; however, the set of forms is not so diverse here, though the quality of making becomes much better. The vessels were rather frequently decorated by a scratched ornaments. There were found crocks with a dense engobe cover. More elegant are jugs-synokhoya bearing traces of painting. The upper part of their handles was crowned by an oval stucco typical for the upper layer of Penjikent (Bentovich, 1964, p. 281, fig. 19; Isakov 1977, p. 133; fig. 41, 2). Cauldrons and mug-shaped pots see acute verge appearing. The complex is most of all comparable with the materials of the third residential horizon of the ancient settlement Kultepa and may be dated back to the 7th-8th centuries.

Ancient settlement Koshtepa is located at the banks of river Tagobsay, 2 km north of settlement Chakand. It was discovered by a Syrdarya expedition in 1985. The settlement is stretched longitudinally, named after two highest hills of its citadel (“Kosh” means “double”). One hill is 11.5 meters high, another one is more than 10 meters high (fig. 27) A citadel with an adjacent territory is separated from the rest part of the settlement by a deep moat. Shahrستان is located south and east of the citadel that apparently was fortified by a wall. Walls are more clearly traced from the northern side. There’s an unnamed hill standing in the settlement’s southern part. Total area of the settlement is no less than 12 hectares. Hillocks containing early medieval earthenware stretch almost to Chakand being either a part of the settlement or its neighborhood (fig. 28).

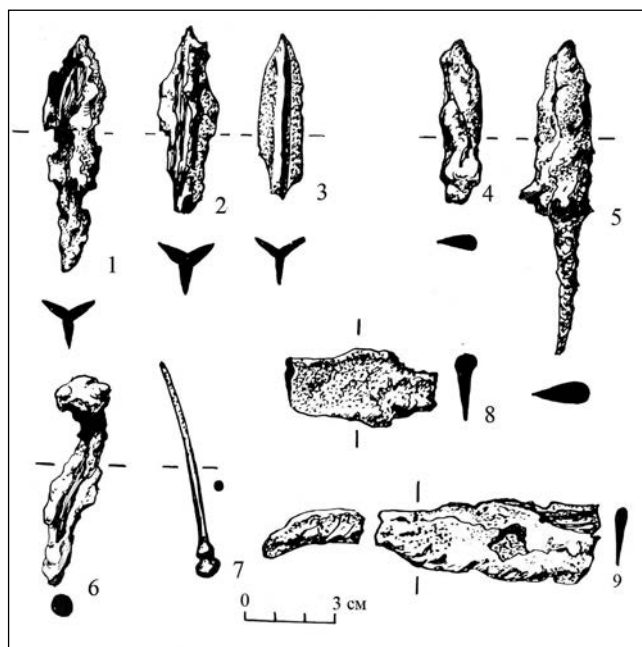


Fig. 22. Site Kultepa. Metal work.



Fig. 23. Site Kultepa. Silver strap in the form of warrior or king with shield, 7-8th centuries.



Fig. 24. Site Kultepa. Bronze pendant in the form of goat, 7-8th centuries.

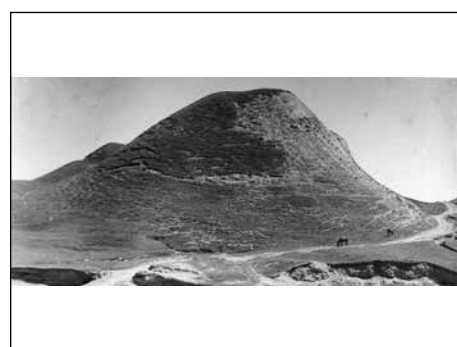


Fig. 25. Mykkurgan. West view on citadel.

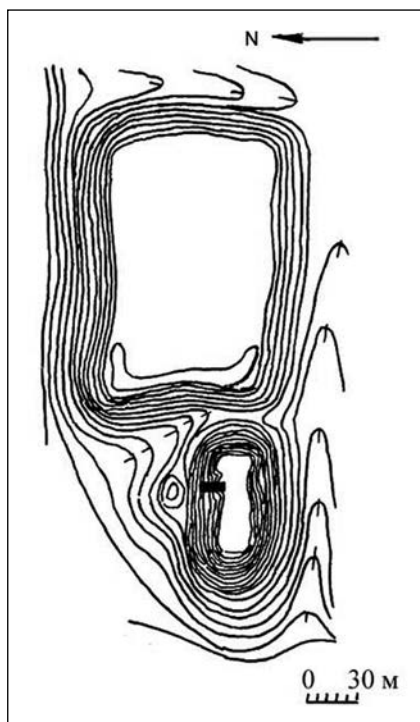


Fig. 26. Mykkurgan. Plan.

Two areas were excavated in the settlement. The excavated area 1 (3/5 m) is located in the citadel's northeastern part at a hill apparently representing a part of an inn. Right at a mark of 125 cm from the original ground there is fixed a floor lying on the subsoil. The excavations cleared a 1.5-meter thick tile out-wall and a tile room wall with the dimensions of 51/22-23/8 cm.

An overwhelming majority of the found earthenware consist of walls of various vessels, mostly hand-formed large-size ones. We'd like to accentuate a fragment of a broken vessel illustrative of the existence of local potter's production. Apart from the earthenware, there were discovered 7 fragments of grain graters, a nucleus-shaped grater, and two biconical distaffs. Similar distaffs take origin from the second residential horizon P-1 of the settlement Kultepa (fig. 29, 25).

The excavated area 2 (3/6 m) is laid in the settlement's shahristan. At a mark of 128 cm from the original ground there is fixed a floor lying on the subsoil. There are discovered three tile rooms. The walls are 50-60 cm thick. In room 3 there are found two hums and in room 2 - one hum dug into the floor. Evidently, the rooms were of household designation, represented a humkhona.

An earthenware complex obtained from these rooms is rather peculiar, was formed by wheel and consisted of hums, whose crowns were often decorated by pinches or digital impressions along the lower edge while the surface was decorated by meander-line scratched ornament and stains (fig. 29, 1-8); cauldrons, some of which are equipped with an orifice outlet under crown (fig. 29, 18-19), an extremely rare phenomenon, or equipped with handles-supports thus leading back to ancient Ustrushana earthenware complexes, a tradition that was interrupted by the Arab invasion; there are also noted different-size jugs without or with an orifice handle abundantly decorated by stains or engobe sparkles (fig. 29, 9, 11, 13-14), analogies are widely found in the materials of the lower layer of Penjikent (Belenitskiy, Bentovich, Bolshakov, 1973, p. 51, fig. 23); there are cups, which are also often decorated with stains (fig. 29, 22-23) and well known from discoveries in Penjikent (1973, p.51, fig. 23; Isakov, 1977, p. 126, fig. 36, 1-4) and from Ustrushana monuments (Berdymuradov, Pardayev, 1990, p. 157, fig. 2); besides, there have been found bowls (fig. 29, 23), large earthenware pots, flasks (fig. 29, 24), censers (fig. 29, 25), and a distaff (fig. 29, 27).

Funnels join the number of rare discoveries from early medieval monuments. There are several fragments and one unbroken specimen of them in our collection (fig. 29, 26). S. K. Kabanov referred similar items from castle Aultepa to as things of production designation, dated them back to the 5th-6th centuries (Kabanov, 1981, p. 118). Given that the discovered items bear no traces of production activity (soot, slagging,



Fig. 27. Site Koshtepa. Citadel.

etc.), their functional designation can be identified due to their appearance: they could serve as funnels. Apart from the earthenware, this excavated area revealed grain graters and grinders.

The earthenware complex is most of all comparable with the materials of the second residential horizon of the excavated area 1 and excavated area 3 of the settlement Kultepa. A distinctive peculiarity is the existence of earthenware with archaic signs (particularly, cauldrons with rudimentary handles-supports); that practically all vessels but cauldrons are painted by stains and engobe sparkles; an insignificant quantity of ornamented vessels; the lack or poorly expressed influence of the Kaunchi culture.

Thus, the studies have demonstrated that the settlement existed for a relatively short period of time, as proved by an insignificant thickness of the cultural layer. As a matter of fact, the monument is a single-layer one. The town became desolate yet before the Arabs invaded it. The excavations revealed no traces of great fires or destructions; hence, the desolation occurred due to not violent actions but changed balance of water sources.

As for the monument's attributes, we suggest the following. By its sizes the monument is the largest early medieval settlement in the Shahristan hollow, located in the same irrigation system with Kalai Kahkaha (a capital center of Ustrushana), emerged earlier than the latter and, after it became desolate up the River Shahristansay, the settlement Kalai Kahkaha appeared. A place where a new capital is being erected is more reliably protected by natural conditions and better supplied with water. Circumstances above make us suggest that the capital center of early medieval Ustrushana might initially be located in the place of the settlement Koshtepa and further shifted (not earlier than in the 6th century AD). This could happen for certain military-political motives; however, the main reason was most likely a change of the water balance towards the side of a substantial decrease (Gritsina, 2010, p. 186-196).

Settlement Eski Khavas is located at a railway station of the same name, at the Right Bank of River Shurbulaksay. It was mentioned by M.E. Masson (Masson, 1934, p. 16). In 1984 and 1988 it was explored by a Syrdarya expedition; in 1989, 2003 and 2004 there were carried on wide-scale excavations at the site of the settlement (Gritsina, 2005, p. 82-93). The territory of the settlement is broken. Lots of the earthenware and coins of the 10th-20th centuries were found on the surface. A sub-square citadel is located in the monument's northwestern part. It is adjoined by two territories separated one from another by a bank. Total area of the settlement exceeds 10 hectares, of which approx. 2 hectares are occupied by the citadel (fig. 30-31). The obtained materials make it possible to suggest that the site was being settled permanently starting from the early centuries AD.

Horizons IV-VI of the excavated area 1 are dated back to early medieval period.

The fourth residential horizon (6-5 m of original ground) relates to the erection and operation of a room made of tile and bricks with the dimensions of 48/28/8-9 cm. The earthenware complex consists of hums, cauldrons, pots, jugs, cups, mugs, and distaffs. The vessels were often decorated

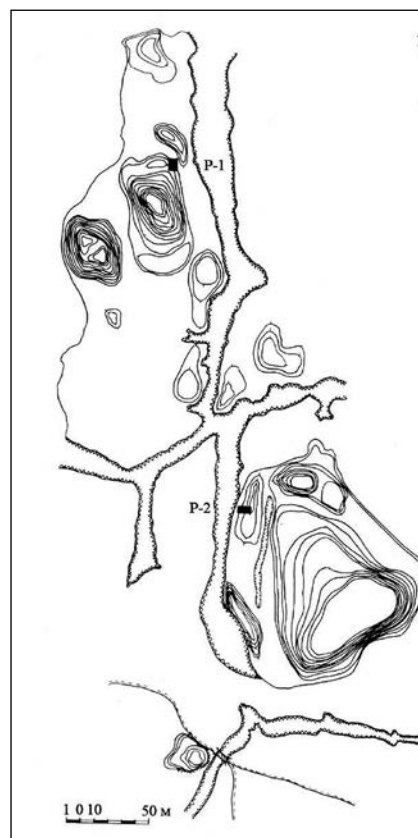


Fig. 28. Site Koshtepa. Plan.

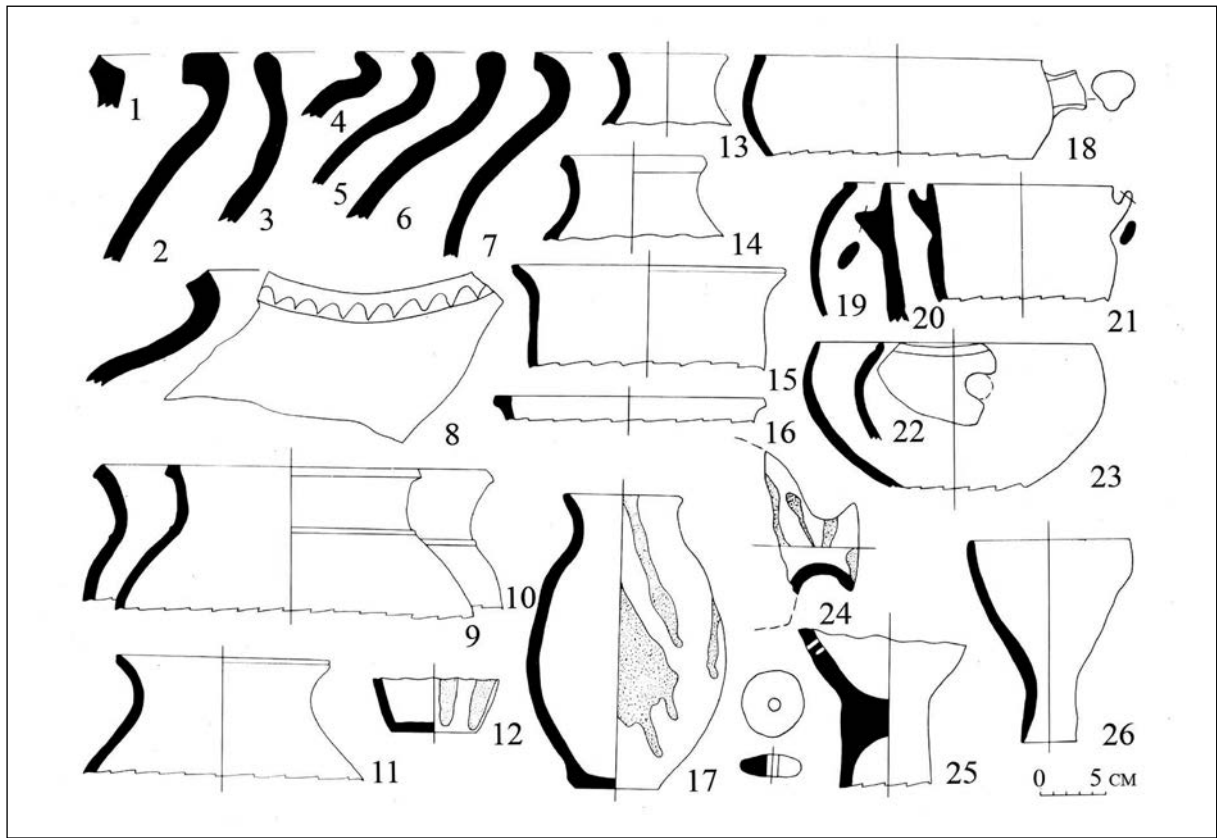


Fig. 29. Site Koshtepa. Ceramics.

by a scratched ornament in the form of straight and wavy lines, simple drawings, signs, incisions, and stains. The complex was evidently influenced by the Kaunchi culture as proved by the existence of hearth supports, censers, a clay stamp-amulet, and the decoration of handles of vessels by images of animals. The set of earthenware forms is typical for the Eftalit period (Lebedeva, 1990; fig. 1; Kabanov, 1981, p. 88, fig. 45; Saltovskaya, 1987, p. 238-247). The complex most of all resembles the earthenware of the lower and especially second residential horizon of the excavated area 1 of the settlement Kultepa.

Earthenware complexes of the fifth (4.5-4 m of original ground) and sixth (4-3.5 of original ground) residential horizons are of the same chronological period and most comparable with the materials of the third residential horizon of the settlement Kultepa but are less expressive compared with the latter.

Settlement Aktepa is located in the regional center Zaamin but at the Right Bank of River Zaaminsu, approx. 0.8-1.0 km east of the settlement Kurgantepa. The monument is strongly broken by roads from the southern and northern sides and residential constructions from the eastern and western sides. It consists of a tower and an adjacent western territory, which cannot be identified exactly and is occupied by a Christian cemetery. The conserved part (without the adjacent territory) has dimensions of 52/51 m, is more than 15 meters high. The upper platform is dug through: there are old Moslem graves there. From all the sides there are fixed intensive traces of settling in the form of tile works, humus and ashy interlayers, burnt sections, masonry, and lots of earthenware and bones of animals included. Mudbrick walls are traced at the upper edges of the settlement's northeastern and southern parts (fig. 32).



Fig. 30. Site Eski havas. Citadel.

The monument drew specialists' attention more than once. Giving the fullest information about it are N.B. Nemtseva and G.Y. Dresvyanskaya who have identified it as a fortified settlement, date it back to early medieval period (Nemtseva, Dresvyanskaya, 1986, p. 222).

Exploration of the neighborhood demonstrate that the area of Aktepa might be much larger. Hill-ocks containing the earthenware are also fixed beyond the boundaries of the Christian cemetery, up to the building of the present-day government (west of the citadel).

Most probably, the monument is an early medieval settlement hiding remains of a pre-Moslem Zaamin. In 1991 the Zaamin expedition carried out excavations at this site (Ancient Zaamin, 1994, p. 26-28; Gritsina, 1995, p. 21).

The prospecting shaft was laid in the southern side of the citadel near a well-detectable wall of large-size bricks of the early medieval standard. Excavations began from the mark of 12 meters, counting from a reference concrete column under a triangulation tower. Two residential horizons were provided for the early medieval period. In the lower horizon there was identified the floor of a certain room whose walls turned to be beyond the excavated area. It appears from the earthenware that this horizon can be dated back to the 5th-6th centuries. The second residential horizon is related to the erection of a monumental tile and mudbrick building, for the reasons of which constructions of a lower building were leveled. The erected building (castle) later on became the basis of citadel of the early medieval Zaamin (Gritsina, 1992, p. 44; Ancient Zaamin, 1994, p. 28, 95, 98).

The bulk of discoveries consist of earthenware from the upper residential horizon with not great diversity of forms. Khums and khumchas are one of the most numerous groups of the earthenware. It is interesting that khums were formed by wheel, and khumchas-by hand. The surface was often decorated by stains. Pot and jugs were formed either by wheel or by hand. There are orifice-outlet vessels known in scientific literature as oynokhoya. Jugs were equipped with vertical handles divided into two parts by a deep hollow. Cups and bowls were also formed by wheel and by hand.

Of other discoveries there is notable a fragment of a khum with a stamp impression and a hearth support with a bifurcated edge. Similar supports are known from the materials of the upper layer of Penjikent (Bentovich, 1964, p. 293, fig. 37). On the whole, the upper horizon may be dated back to the 7th-8th centuries.

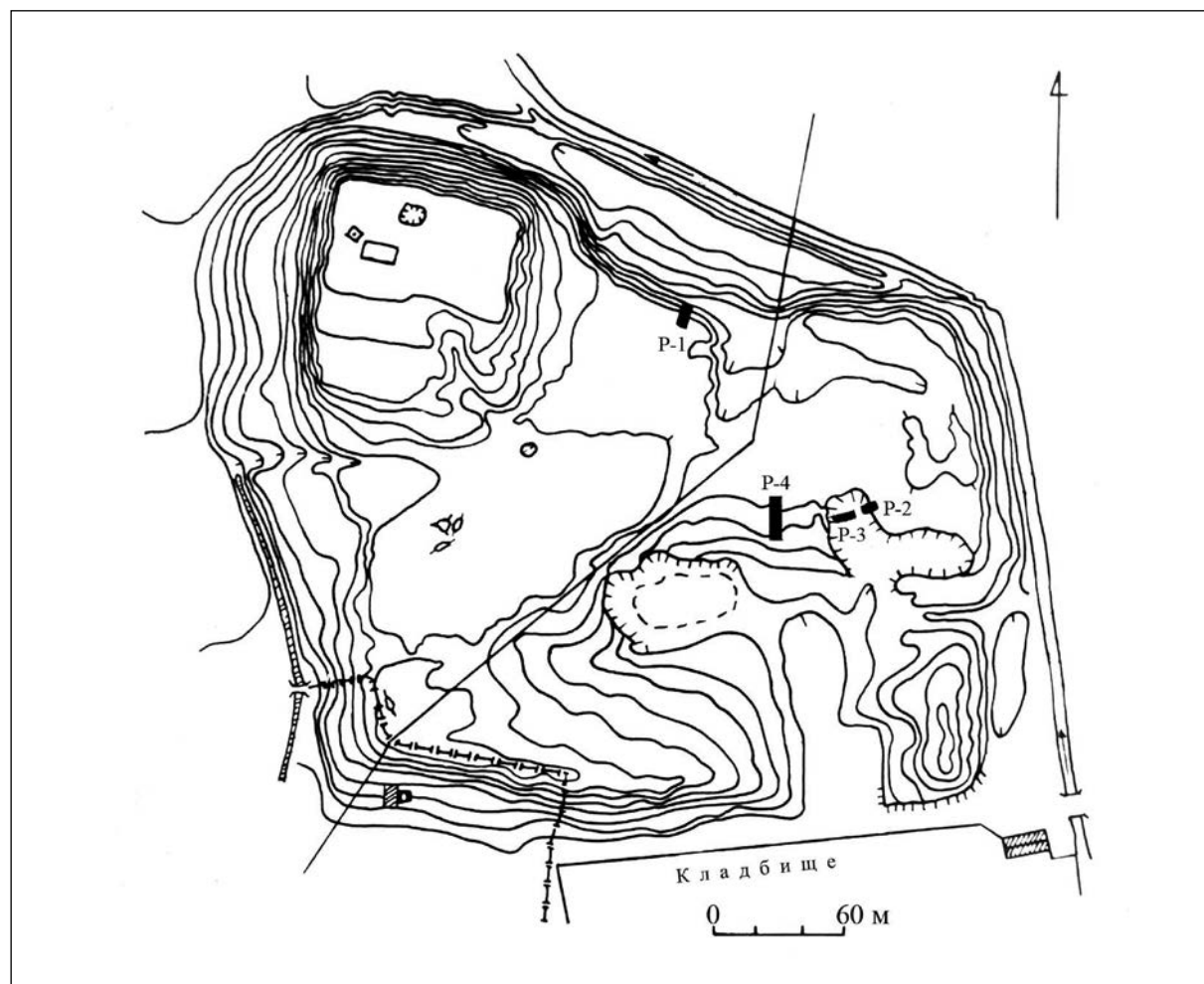


Fig. 31. Site Eski havas. Plan.

Azlyartepa (a pre-Arab caravansary). Azlyartepa (Ozattepa) is located 2 km southwest of Zaamin, in the settlement Kyzylsai. Analysis of the monument's topography has shown that its core consists of a citadel with a southern adjacent territory of an inn that was later added by a square construction (fig. 33-34). Dimensions of the monument are 150/100 m; the citadel is located in the eastern part. Its height is 12 m. The inner surface of the adjacent territory is lowered; shafts are traceable at its edges. Initially, the monument was identified as "not large but well fortified small town or fortified settlement in the center of an agricultural estate consisting of numerous non-fortified settlements and separate houses" and dated back to a period ranging from the early centuries AD to the early medieval period (Nemtseva, Dresvyanskaya, 1986, p. 224; fig. 3).

A stratigraphic excavated area (4/6 m) was laid near the northeastern corner of the adjacent construction with the aim to cover a part of the supposed angular tower (Nemtseva, Dresvyanskaya, 1986, p. 224). The excavations' main purpose was to identify stratigraphy of this part of the monument, existence of walls and towers, definition of order of construction, designation and chronology of this architectural monument.

The excavations revealed a sufficient number of earthenware implements. Khums and khumchas were made primarily by wheel, had their surface not ornamented. Only in one instance a bottom

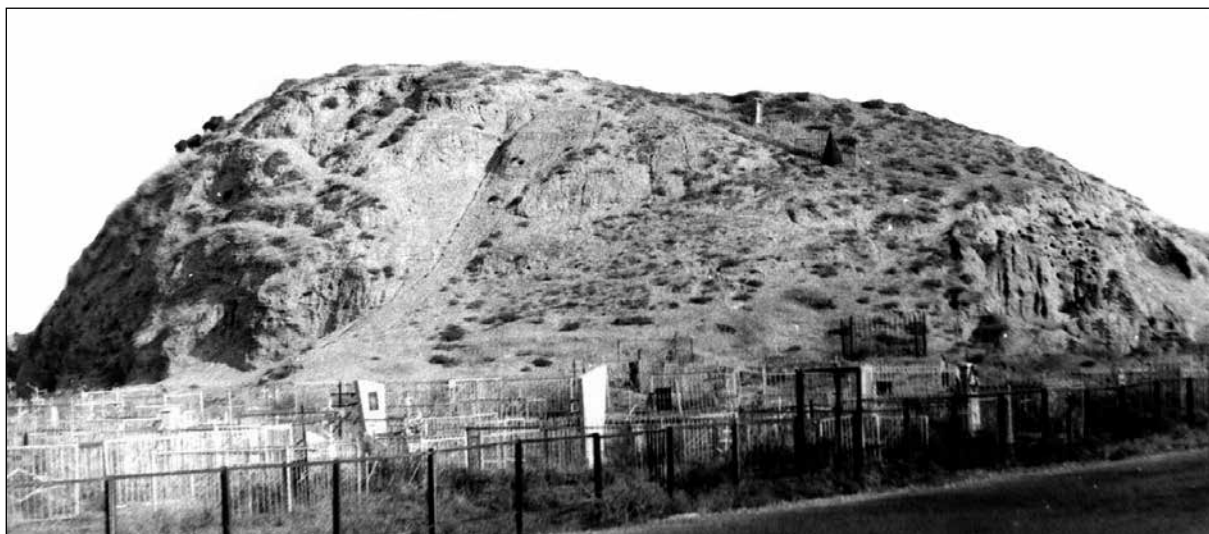


Fig. 32. Aktepa. Citadel.

part of the khum is decorated by digital impressions. These vessels are notable for a great variety of edges, which is typical for Ustrushana and Sogdian monuments that appeared right on the eve of the Arab invasion (Pulatov, 1975, fig. 26; Bentovich, 1964, p. 267, fig.11). Packer earthenware also includes wide-neck vessels with loop-shaped handles. Such vessels are typical for the upper layer of Penjikent where they were often ornamented, modeled in the form of head of an animal (Bentovich, 1953, p. 269, fig. 3). Cauldrons were equipped with horse-shoe-shaped handles and decorated by digital impressions at a place under the crown. The modeled vessels also include small earthenware pots. The pots were decorated by a simple ornament. Some of the vessels had holes drilled under the crown. Vessels of such sort are known from materials from the upper layer of Penjikent and were designated, probably, for foods stored under a limited air access (Bentovich, 1964, p. 272, fig. 8). Other vessels include tagoras, jugs, mugs, cups, and bowls with a wide orifice and thick walls. Hearths or frying pans are known well in the early medieval complexes. They are the vessels with low ledge and flat bottom. On the basis of broad analogies the obtained materials are consistent with the frames of the 5th-8th centuries AD. The excavations identified two periods of construction works. The first one assumed the erection of monumental tile walls forming a series of parallel rooms. Their out-wall was not notable for anything particular. The width of one room is 220 cm, of another one-250 cm; length was no possible to identify, for the rooms stretched beyond the excavated area. Leading to the rooms from the northern side were broad passageways (210-220 cm) that interconnected the two rooms. The walls were laid right on the subsoil, had approx. the same width and, probably, were erected no earlier than in the 7th century.

The second period of construction covered erection of mudbrick rectangular walls. The upper part of the previous period's walls was demolished, while the rooms were strictly backed up for the new construction. The new rooms were erected of either brick or tile. Possibly, walls of the previous rooms were used. The excavations identified no fortifications, including towers, in contrary to suggestion by previous researchers. A strong ashpit overlapping the masonry is related to either a moment of destruction of upper period's constructions or a later period of settling, as proved by rare discoveries of Karakhanid and ethnographic vessels.



Fig. 33. Azlyartepa. Citadel.

The excavations make it possible to identify the date and succession of construction of the architectural complex Azlyartepa. Initially, there were erected a citadel (a fortress) and an inn adjacent to it from the southern side. Evidently, this happened no later than in the 5th-6th centuries or even earlier. Data of excavations carried on at similar Ustrushana fortresses do not contradict this dating. Particularly, lower layers of settlement Kultepa (Gritsina, 1990, p. 14-15), and fortress Chilkhujra are dated back to the end of the 4th-6th centuries (Pulatov, 1975, p. 163). Relating to approximately the same date are also lower layers of some other fortresses of the Sangzar basin (Pardayev, 1995, p. 12-14; Pardayev M., Pardayev A., 1998, p. 58-68). Later on, probably, not earlier than in the 7th century from the western side the fortress and the inn were added by nearly a square construction of rather huge dimensions (100/100 m), which at the end of the period was subjected to a radical reconstruction (the second construction period). The attached construction bears evident traces of two gates: southern and northern. The southern gates used as an entryway to the fortress's inn were quite visible in the monument's micro-relief. It seems that the northern gates registered within the excavated area 1 were the main entryway. It is no coincidence that this part of the construction is clearly distinguished from general view (fig. 34).

What are the aim and designation of this construction? It is a working hypothesis that it was a kind of an inn, a predecessor of later caravansaries. It was built primarily for economic reasons. Azlyartepa was located at a busy caravan way, quite near to a large trade and administrative center. It seems that statement of Ibn Haukal that Zaamin was "a place of stoppage for those traveling from Sogd to Fergana" can be extrapolated to an earlier period as well (Ancient Zaamin, 1994, p. 25.)

Jartepa. The settlement is located at Zaamin's northern outskirts (fig. 35-36). The excavations identified two residential horizons: the lower, early medieval one, and the upper, Karakhanid one. The horizons are separated one from another by a hard, having almost-no-discoveries layer representing a planned platform of a construction of the upper residential horizon. Below there were ashy-organical accumulations including ashy and humus interlayers and lenses, burnt sections, earthenware, bones of animals, stones, hearths, and remains of tile walls. They were underlaid by a floor level at the beginning of the 8th tier. In turn, the floor overlapped a room made of bricks with the sizes of 48/21-23/9 cm. The walls were one brick thick; the thickness of the filling was 4 cm. It is interesting to note that a finger strip was drawn across every brick, nearly at the very edge. The wall stretching

east-westward has this strip alternating: first it is located in the northern part of a brick, then in the southern part of the next brick, etc. The level of floor relating to these rooms is fixed at a depth of 4.2 m from original ground.

The earthenware set is typical for early medieval period. The vessels were often decorated by a scratched ornament. Of interest is a drawing in the form of an oblique net in cartouche. A wall of another vessel has conserved a seal in the form of equilateral straight cross. Such seals are widely spread in the Kaunchi culture (Gritsina, Alimov, 1986, p. 38, fig. 1, 6, 8).

A rare discovery is an unbroken glass-shaped vessel with a through hole in the bottom. Probably, it was used as a funnel. And there's also a peculiar vessel-shaped earthenware distaff. No such discoveries have yet been noted in neighboring regions.

Owing to a limited area of excavations, the obtained earthenware set naturally does not reflect fully the character and assortment of earthenware produces of early medieval Jartep, which is located quite near Zaamin relating to the same period. Exact dating of the settlement is still hard to guess. Possibly, it was located under the monument's "tower" where no excavations have yet been carried on. In our opinion, fragments of antique earthenware from Jartepa should be regarded as random or imported discoveries.

Compared with the earthenware of the 6th-8th centuries of Ustrushana's nearby monuments (Berdimuradov, Pardayev, 1988, p. 70, fig. 2; fig 3; 1990, p. 156, fig. 2-3; Ancient Zaamin, 1994; fig. 4, 20), the quality of that of Jartepa is much higher, for the monument was located near the largest urban center of Ustrushana. At the same time, it has a poorer assortment of vessels. Particularly, it contains no vessels with a wavy ledge, which were spread widely at the time (Bentovich, 1953, p. 139, fig. 6; Belenitskiy, Bentovich, Bolshakov, 1973, p. 57, fig. 26; Berdimuradov, Pardayev, 1988, p. 70, fig. 2; 1990, p. 157, fig.2). It is interesting to note that no cups of such sort were found among quality urban-type earthenware of the Jartepa temple located at a busy trade main between Samarqand and Penjikent (Berdimuradov, Samibayev, 1999, p. 38-39).

The obtained complex's dating is likely the period of the 6th-8th centuries AD (Pulatov, 1975, fig. 30-35; Negmatov, Pulatov, Kmelnitskiy, 1973, 38, 39, 41; Isakov, 1977, p. 127-127, fig. 36-37 and next). However, it is not denied that the lower layers of the complex may be dated back to an earlier, probably, Eftalit epoch.

The excavated area is southwest of the "tower"-citadel, i.e. in the territory of the inn; hence, the obtained complex allows dating the operation of this part of the fortress. As for its designation, Jartepa was basically a typical pre-Arab fortress. This is traced well from the eastern side that is washed out by a river. Here, there have been found a series of parallel rooms overlapped by arches and typical for this category of constructions of this period (Berdimuradov, Pardayev, 1988, 1990).

Settlement Karatepa is located at the western outskirts of town Dashtabad (Ulyanovo) in Zaamin region of the Jizak district of Uzbekistan, has long been attracting attention of either Russian or local

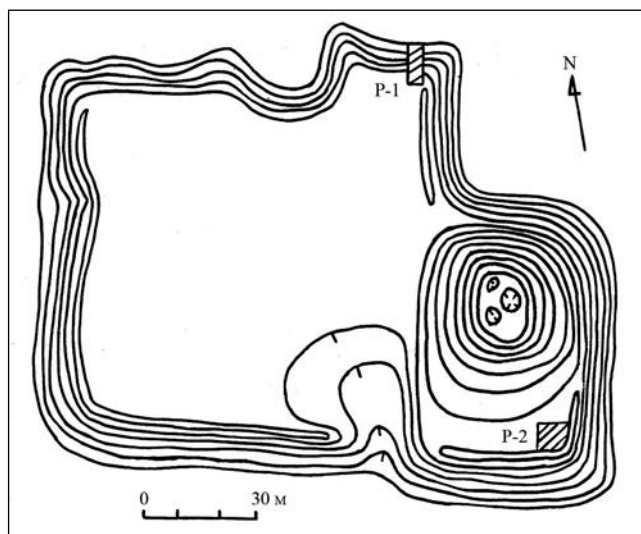


Fig. 34. Azlyartepa. Plan.

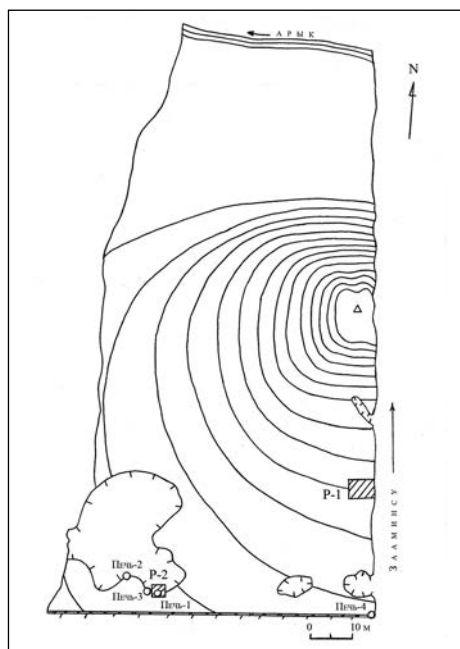


Fig. 36. Jartepa. Plan.

researchers of antiquities (Gritsina, 2010, p. 46) There were given quite contradictory appraisals of settlement's dating and role it played in the ancient and medieval culture of Ustrushana (Nemtseva, Dresvyanskaya, 1986, p. 227).

The settlement has a clearly expressed more than 15 meters high citadel adjoining the middle of the southern wall. From the western and eastern sides it is fortified by moats. The citadel's eastern side is strongly broken. From all its sides the citadel is surrounded by shahristan 1. From the northeastern side the latter is adjoined by shahristan 2 outlined by a strict square of fortification walls (fig. 37; fig. 38). Most likely it was built later than shahristan 1, around which no walls are visible. Total area of the settlement is approximately 6 hectares. Probably, beyond the territory above there were located some other parts of the settlement, which are currently practically not detectable except for a site located south of the settlement. In the view of early researchers, this was the site of a fortified town with suburbs; materials excavated from it allow dating it back to the early centuries AD;

for the second time it was being settled in early medieval period (Nemtseva, Dresvyanskaya, 1986). The town was built upon the basis of waters of Zaaminsu and Hojamushkentsay.

The excavated area covered the settlement's shahristan 1. A depth of just 0.7 m revealed an obstruction of tile bricks and mudbricks. The obstruction was located at the floor that was rather clearly identified throughout the excavated area. In the excavated area's southern part it became possible to clean a small part of front wall. At the depth of around 2 m there was found another tile-brick wall overlapped by the wall above, as well as it-related floor. The surface of the floor turned to be strongly burnt, partially overlapped by a tile obstruction.

The depth of 2.5 meters revealed walls and the northeastern angle of a room of another construction period. An insignificant but rather expressive material pertaining to this period of existence of the settlement (red engobed cups and cups with the so-called wavy ledge) may be dated back to a period of not earlier than the 6th-7th centuries AD.

The excavations identified a rather modest number of earthenware material, which, however, makes it possible to preliminarily characterize either the level of production of earthenware or the degree of the settlement's being inhabited in the 6th-early 7th centuries AD. That the vessels were made at the site is to conclude from ceramic slag and defective specimens.

Practically all the vessels were made by potter's wheel. Rather considerable is a set of large packer earthenware (khums and khumchas). The excavations also revealed vessels having pinches in their lower part and signs on the body (fig. 1-2). Such a technique is rather typical for this period of Ustrushana (Negmatov, Khmel'nitskiy, 1966, tables XI-XII; Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 72, fig. 38; Pulatov, 1975, fig. 29-30; Yakubov, 1979, fig. 36-38; 1988, p. 248-250, tables II-IV; Ancient Zaamin, 1994, fig. 19). Vessels of the type of pots are made of evenly baked mixed clay by a high rotation wheel (fig. 3, 3-4). The quality of cups is not worse than that of best specimens from either Ustrushana itself or neighboring regions (Ancient Zaamin, 1994). Rather large vessels are found among

jugs. Some of them are decorated by a “falling wave” motif, which is also typical for the 6th-7th centuries (fig. 6).

In early medieval period here there was located a town small though, with all attributes of urban planning: an outlined citadel, two shahristans, and suburbs. Its role and meaning will become clear only upon the completion of large-scale archeological works.

Its being located at this place is not occasional for a simple reason that this was a crossroad of trade and military mains: one of them led from Zaamin, the other one—from Jizak. Minor excavations have demonstrated that the settlement developed quite intensively, went through several construction stages. The excavations did not confirm assumption that the town had emerged in the ancient period. Most likely, taken for antique earthenware were crowns of thin-walled cups, which, indeed, are hard to differ from glasses. Our excavations also identified cups of such kind.

As a matter of fact, this purely early medieval monument is of great importance for the study of culture of its time, yields, in terms of sizes and significance, to the settlement Penjikent; however, it can give lots of information as not elite but common monument. It appears from the found earthenware material that the town was left in the first half of the 8th century due to the Arab invasion.

Fortress Myk is a well-known archeological monument in the Jizak region (Smirnova, 1950, p. 61; Rtveldadze, Iskhakov, Malikov, 1978, p. 537; Oga Burgutli, 1992, p. 23-26). It is located 43 km south of Zaamin, near a settlement of the same name (fig. 39). It consists of three objects: Myk I (upper fortress), Myk II (lower fortress), and Myk III (a production and residential area). Multiyear excavations have demonstrated that the objects are dated back to the 7th-12th centuries (Sverchkov, 1994, p. 49-61; Ancient Zaamin, 1994, p. 6).

The ruins (as they appear now) of fortress Myk I were erected of tile bricks and mudbricks at the top of a clint. The construction has the form of a triangle whose tops are crowned by towers. At the southern top there is located a donjon with three narrow rooms and arched passageway. The excavations identified eleven rooms made according to the traditions of fortress architecture of the 7th-8th centuries: a front hall with niches along the walls and a sanctuary with an altar niche for firing formed by two columns. The altar niche was also found in the sanctuary of fortress Kingirtrepa in the lower reaches of Sangzar (Berdimuradov, Pardayev, 1988, p. 68-71). It was possible to get to rooms above through a common corridor. The household part was separated from this part of the fortress. In the view of the author of the excavations, the building was destroyed as a result of strong fire relating to the Arab

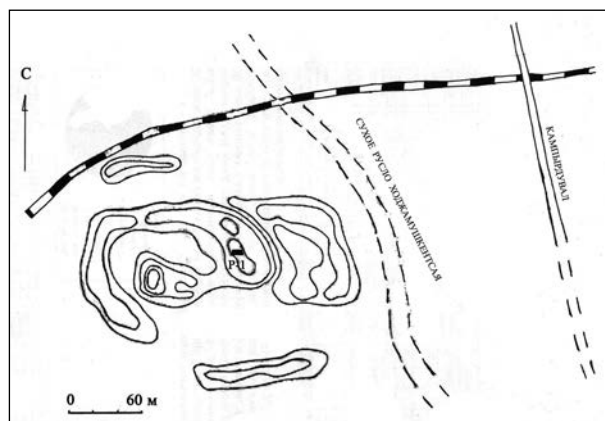


Fig. 38. Site Karatepa. Plan.



Fig. 39. Fortress Myk.

invasion. It appears from the excavations that a Yulsay keep protecting the approach to the fortress was destroyed at the same time (Sverchkov, 1994, p. 52-53).

JIZAK OASIS. Here we mean the town Jizak and its neighborhood. Within the modern administrative boundaries of the Jizak, Gallyaaraal and Bahmal regions there were located five settlements: Feknan with its center in Dizak, Kharakana, Burnamad, Nushent, and Bangam. Multiyear excavations here fully or partially revealed several early medieval architectural constructions.

Fortress Kingirtepa. The monument is located at the Right Bank of River Sangzar, near settlement Obiz of the Gallyaaraal region. It consists of a citadel and an adjacent territory. Dimensions of the hill are 100/120 m.

The excavations revealed a rectangular building consisting of 18 rooms (fig. 40). An outwall and the building itself are made of tile blocks and covered by glazed plaster with lots of adobe bricks. The very building is erected on the site of an earlier construction. At the time, there was erected the outwall that covers the territory of the inn as well (Berdimuradov, Pardayev, 1988, p. 66-75).

The upper building is divided by an axial corridor into two parts: western and eastern. The western part consists of four long rooms, one intercommunicating room (room 18 that intercommunicated with room 12 and room 16), one square room, and a corridor. The eastern part consists of seven rectangular rooms interconnected by a corridor, except for room 5 linked with the axial corridor. The fortress's entryway led from the inn's southern side. No ceilings of rooms have been conserved; however, they were evidently made of tile bricks in the form of arches in conformity with early medieval architecture (rooms 3, 11, and 12) or of wood (rooms 1, 4 and other) as proved by the discoveries of burnt thick beams in thick ashy layers. The latter circumstance may illustrate that the building was destroyed by fire caused by the Arab invasion in the beginning of the 8th century.

Dimensions of the fortress are large enough (26/26 m); it is one of the largest constructions of its kind. It resembles well-known fortresses with the so-called corridor-comb-shaped planning (Negmatov, Khmelnitskiy, 1966, p. 106-115). In the authors' view, a building excavated at Termizaktepa performed guard functions because it was located quite near the capital center-town Bunjikat (Negmatov, Pulatov, Khmelnitskiy, 1973, p. 132). As for our building, we'd like to stress two peculiarities. Unlike buildings with a corridor-comb-shaped planning, rooms of our building are as if turned aside from the axial corridor towards another, eastern corridor. Also, it is interesting to note the existence of one more rather long corridor (room 19) that intercommunicates rooms 1, 4, 3, and 11.

In the opinion of the authors of discoveries, the remains of wooden thresholds may indicate that the entrances were wooden doors. This was a one-storey building because no traces of the second floor have been identified. The majority of the discovered rooms were living rooms or utility rooms except for rooms 1, 4, and 16, which were related to the performance of certain local cults (p. 68-69). This is testified by some peculiarities of construction: the existence of a niche along the northern walls of rooms 1 and 4, an arched niche with ashes and traces of soot in the northern wall of room 4, an unusual thickness of the walls of room 16 and the existence of a rather large niche (1/0.7 m) with traces of soot, as well as discoveries (a modeled censer reservoir in room 1; three censers, the figure of a horse, earthenware supports in the form of stylized heads of animals (Berdimuradov, Pardayev, 1988, p. 68-71).

The building endured at least one major reconstruction. First, a southwestern room in the building's western side (rooms 1 and 4) was divided into two parts by a 0.5 meters-wide partition. At the latest stage of the building's existence partitions divided the axial corridor, which led to the appearance of four more rooms: 2, 7, 9, and 13 (fig. 40). Room 9 was evidently used as a kitchen, as proved

by a broken-bottom overturned cake-baking khum found in the room's eastern angle. Such khums-tandyr were also found in a series of early medieval monuments (Negmatov, Pulatov, Khmelniyskiy, 1973, p. 16, fig. 10; Pulatov, 1975, p. 36).

Earthenware items identified by the excavations are typical for Ustrushana monuments of the 7th-8th centuries. It'd be appropriate only to emphasize the existence of a rather large number of bowls with a wavy ledge; noteworthy is that the number of waves ranged from three to five or higher (Berdimuradov, Pardayev, 1988, p. 68-70, fig. 2, 1-4). In our opinion, they could serve as forms for baking cookies (Gritsina, 1994, p. 45). Besides, straining vessels of various forms also draw attention (p. 70; fig. 2, 5-6).

Winery. A winery, more exactly, residence of a professional wine-maker was for the first time fully excavated in Ustrushana near the fortress Kingirtepa. The discovery illustrates that it functioned simultaneously with the fortress, i.e. in the 7th-8th centuries (Berdimuradov, 1986, p. 210-214).

The dwelling represents a one-storey building with a flat ceiling made of tile 1.0 m-thick walls. Its inner part is divided into two parts: residential (rooms 2 and 3) and utility (room 1). The utility part, i.e. the very winery is divided into two parts by a tile 0.5 m-thick partition (fig. 42), is of rather popular construction. In the western side there is laid a firm three-layer pebblestone platform where the collected grapes were put. The platform is slightly turned towards the partition under which there passes an earthenware duct. On the other side of the partition there was dug a pit with a khum at its bottom. The pit's upper part, from the khum's crown to the surface, was covered by pebble-stones. The produced wine flew through the duct into the pit-tank with a khum (p. 211, fig. 1-2). The room's eastern part evidently was used for the storage of commodity outputs, as proved by the construction of the very building and a significant volume of the winery's tank.

Fortress Almantepa is located in the settlement Koshbulak of the Gallyaaraal region of the Jizak district, at the Right Bank of River Sangzar. The two-tier monument joins the number of monuments widely spread in the early medieval period in either Ustrushana itself or neighboring estates. Ruins of such settlements usually hide fortresses with a spacious utility part - an inn. At present, only a part of the settlement's citadel has been conserved. The territory of the inn is wholly ploughed out.

In 1982 in the citadel there was excavated an upper building, which represented a clearly outlined construction with a corridor-comb-shaped planning consisting of six parallel rooms surrounded by a 2.2 m-thick tile-block fortification wall. All the rooms were practically of the same length (9.75 m), had two exits, and were surrounded by a corridor. The corridor's width is 2 m from the eastern side and 1.5 m from the northern side. The building's entrance was located in the southern corner, accessible from the side of the inn. Rectangular towers were located in the eastern and western corners of the exterior part of the building (fig. 43) (Berdimuradov, Pardayev, 1990, p. 148, fig. 1).

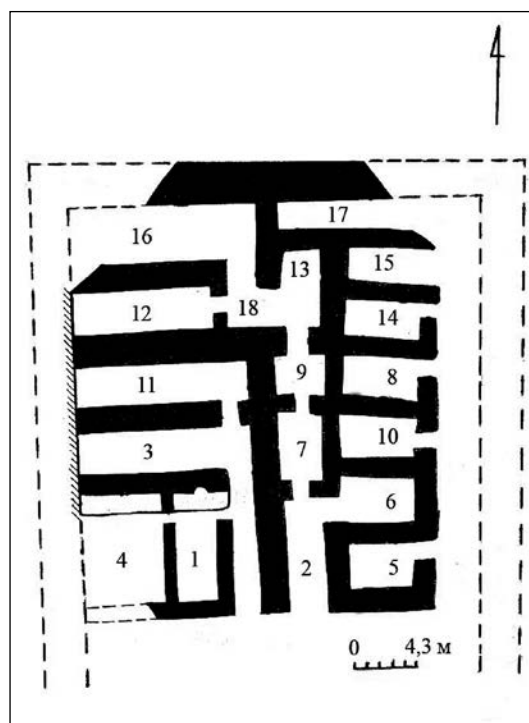


Fig. 40. Kingirtepa. Plan of fortress.

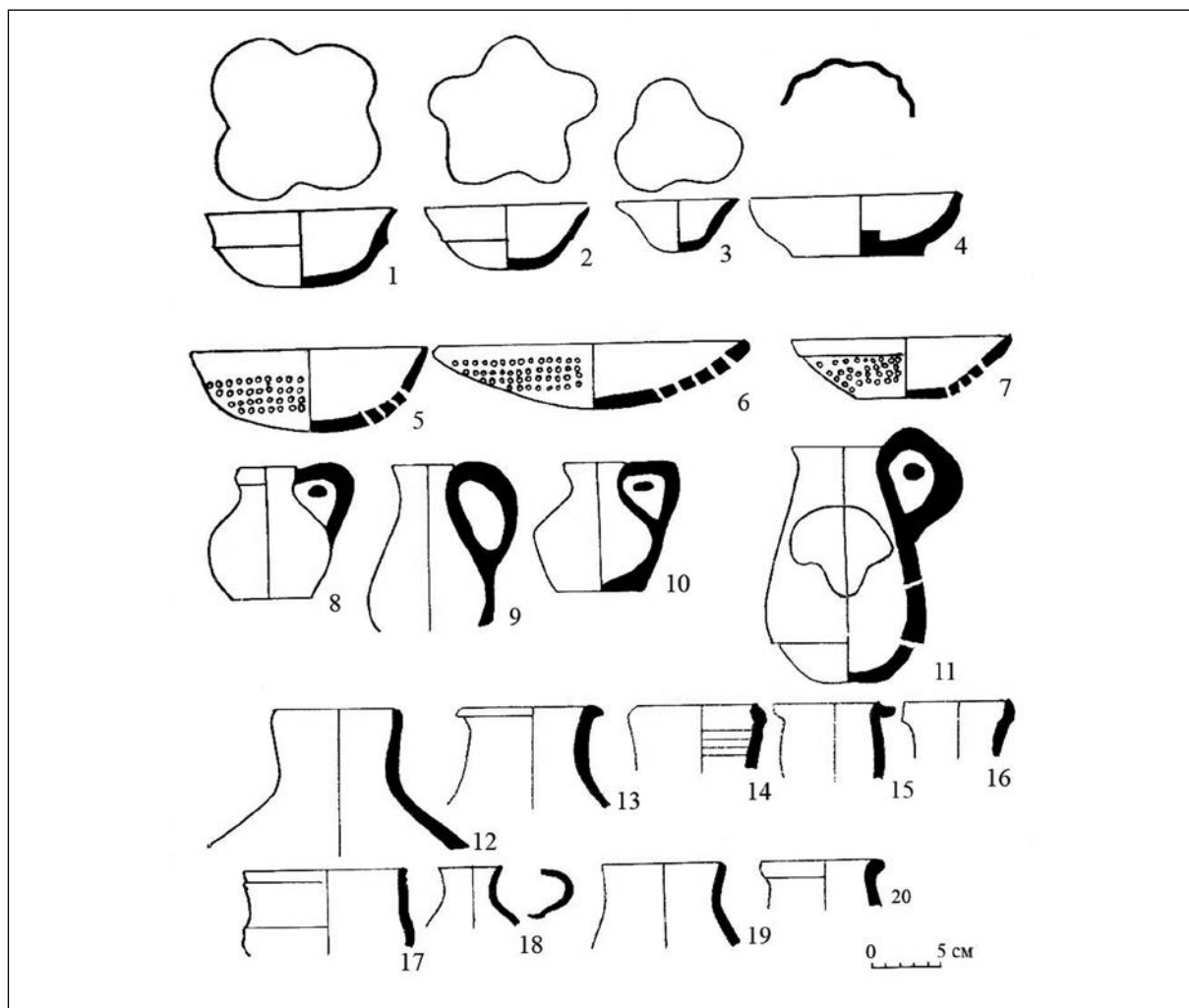


Fig. 41. Kingirtepa. Ceramics.

The authors of the excavations note that all the discovered rooms are almost equivalent, apparently of a residential character. With peculiarities of some of the rooms in consideration, it is possible to identify their functional designation. Particularly, room 6 may be viewed as a kitchen due to the existence of a 1.2-meter diameter pit with pieces of baked clay where there could be put a khum-tandyr, like the one in fortress Kingirtepa (see above), and narrow niches where kitchen utensils were stored. Rooms 1 and 5 can be defined as utility rooms. No main or cult rooms that could have been placed beyond the very building, particularly, in the inn, have been found in the building. In the researchers' view, doorways were not wooden doors but were simply covered by a cloth curtain. The existence of fragments of mud bricks in the rooms illustrates that the latter had arched ceilings.

On the whole, Almantepa is identified as a fortress of a farmer-peasant, though its corridor-comb-shaped planning is typical for not only secular buildings and military barracks but also constructions of a mixed designation (p. 150-152; fig. 1).

The set of earthenware forms is typical for early medieval Ustrushana monuments, consists of bowls with turned, straight or wavy ledge, a prototype of which were the Sasanid spoon-shaped cups (Marshak, 1961, p. 96-103), pots with or without handles, hand-made cauldrons, as well as khums

and khumchas, bowls, censers, and miniature vessels. Nearly all the types find parallels with the earthenware items from the upper layer of Penjikent and may be dated back to the 7th-8th centuries (Bentovich, 1964).

Of other discoveries, we'd like to emphasize two terra cotta figures of a ram, and an extremely rare (for Ustrushana) cornelian intaglio depicting a slim-legged horse (Berdimuradov, Pardayev, 1990, p. 156).

Pardakulteпа. The fortress is located within the territory of the town Jizak, initially represented a 70/80 m hill approx. 8 meters high. The excavations almost fully revealed its central building (20/25 m) erected on a 1.5-meter platform. Besides, a utility area along the northern fortress wall was partially excavated (fig. 44). As a matter of fact, this remains the only Jizak fortress where it became possible to excavate two floors and identify an interesting peculiarity: a keep inside the complex.

The excavations revealed 15 rooms (Pardayev, 1995, p. 12-13; 1997, p. 145-147, fig. 3-4). Three construction periods have been identified. The first period assumes operation of the central building's core - a large rectangular hall with a flat ceiling (room 2) that was intercommunicated with a smaller room and an inn.

The second construction period saw reconstruction in the northern and eastern parts of the large hall. In the northern part there was erected a long narrow corridor linked with southern and northern rooms by passageways. It divides the complex into two unequal parts. In the hall's eastern part there was erected a square mudbrick room with air holes and loopholes linked with the inn. Constructions under the third construction period are subdivided into two stages. The first one envisions reconstruction in the southern section, as a result of which two large rooms are rebuilt into five rooms. Narrow rooms with arched ceilings become entry rooms. There is built the second floor with an entrance ramp. The second stage marks construction of a semicircular tower of mudbricks with the dimensions of 40/26/12 cm; 40/22-23/10 cm; the tower is supported by high walls of neighboring rooms. It served as a look-out station. Loopholes of the building were laid at the time. It appears from the found earthenware (fig. 45) that the fortress Pardakulteпа ceased to exist after the Eftalits clashed the Turkic kaganat (Pardayev, 1995, p. 12-13). Of the discoveries there is distinguished a unique unbroken hearth support whose edges have the form of stylized images of heads of rams (Pardayev, 2002, p. 149, fig. 1) (fig. 46).

Kamilbabateпа, like the fortress Pardakulteпа, is located in the territory of Jizak. In the early medieval period it was a part of the neighborhood of the capital center of settlement Feknan. This is a two-tier monument stretched from the north southward, has the dimensions of 45/70/115 m, height up to 7 m.

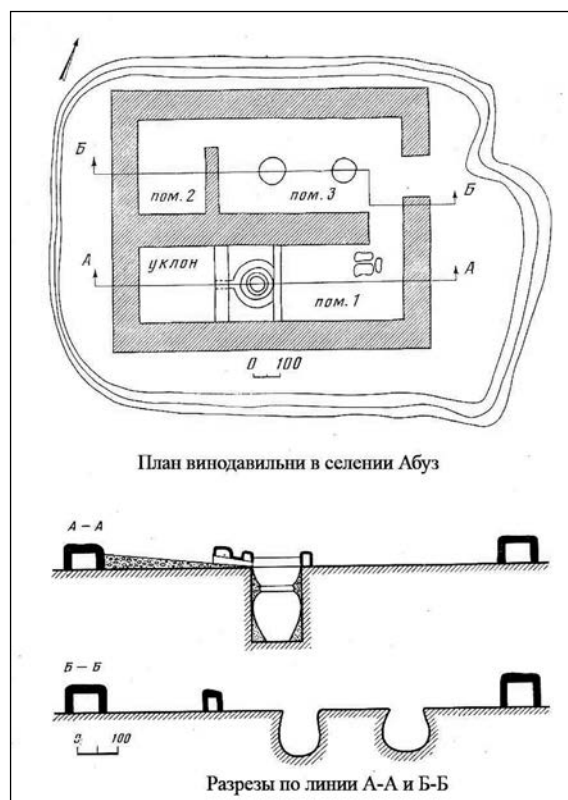


Fig. 42. Plan of winery.

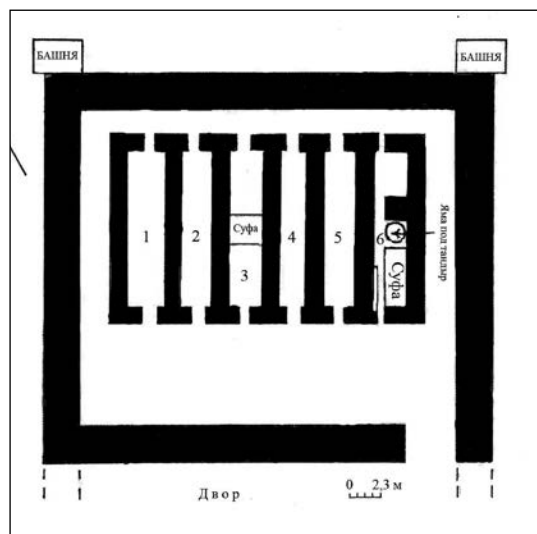


Fig. 43. Almantepa. Plan of castle.

In the citadel there is almost fully excavated an architectural complex (22/25 m) erected on the remains of a building of the previous period (Pardayev, 1995, p. 13; 2001, p. 133-141; fig. 1-5). In the eastern part along the whole building there were located two long corridor-shaped rooms. The northern part consists of two rectangular rooms while the western one - of four rectangular rooms and one narrow corridor-shaped room (fig. 47).

The building seems to have been erected in two stages. At the first stage the northern part was a front one. Here there was located a small hall with the dimensions of 3.8/11 m. The second stage saw certain reconstruction: the hall was divided into two rooms that started being used as living rooms. Corridor-shaped rooms of the complex's southern and southeastern

parts were utility rooms, according to the nature of planning and discoveries. The front room was a central room that had passages from two sides and a hidden passageway in the form of a 0.6-diameter sap turned towards the northern fortress wall.

Of the discoveries it'd be appropriate to emphasize a hearth support with a realistically made head of a ram dated back to the 6th century AD (fig. 48), as well as an early medieval monument with khum graves (Pardayev, 2001, p. 140-141; 2002, p. 149).

Thus, the excavations fully revealed 10 rooms, which make us suggest that the construction was a typical one-storey Ustrushana fortress of the 7th-8th centuries.

Our brief review illustrates that in some latest years there was taken a substantial step towards study of early medieval archeology, history and architecture of North-Western Ustrushana and that the paces of these works are accelerating, becoming more effective from year to year.

Part 2. North-Western Ustrushana in the 9th-early 13th centuries

Arab historians and geographers provide the fullest information about a pre-Mongol Ustrushana. Particularly, Ahmad al-Qatib calls Ustrushana an "extended, important country that includes, as they say, 400 fortresses and some major towns" (Negmatov, 1953, p. 243). A work of unknown author titled "Kitab Hudud al-'alam min al-Mashrik ila-l-Magrib" (A book about the world's boundaries from the east to the west) written at the end of the 10th century calls Ustrushana "a wide, prosperous region with towns and numerous settlements. A lot of wine is exported from here; its mountains produce iron" (Hudud-al-'Alam, 1970, p. 115). The book lists largest settlements of Ustrushana, points out to a fortress in Zaamin (Abdullayev, 2002, p. 121-123). According to al-Istahri, the country's largest part was occupied by mountains: "there is no single river where ships could have sailed, no single lake in it" (Materials of the History of Kyrgyzs and Kyrgyzstan, 1973, p. 18-19). He rather accurately outlines the territory, calls towns: "Ustrushana borders Samarqand in the west, Shash and a part of Fergana in the north, a part of Kesh, Saganian, Shuman, Vashdjird, and Rasht in the south, and a part of Fergana in the east...Ustrushana towns are Arsianiket, Kurket, Gazak, Vagket, Sabat, Zaamin, Dizak, Nujiket, and Harakana, while a town where rulers live is Bunjikat" (p. 18). Al-Muqaddasi added Mars-

manda to the number of these towns (Muqaddasai, 1994, p. 240). In calling the same towns, Ibn Haukal noted that they were the centers of large rustaks and that there were no towns in the rest rustaks (Betger, 1957, p. 20-21). In other words, Ustrushana bordered the Hujand region and Syrdarya in the north, in the south covered a part of upper reaches of Zarafshan and Zarafshan ridge thus being separated from the rest mountainous estates by the Gissar ridge, and bordered the lands of Hujand and Fergana in the east and the lands of Samarqand in the west (Negmatov, 1957, see the map).

According to sources, the territory of Ustrushana was divided into rustaks (districts), No exact number of these districts has been identified; probably, it was not permanent as shown below. Al-Muqaddasi reports that the number was 17 (Muqaddasi, 1994, p. 240) though sources mention only 12 rustaks but make a proviso that all large towns had their own rustak. Proceeding from the latter, it seems that the number of rustaks was 18: Bunjikat, Sabat, Zaamin, Burnamad, Harakana, Feknan, Havas, Shavkat, Faqkat (located in the steppe part), and Ming, Asbanikat, Biskar, Bangam, Vavr, Shagar, Mascha, Burgar, and Buttam (located in the mountainous part) (Negmatov, 1977, p. 43). Rustaks above should be added by Nujikat because it is mentioned among Ustrushana towns, while Havas should be excluded from this number because it was not cited among either towns or rustaks, but was mentioned among Ustrushana's large settlements (Gritsina, 2000, p. 34). While Nujkat had lots of settlements, Havas had almost no settlements at the time. As shown below, our point of view is confirmed by archeological data as well. Besides, the rustak Burnamad was mountainous only by half: another part of it laid in the steppe area. Of mountainous rustaks that had no towns there are mentioned Bushagar (Shagar), Mascha, Burgar (Fargar), Bangam (Bagnam), Mink, Biskun (Biskar), Isbasket (Arsubanikat, Asbanikat), Vavr, and Buttam (Betger, 1957, p. 21).

According to Ibn Haukal, Ustrushana was famous for the abundance of its agricultural produces, which were exported as well: this predetermined a high level of develop-

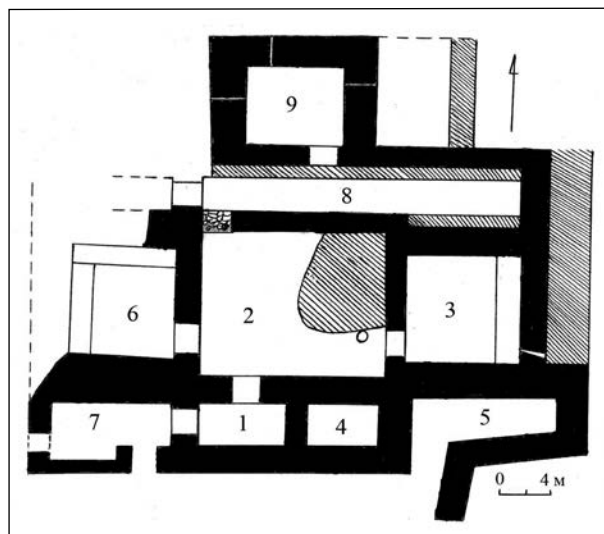


Fig. 44. Parda Kultepa. Plan of castle.

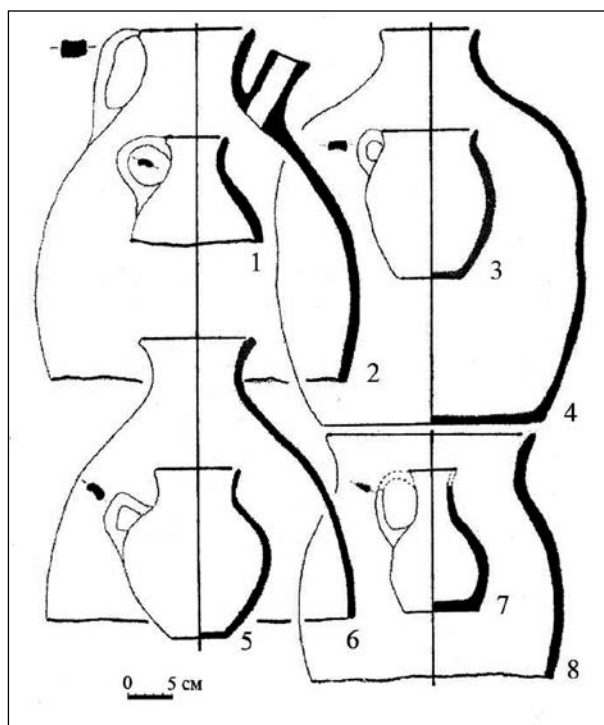


Fig. 45. Parda Kultepa. Ceramics, 4-6th centuries.



Fig. 46. Parda Kultepa. Hearth rack.

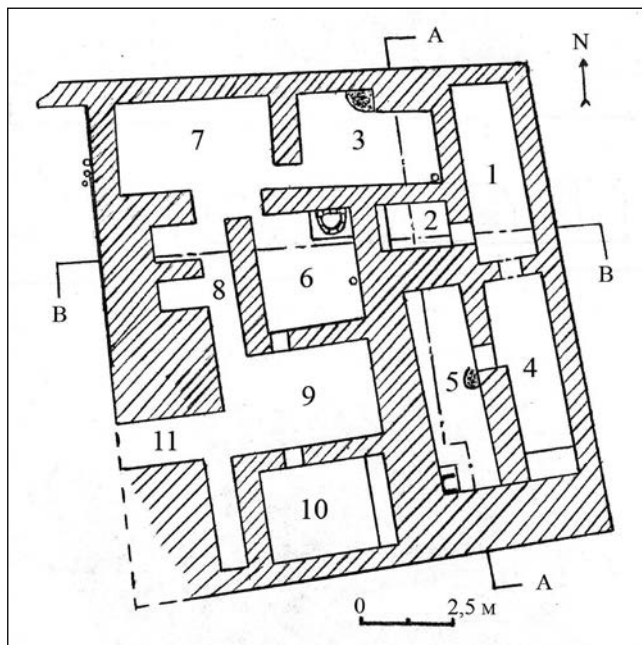


Fig. 47. Komilbabatepa. Plan of castle.

ment of its artificial irrigation. Archeological works have confirmed that information of medieval authors was true (Bilalov, 1980, p. 14 and next). In towns there prospered bazaars and several large, seasonal and regular fairs that gathered residents of rather remote areas. Ustrushana residents were particularly proud of iron weapons (made in the neighborhoods of Mink and Marsmanda), which were “in general use in Horasan” and “spread over an area to Baghdad and Iraq” (Betger, 1957, p. 21).

Capital of Ustrushana was the town Bunjikat that, according to al-Idrisi, was laid at a slope of a mountain. Al-Muqaddasi reported: “Bunjikas is...a large, fertile, important town, waters are full, people are numerous; the town is surrounded by gardens, has beautiful houses (Belenitskiy, Bentovich, Bolshakov, 1973, p. 191). Medieval sources inform that the town was approx. one farsah (6-8 km) in circumference. Its houses and constructions are erected of clay and wood. It was surrounded by two rows of walls. In the town there were castles, inns, gardens and vineyards, as well as a cathedral mosque and a prison. Canal flew through it; there were numerous mills in operation. Male population alone reached 20,000. The outwall had four gateways (darbs): Zaamin, Marsmanda, Nujikat, and Kakhlyabad ones (Materials of the History of Kyrzgys and Kyrgyzstan, 1973, p. 18-19; Betger, 1957, p. 20; Bartold, 1963, p. 223-224; Negmatov, 1953, p.242; Belenitskiy, Bentovich, Bolshakov, 1973, p. 190-191; Mukaddasi, p. 247). Bunjikat is localized in the settlement Shahrستان (the Sogdian district of Tajikistan) at the site of settlements Kalai Kakhaha I-III (Negmatov, Khmel'nitskiy, 1966, p. 191 and next). Archeological works have identified that the citadel and the palace of Ustrushana rulers were located not at Kakhaha II, in contrary to a previous opinion, but at Kakhaha I (Negmatov, Mamadjanova, 1989, p. 92). In the view of G. Goibov, the settlement's shahrستان was located at a territory previously regarded as a rabad (20 hectares). Its very name as if indicates on this. As for the very rabad, it should be sought somewhere around the shahrستان (Goibov, 1989, p. 44-45).

Apart from Bunjikat, largest towns of the North-Western Ustrushana were Zaamin, Dizak, and Sabat accentuated by sources most of all.

Probably, Dizak was the third largest and important town of Ustrushana, though it should be noted that one of the trustworthiest medieval authors, al-Muqaddasi, who gives rather detailed information about largest urban points of North Ustrushana, only mentions Dizak, provides no other information about it (Mukaddasi), 1994, p. 240). Located at the border with a nomadic steppe and a fork of important trade and migration roads, it rapidly converted from a small but strong fortification surrounded by rabats into a small town, which is reflected in its name (Dizak means a small fortress, a small town).

Its initial, antique place of origin is localized at the site of settlement Kaliyatepa in the southeastern outskirts of present-day town Jizak (Pardayev, 2002, p. 123-126) (fig. 47). However, following the known events when

Ustrushana was finally conquered in the 9th century, Dizak shifted to a new place. Supposedly, exactly this “new town” is mentioned by sources reporting that in the 9th-10th centuries Dizak represented a prosperous, densely populated town surrounded by gardens and selected by gaziahs-furious strugglers for the triumph of Islam. Dizak was glorified for its numerous rabats and excellent woolen clothes known far beyond its boundaries (Materials on the History of Kyrgyzs...1973, p. 18-19, 21, 27; Betger, 1957, p. 20). Supposedly, the Samanid Dizak was located at the site of settlement Kaliyatepa or settlement Urda (Nemtseva, 1974, p. 3-5) (fig. 49). However, no materials regarding this period have yet been found (Pardayev, 2000, p. 120-129).

According to Ibn Haukal, the rest towns “closely resemble one another in terms of either size or hygienic conditions or size of gardens and springs” (Betger, 1957, p. 21).

Marsmanda is kept aloof, to extent. Al-Muqaddasi and Ibn Haukal do not cite it among Ustrushana’s towns. However, the latter in another fragment of his work calls Marsmanda a mountainous town, thus evidently accentuating its huge sizes compared with the rest mountainous settlements. The description of Marsmanda is vivid, typical for remote, hardly accessible localities of the district: “An exception is Marsmanda. It is a mountainous town having neither gardens nor vineyards; however, there is running water in it. Severe frosts rule out any vineyards or gardens in the town. It has a wide river that is frozen over. However, there are beautiful flower gardens and meadows and places with delightful location and beauty in the town” (Betger, 1957, p. 20). As is known, local rulers were kings called afshins. Of all Ustrushana kings, al-Afshin is perhaps the most striking personality. Written sources from the 10th century to the late medieval period paid sufficient attention to him (Sabi, 1983, p.90; Baykhaki, 1969, p. 210, 247-251; Siaset-nameh, 1949, p. 227; Asir, 1985, p. 86-90; Minorskiy, 1963, p. 45-47; Hojib, 1972, 964 b; Metz, 1973, p. 317, etc.) A faraway small principdom of Maverahhakhr was suddenly illuminated by the glory of this man so the title of Ustrushana kings - “afshin” - became a proper name. This would be one of the most honored names of the early medieval history (Grunebaum, 1988, p. 84).

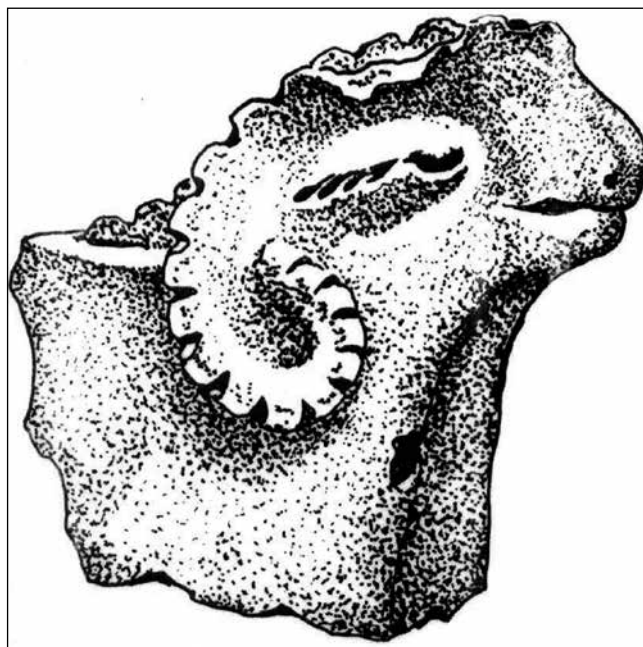


Fig. 48. Komilbabatepa. Hearth rack.

Al-Afshin (his real name was Abu-l-Hasan Haydar ibn Kavus) was a representative of the ruling family who substituted the dynasty of the early rulers, who we know from coins. As has been noted, coins of afshin Rakhanch III saw the appearance of a new symbol - equilateral cross - so we've assessed its appearance as a sign reflecting the collisions of this time of trouble. Regretfully, we don't know how struggle between these two dynasties developed, and we're unaware of exact dates of main events or periods of rule of a certain ruler. However, owing to coins and the information obtained as a consequence of the coins' deciphering (see: Smirnova, 1981, p. 30-35, 230, 324-335), it is possible to restore them with a certain share of probability.

When the Arabs started conquering Central Asia regions, they saw lots of separate small estates there. The West Turkish kaganat, of which they were part, in the middle of the 7th century became weaker as the Chinese defeated it and later on ceased to exist at all. Nevertheless, Turks continued to remain strong enough to provide a substantial influence on the internal life of Maverannah. They often helped local rulers fight the Arabs through interfering with discords among dynasties of various estates. It seems that the Turks also played a certain role in the establishment of a new Ustrushana dynasty. The dynasty's founder was most likely afshin Harabugra, a great grandfather of al-Afshin. This happened in around 720 or a bit earlier. The assumption is more than probable because the very name of the new ruler is indicative of his Turkic origin (Grunebaum, 1988, p. 84). In the opinion of E. Vaissiere, Afshin Harabugra became the ruler a bit later, after the Arabs invaded Hujand in 722 (Vaissiere, 2001, p. 26-27). It is known that at this period many rulers maintained permanent relations with West Turkic khans, often established kindred links with them. It is no coincidence that al-Afshin's son Hasan ibn Haydar, later on the former's deputy in Ustrushana, married a daughter of a Turkic military leader. However, there are no solid grounds to regard Ustrushana kings as Turks, in contrary to suggestion of O. I. Smirnova (Smirnova, 1981, p. 34-35). A report by al-Belazuri reads that it was afshin Harabugra who successfully opposed Kutaiba ibn Muslim when the latter organized a special raid against Ustrushana (Goibov, 1989, p. 44).

Afshin Harabugra for the first time is mentioned by at-Tabari in connection with the events of 737 when he, together with the Turkic khan and rulers of neighboring districts once again attempted to oppose the Arabs. This time the coalition was defeated again. The same source informs that when after the defeat the hakan "arrived in Shurusana, he was met by Harabugra, the father of Hanahara and the grandfather of Kavus-the father of al-Afshin, with musicians; Harabugra gave him gifts and horses to his troops. Relations between them were hostile; however, when the defeated hakan returned, Harabugra desired to establish influence on him so he gave him everything he could" (Tabari, 1987, p. 253).

In the next year, 738 he was substituted for Hanahara whose rule was one of the longest in the history of Central Asia (about 60 years). Like his father, he tried to pursue an independent policy. In the very first year of his rule raiding Ustrushana on his way to a neighboring Chach was a prominent Arab military leader, later on a deputy of Horasan Nasr ibn Sayyar. Hanahara was forced to pay him money to reject his claims (1987, p. 269). In 752 he asked Chinese for military aid but was denied his request; nevertheless, he does not stop fighting the Arabs. Beyond any doubts, this was a stubborn, long struggle. In 795 new deputy of Horasan al-Fadl ibn Yahiyya raided Maverannah. At-Tabari laconically noted: "He was welcomed by Hanahara, a king of Ustrushana who earlier displayed disobedience" (Tabari, 1987, p. 366).

Sources report almost nothing about the rule of Kavus, the father of al-Afshin. It is known that becoming a ruler of Ustrushana soon was his son Haydar ibn Kavus or al-Afshin, as he's called by all

written sources. In this respect, Hilal as-Sabi reports an interesting detail that “Haydar ibn Kavus was awarded the title of al-Afshin because he is an Ustrushana native, and al-Afshin means “king” in that language...”(Sabi, 1983, p. 90).

In 822 the Arabs managed, after all, to break down the resistance of Ustrushana residents, one of the last residents of Maverannahr districts, and occupy their country. Perhaps having realized that any further resistance is useless, Al-Afshin makes an unprecedented action: he surrenders to the victors, takes their side and also helps them conquer his own nation. What was the reason of this step? It is possible to conclude from his further life that this was a kind of tactical step, a retreat for the sake of the future, his career, and his country that he nevertheless continued to rule (Abayev, 1959, p. 113).

According to sources, al-Afshin practically didn't have to rule his state. Nevertheless, before taking Islam and leaving for the Caliphate's capital, he left a long memory of him. According to al-Ishtahri, Ibn Haukal, and as-Samani; linked with his name is the construction of a rabat viewed as the largest one in Maverannahr. It was called rabat Khudaysar, had a water spring with cupolas erected over it (Materials of the History of Kyrgyzs..., 1973, p.27; Betger, 1957, p. 20, Kamaliddinov, 1993, p. 100). As we suggest, it is comparable with caravansary Purtkulpepa near the settlement Pshagar in the Zaamin region (Gritsina, 1999, p. 76-78; 2000, p. 70-73) as shown below. Besides, al-Afshin seems to have made a considerable contribution to the establishment of a Central Asia unique facility specialized in extraction of iron ore and production of iron implements near his family estate in the rustak Mink; the facility became known far beyond the estate's boundaries (Masson, 1953, p. 22, 28).

A further fate of al-Afshin is closely linked with the Caliphate. Together with his associates, he was given a benevolent reception by the courts of caliph al-Mamun (813-833) and then caliph al-Mu'tasim (833-842). His talent of a military leader was here displayed in full. In 831 he attains a success in suppressing anti-Arab revolts in Egypt and Magrib (North Africa) and then for a relatively short period of time totally defeats mazdakid Babek from Azerbaijan in West Persia where Hurramits-fire worshippers were fighting the Caliphate for more than 20 years (816-838) (Grunebaum, 1988, p. 84).

At this time the popular movement of Hurramits that still remains unguessed covered the territories of North-Western Iran, Armenia, and Azerbaijan. Their ideology comprised a fanciful combination of many pre-Arab doctrines of the Middle East. Anyway, this was a clearly expressed anti-Islam ideology that found a frequently negative reflection in many Moslem sources. Prominent Arab historian Ibn al-Asir (died in 1234), the author of a multi-volume “Tarih al-kamil” (“World History”), details about a rebellion of Babek. According to him, in 817 “Babek-Hurramit who headed the Javidanits, followers of Javidan ibn Sahl, the ruler of Badd, was filled with indignation (the residence of Babek is located south of the River Arax -A. G.). Babek alleged that the spirit of Javidan had entered him so he began running riots and ravaging. Javidan is interpreted as eternal, permanent; hurram -as gladness (joy). They profess the teaching of magicians. They believe in transmigration of the souls and that the souls transmigrate from one animal to another...”(Asir, 1985, p. 86).

Caliph al-Ma'mun failed to cope with the rebels. In his testament he wrote: “As for the Hurramits, send against them an energetic, devoted, quiet man, support him with money and troops, and if they resist long, act against them jointly with your associates and friends” (Asir, 1985, p. 87). Al Ma'mun's successor al-Mu'tasim fully performed this part of the testament. He found “an energetic, devoted, quiet” man in the face of al-Afshin, who came to him with his men-Ustrushana and Fergana residents.

Ibn al-Asir describes the defeat of the Hurramits as saying: “In this year 222 (837) Badd, the town of Babek was invaded by Moslems who ruined and robbed it...The things were as follows: having de-

cided to move towards Badd, al-Afshin started moving forward slowly. Having seen that his troops were surrounded from all the sides, Babek left Badd.

The envoy of al-Afshin came to turn the troops back but was told that Fergana residents had already entered Badd with their banners and climbed the fortresses. Then he, al-Afshin sat on horseback, shouted to his troops and together with them entered the town...against Babek's fortresses where lying in ambush were 600 men, who came out and attacked the assaulting troops. Having taken use of this, Babek invisibly left for a gorge. Meanwhile, Al-Afshin and his troops were busy in fighting at the gates of fortresses, which upon his order were burnt by fire throwers...The troops ruined the fortresses and killed all the Hurramits while al-Afshin took Babek's children and all his family prisoners" (Asir, 1985, p. 86).

Babek managed to hide in the mountains of Armenia for a certain period of time. All his attempts to penetrate the "country of Rums", emperor of which Theophile (829-842) favored him, failed. Finally, tempted by a great reward, one of the rulers of Caucasian Albania extradited him to al-Afshin. In 838 Babek and his brother Abdullah were brought to Samarra. Caliph al-Mu'tasim cruelly reprimed over his sworn enemy. He ordered "cutting Babek's hands and feet, after which Babek fell on the ground. Then al-Mutasim ordered to slaughter him so he was disemboweled; al-Mutasim ordered to send his head of Horasan, while his body was crucified in Samarra". In the same way they treated Babek's brother, Abdullah (Asir, 1985, p. 89-90). According to another version, when Babek had one his hand cut off, he put the other one in blood and smeared his face. Then the Caliph ordered to sew up Babek in oxhide to put the horns onto behind his ears. Later on Babek was hanged and died in agony (Siaset-nameh, 1949, p. 227).

As if in an effort to justify this cruelty, Ibn al-Asir delivers Babek a "bill". "For twenty years Babek killed a total of 155,000; he defeated military leaders Yahya ibn Maaza, Isa ibn Muhammad Abu Halid, Ahmad ibn al-Junaida (the latter was taken prisoner by him), Zurayk ibn Ali ibn Sadaka, Muhammad ibn Hamid at-Tusi, and Ibrahim ibn Leys" (Asir, 1985, p. 90).

The victory makes al-Afshin a favorite of caliph al-Mu'tasim who showers "the greatest of his servants" (Minorskiy, 1963, p. 45) with every kinds of honors. Al-Bayhaki (the 11th century) informs that when al-Afshin "ended the victorious war against Babak Hurramdin and arrived in Baghdad, al-Mu'tasim, the sovereign of believers, met him with honors, ordered all the pedestrians to accompany him on his way toward the palace" (Bayhaki, 1969, p. 210). According to Hilal as-Sabi (the 10th-11th centuries), he was granted with honored dresses with a belt and a sword encrusted by bracelets and ten-kopeck coins; on his head there was put a turban with its edges encrusted by jewels as well (Sabi, 1983, p. 90). Al-Afshin was proclaimed the savior of the empire and became the second important man, after al-Mu'tasim, of the Caliphate. His glory became wider due to his new victories, including a victory over Byzantines. He is appointed Caliph's deputy in Armenia and Azerbaijan. During military battles al-Afshin does not forget about his creative activity. According to Ibn Hordadhbeh (the 9th century), in Azerbaijan he built and settled the town Barzand. Sources started mentioning him Afshin the Great more frequently.

Naturally, all these victories also glorified the very caliph, as they took place during his rule, and beautified his crown. It is no coincidence that Nizam al-Mulk, who deeply knows the history of Islam (Lambton, 1984, p. 55-64) noted: "Mu'tasim had three victories, all they aimed to glorify Islam: the first victory was over Rum, the second victory-over Babek, and the third victory-over Maziar Gyabr from Tabaristan. If it weren't even one of these victories Islam would have been destroyed" (Siyaset-nameh, 1949, p. 227-228).

Certainly, all this could not help exciting envy in caliph's courtiers, who either feared or fawned upon al-Afshin. In changing gradually his attitude towards his favorite, the caliph himself more and more annoyed him with his extreme claims. Now the caliph not only praised but also roughly abused him at minutes of displeasure. The courtiers rapidly catch the change of sentiments, back it in any possible way. Vizier Ahmad ibn Abu Du'ad is so indignant at the humiliation he experienced when he says: "...I began praising Persians, for this man was one of them, from Ustrushana. I put Persians about Arabs though I understood that this was a great sin...but al-Afshin did not listen to me, this carrion, semi-atheist sets me at defiance" (Bayhaki, 1969, p. 251).

Clouds were gathering over al-Afshin when the Caliph learnt that the former all these years long maintained links with his family estate - Ustrushana - and had direct relation to a plot that aimed to overthrow Arab yoke and restore the religion of his ancestors (Negmatov, 1977, p. 18-19; Kadyrova, 1965, p. 179-181; Bartold, 1965, p. 497). The Caliph did not question the trustworthiness of his sources, so al-Afshin was deposed, accused as an apostate of Islam and sentenced to hunger death in prison where he died in 841. His body was first crucified at the gates of Samarra, then was burnt, and the ashes were scattered over the River Tigr (Abayev, 1949, p. 112; Bartold, 1965, p. 497).

Of no less interest is that we know rulers of the early dynasty only from coins and that of later dynasties -only from written sources just except for Sayr ibn Abdullah whose name became known to us due to numismatics (Bartold, 1963, p. 269; Kochnev, 1994, p. 65; Kalinin, 2001, p. 57-58; Dovudi, Sharipov, 2002, p. 114-116.) As a matter of fact, this is the last Ustrushana ruler we know about. What was the fate of Afshins after Ustrushana was conquered by the Arabs in 822? Below are given few facts available from sources.

At the end of 8th century-9th century Central Asia saw a strong rise of popular movements that made the Caliphate so weaker that the local nobility started declaring themselves at the top of their voice. Centrifugal tendencies, interrupted by the Arab invasion, restarted being intensified. Feared by the growing influence of the family of Barmakids, the natives of Balkh, Caliph Harun ar-Rashid (789-809) exterminates this family. However, it is substituted for another dynasty-the Tahirids (Gafurov, 1972, p. 333-334.)

The dynasty's founder Tahir ibn Hussain, a native of the Herat region, acquired a great influence under the court of caliph al-Mamun (813-833) and soon became a deputy of Khorasan with Maverannahr traditionally being its part. Either Tahir or his successors pursued an independent policy in an attempt to fully rid of the Caliphate's protectorate and unite these regions under the former's rule. Under the rule of his son Talh (822-828) Islam was intensively planted in Ustrushana; anti-Caliphate rebellions were cruelly suppressed. Talh in any possible manner contributed to Ustrushana's being conquered, gave generous gifts to its conqueror, Arab military leader Ahmad ibn Abu Halid al-Ahval. His brother Abdullah ibn Tahir (830-844) feared the strengthening of local nobility in him-ruled districts and thus tried to prevent it. Ustrushana rulers living in hardly accessible mountainous fortresses permanently made him anxious. Abdullah's alert eye was Samanid Nuh ibn Asad, who ruled Samarqand and often interfered with the internal affairs of this estate (Kadyrova, 1965, p. 154-155). Furthermore, afshins (first Hanahara and then Kavus), having recognized the power of Harun ar-Rashid, did not recognize his son al-Mamun, who succeeded him, and thus refused to pay taxes. Exactly these circumstances made Ahmad ibn Abu Halid raid Ustrushana (Negmatov, 1977, p. 18-19).

Viewing al-Afshin as a dangerous enemy, Abdullah greatly contributed to the trial over him in 840. The trial unexpectedly revealed that despite all the political efforts and repressions, they in Ustrushana professed Islam only formally, in reality professed the religion of their ancestors (Kadyrova,

1965, p. 179-180; Gafurov, 1972, p. 292). Contributing to this was al-Afshin himself and his successors, though Moslem cult buildings in towns of Ustrushana were used rather actively in the 9th century. According to Arab sources, there had been a cathedral mosque in the “old town”, i.e. pre-Arab town before it shifted to a new place (Betger, 1957, p. 20-21). Nevertheless, idolatry was developed very strongly in Ustrushana (see below). According to sources, al-Afshin himself “was a Moslem only by his appearance” (Negmatov, 1957, p. 73-74). It is no coincidence that al-Afshin was accused primarily of idolatry at the trial (Negmatov, 1957; Smirnova, 1953; p. 190; 1971, p. 105). There is an illustrative testimony by two Sogdian residents, who said that al-Asfhin had allegedly ordered to beat them cruelly for having attacked a temple with idols and thrown idols out and for having made the temple a mosque (Belenitskiy, 1954, p. 59; Negmatov, 1957, p. 74). In mountainous regions of Ustrushana the population remained devoted to its religion until the Mongol invasion, as confirmed by either archeological or written sources (Pulatov, 1993, p. 87-88; Smirnova, 1971, p. 105).

The Samanids started rising almost simultaneously with the Tahirids. For services rendered to him caliph al-Ma'mun granted various regions of Maverannahr to representatives of this dynasty. Ustrushana and Shash fell under power of the dynasty father as-Saman's grandson Yahya ibn Asad who ruled these regions till his death (820-856). After he died Ustrushana fell under power of his brother Ahmad who then appointed his son Yakub as ruler-governor of this region.

It should be noted that such form of the rule was being granted at the time, so a ruler-governor took over certain land estates to rule them temporarily. The key duty of a ruler-governor was to collect taxes to the caliph's treasury. Often, having the actual power were local rulers, like this happened in Ustrushana.

As has been noted, when al-Afshin was absent ruling Ustrushana as a ruler-governor was his son al-Hasan. However, after al-Afshin was put in prison, caliph al-Mu'tasim ordered to seize his sons as well. Instructed to arrest them, Abdullah made an artful step as he feared to act openly. He granted to al-Hasan a diploma to govern Maverannahr and at the same time instructed Nuh ibn Asad to arrest al-Hasan and his associates. The instruction was performed diligently because doing away with the afshin allowed Nuh to rid of a dangerous rival for ruling Maverannahr. Beyond any doubts, afshins really pretended for a higher position than they kept as appanage princes. This is proved by the peripeteia of the Tahirids and Samanids' struggle against al-Afshin and his relatives, and the very fact that Hasan accepted the post granted to him as something expectable.

Written sources tell us nothing about a further fate of Hasan ibn al-Afshin. Numismatic data make us suggest that this dynasty continued to rule Ustrushana and that the traditional principle of power's direct succession from a father to a son was not violated (Smirnova, 1970, p. 37).

Ustrushana coins minted on behalf of a local ruler restarted being minted in 279 Hegira (893-894) for the first time after a long pause (since the period of rule of Rahanch III, i.e. 100 years). They were bronze coins of afshin Sayr ibn Abdullah (Bartold, 1963, p. 269, 282; Kochnev, 1994, p. 64-65; Davudi, Sharipov, 2002, p. 114-116). Naturally, minting coins envisages certain economic and political independence. This is to assume that this act represented the last, desperate splash or effort in the long struggle for independence that the Ustrushana residents had been conducting unsuccessfully.

It seems that as-Sayr rather quickly paid for his “boldness” and, as identified by V. V. Bartold, yet in 893 Ustrushana was finally conquered and linked to the original estates of the Samanids (Bartold, 1963, p. 282). Besides, we don't know whether as-Sayr and his dynasty were dethroned or continued to rule as vassals. Anyway, in other regions of Maverannahr, particularly, Chach local rulers

possessed a rather strong influence until the Mongol invasion, and some of them were authorized to mint their own coins.

We know the names of 14 afshins of Ustrushana (see Smirnova, 1981, p. 230, 324-335, 428). Of them, seven were representatives of the first “coin” dynasty, and seven were representatives of the second, last dynasty of rulers. Among the names of the first dynasty there’s probably also hidden an unnamed young king mentioned by Chinese chronicles above. Below is given a list of rulers, in order of succession.

First dynasty (ruled from approx. 600 to 720 AD)	Second dynasty
Chirdmish	Harabugra 720-738
Satachari I	Hanahara 738-800
Rahanch I	Kavus 800-825
Satachari II	Haydar (al-Afshin) 825-840
Satachari III	Hasan 840-860
Rahanch II	Abdullah 860-880
Rahanch III	Sayr 880-893/894

As sources mention no timelines of rule of afshins, data above are approximate. The very succession only orients, not provide the exact picture. However, let’s hope for new interesting discoveries, which will improve, add substantially to our knowledge.

The state of the Samanids entered the history of Central Asia as the first independent centralized state founded by a local dynasty since the Arab invasion. Could any other local dynasties be its founders? What were chances of, say, Ustrushana dynasts?

As is known, the Tahirids and the Saminids managed to rise due to a permanently growing economic strength of the Caliphate and the correct assessment of the then political situation. In other words, they “in a needed moment found themselves in a needed place.”

Following the death of caliph Harun ar-Rashid in 809, his sons Amin and al-Mamun fought for the Baghdad throne till 813 (Gafurov, 1972, p. 332-334). The Tahirids dynasty’s founder Tahir ibn Hussain decisively took the side of al-Ma’mun through displaying unordinary capabilities of a military leader and, after al-Ma’mun became the caliph, made a breathtaking career. He is appointed as a governor of Jziera (North Mesopotamia), heads a very prestigious, profitable agency specialized in the management of all natural taxes in Iran and at the same time remains the chief military leader of the Caliphate and Baghdad.

However, these territories’ being remote from his native places was not good for him, so he soon got a post of governor in Horasan. It is Tahir who, after having settled down in Horasan, shifts the capital from Herat to Nishapur, which becomes one of the most prosperous, famous towns under the next caliph al-Mu’tasim. However, his end was to the same extent sad. He pursued too independent policy as regarding the caliph, very often disregarded the latter’s will. His desire to separate and rule independently was too evident. The conflict reached its peak after Tahir suggested excluding the mentioning of the caliph’s name from the Friday prayer in the cathedral mosque, which meant direct disobedience. Not daring to launch a direct military assault, caliph al-Mamun poisoned him through his agents. However, the rule was passed to Tahir’s ancestors.

The Samanids began rising when a to-be head of dynasty as-Saman drew attention of a to-be caliph al-Ma'mun when the latter was a ruler-governor in Merv. After their relations became closer as-Saman, influenced by al-Mamun, parts with the ancient religion of his ancestors and takes Islam, according to sources. Approximately at this time there also rises as-Saman's son Asad, who was also favored by al-Ma'mun thanks to whom Asad took Islam. However, the position of the Samanids became particularly strong under as-Saman's grandsons Nuh, Ahmad, Yahya, and Ilyas who rendered al-Ma'mun, the ruler-governor of Horasan and Maverannahr at the time, a great service to suppress a rebellious Arab military leader Rafi ibn Leys-led mutiny (in 806) that covered practically all largest land oases of Maverannahr. Al-Ma'mun perfectly realized what danger threatened the Caliphate. The brothers managed to win Rafi ibn Leys's trust, pursue him to conclude armistice and thus split him-led movement. The mutiny was suppressed in 810, and the brothers were appointed as rulers-governors of various regions of Maverannahr.

Representatives of the Tahirids and Samanids took a direct part in the then main events.

Keeping quite a different position were representatives of the dynasty of Ustrushana rulers who took every opportunity to rid of claims of the caliph and his deputy governors. They permanently supported anti-Arab movements. Thus, afshin Kavus used "the time of trouble" (806-814) when the sons of the deceased caliph Harun ar-Rashid fought one another for power to get separated from the Caliphate, and stopped paying taxes. Besides, he did not recognize new caliph al-Ma'mun. It seems that Kavus's shortsighted, failed policy caused a serious conflict within the dynasty. Written sources give rather detailed information about this moment of the political history of Ustrushana (Bartold, 1963, p. 269, 282). The elder son Haydar, i.e. al-Afshin tried to overthrow his father to seize power. He was opposed by his brother Fazl. In the heat of the struggle al-Afshin kills his brother-in-law, who backed Fazl, and enjoys help of a local representative of the Arab power. At this moment, Fazl called for Turks to help him. Al-Afshin was forced to retreat but did not give up his intention to seize power with the help of Arabs, so he left for Baghdad.

His coming was very opportunely. Ustrushana had long been troubling the caliph by its declination to pay taxes to the treasure and thus negatively affected the neighboring areas by its "example". In 822 Arab military leader Ahmad ibn Abu Halid enters Ustrushana with his troops. Perhaps, al-Afshin's capabilities of a military leader started being displayed at this moment, to be frank, not in favor of his native country. With his help the Arabs could take Kavus unawares, force him to surrender rapidly. The Turks and Fazl retreated to the steppe; however, Fazl soon leaves them and joins the Arabs. Kavus was forced to leave for Baghdad to take Islam to confirm his previous commitments, so he was let remain the ruler of the region.

It is not clear why staying at power was the father, not al-Afshin, given that everything went very well for the latter. It seems that the obstinate son found common language with either the Arabs or the household, decided to use his father's loyalty to the Arabs as an opportunity to declare himself in the Caliphate. It appears from written sources that he excellently realized this opportunity after the death of Kavus when al-Afshin took the Ustrushana throne by right of succession.

Having begun his career under the court of caliph al-Ma'mun and continued it under the court of caliph al-Mu'tasim (833-842), al-Afshin soon becomes the first person in the Caliphate and one of the most influential men in the Moslem world. It is no coincidence that the Tahirids and the Samanids viewed him as a rival, threat to their power. Like once Mesopotamia was not good for Tahir ibn Husain, a post of ruler-governor of Armenia and Azerbaijan, too remote from Horasan and Ustrushana, was to the same extent not good for al-Afshin. His position allowed him to hope for becoming a rul-

er-governor of Horasan and Maverannahr after a certain time. He planned to separate these regions from the Caliphate to establish an independent state. It was only necessary to choose an appropriate moment. This moment really came.

In 839 the ruler of Tabaristan, a small province located south of the Caspian Sea, Mayziar ibn Karin (Mayziar Gyabr) from the dynasty of the Isphehbadis, having felt his economic and military strength, refused to obey Horasan's deputy governor Abdullah ibn Tahir. Regarding himself as a person equal to Abdullah, he started circumventing the latter in paying tributes directly to the caliph. Caliph al-Mutasim found himself in a delicate situation. Mayziar apparently broke the established tradition, under which the caliph did all his businesses only through his deputies. In this case, he had to call the rebellious ruler to order, again through his deputy in Horasan. However, al-Mutasim himself hated and feared Abdullah, a strong, clever ruler, and dreamed of ridding of him in future. Al-Afshin felt the moment well and offered Mayziar his full support against Abdullah and the Caliphate on the whole (Negmatov, 1977, p. 18-19). They were united by not only common goals but also common religion of ancestors that they continued to profess secretly. The calculation was accurate. The mutiny apparently took an anti-Arab character. Al-Afshin was sure that the caliph would send exactly him to suppress the mutiny, so a success would be ensured.

Al-Afshin's plans were thoughtful, real because he might hope for a backing from outside, particularly, the Volga Khazar kaganat, with which he could maintain links supposedly through his deputies in Azerbaijan (Negmatov, 1977, p. 19). Aid should also have been provided from his remote estate - Ustrushana - ruled by his son al-Hasan on behalf of him.

However, unforeseen circumstances occurred. Al-Mu'tasim learnt that a mutiny in Tabaristan was under preparation. Its scope was so wide that caliph, fearing the outcome and knowing about hostile relations between al-Afshin and Abdullah, decided to send another military leader to Tabaristan. This was the end, for any secret always become evident. Al-Afshin was too ambitious. He did his best to bring al-Mu'tasim over, but the caliph remained adamant. This decision turned to be an hour of al-Mu'tasim's triumph. The victory over Mayziar Gyabr, like over Byzantines and Babek, was one of the most significant successes of the caliph (Siaset-nameh, 1949, p. 228). A mutiny thoroughly prepared by Mayziar was suppressed. Al-Afshin's rival in fighting for power in Horasan, Abdullah ibn Tahir had two victories: one over Mayziar, another-over al-Afshin. He got too many evidence: al-Afshin's instigating letters, a book of the old religion, and a decorated idol-all these were illustrative of apostasy. There were identified fortresses Hurmuzadab where Mayziar lived. It was alleged that the spoils that stemmed from the suppression of Babek's mutiny were sent to not the caliph's treasury but Ustrushana. Accusations forwarded by the victor were too serious, so the caliph was forced to kill his favorite. Thus, the dynasty of Tahirids gave the upper hand in the tough struggle for power in Horasan. However, facts above illustrate that the things could be quite different. If al-Afshin managed to overthrow the dynasty of Tahirids like Saffarids did, he, probably, would have become a deputy governor of Horasan and Maverannahr and later the founder of a new state- the state of Afshinids.

An important stage of development of the statehood of Ustrushana is closely linked with the Samanid state, the first medieval centralized state established by a local Central Asian dynasty (Gafurov, 1972, p. 338-340).

In 893 the history of the Samanid state saw a turning point: following the death of Nasr ibn Ahmad the whole power is transited to his brother Ismail (893-907). Ismail is believed to be the most prominent Samanid ruler, as a matter of fact, founder of a state. Later the same year he finally makes Ustrushana subordinated to him, so the last afshin we know about - Sayr ibn Abdullah - disappears

from the historical arena having stopped minting his own coin (Bartold, 1963, p. 282; Negmatov, 1977, p. 25). As a talented, successful military leader, Ismail continues his rapid expansion toward the north, makes nomads subordinated to him. He immediately seizes Taraz, takes 10,000 Turks and the khan prisoners. The Christian temple becomes a mosque; the Islam banner rises in the steppe. According to al-Istahri, “Taraz is a boundary between Turks and Moslems, surrounded by fortification walls also called Taraz. The boundary of spread of Islam reaches to this place and from there to markees of Harluks. This (at the same time) is a border of Shash” (Materials of the History of Kyrgyzs..., 1973, p. 30). Nomads leave the young but strong state alone for a long time.

Possessing experienced, effective troops, Ismail no longer needed expensive, sometimes low-effective fortification walls that safeguarded the prosperous oases against nomads. He’s appropriately ascribed words that have become a proverb: “I’m the wall of Bukhara until I’m alive” (Gafurov, 1972, p. 340; Khmel’nitskiy, 1992, p. 14-15). Given that Bukhara was not only a longtime residence of Ismail but also the capital of a state, these words were to the same extent true as regarding all his estates.

Several years later he establishes “order” at the state’s southern boundaries as well through having dethroned the dynasty of Saffarids and having linked Horasan and a number of Iran’s districts to his estates. This marked final establishment of a mighty, prosperous state free of the Arab caliphate’s protectorate and headed by a local dynasty. The prestige of the state was so great that Persian sources sometimes call the Samanids “rulers of the faithful”, i.e. provide them with the title allowed for caliphs only. Stabilization of the situation contributes to a rapid economic development. Old trade ways are getting restored, start operating; new ones are under formation. Towns grow, become stronger, and there emerge new settlements, particularly, Hushket. This is the beginning of the so-called “Moslem Renaissance” when other Moslem countries are also on an unprecedented rise (Metz, 1973).

Site of settlement Nurata-Hushket. The settlement Nurata is located in Saykhunobad district of the Syrdarya region, at the Right Bank of Syrdarya. It is marked on the map by V. F. Karavayev (Karavayev, 1914, see the map), mentioned by M. E. Masson in connection with localization of the Christian settlement Vinkerd Masson, 1934, p. 18). Minor archeological works were carried on by V. A. Nielsen (Nielsen, 1966, p. 213); in 1984 the site was explored by the Syrdarya expedition (Alimov, Sverchkov, 1987, p. 136). Excavations led by the author took place at the site of the settlement in 1987 and 1989 (Gritsina, 1996, p. 82-92; Gritsina, 2008, p. 239-256; Gritsina, 2011, p. 106-107). At present, the monument’s largest part has been leveled as a consequence of exploration of lands, while another part is occupied by a settlement of the same name. There has been conserved only the top-elevated area of around 7.5 hectares that is occupied by a cemetery (fig. 50). It is identified as the medieval town Hushket that was located near a crossing from River Syrdarya to the Shash’s largest town-Benaket (Gritsina, 1992, p. 36-41; 1996, p. 91). Six excavated areas were laid at various parts of the monument (fig. 5). Most interesting materials stem from the excavated area 4 that is laid in the cemetery’s southeastern part, at its most elevated point. Here there has been obtained most numerous, stratified material, dating of which is confirmed by coins. There have been identified four residential horizons (fig. 50, 1-4); in the lower horizon (4 m of the ground) there has been discovered a room made of tile walls (fig. 50, 4). Here there were cleared two hearths, remains of a tandyr (kiln) and a pit. The obtained set of materials is appropriately dated by a coin of Ismail ibn Ahmad minted in 290 Hegira/902-903 (Gritsina, 1996, p. 85).

In the second residential horizon (3.5-2.5 m of the ground) there has been found a room of tile bricks and mudbricks with the sizes of 40/22/8 cm (fig. 50, 3). The horizon’s upper part underlying the third residential horizon’s floor represented a backup filled with fragments of tile (fig. 50, 1). An

unbroken small baked earthenware hearth with an abundant slag mixture in the form of a crescent has been cleared at the base wall (fig. 50, 4). Aren't such small hearths prototypes of mobile small hearths of mountainous Tajiks who call them "degduni sargardun", which means "nomadic hearth"? (Pesherova, 1959, p. 69). In turn, the roots of "nomadic hearths" should be sought in earlier cultures, most likely, the Kaunchi one where mobile hearth supports were spread widely (Levina, 1971, p. 102, fig. 29; p. 105, fig. 30, etc.)

In the third residential horizon there has been found a room of tile walls (fig. 50, 4) where an unbroken khum with two handles was discovered. The khum is covered by baked bricks with the sizes of 35/18/5 cm.

In the fourth residential horizon there has been discovered a room of tile walls apparently representing a lavabo room with tashnau, a lavabo water tank made of backed bricks in the room's center; besides, here there is a broken-bottom upside-down khum at the floor's level. A slag and broken earthenware platform is laid around the khum with inclination towards the center (a hole of the khum). The very water absorber consisted of two parts: the part of khum above was the upper part, and an upside-down, also broken-bottom whole khum was the lower part. The room's floor is hard, khaki, generally inclined towards tashnau (fig. 50, 2).

Two coins have been found in the room. One of them was minted in Shash in 403 Hegira/1012-1013 on behalf of Karakhanid rulers Ahmad b. Ali and Yusuf b. Abdullah. The other coin is not readable but can be dated back to the first quarter of the 11th century due to its appearance.

The earthenware works lie within a single chronological period: the 10th century-the first half of the 11th century and, despite its abundance, can be regarded as a single complex. They are largely non-glazed vessels. In our estimate, the share of glazed earthenware items does not exceed 6% of total (Gritsina, 1996, p. 86). It is no coincidence that glazed vessels often bear traces of a repair in the form of drilled holes because these vessels were of great value. The latter remarks is true not only for our monument: this fact has been confirmed practically at every medieval monument of Central Asia and Kazakhstan (Ilyasova, Mirzaakhmedov, Adylov, 2000, p. 239). Besides, the set of glazed vessels is not diverse: cups, bowls and lamps (chyrags). All the earthenware items are formed of well-baked clay without admixtures.

Cups are notable for variety of forms and sizes (fig. 51, 1-17). The earliest specimens consist of fragments of a plate and a closed-form vessel. The plate is decorated with ornament in the form of green stains against the dirty-pink background. Boundaries of stains are outlined by a brown paint (fig. 51, 19). The other vessel is also decorated by stains, this time against a light background (fig. 51, 27). Such earthenware works are known well, usually dated back to the second half of the 9th century (Brusenko, 1986, table 25, 5; Filanovich, 1983, table VII). The rest cups are predominantly with vegetative and epigraphic ornament, sometimes in combination with engraved ornament. The epigraphic ornament was put on either the edge or in the center of vessels, most often was black or brown against the white background, while the vegetative one - black, brown or olive- was against light green, olive or light background. In the earthenware vessels of the 10th century-first half of the 11th century there were widely spread motifs of radial and vortical rosettes, flower buds, and r-shaped signs (Brusenko, 1986, table 37, 3-4; tables 10, 15, tables 13, 9, tables 16, 1; Brusenko, Galiyeva, 1982, fig. 2, 9; Ilyasova, Mirzaakhmedov, Adylov, 2000, p. 230, 237, Anarbayev, Ilyasova, 2000, p. 213-214). A bowl was either covered by blind white glaze or decorated by a simple ornament in the form of festoons on the crown's inner edge (fig. 6, 18). Chyrags were vessels with a round tank, a beak narrowing towards

its end, and a ring-shaped handle. These vessels were covered by blind brown glaze or painted black against the white background (fig. 51, 16-17).

A collection of non-glazed earthenware works is much more diverse. The form of khums can be guessed from two unbroken specimens (fig. 58). One of them is marked by two identical seals: one of them is at the khum's shoulder, the other one-in the inner part of the neck. Khumchas have been conserved only in fragments. Some of them are decorated with a stamped ornament (figure. 52, 4-9). Tagoras are large open-type vessels. Some of such vessels were equipped with handles (fig. 53, 7-8, 10, 31). Cauldrons were formed either by wheel or by hand, while pots were formed by wheel only, covered by a thick black or brown engobe, and decorated by scratched, stamped or rarer painted ornament (fig. 52, 13-20). Jugs were also formed by wheel but seldom had their surface engobed (fig. 52, 11-12, fig. 53, 19-25). The collection contains an unbroken tuvak. Almost an identical vessel takes origin from a badrab of the 10th century of the site of settlement Khanabad (Brusenko, 1986, table. 4, 2). These children's hygienic items of everyday practice were spread widely among the peoples of Central Asia and Iran. These items were glazed (discoveries from the settlement Kultepa, Gritsina, 1991, p. 190, fig. 2, 19), made of glass (Shishkina, 1986, fig. 5, 11, Zadneprovskiy, 1960, p. 239, fig.58, 8; Baypakov, 1986, p. 165, fig. 69, 1-4; Mirzaakhmedov, Ilyasova, Adylov, 1999, p. 240, fig. 2, 21; fig. 3, 8) and have been conserved up to nowadays in a nearly unchanged form (Pesherovala, 1959, p. 158; fig. 73, 1). Mugs join the number of rare discoveries. The surface of these vessels was engobed, glazed (fig. 53, 12). A unique discovery is a moulded small vessel with two ring-shaped handles and a flat side. Its surface is glazed and blackened (fig. 52, 16). There is a single specimen of an unbroken inkpot (fig. 53, 16; fig. 55). It is referred to a type of vessels with a tank at external body.

It seems that such inkpots appeared by the middle of the 10th century. This still remains the first item of such sort from Ustrushana. Earlier, similar inkpots were found in Sogd, Chach and Iran (Shishkina, 1979, p. 19, table XIX; Bogomolov, 2000, p. 55). Inkpots, as a rule glazed ones, are often found from medieval monuments. Non-glazed items of this sort are detected comparatively rarely. A small glass item was used apparently to prevent ink from penetrating the walls of the tank. As confirmed by our discovery, inkpots were usually painstakingly decorated because they were the things of spiritual world of medieval residents.

Lids were formed either by wheel or by hand (fig. 25). Concave lids are equipped with a relief rim around the handle; flat lids are found rarer (fig. 52, 22-23; fig. 53, 25-30). These items were decorated by various stamped ornaments. Simakuzachas are represented by several unbroken specimens (fig. 53, 13; fig. 56). Their surface was decorated by a simple scratched ornament or digital impressions. The discovered defective specimens indicate that they were locally made items. Sandals are one of popular discoveries at the site (fig. 54, 3-6). There are two forms of them: rectangular and round. They are formed of very rough fireclay with an essential admixture of gravel. Their bottom was usually burnt black to burning hot coal. The surface of the external border was decorated with a cut-in ornament. Dastarkhans include several fragments and one unbroken specimen (fig.57) of "a discal form with a ledge at the lower edge of the table top and a hollow cup-shaped support" (Bogomolov, Papahristu, 1982, p. 107). The paste is rough, mixed with gravel. The working face is even while the front one is decorated with modeled ribbons in the form of semicircles, edges of which are set against the ledge (Gritsina, 2000, p. 230). Other dastarkhans are also decorated by a stamped ornament (fig. 54, 1).

The discoveries of metallic implements consist of fragments of an iron knife, a hook-shaped top resembling the head of animal (fig. 52, 1), a small copper ring, and a fragment of a semi-spherical cup (fig. 52, 2-3). Similar cups were found in the shahristan of medieval Nuket (Buryakov, 1963, p. 254,

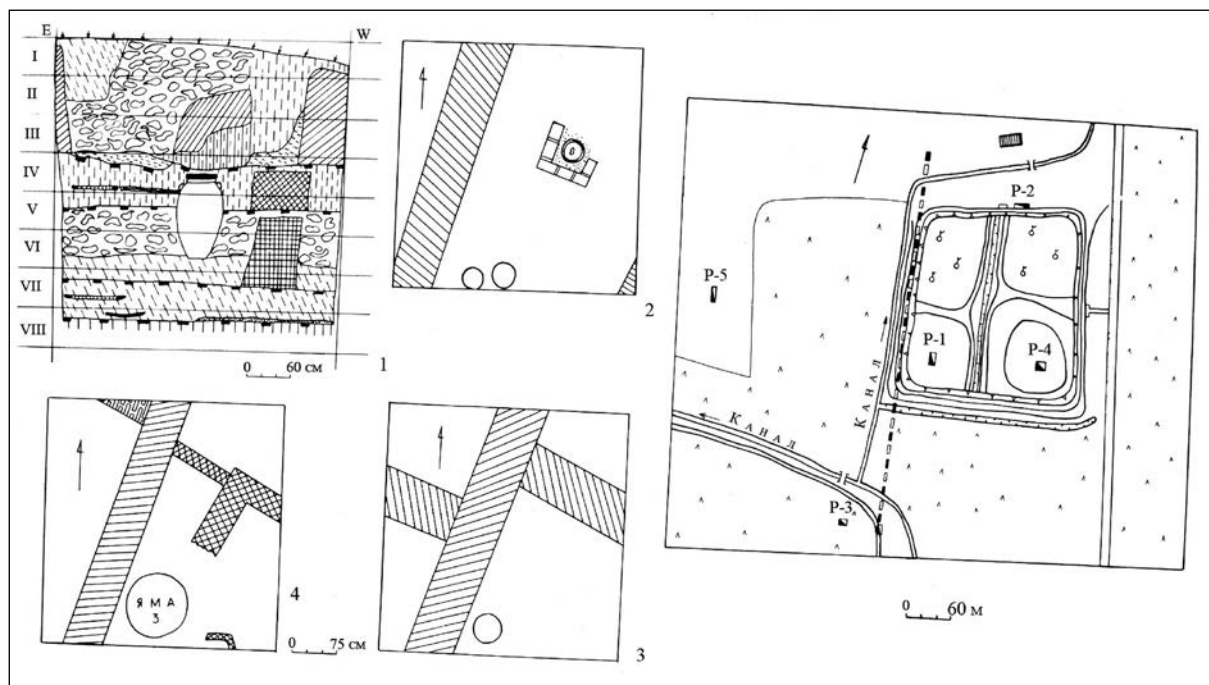


Fig. 50. Nurata. Plans of site and archaeological dig 4.

table 1, 13, 20). Remains of the glassware are concave bottoms, necks of wide-orifice vessels (fig. 52, 1-3), and fragments of window glass.

Excavations at the site of the settlement have made it possible not only to identify it as a medieval Sabat but also to trace landmarks of its history. Hushket-Nurata was formed as rapidly as the Samanid state was. One of the earliest Arab travelers, Ibn Hordadhbeh, in his work dating back to 885, describes a way through the Hunger steppe from Zaamin to Havas and towards Hushket. However, he does not cite the name of the very town: "There are 7 farsahs on the desert from Zaamin to Havas. Further they move towards Banakit across the bridge" (Hordadhbeh, 1889, p. 20; Hordadhbeh, 1986, p.4). At this place occurs a "loss" of town and its name. Owing to that Abu-l-Fida used one of the earliest lists of the Ibn Hordadhbeh's work we're unaware of, we have the only evidence of the existence of a shortest way from Havas via the Hunger steppe to the crossing at Hushket towards Benaket. Here is how this way was described by Ibn Hordadhbeh (as interpreted by Abu-l-Fida): "From Havas to Hushket there are also 7 farsahs on the desert; Hushket is located at the Bank of River ash-Shash" (Hordadhbeh, 1986, p.23). Probably, this straight way through the Hunger steppe and nomads' estates had no intermediate points and was used not often, not long. A safer, more developed way was the one described by Ibn Hordadhbeh. It is identified that this way passed along the Left Bank of the river circumventing at least two settlements. However, Hushket is not mentioned here for some reason. Later travelers of the 10th century "ignore" it at all because it loses its initial significance due to change of the route of caravan traffic (Gritsina, 1992, p. 36-41; 2000, p. 216-217).

But let's return to excavations at the site of settlement Nurata. Materials pertaining to the early 10th century are marked throughout the citadel's territory. Earliest materials have been obtained from the northern part. Glaze was put straight on a non-engobed crock. A painting - in the form of green stains against the pale-pink background - was one of the most ancient patterns and at the same time

magical symbols. Evidently, by this time Hushket's potters had already explored an earlier technique of production of glazed earthenware vessels, which was typical for Shash.

Where did early Hushket residents come from? They were most probably business people of a neighboring Benaket. It seems that the very town was related to Shash, not Ustrushana. Despite finding parallels with Ustrushana materials, the whole set of materials of the 10th-11th centuries obtained from several excavated areas is closer to the Shash earthenware school (Gritsina, 1996, p. 86-92). Besides, all coins found from the site were minted in Shash (identification by B. D. Kochnev). This is another confirmation to V. V. Bartold's suggestion that a strip of agricultural land south of Syrdarya and north of the Hunger steppe was most likely a part of Shash (Bartold, 1963, p. 227). Maybe, foundation of the new settlement coincided with a shift of the "old" town - early medieval Benaket - to a new place.

Thus, in the second half of the 9th century opposite the largest settlement of Shash - town Benaket - there appears a small settlement that is rapidly expanding and developing. The secret of appearance and prosperity of this settlement is simple. First, it is located at the southern, "Benaket way" popular at the time. Second, here there is the main crossing of River Syrdarya. In this respect Hushket very much resembles another settlement in the lower reaches of Syrdarya - Nedjaket or Undjaket. It also emerges at the end of the 9th century, initially as a special fortification at the crossing's site demanded by the prosperity of a northern caravan way from Sogd to Shash. Later on, it grows into a small

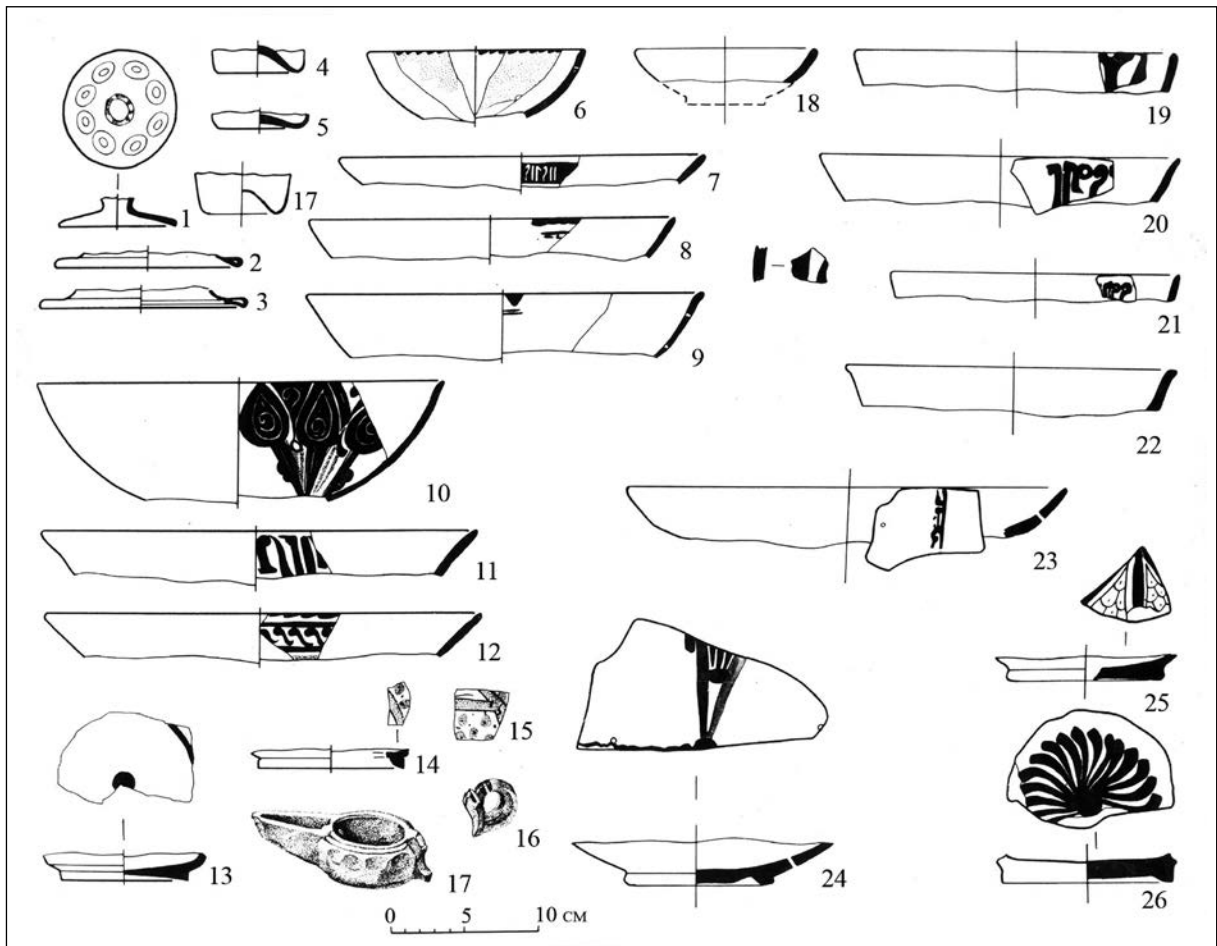


Fig. 51. Nurata. Glazed ceramics, 10-11th centuries.

town. Prevailing among its population are ferrymen on whom success of the crossing and, partly, of trade depended (Buryakov, 1975, p. 46-47; 1982, p. 162).

Given that Hushket was located at the border of Shash, an important customs point could also be operational there. In the Samanid state duty was imposed on imported goods. The duty rate was not high. For instance, duty rate imposed on the goods worth more than 200 dirkhems was 2.5% for a Moslem, and 5% and 10% for a person of another confession residing in a Moslem country and a stranger respectively (Belenitskiy, Bentovich, Bolshakov, 1973, p. 293-294). Particular items of the taxation comprised slaves and silver bullions. Probably, incomes were essential because slaves could be delivered by Hunger steppe's nomads, and silver was imported from Shash where a large "silver mine" was located (Buryakov, 1974, p. 110-111; 1975, p. 112; 1978, p. 70-79). Besides, trade links with a steppe envisioned seasonal fairs to where nomads brought their cattle-breeding produces.

Regretfully, written sources provide too little information about the Samanid Benaket. At the end of the 7th century-the beginning of the 8th century an unnamed "ruler of Banak" minted his own coin (Rtveladze, 1985, p. 168-169). According to al-Muqaddasi, in Benaket "there lived trouble-makers, there was no fortress wall. A mosque is located in the territory of a bazaar" (Mukaddasi, 1994, p. 247). Later on, the town was glorified for its so-called "Turkestan" cloths (Bartold, 1963, p. 295). That Benaket had no wall resulted from the policy of the Samanids, who were the guarantors of security: Ustrushana's towns Zaamin, Sabat and Dizak were not fortified as well. Also, there was no fortress around Hushket.

Signs of decline of the Samanid state became more evident in the second half of the 10th century following the beginning of rule of Nuh ibn Nasr (943-954). Further Hushket saw events of a warning nature that would lead to his death. First of all, this is the appearance of a new crossing in the lower reaches of the river and the shift of the caravan way leading to Benaket from the river's left bank to right bank, which happened probably in 820s. Qudama, who composed his work in 928, reports: "... from Havas to the River Shash there are 5 farsahs and there is a crossing over this river there. The distance from this site at the river's bank to Benaket is 4 farsahs." It is to conclude from sources above that the both crossings continued to operate simultaneously for a certain period of time. However, the crossing at Hushket gradually loses its significance. Perhaps, this was connected with general destabilization of the situation in the Samanid state. Nomads began troubling bypassing caravans more frequently so merchants tried to reach Syrdarya as soon as possible and get over to the river's right bank where they could be protected by guard stations and settlements. For the same reason the situation was not quiet in the very Hushket that had no reliable fortification walls and moats. From the one side there laid an unpredictable Syrdarya, from the other one - a furious steppe. Particularly, sources make reports about numerous tribes of Guzs (Oguzs). It is no coincidence that Ibn Haukal calls steppes north of Zaamin "a country of Guzs". Later on, the Guzs played their fatal role in the last years of the Samanids' rule.

In 999 Karakhanid ruler Nasr-ilek seized capital of the Samanids Bukhara and put the last ruler Abd al-Malik and his family members in prison. Once a mighty state ceased to exist. However, Abd al-Malik's brother, energetic and capable military leader Abu Ibrahim Ismail ibn Nuhu more known as al-Muntasir (Victor) managed to escape the prison. Despite a seemingly hopeless situation, he commenced a determinative struggle to restore the power of the Samanids. He could seize Bukhara, mint his coin, and gain striking victories that, like his defeat, related to the territory of Ustrushana.

In the very beginning of the 11th century, having gathered multi-thousand troops and enforced it by bellicose Guzs, he was strong enough to crush the main troops of Nasr-ilek at Burnamad. How-

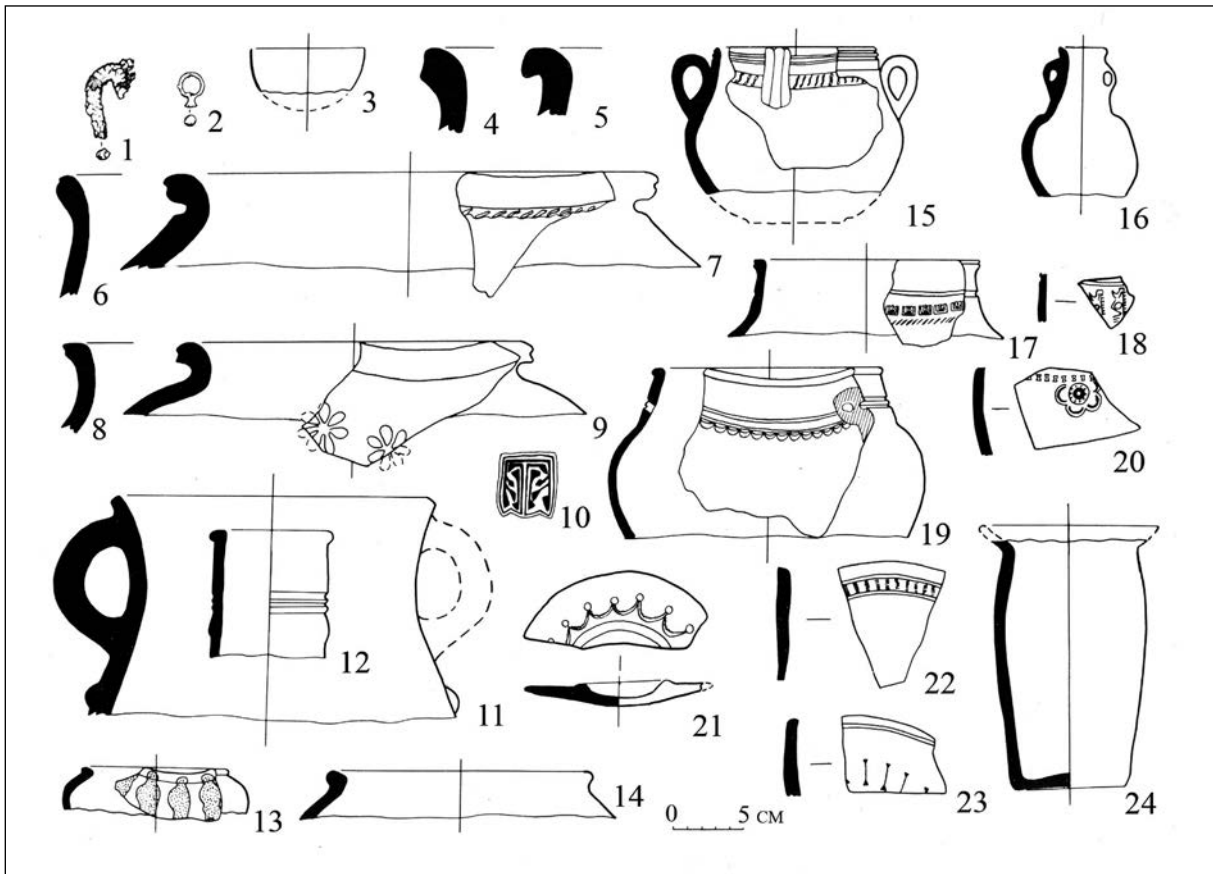


Fig. 52. Nurata. Non-glazed ceramics.

ever, in the next battle in a steppe between Dizak and Havas he was crushed. The nomads, burdened by spoils, leave him. Al-Muntasir was forced to hide in Horasan where he was killed in 1005 (Utbi, 1988, p. 37-45; Pugachenkova, 1956, p. 83).

Beyond any doubts, these events influenced on Hushket. The town rapidly fell under the power of the early Karakhanids. The earliest Karakhanid coin found here was minted in Shash in 394 Hegira/1003-1004 on behalf of al-Han al-Adil, the latest one-in 403 Hegira/1012-1013 on behalf of Ahmad ibn Ali and Yusuf (Ibn Abdullah). The Karakhanid Benaket rapidly accumulated its strength, became one of Shash's largest towns with its own mint place and developed system of roads (Buryakov, 1982, p. 147). A crossing towards Hushket, not used by caravans, had long been of no need, so residents were leaving the town (Gritsina, 1992, p. 36-40).

Settlement Kultepa-medieval Sabat (the 10th century-the first half of the 11th century) is located at the Left Bank of Hojamushkentsay, south of a settlement of the same name. Several areas excavated here yielded Samanid materials.

The largest excavated area #6 (120 sq. m) is at the southern slope of the Samanid citadel (Gritsina, 1989, p. 125; 1992, p. 32; 2010; p. 86-94). Here there has been discovered a complex of rooms made of the Samanid standard tile and mud bricks (41/20-21/7-8 cm). In special cases there were used baked bricks, also of the typical Samanid standard (22/22/4 cm) (fig. 59).

It is to conclude from the discovered rooms that it is a part of a certain fundamental building, undoubtedly a residential one. Two stages of its operation have been identified. No lower floor of the

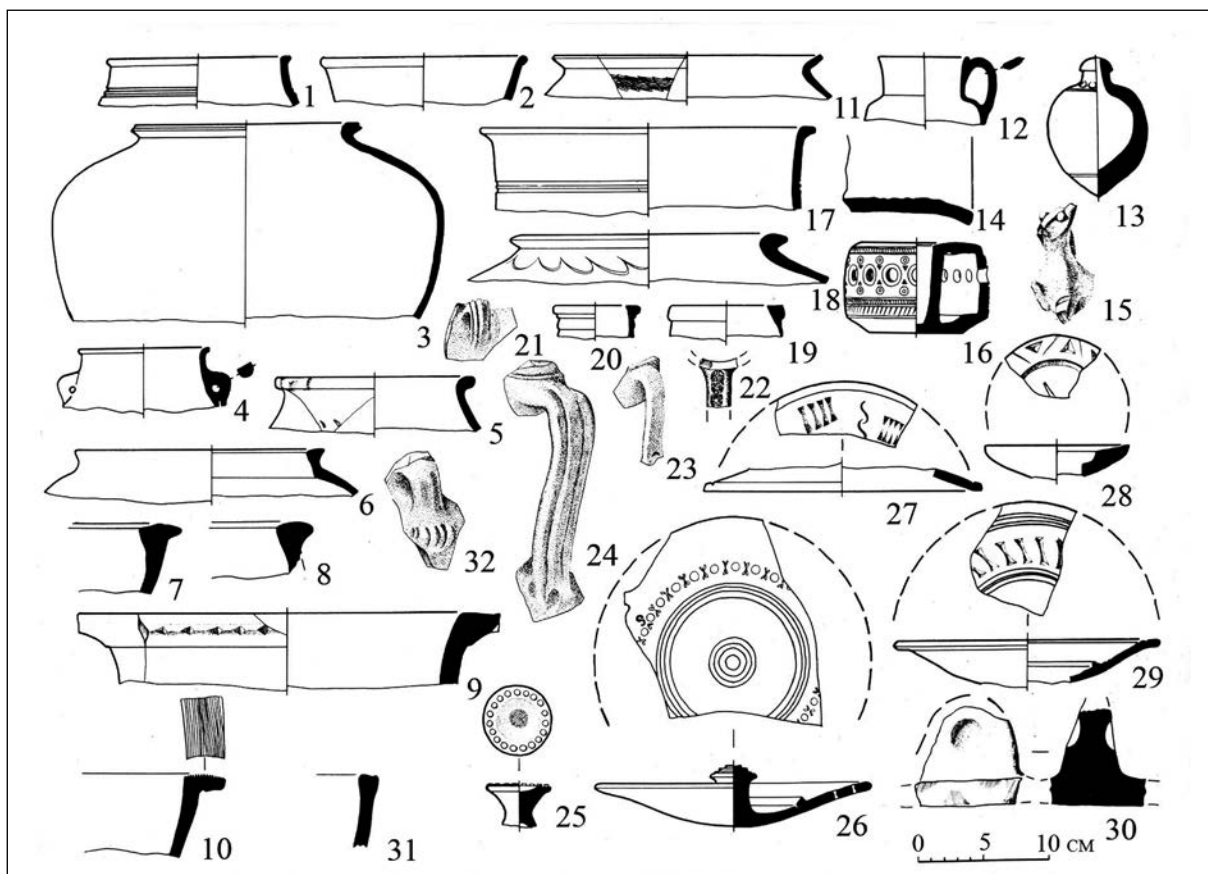


Fig. 53. Nurata. Non-glazed ceramics.

building has yet been excavated. A distinctive peculiarity of the found rooms is that wall junctions form not right angles but acute angles or obtuse angles, which is explainable by relief peculiarities (Ancient Zaamin, p. 47-48).

The excavated area 7 repeats the stratigraphic situation registered in the excavated area 6. Two residential horizons have been identified. In the lower horizon there have been cleared remains of a tile-wall room. The upper horizon consists of remains of two tile and mud brick rooms (the sizes of the bricks are 44/21/9 cm). It is interesting to note that the partitions of the rooms represent alternations of mud bricks and small tile blocks having the dimensions of 24/24/23/24 cm.

The most interesting discovery in the excavated area 8 is a wall hearth that has been conserved in full. It is of unusual form: an open circle with two ears one opposite another; designation of the ears is not quite clear. Probably, they performed no particular function. Aren't they prototypes of zoomorphic or anthropomorphic hearths? In Khorezm, at the site of settlement Jigerbent's building of the 10th century there was found an anthropomorphic hearth that is thoroughly buried. In the opinion of the authors, this was done for the sake of avoidance of a conflict with faithful Moslems (Vishnevskaya, Rapoport, 1979, p.110). Does this hearth reflect a desire to camouflage adherence to the traditional pre-Moslem beliefs: the cult of fire and the cult of idols? This to a larger extent concerns Ustrushana where the religion of ancestors had been observed until the Mongol invasion (Pulatov, 1993, p. 87-88; Gritsina, 1999, p. 6-7).

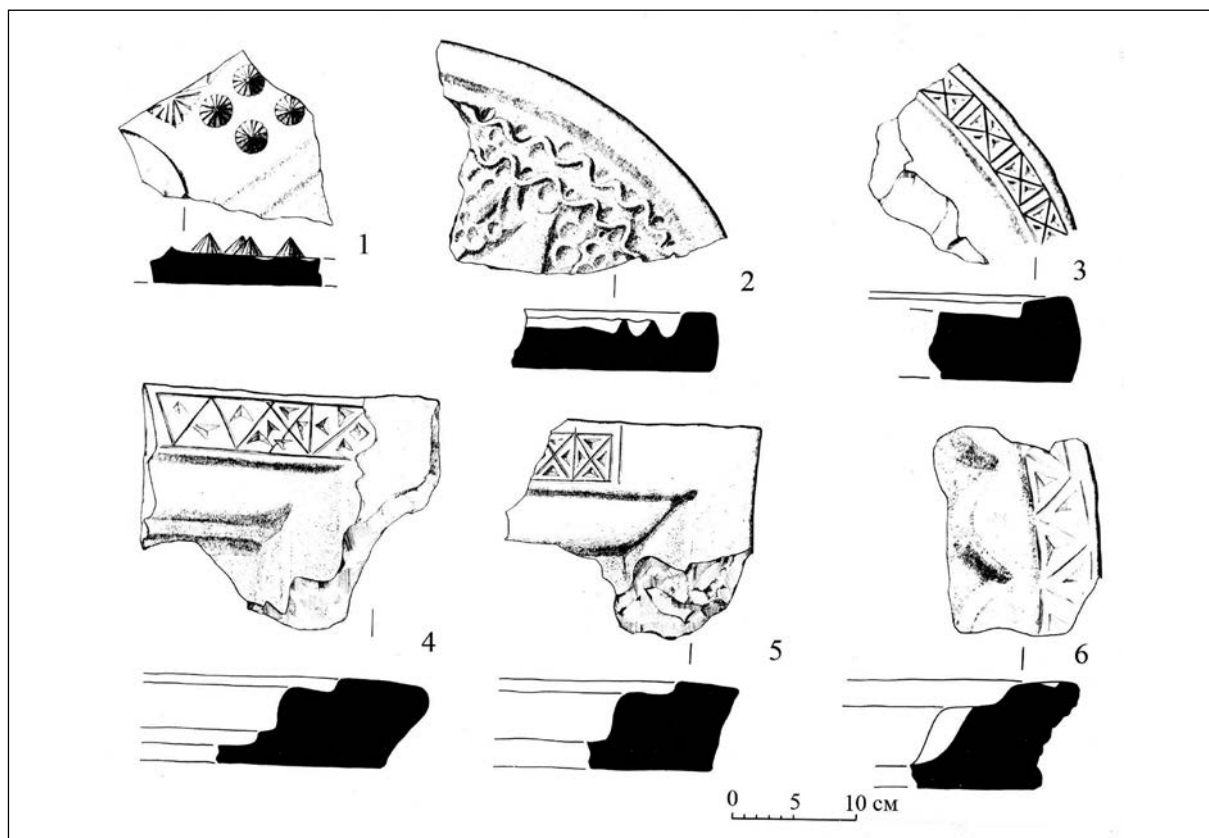


Fig. 54. Nurata. Sandals and dastarkhans, 10-11th centuries.

Glazed earthenware works are much more diverse than that from the settlement Nurata, in terms of either techniques of ornamentation or set of earthenware forms: plates, a scythe, a bowl (fig. 60, 2, 5-7, 16; fig. 61). Vessels of such sort are usually dated back to the 10th century-the first half of the 11th century (Shishkina, 1979, table LXVI, 3).

There is a single specimen of a plate type vessel covered by blind light green glaze (fig. 60, 4), as well as chyrag- with a round tank, stretched beak, and a loop-shaped handle. The ornament was out against white or brown background (fig. 60, 18-19). A single discovery is a chyrag in the form of an earthen saucer with bulged edge and a loop-shaped handle covered by blind green glaze. It had a high-stem tray. Lamps of such sort are typical for the 10th century (Shishkina, 1979, table XVII, 5; Brusenko, 1986, table 31, 13). The collection also includes handles with a leaf-shaped top of mug type vessels (fig. 60, 21) known from materials of the 10th century-early 11th century (Brusenko, 1986, table 41, 21).

Non-glazed earthenware items have much in common with that of the Nurata complex; however, the difference is a certain common roughening of the vessels. This primarily concerns packer earthenware, pots, jugs, and lids. The Kultepe complex reveals no sandals, extremely rarely yields dastarkhans, lots of which have been found at the settlement Nurata; besides, no spherical-cone-shaped vessels have been found but new forms and manners of decoration have been identified. Of rare discoveries, it'd be appropriate to accentuate a vessel with a groove or tubular outlet, strainers, churns, tuvaks, miniature thin-walled vessels, and kuburas (Gritsina, 1998, p. 139).

As for its chronology, the complex above finds wide parallels with the materials of the 10th century-first half of the 11th century (Gritsina, 1996, p. 86-91; Brusenko, 1986, p. 24, table 4; Brusenko, Galiyeva, 1982, p. 126, fig. 2; Buryakov, 1977, p.78, fig. 5; Shishkina, 1979, table LIX, etc.). This dating is also confirmed by numismatic material. Several coins were found at P-6. They include a Samanid fels coin with the name of Nuh b. Mansur minted in 976-997, a Fergana coin with the name of Nasr b. Ali 385 Hegira/995, as well as Karakhanid silver coins from a small treasure (of approx. the middle of the 11th century.) Inscriptions at the coins have been conserved badly: it has become possible to

read fully only one of them: Kashgar, 417/1026-1027 (Kadyr-khan Yusuf b. Harun and Sulaiman b. Yusuf). There is also a coin dated back to the second half of the 8th century-first half of the 9th century.

Metallic implements. There are rather many iron implements: fragments of knives, a short-handle little scoop, a punch, nails and cramps, rings, grooves, kapkyr, arrowheads, elements of door locks, etc. Copperware consist of a relief pipe, rings, and elements of decorations.

The number of glassware is insignificant: fragments of crowns, convex bottoms, and a handle with horizontal excrescences typical for Samanid-era vessels (Buryakov, 1966, p. 143, fig 20, 16).

Thus, at the sites of settlements Nurata and Kultepa there has been obtained such a representative Samanid complex for the first time ever in North Ustrushana and throughout Ustrushana. Maybe, this complex yields to best specimens of Sogdian or Chach items of that period; nevertheless, it indicates on rather intensive links with neighboring regions, demonstrates a high level of development of handicrafts.

The materials of the next, Karakhanid period (the 11th century-the early 13th century have been obtained from several monuments. The most impressive complex has been obtained from the settlement Kultepa, caravansary Turtkultepa, and settlement Jartepa.

Settlement Kultepa-medieval Sabat (the 11th century-early 13th century). A monumental building of the end of the 11th-early 12th centuries was studied at the site's citadel within two field seasons. Supposedly, the site of the settlement represents remains of a palace of Karakhanid-era Sabat rulers (Gritsina, Gaybullayev, et al, 2012, p. 120).

The excavations have identified two periods of the building's operation. The first period is main one. It envisions an almost fully excavated large room with a passageway contoured in the southern wall. The room is 1,160 cm long and 230 cm wide. The walls are built of 100 cm-high tile blocks. The width of the blocks vary: 113, 122, 132, 126 cm, etc. Two rows of the lower blocks and partly the third row have been conserved. Probably, the third row was built only by half because bricks have been found on top of it. The thickness of the western wall is 130 cm; of the eastern one-115 cm. In the eastern wall's northern part there is found a "standard" format masonry. It is interesting to note that the junction of the eastern and southern walls was covered by loess, a technique used in architecture for the case of an earthquake. Along the eastern wall there was laid a niche erected of tile



Fig. 57. Nurata. Dastarkhan, 10-11th centuries.

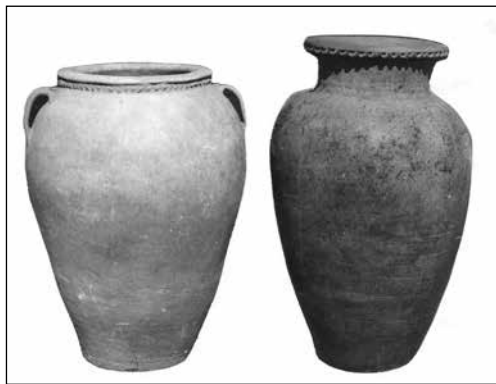


Fig. 58. Nurata. Hums, 10-11th centuries.

bricks (35/23/8 cm). The niche's surface was covered by the same bricks. The niche is 70-75 cm wide; the height from the level of the floor is 85 cm (fig. 62).

The passageway has been conserved practically in full; its height from the level of the floor to the door lock is 215 cm, width-110 cm. Left of the passageway there was a 28 cm-wide, 22-cm high niche. Though its designation is not yet clear, it is apparent that it was not used as a place of a chyrag because no lampblack traces have been found in it (fig. 63).

The excavations revealed fragments of and unbroken baked bricks with the sizes of 28/14/3 cm; 20/20/3 cm; 20/20/3 cm; and 20/19.5/4 cm. A small-sized rectangular brick and square bricks can be dated back to the end of the 10th century-beginning of the 11th century. Small-sized bricks of the early 11th century are typical for Central Asia other regions as well (Pugachenkova, 1979, p. 168; Brusenko, Galiyeva, 1979, p. 98-10). All these bricks of secondary use have been delivered from the site's Samanid part.

The second identical room was located west of the first one. Its eastern wall was common with the first room (fig. 64). The room has been excavated partly because its southern part has turned to be destroyed. Nevertheless, sizes of the room are identified definitely, correspond to that of the first room. The only difference is that the western wall is erected of not tile but mud bricks. The facade of a niche located along the eastern wall has an interesting stepped construction. There are four steps. Whether it had a purely "applicable" meaning is yet hard to say. The niche's top was thoroughly smeared (fig. 65).

In the second construction period radical reconstruction occurs in the second room: it is back-filled to the niche's surface, becomes smaller, though it should be noted that excavations in 1987 identified remains of monumental, 120-cm thick walls of the last (second) period of the citadel's being settled. They were built of a typical Karakhanid standard tile brick with the sizes of 37/20/6-7 cm (Ancient Zaamin, 1994).

Thus, the excavations have identified two main construction periods. The first one is relating to the erection of a tile- and mud-brick monumental building straight on an early medieval layer. Its construction might occur in the second half of the 11th century when a new citadel was being erected at the site of the Samanid building. The second period envisions an active use of the first period's walls; however, the walls are being built of bricks of an unchanged standard.

The excavations have cleared several cesspits. One of them, in our view, represented remains of a zindan, a medieval prison cell, an indispensable attribute of the then palace complexes. This is yet the only construction of such sort excavated in the territory of Ustrushana (Ancient Zaamin, 1994, p. 45-46; Gritsina, 2000, p. 67-68). Later on, the zindan was converted into a cesspit where there have been found two Karakhanid coins: one of them, with the name of Ibrahim b. Hussain was minted in Uzdjend in 570-574 Hegira/1174-1179; the other one is unreadable but due to its appearance is dated back by B. D. Kochnev to the second/third quarter of the 12th century.

Emphasis should be laid on the length of the discovered rooms - around 12 m - designation of which is still hard to identify. Both rooms had niches stretching along eastern walls. The first room

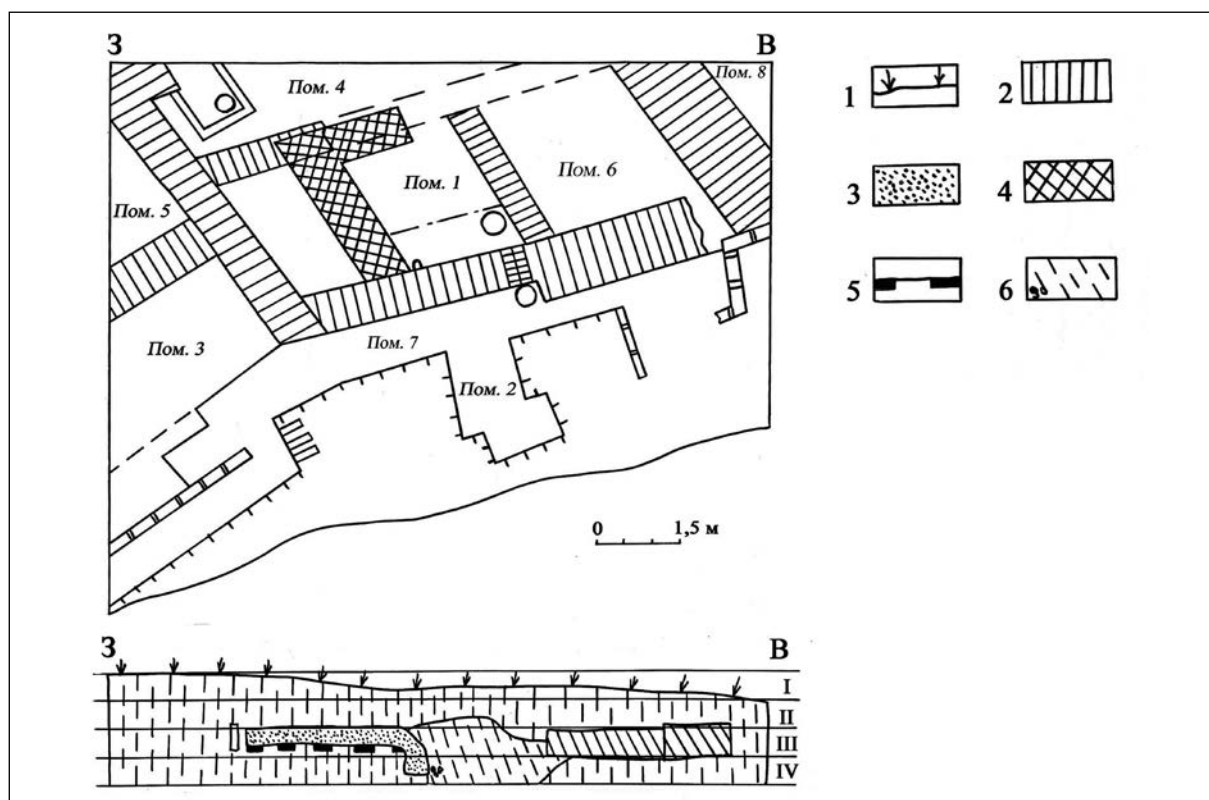


Fig. 59. Kultepa. Plan and section of archaeological dig 6.

has a rather strict appearance, resembles a barrack. Red hot spots, possibly, traces of sandals have been found on the floor. No hearths have been discovered. In all, the number of discoveries is too small for such large rooms.

The site of settlement Kultepa has produced most representative, impressive earthenware complex of Ustrushana, including various glazed and non-glazed earthenware, unique vessels, as well as red-glazed, painted vessels and highly-glazed pottery. Some of the materials take origin from a caravansary located north of the citadel (fig. 17; fig. 66).

The glazed earthenware consist of plates, a scythe, a bowl, pots, tuvaks, and chyrags (fig. 67; fig. 68). Let's accentuate a vessel of unclear designation, which had two tanks: external and internal, due to its conserved fragment. The lower part of a similar vessel was found at a site in Iran (Kleiss, 1982, P. 275, abb. 40, 7).

Another distinctive peculiarity of the Kultepe complex is the existence of a rather essential number of highly-glazed pottery consisting of small jugs (fig. 67, 11), bottles (fig. 67, 16) and faceted-tank cups and chyrags. They are mostly small-sized vessels because faience-clay items are very fragile, difficult to make. Maybe, that's why stoneware was not developed widely in either Ustrushana or neighboring regions (Chach and Fergana), while stoneware comprised masses of specimens in Karakhanid-era complexes in Khorasan and regions near it (Atagarriyev, 1986, p. 108; Vakturskaya, 1959, p. 320).

The existence in the complex of a high quality faience-clay crock, made apparently to imitate chinaware is hard to explain. It is painted blue and black against the light background (fig. 67, 20). Such vessels are usually found from later complexes (of the 15th-16th centuries) (Pugachenkova, 1949, p. 403; Vakturskaya, 1959, p. 320-326; Lunina, 1962, p. 335). Nevertheless, it should be noted that at-

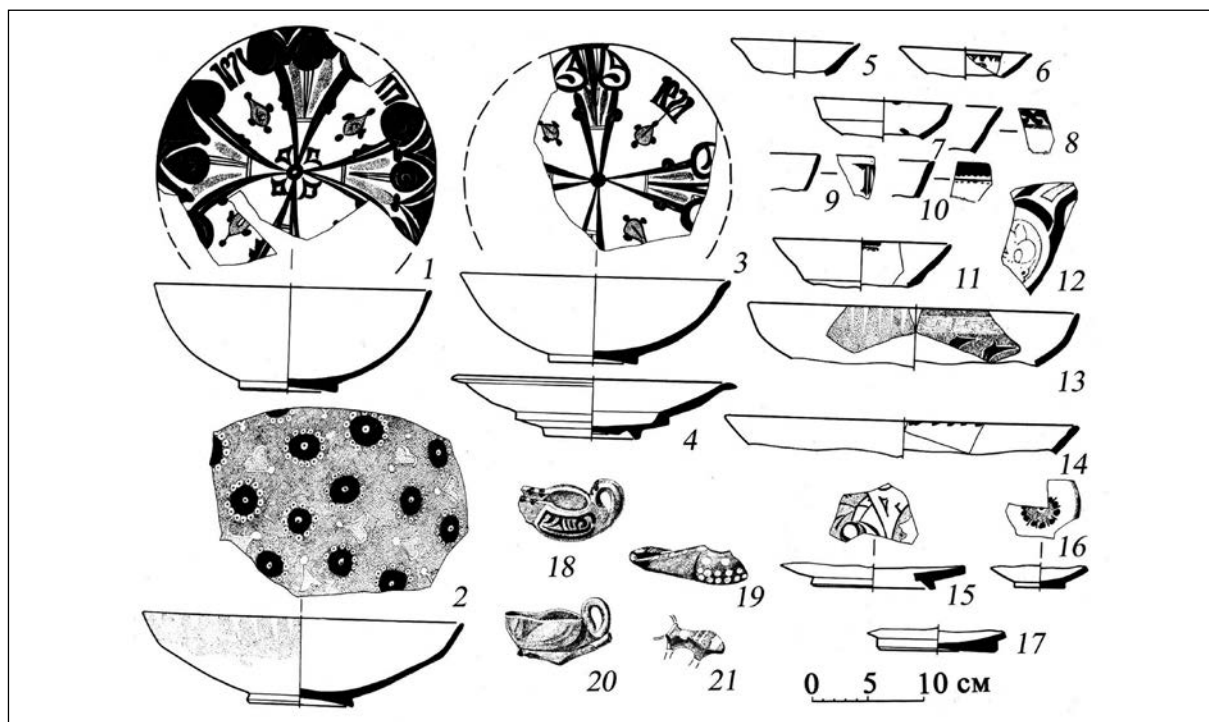


Fig. 60. Kultepa. Ceramics, 10-first half of the 11th century.

tempts of making similar cobalt earthenware were noted at Afrasiab's layers of the late 12th century-early 13th century. It seems that cobalt, as a dye, only started being explored by Samarqand masters-kulals, had an expensive price and thus was of great demand (Nemtseva, 1969, p. 197; Akhrarov, 1969, p. 306, 309).

Non-glazed earthenware items are also diverse, in terms of either assortment or external appearance. They include khums and khumchas, tagoras, cauldrons, jugs, pots, lids, as well as several rare and unique vessels (fig. 69). Red-engobed glazed and painted earthenware works constitute a special group.

Rare discoveries include cups, mug and glass-type vessels, and vessels with stamped ornaments. There have also been found fragments of kuburs indicating that Sabat urban residents used special sewage and water pipeline systems.

Red-engobed glazed earthenware are notable for a high quality of making. It is formed by wheel, as a rule, of fine-dispersed clay, covered by a thick engobe and in the majority of cases is glazed.

Khums are represented by fragments of the crown and body richly decorated by stamped, cut-in and moulded ornaments; the latter decor is performed as rounded and tear-shaped pendants. Jugs are subdivided into two types. The first type includes high narrow-necked vessels, surface of which is decorated by lamellar vertical glaze. At a junction with the orifice they are decorated by ledges with a sharp verge (fig. 69, 18, 20). The crown of one of the vessels is formed as five festoons (fig. 69, 17; fig. 70) (Gritsina, 1992, p. 39, fig. 22). A glass vessel of a similar form was found in Uzgend (Zadneprovskiy, 1960, p. 239, fig. 58, 1). Our vessel had no handle; however, the complex has revealed fragments of narrow-neck jugs equipped with cramp-shaped handles. The second type consists of narrow- and wide-neck jugs (fig. 69, 23). There are fragments of two hemispherical cups. One of them has a simple crown, has its body decorated with two grooves (fig. 69, 21). The crown of the other cup is formed

as pinches (fig. 69, 22). Pots are represented by some fragments of the body, decorated by a cut-in ornament and encrusted by turquoise paste insertions that possibly imitate metallic vessels (fig. 69, 24). We haven't met a full analogy of it anywhere. However, let's accentuate a Karakhanid-era vessel decorated by a glass paste insertion. The discovery takes its origin from the site of settlement Shahjuvar of the Tashkent region (Reutova, Tikhonin, 2001, p. 187). This is a "cup"-vessel with two tanks: external and internal (fig. 69, 15). Like the glazed vessel above, it probably refers to a type of items with still unclear designation.

Red-glazed vessels have been identified at many Karakhanid-era monuments. For example, A. N. Bernshtam noted that in Uzgend "there is a lot of glaze at non-glazed earthenware" (Bernshtam, 1952, p. 258). Such vessels are also known from other monuments of Fergana (Mirzaliyev, 1988, p. 15). Red-glazed vessels have been noticed at the sites of settlements Shahtepa, Kanka, Shahjuvartepa (Gritsina, 1991, p. 194; Reutova, Tikhonin, 2001, p. 187). As a rule, they are single specimens, of lower quality than the Ustrushana ones. This is explainable by the fact that our discoveries were extracted from a citadel's "elite" cesspit where defective vessels of rulers had been thrown to.

There are lots of painted earthenware - modeled vessels and vessels formed by a potter's wheel. Modeled items include cone-shaped outlets with a painting in the form of various kinds of curls and intercrossing strips (fig. 69, 25, 26, 28; fig. 71; fig. 72; fig. 73). In the lower part of the outlets there is a handle ledge. They were most likely water pourer-type vessels often painted at the time (Brykina, 1974, p. 49). Such unbroken vessel has been found at one of the Pshagarsay's monuments (Gritsina, 2000, p. 154). In the excavated area 2 there has been found a fragment of the body of a moulded vessel decorated by ornament in the form of oblique net painted brown against the light background.

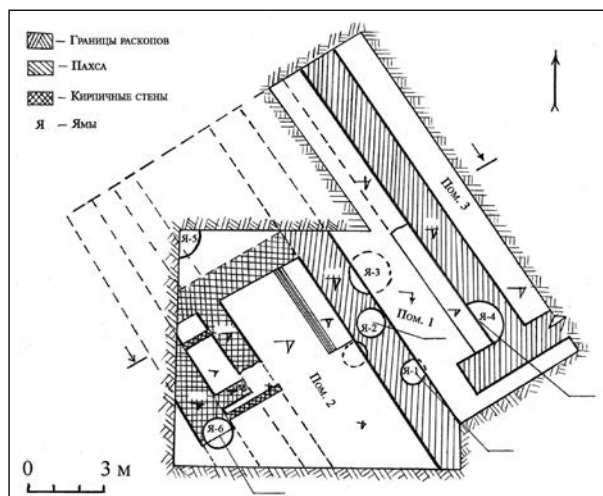


Fig. 61a. Kultepa. Citadel. Plan of archaeological dig 10.



Fig. 63. Kultepa. Room-way 1.



Fig. 64. Kultepa. Citadel. Room 2 with stepped sufa.

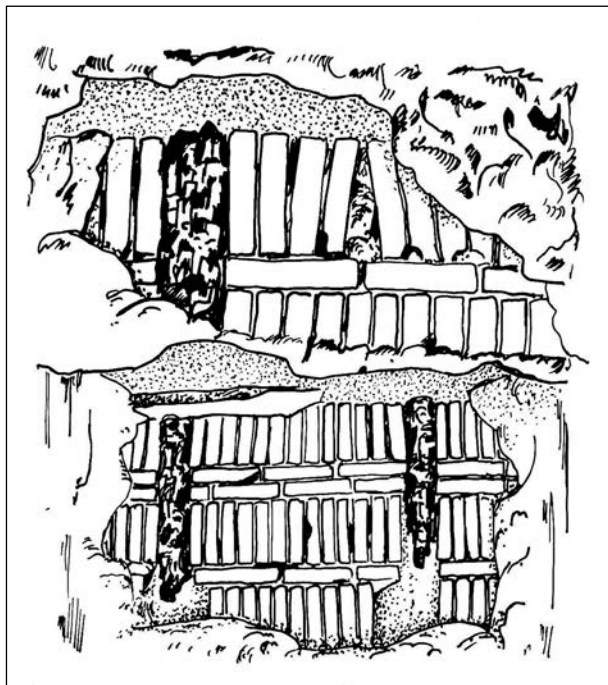


Fig. 66. Kultepa. Ruins of caravanserai, 12-earlier 13th century.

most likely should be linked with the Fergana's influence.

It seems that the painted earthenware were designated and could be used for ritual purposes.

It should be noted that not only dining earthenware but also kitchen vessels were being decorated. In the view of S. B. Lunina, painted cauldrons were used for cooking special meals while the painting itself served as a kind of amulet. In all, "...painted vessels were special vessels pertaining to ancient cult rituals, survivals of which remained in the area of spread of Islam" (Lunina, 1987, p. 108). It is interesting that the appearance of a significant number of painted cauldrons in urban milieu, more exactly, in Termez, as well as in other urban settlements of Central Asia in the 12th century-early 13th century is explained by a flight of rural population from mountainous regions to towns. As for the paintings themselves, they could serve as an amulet of meals being cooked in cauldrons (Pidayev, 1997, p. 153-154).

Apart from the earthenware, the site of the settlement has revealed a substantial number of artifacts made of other materials (fig. 74, 74a). The most impressive specimen is an unbroken bronze lamp discovered from the citadel's fifth residential horizon (Gritsina, 1991, p. 196-197). This is just a second discovery of such sort in the territory of Ustrushana. The first (random) one was found among bronze implements at the site of Kalai Kahkaha in Shahrstan (Negmatov, Khmelnitskiy, 1966, table XXIV; Negmatov, Kilchevskaya, 1979, p. 49). Of interest is the lamp's handle formed as a bird, supposedly, nightingale; it is made rather realistically; an interesting thing is that local residents immediately identified it as a nightingale. The lamp is elegant, simple and of strict form, has no any other decorations. We are yet unaware of direct analogies; closest specimens take origin from the sites of settlement Lyagman (Litvinskiy, Solovyev, 1985, p. 259, fig. 1) and especially settlement Kanka in the Tashkent region (Buryakov, Bogomolov, 1990, p. 40, fig. 17, 3; Bogomolov, Gendelman, 1991, p. 141-

There has also been identified a "reserve" painting that is widely spread on glazed vessels of this period (fig. 69, 27). Sometimes, both kinds of paintings were combined.

According to reports, the more spread glazed earthenware items were in demand. In Uzgend, for instance, it was "a typical feature of the earthenware complex" (Zadneprovskiy, 1960, p. 226). It was spread to a much lesser extent in the Tashkent region.

In Ustrushana, painted ceramic works were found under the initial excavations at the site of settlement Munchaktepa (Gaydukevich, 1947, p. 108). Separate discoveries from other monuments have also been noticed (Negmatov, Pulatov, Khmelnitskiy, 1973, p. 124, fig. 53). However, while in Fergana there are traced the roots of painted ceramic works (Zadneprovskiy, 1962, p. 116; Usmanova, 1984, p. 218-219; Sverchkov, Mirzaliyev, 1988, p. 85-87), in Ustrushana they only start being studied; their appearance here

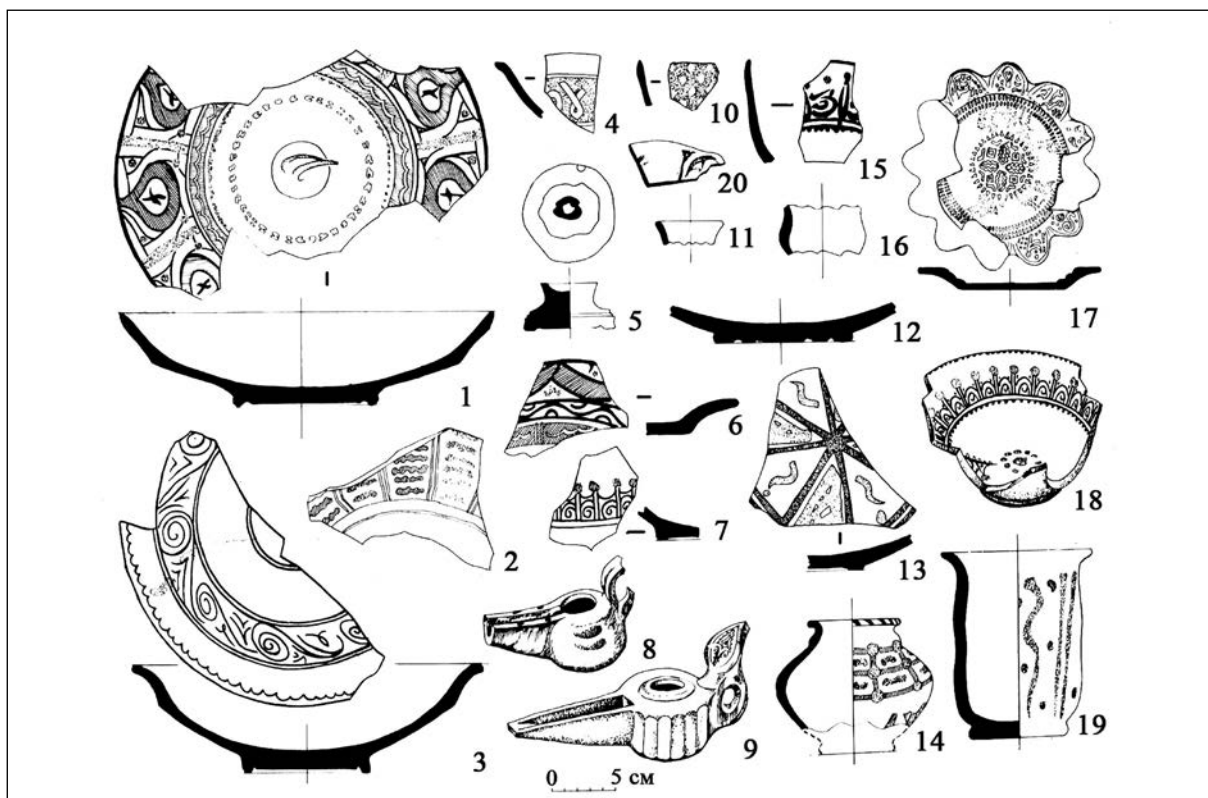


Fig. 67. Kultepa. Glazed ceramics, 12- earlier 13th century.

142). The image of a bird on our chyrag has the closest parallels with the images at handles of the Budrach treasure of bronze implements (Rtveladze, Sagdullayev, 1986, p.115; Ilyasov, 1989, p. 297). As for the Shahrstan lamp, it is heavier, richer decorated. To attach “lightness”, the master put “little wings” - thin figured plates - onto its sides. The body is decorated by belts-incisions in the form of two stylized birds. The little wings above were also used as an element of decor of other metalware of the 11th-12th centuries. Particularly, at the site of settlement Kuva (South Fergana) there have been found bronze lamps with similar “little wings” (Shirinov, Matbabayev, Ivanov, 1998, fig. 34; Matbabayev, Gritsina, 2000, p. 108, fig. 13.) The handles of lamps from Ahsiket and Masjit-i Sulaiman are also made in the form of a bird wing (Voronina, 1977, fig. 38a; Ghirshman, 1971, pl. Va).

Evidently, birds are the key painting motif on the both lamps. This is no coincidence given that the figures of birds crown a whole group of Central Asia bronze lamps of the 11th-12th centuries, now stored in the Hermitage. They differ from our lamps by form (they are equipped with stands); however, birds are easily recognizable: a dove, a cock, and a falcon (Khakimov, 1983, p. 101). Such lamps were also found from Horasan and Iran (Pugachenkova, 1986, p. 198; Fehervari, 1976, pl. 31, no. 95-96; Melikian-Chervani, 1982, p. 102, fig. 32; Islamisce kunst, 1985, p. 3, 43).

Regretfully, it is still hard to identify kind of birds at the Ustrushana lamps. If a lamp from the settlement Kultepa really depicts a nightingale, this image needs no special recommendation: Central Asia nations regard it as a symbol of love and excellent vocal capabilities. Suffice it to recall a hereditary Samarqand “nightingale” - Jumanbulbul-ogly (Jumanbulbul-ogly, 1977). However, the images of nightingales are extremely rare because they are as expressive in singing as unrepresentable in appearance.

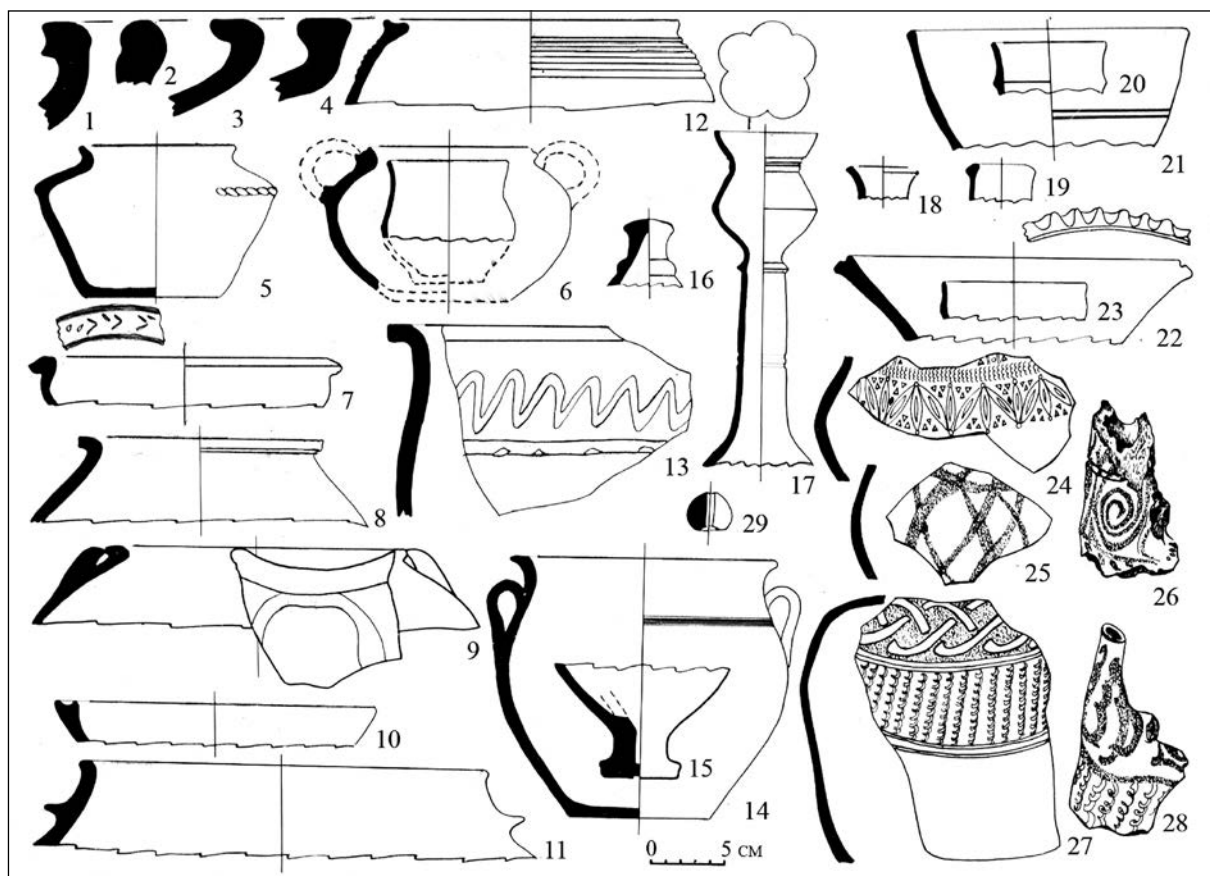


Fig. 69. Kultepa. Non-glazed ceramics, 12-earlier 13th century.

The ironware consists of nails, door cramps (fig. 7), a pendant, and a kapkyr (fig. 75, 9). A set of utility implements is rather typical for medieval monuments (Bogomolov, Gendelman, 1990, p. 95-96; 1991, p. 137-138). The most interesting discovery is a practically unbroken kapkyr (fig. 75). It is one of the rarest discoveries at medieval monuments (Brykina, 1974, p. 86; Bogomolov, Gendelman, 1991, p. 141).

The glassware consists of fragments of cups decorated by a relief ornament (fig. 75, 1), neck of a carafe, stem of a glass (fig. 4), a window glass (fig. 75, 2) and the lower part of a riton horn (fig. 75, 5).

The window glass found at the citadel's zindan and in the excavated area 2 represented 18-diameter light glass disks framed by a hollow edge. Such window glasses were spread most of all in the 11th century-early 13th century (Pidayev, 1986, p. 57; Shishkina, 1986, p. 27-28) Our materials demonstrate that they were rather widely used in Ustrushana urban settlements as well.

The next item - a fragment of a riton - is one of rare discoveries (Brykina, 1968, p. 253; *Antiquities of Tashkent*, 1976, p. 43-44, fig. 16; Gritsina, 2000, p. 84-85), blown of violet glass and decorated by four add-on serpentine threads (fig. 75, 50). M. Aminjanova specially studied them, believes that they had already been of not everyday importance but kinds of happiness and prosperity by the Karakhanid era (Aminjanova, 1961, p. 245). Strictly speaking, old prototypes of ritons were common horns of some animals; hence, ritons were spread widely in the ancient time. The earliest images of horns-ritons discovered in a grotto in France are dated back to the Stone Age (p. 142-143). In Iran and Central Asia terra cotta ritons were known yet in the Bronze Age (since the 13th century BC), went on

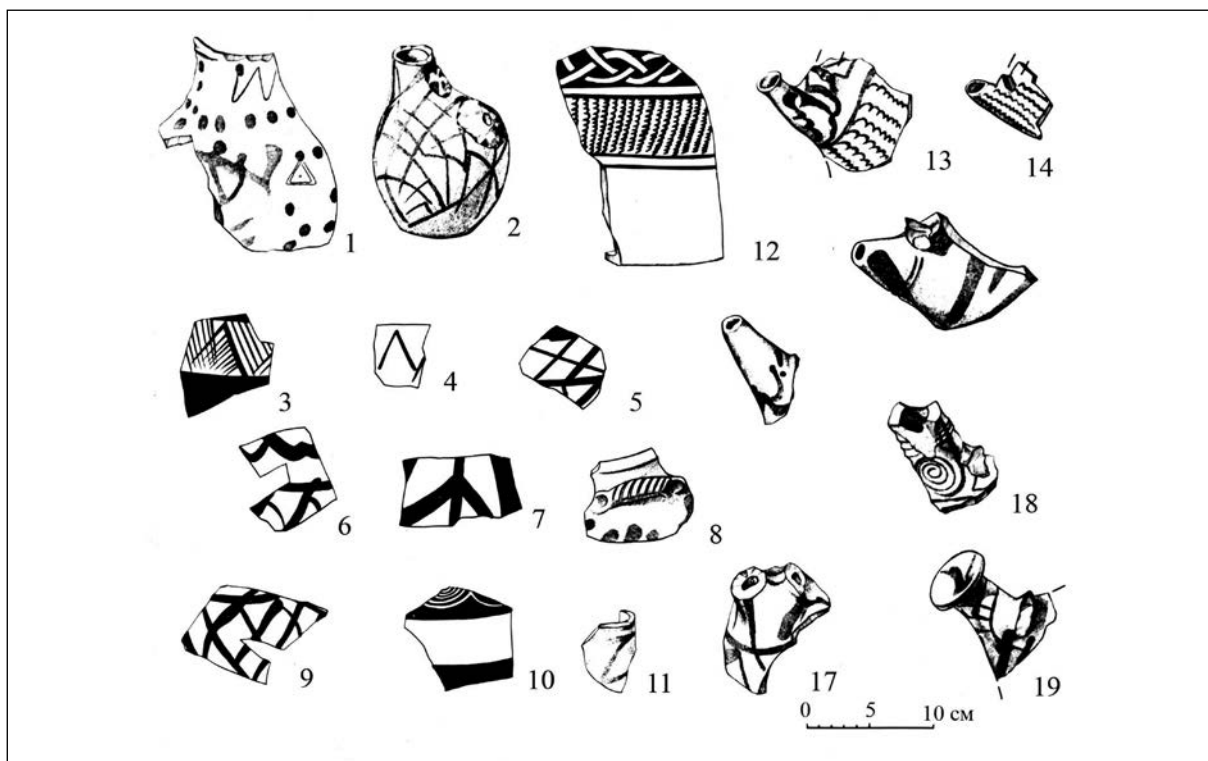


Fig. 71. Kultepa. Painted ceramics, 12- earlier 13th century.

being used in the later periods performing either ritual or utility functions (Masson, Pugachenkova, 1959; Lukonin, 1977, 10, 34-36; Dyson, 1969, p. 18-19). The Greek influence revived an ancient tradition, which is detectable at Parthian monuments. For instance, this is a Babylon riton covered by blue-green glaze, edged in the form of ox head (Masson, Pugachenkova, 1959). Numerous discoveries in Parthia, like that in Central Asia, are usually of local origin.

In the early medieval period ritons were not spread widely, though they seldom exist at wall paintings in various regions of Central Asia (Belenizki, 1977, fig. 124; Belenizki, 1980, p. 118-120, fig. 51-58, Semenov, 2001, p. 28, fig. on the page 35). They demonstrate an astonishing diversity of forms and decorations. A riton found in Samarqand just slightly resembles its prototype. A much more elegant, in terms of form and decoration, is a riton from Tirkashtepa (Aktepa) in Taboshar. Its upper cylindrical part is decorated by a belt of hatched triangles, while the lower cone-shaped part ends with a little hole with two modeling clearly imitating horns of an animal. Apparently in an effort to make it more similar with a horn, the riton was covered by black engobe, glazed (Antiquities of Tajikistan, 1985, p. 152, fig. 415). A group of ritons takes origin from Penjikent. Of unique character is an amphora-shaped vessel (Antiquities of Tajikistan, 1985, p. 204, fig. 216; p. 206-207, fig. 525-526; Isakov, 1977, p. 144, fig. 51, 2).

Of interest is a marble cruciform pendant (fig. 75, 6). On its rear side there are non-through holes where pieces of copper wire have been conserved. Probably, it served as a certain decoration.

The excavated ceramic complex reflects primarily general tendencies in the development of pottery in Central Asia. This was favored by the town's location at a busy caravan way leading from Sogd to Chach, Semirechye, Fergana and onward to China (Bartold, 1963, p. 222-223). The share of engraved ornament earthenware, with or without painting began increasing at this time. It was particularly

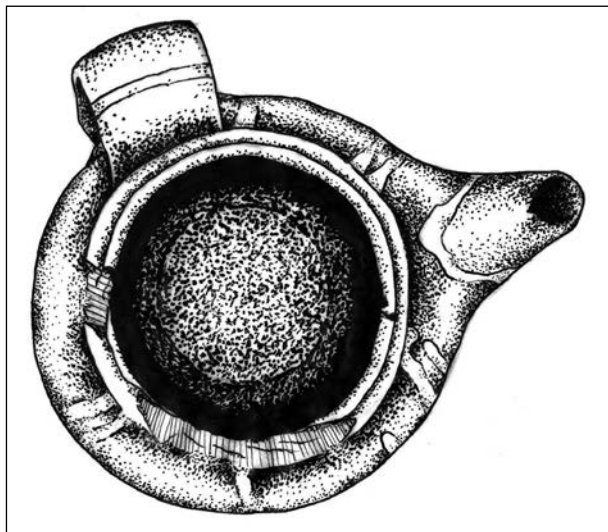


Fig. 73. Kultepa. Painted kettle, 12th century.

typical for Chach and Fergana (Shishkina, 1979, p. 52, 143; Abdulgazyeva, 2000, p. 30-31, fig. 1-2; Brusenko, 1986, p. 54-65). Similar pottery works were spread in the Moslem East (Kleiss, 1982, p. 242, 246, 250 and other). In the view of A. Williamson, engraved pottery works were spread within central regions of Maverannahr.

Our pottery finds closest parallels with the materials of Tashkent (Brusenko, 1973, p. 90-100; 1986, p. 64-65), the site of settlement Karabulak (Brykina, 1974, fig. 45), and the medieval Hujand (Belyayeva, 1987, p. 219, fig. 2). Nevertheless, the complex under consideration most of all resembles the pottery of the Tashkent region (Brusenko, 1986, p. 60-68).

A substantial difference from the pottery of Chach and Fergana is that our complex includes specimens of blue-glazed items, especially, stoneware that were not spread widely there (Brykina, 1974, p. 79; Brusenko, 1986, p. 61). The quantity and a rather wide assortment of the stoneware make us suggest that these items were of local production. As for a fragment of a cobalt-type vessel, it, as has been noted, might penetrate the site of the settlement from western regions, including Afrasiab.

A substantial quantity of painted pottery makes complex under consideration closer to Fergana. Many elements of paintings (spirals, various curls, wavy lines, etc.) are identical with Uzgend's. The existence of contacts between these two regions is to conclude from discoveries of Fergana coins, including ones minted in Uzgend at the site of settlement Kultepa.

A distinction of the complex is the existence of unique vessels (a cup-calendar, double-tank vessels, vessels encrusted by blue vitriform insertions) and a large number of high quality red glazed pottery.

Jartepa. Our works have demonstrated that a pre-Mongol Zaamin occupied largely the Left Bank of River Zaaminsu extending westwards and northwards and covering the ruins of early medieval fortresses and settlements. Particularly, Zaamin kuloli-potters actively explored the territory of Jartepa (fig. 35; fig. 36) located north of the citadel of settlement Kurgantepa (Ancient Zaamin, 1994, p. 39; Gritsina, 1998, p. 51-54). Several potter's furnaces were excavated in the southern and southwestern sections of Jartepa. There have been found furnace equipment implements (sepaya-tripods, pins). All this indicates that a handicraft quarter of medieval Zaamin was located here.

Glazed pottery works are formed by wheel of high-quality, evenly baked clay, as a rule, without admixtures (fig. 76).

Vessels have a rich palette of painting, which is often combined with engraving (fig. 76, 77). An embedded ornament in the form of incisions was sometimes put onto the frame of a mirror. Typical specimens are large vessels decorated by two kinds of ornament (painting and engraving) against light green background. Green spots and stains of various configurations are an additional decoration. There is a group of vessels covered by solid green or pale green glaze. As a rule, these vessels contain elements of engraved ornament. There's distinguished a fragment of a plate with engraved ornament depicting, apart from common curls and spirals, an unusual eight-petal rosette.

The rear side of glazed vessels above was not decorated; only its upper part was covered by a strip of white engobe (presizing). Sometimes this strip was covered by glaze or painting. An exception is a single vessel with its rear side decorated by engraving, stains and spots - green amulets (Gritsina, 1999, p. 6) (fig. 5).

The discovery of a glazed turquoise sphero-conical vessel (simabkuzach) dated back to the 12th century-early 13th century (fig. 78) is unique for Ustrushana.

A set of pottery forms is not diverse. Compared with a similar complex from the site of settlement Kultepa, it is poorer, less representative. On the other side, all forms and painting gammas described above exist in the Kultepa pottery. Along with the aforesaid materials from the settlement Kurgantepa, they indicate on a rather high level of development of pottery in Ustrushana's largest urban center. Worthy of a note is a high quality and diversity of vessels with stamped ornament (fig. 79), which surpass the Kultepa complex and are not worse than that of the site of medieval town Bunjikat (Kalai Kahakah) and best pottery specimens with stamped ornament of Central Asia of the 12th century-early 13th century (Negmatov, Khmel'nitskiy, 1966, tables XVIII-XIX; Pidayev, 2000, p. 140-141). Beside the very produces, our collection contains a specimen of a matrix used for the making of stamped pottery works (fig. 80).

There are rather many specimens of painted earthenware, mostly cauldrons, formed of heat-resistant clay. It should be noted that crocks of these vessels practically bear no traces of blackening. Of interest is a group of red glazed pottery. All these vessels are made of high-quality clay, covered by thick engobe and glazed. Its quality resembles that of antique vessels. Two vessels - a stemmed cup and a four-horn chyrag with a hang-ring - have no precedents (fig. 81, 82). An outlet of one aquarian-murgobi is formed as a real ox head (fig. 83). It should be noted that several non-glazed lamps with massive basements and high stems have yet been found only in Zaamin (fig. 84, 85, 86).

As for glazed pottery, it has been found practically in every Karakhanid-era complexes of either Zaamin district (Ancient Zaamin, 1994, p. 30, fig. 18-20; Gritsina, 1998, p. 140-143, fig. 4, fig. 5) or other regions of Ustrushana (Gaydukevich, 1947, p. 108; Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 124, fig. 53). Techniques of Zaamin and Sabat pottery painting resemble that of Fergana, especially Uzgend, as noted above. However, given that there is wide area of spread and diversity of painted pottery works, it is to suggest that there existed Ustrushana's own production.

Caravansary Turtkultepa is located 20 km of Zaamin near settlement Pshagar, approx. 60 m of the road Jizak-Zaamin. When the Zaamin region was explored first by a group of Samarqand crew in 1964 and then by a joint archeological crew of the Institute of Art Studies and the Chair of Archeology of the State University of Tashkent in 1973, the caravansary was not for some reason detected though it is seen well from the road's side (Aminjanova, 1969, p. 137-142; Nemtseva, Dresvyanskaya, 1986, p. 221-229). Only in 1975 the monument was identified as a settlement with a citadel and a territory adjacent from the south (Alimov, 1975, p.21). The monument drew the author's attention yet at the end of the 1980s; however, only in 1996 it became possible to launch excavations that were continued (in 2006-2008) by a joint Uzbek-French expedition (Gritsina, 1999, p. 67-69; Gritsina, 2003,

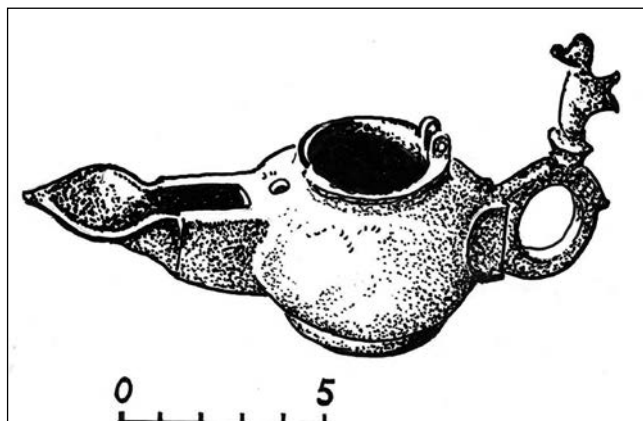


Fig. 74. Kultepa. Bronze lamp, 12th century.



Fig. 75. Kultepa. Metal and glassware, 12-earlier 13th century.

tified by baked bricks. The floor, like that in the portal's northern part, is covered by huge flat stones. The stonework not only is laid under the portal but also stretches farther, towards the inn (fig. 90). This is to conclude that the inn or a part of it also had stone floors. The width of passageway to the inn (230 cm) was practically similar to that in the main portal. The construction and the supports makes an impression that the inn's size and importance were similar to or even surpassed that of the main portal. Besides, along the western wall it became possible to excavate a part of niche adjacent to the portal's support. However, unlike a niche in the northern part, not only baked but also tile bricks were used for the construction of this one.

It should be noted that the southern and northern portal were erected later than the portal itself. This is to conclude from layers of plastering on the wall adjacent by the western post of the doorway's southern gates. This is confirmed by a lower quality of different-size tile bricks, though the builders apparently tried not to deviate from the Samanid standards. How the gates looked in the early Samanid era is yet hard to say. Nevertheless, there is confirmed assumption that northern part niches excavated last year passed along the both walls from the northern portal to the southern one.

Further works continued directly in the inn. Trenches were laid along the outwalls to identify the character and designation of rooms directly forming the inn (fig 87, 88). In both western and eastern walls there were found passageways, arch support and remains of the fallen supports as wide (with a minor difference) as the passageway to the caravansary's inn. As a consequence, there has been identified a planning that corresponds to our suggestions to a significant extent. In front of entry gates there was located a pre-gate rectangular, almost square area with arched passageways to side rooms. Possibly, the area was also laid by stones.

Excavations in the doorway portal's northern part aimed to identify construction of the road side's entry portal found destroyed. Nevertheless, it became possible to excavate a part of the outwall and identify a corner between it and the entry portal. This part of the entry portal turned to be a bit wider than that of the main corridor but narrower than that of the pre-gate construction (fig. 88). Thus, it has been confirmed that the entry portal was not a ledge from the building's surface unlike caravan-

p. 16-17; Gritsina, Vassiere et al, 2009, p. 100-109). Several areas were excavated at the caravansary's site.

At the entry portal (excavated area 1) works were carried on in the northern part (main passageway from the side of the trade way); however, major excavations focused at the southern part (a passageway to the caravansary's inn). As a consequence, it became possible to reach the floor, excavate well-conserved supports of an arch and a portal. Both eastern and western arches are built of typically Samanid-era tile bricks of various sizes. It is interesting that a part of the side room's wall was laid flatwise by tile bricks that were later on thoroughly plastered. Such a method of repair was earlier also identified at a peshtak of the entry portal (2006, p. 248). The lower part of the supports is backfilled and fortified by baked bricks.

saries of the 11th-12th centuries. It was located deep in the walls, like many similar constructions of the Samanid-era (Pugachenkova, 1967, p. 103-107; Siroux, 1949, p. 42, fig. 11), as noted in early works (Mukhamedjanov et al, p. 117, fig. 2).

At the excavated area 4 (fig. 88) there were explored the monument's initial architecture and architecture of the second half of the 12th century when the caravansary partly or fully lost its functions. Initial works were carried on in room 5 where study of the Samanid-era architecture continued (fig. 92a). It is wholly embodied in tile blocks and mud bricks. As we've noted, the sizes of building materials and the techniques of construction resemble that of Paykend rabats. It should be noted that a similar picture has been identified in the Maverannahr's far eastern part - Fergana (Anarbayev, Karayeva, 2008, p. 223).

Note that 70 cm-wide niches were excavated along the walls. The niche along the southern wall is built of Samanid-standard tile bricks, while that at the northern wall - of blocks. Evidently, the latter was built a bit later when an arched passageway in the northern wall was covered. Throughout the excavated area there's cleared a floor linked with these niches. The floor's most ancient level was located approx. 0.5 meters deeper, represented a very hard greenish surface. It appears that no niches existed in the room at this, most ancient period of construction.

Leading here initially were three passageways: one from the above-described pre-gate construction (an area at the entryway to the caravansary's inn) and two others from a spacious northern room. It is interesting to note that the room's length of approx. 18 m was practically similar to that of the entryway portal, thus demonstrating unity, grandiosity of architectural solution.

As for a huge room east of the entryway portal, it has become possible to excavate, apart from the southern wall (partly excavated), a corner, and trace a part of the eastern wall. Regretfully, the latter was destroyed. Attempts to detect it north of this place failed. A minor prospecting shaft covered a corner of huge till walls (fig. 88). The designation of this large room will remain unclear until the inner room is excavated.

Quite a different picture is detected east of these rooms (closer to the caravansary's northeastern corner). Though the southern wall of the northern room continues here, architectural orderliness as if is lost. The excavated area covered several ancient walls forming several rooms. However, all they are excavated only partly, so no general view is detectable. It'd be appropriate to accentuate a wall made of Samanid-format figured brick wall.

Architecture of the upper construction horizon has been studied as well. The excavations were carried out at the level of floors linked with rather solid tile walls. The latter are parallel with the Samanid walls, form a corridor-shaped rooms jointly with them. We explored the eastern wall of the Karakhanid-era complex. It was rather well conserved; it became possible to trace it up to the caravansary's northern outwall. In a trench along it there were identified three more parallel tile walls located perpendicularly to the main wall. The excavations revealed two burnt beams, apparently from the roof. Karakhanid-era fundamental constructions seem to have been located here. In other places there were also identified baked-brick walls, brickwork, hearths, etc.; however, Samanid-era walls were used most of all. Lots of pits were identified here. The most interesting discovery was an underground room of taghon type: a food storage that was led to by well-conserved steps. Regretfully, it turned no possible to clear this room fully. Storage of such sort is known, particularly, from excavations at Afrasiab and Kank (Lebedeva, 1986, p. 136-146).

The excavations made it possible to open the caravansary's southern gates (fig. 87). This is another confirmation to its ancient age: the existence of two gates is a feature of early rabats (Muhamedjanov,

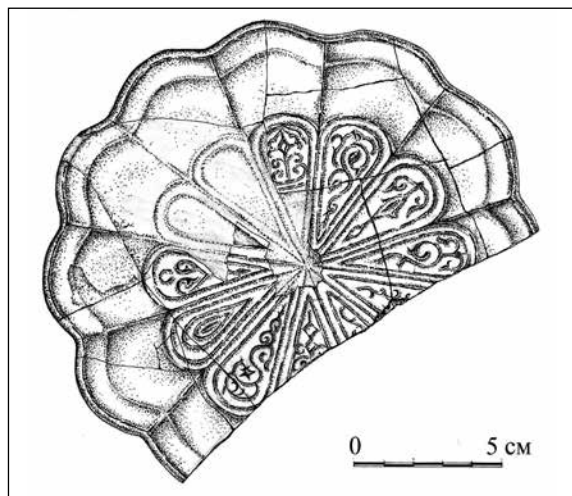


Fig. 76. Jartepa. Glazed bowl with scalloped edge, 12th century.

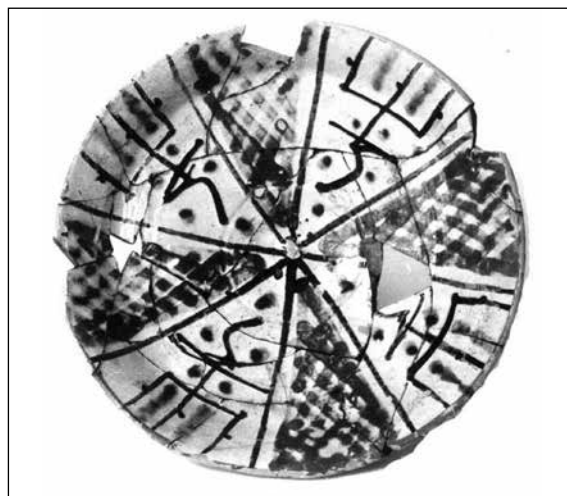


Fig. 77. Jartepa. Slip vessel with tamga image, 12th century.

Adylov et al, 1988, p. 117 and next). It became possible to excavate the eastern support that has been conserved well enough. Unlike the northern gates, it is made of not bricks but tile blocks. The western support turned to be beyond the excavated area, so it was no possible to identify its width. Nevertheless, it appears from the excavated area's dimensions that its width was approx. equivalent to that of the northern gates. It is interesting to note that here the floor is also laid by huge flat stones. The southern gates are located straight opposite the northern gates. In the monument's topography there is rather clearly traced a way leading from the southern gates to the caravansary's inn. In the area 3 there were excavated remains of the northwestern angle tower, as well as sections of walls forming the northwestern angle (fig. 93; fig. 94).

The excavations identified remains of a Karakhanid-era construction erected of 28-29/16/6.5 cm tile bricks. The maximally conserved height of the construction does not exceed 70 cm. Of interest is the structure of the building's northern wall. Its exterior and interior parts are erected half-a-brick, while the inner space is full of clay with fragments of bricks. A similar brickwork of Karakhanid-era buildings was identified at the site of settlement Kuva in South Fergana (Matbabayev, Gritsina, 2000, p. 96). It has later been identified that this was the place for a lavatory consisting of three rooms and a tashnau. Tashnau represented a platform made of Samanid- and Karakhanid-format baked bricks. An outlet was drilled in one of the bricks in the middle of the platform (fig. 94) (Gritsina, Vassiere et al, 2009, p. 101-102).

Within the prospecting shaft 3 it became possible to excavate the front part of the caravansary's western wall. In the shaft's lower part there was identified a tower's lead representing a tile-base construction alternated with mud brickwork of a traditional Karakhanid style: one row of flatwise laid bricks was put first. Then, a series of upright placed bricks covered by two or three rows of bricks were put onto it. The sizes of the bricks were 30/18/5-6 cm (fig. 95).

It also became possible to discover the front part of the northern wall found destroyed. The wall that was laid on loess subsoil was 360 cm wide (fig. 94). The outwall is erected of 58-65-cm wide, 106-cm high tile blocks; the width of gap between the blocks is from 0.8 to 1.5 cm.

The discoveries have revealed lots of archeological material dating back mostly to the 12th century-early 13th century. Glazed pottery include dishes (lyagans), bowls, plates, pots, jar-shaped ves-

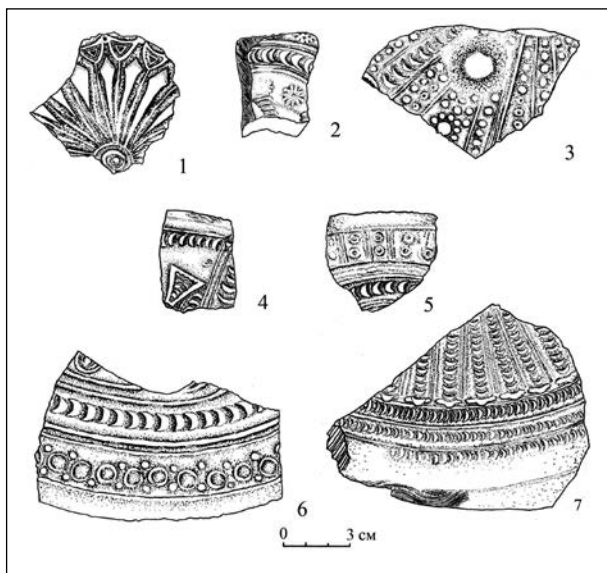


Fig. 79. Jartepa. Stamped ceramics, 12th century.



Fig. 81. Jartepa. Four-pronged ceramic lamp, 12th century.

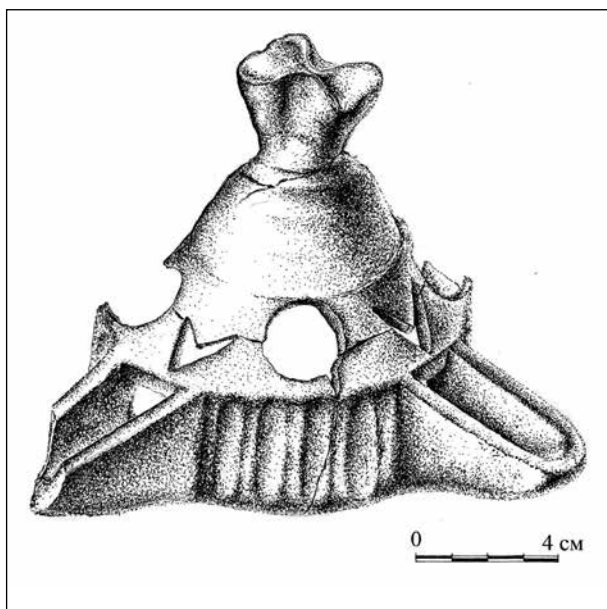


Fig. 82. Jartepa. Four-pronged ceramic lamp, 12th century.



Fig. 83. Jartepa. Vessel outlet in the form of bull head, 12th century.

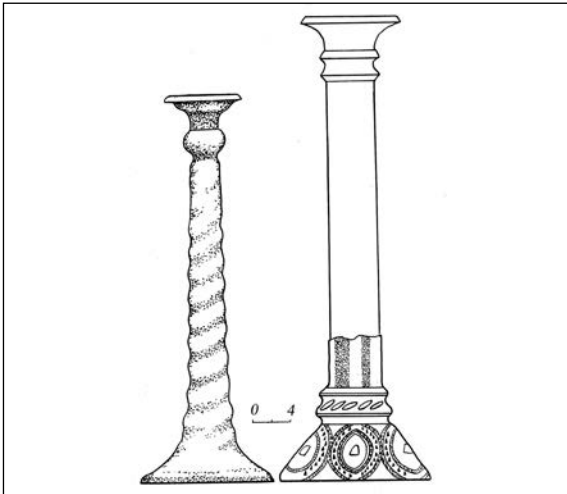


Fig. 86. Zaamin. Ceramic lamps, 12th century. Details with partial reconstruction.

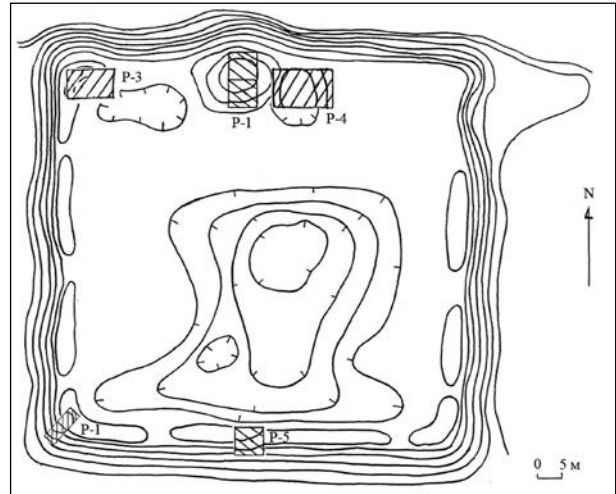


Fig. 86a. Turtkultepe. Diagrammatic plan.

sels, and chyrag. These vessels were decorated by painted, engraved and stamped ornaments (fig. 96, 97). Non-glazed pottery include items made either by wheel or by hand. Items made by wheel are formed of well-baked clay with an insignificant admixture of sand, evenly baked; crack at the fracture is brick-red. They are khums and khumchas, jugs, pots, flasks, cauldrons, and lids. These vessels were decorated by scratched, stamped, and carved ornaments. A group of the vessels is decorated by stains; red-engage vessels are identified as well (fig. 98, 99, 100). Modeled vessels include a large number of painted pottery (fig. 97a). They primarily have the form of *acquarius-murgobi* but also represent large jugs, cauldrons, as well as lids. Defective items have been found among the pottery and bricks. Basic forms of glazed and non-glazed pottery have already been identified during excavations at the site of settlement Kultepe (see above). It should be noted that in terms of assortment of forms and quality of performance the pottery practically does not yield to that of Ustrushana's largest towns: Zaamin and Sabat, as well as other towns of Maverannahr. It seems that a part of the figuline was delivered here from Zaamin's potteries and that the other part was a local production (Gritsina, 2006, p. 249-250, fig. 9-10).

Thus, the conducted excavations have confirmed the monumentality and state importance of the caravansary. At the early, initial stage it was, probably, a *rabat* of military-strategic importance at Ustrushana's western boundary. There were no niches in either entryway portal or adjacent rooms at the time. The initial planning's being target-oriented is evident. We see spacious rooms more suitable for unpretentious barracks than for servicing caravans. There are no common *hujras* here. At the second stage when the construction's functions change, the former barracks are rebuilt into residential premises with stove benches. Materials stemming from the excavations confirm sources' report on the functioning of "...the biggest and most well-known in Maverannahr" (al-Istahri) are not contrary to the fact that caravansarai Khudaysar's was localized at the site of settlement Turtkultepe.

The tower performed, most likely, no military functions but was an architectural structure typical for constructions of this sort in the Moslem architecture. It seems that the towers were attached to the main building at a later period when this element of architecture was spread widely. At this time, the caravansary's northwestern part was not restored; instead, a complex of rooms with lava-

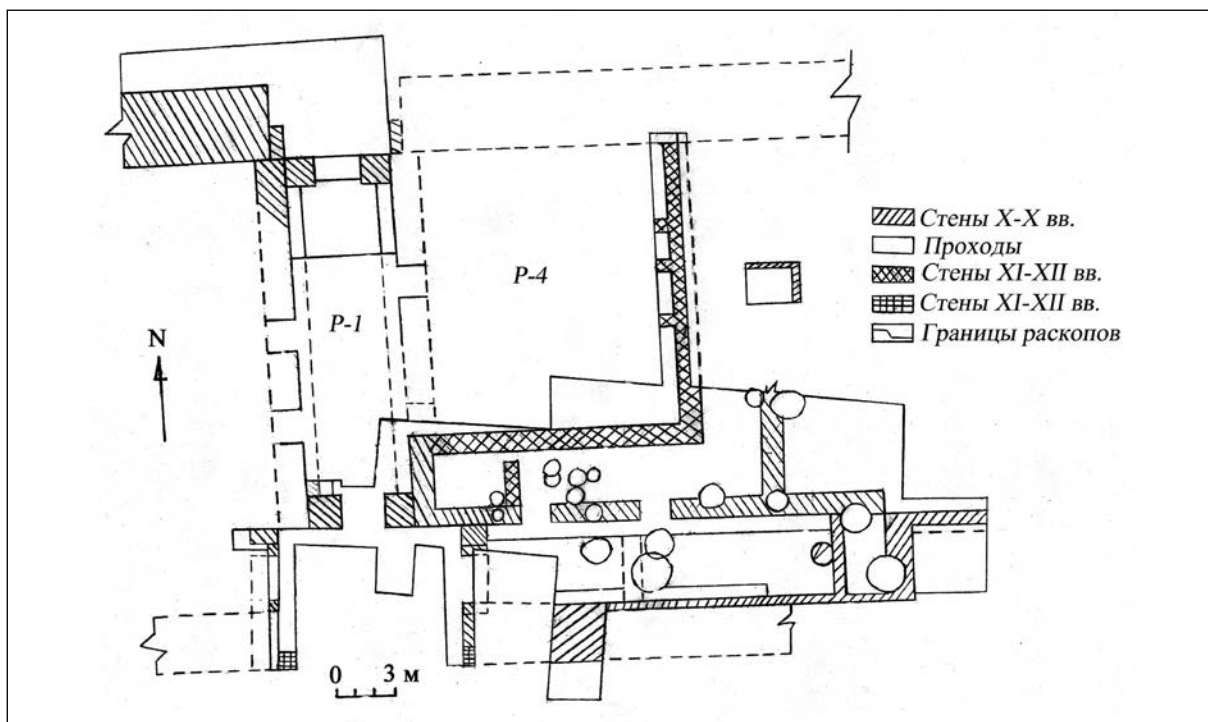


Fig. 88. Caravanserai Turtkultepa. Plans of archaeological digs 1 and 4.

tories-tashnau was erected straight on the ruins. Lots of cesspits and badrabs were dug near them. The unusual width of the northern outwall - around 4 meters - is apparently designated to defend against steppe nomads, who are mentioned by medieval authors. At the same time, the width of the side western wall turned to be a bit narrower: 3.15 m. By the second half of the 12th century the caravansary gradually loses its functions, is substituted for a settlement. There are actively used Samanid-era capital buildings and new ones are being built in the settlement. Outwalls become leveled, are used for utility needs.

The excavations have revealed a huge number (for such a small settlement) of glazed and non-glazed pottery, quality of which is not worse than that of the urban pottery. Among the discoveries there are many painted and red-glazed vessels. There is a significant number of ironware, which confirms reports of sources about developed metal-producing and metal-working centers in Ustrushana (fig. 101), as well as decorations made of various materials (fig. 102). It is not denied that the pottery, at least partially, represented local production. This is to conclude from the found defective items, ceramic slag, and fragments of furnace lining. The discovery of ball iron may be an illustration of the existence of blacksmithing, while that of clots of glass-of glassblowing. It should be stressed that there have been found many elegant bottles decorated by an excellent stamped ornament. Probably, all these items were made for not internal use but sale. In such case it'd be appropriate to assume operation of a small handicraft center that supplied local population and bypassing caravans with its produces.

Apart from the excavation works, a neighborhood of the caravansary was studied as well. South of it there are definitely fixed four hillocks. Their height does not exceed 1 meter. Pottery and fragments of baked bricks have been found at all the fortresses. Within an area of 70-80 m east of the monument there are detected hillocks containing, apart from pottery, lots of ceramic slag. The discoveries are as if illustrative of production character. Owing to the existence of a large number of baked

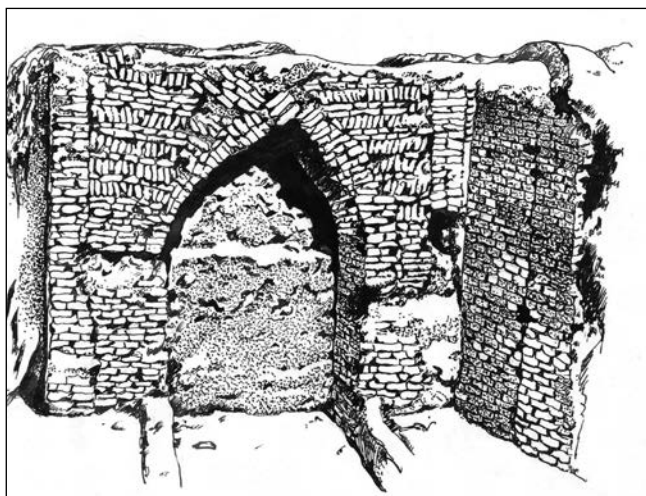


Fig. 89. Caravanserai Turtkultepa. Entrance portal. View from entrance ayvan.

Samarqand via the Katvan (Bulungur) steppe to Ustrushana lands by two main routes. First, they went to Barket (a straight route, as this is one of Samarqand towns) and then to rabat Abu-Ahmad where the road was divided into two turn-offs. One of them turned northward and through the Ustrushana towns Harkany (Harakanu) or Katvandizu led to Dizak, a center of the far north-western Ustrushana settlement Feknan (Fegnan). The other way led eastwards, deep into Ustrushana lands up to rabat Sa'd from where it was possible to reach Zaamin via the settlement Burnamad (Bartold, 1963; p. 221-222; Negmatov, 1953, p. 246-247).

The first road led from Dizak through the Hunger steppe towards Shash, while the second one led to Fergana. Caravans often moved towards Shash on the Fergana road as the most suitable, safest way. From Zaamin they moved towards Havas, then straight towards Syrdarya and further to Benaket, the second important, after the capital, town of Shash. Sources call this road a Benaket one. Naturally, this road was being exploited in the most intensive manner and, as sources and archeological observations illustrate, was the most ancient one. The caravansary Turtkultepa was linked exactly with this road (fig. 103).

Well-equipped caravansaries and inns were erected in all major towns and at large transit ways at the time. According to Istahri and Haukal, their number throughout Maverannahr exceeded 10,000 (Smirnova, 1970, p. 138-139). Probably, the figure is exaggerated; nevertheless, it reflects a scope of caravan trade and the great role caravansaries played in the state. They were often linked with the name of a certain ruler. For instance, in the 8th century deputy of Khorasan Asad ibn Abdullah was widely known to his contemporaries for erecting "hotels-palaces in steppes: A traveler from the east and another traveler from the west who arrive there find no shortage there" (Bartold, 1963, p. 250). Sharafeddin Abu Tahir ibn Sa'ad, the governor of the Merv oasis under sultan Sandjar, was left in the memory of his descendants for having built (in the early 12th century) a grandiose caravansary Rabati-Sharaf located between two largest Khorasan towns: Nishapur and Merv. Building's huge ruins rise near Shurlag, between the towns Meshkhed and Serakhs, reminding of one of the most famous, busiest trade ways of the East (Pugachenkova, 1958, p. 230; Orazov, 1973; p. 84-85).

Great A. Navoi got glorified not only as a patron of arts, prominent poet and prosaic but also as a person who built and maintained 90 rabats (inns) in Herat. Besides, he built or reconstructed around

bricks it is possible to suggest that they were locally made. Thus, the area of the monument increases substantially. It appears that not only the dimensions of the caravansary itself but also the whole area under settlement around it made Yakut Hamavi mention Khudaysar as a Maverannahr town located at Ustrushana's outlying district (Negmatov, 1953, p. 246).

On identification of caravanserai Turtkultepa. The second half of the 9th-10th centuries is a period of establishment and prosperity of the Samanid State, a time of growth of international caravan trade (Metz, 1973, p. 375-383). According to the then sources, it was possible to get from

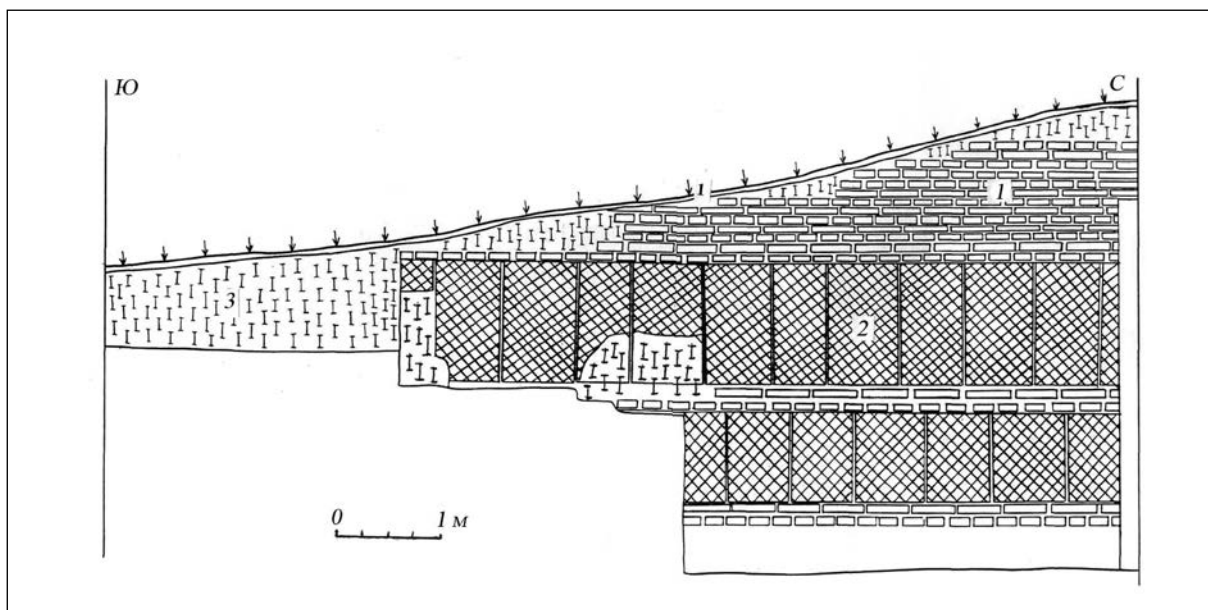


Fig. 92. Turtkultepa. Laying pattern of western wall of entrance ayvan.

50 rabats along the main ways of Khorasan. Regrettably, only one semi-destroyed caravansary Kush-Rabat in the Herat province relating to the name of A. Navoi has been conserved up to nowadays (Pugachenkova, 1976, p. 49).

Karakhanid ruler Shems al-Mulk was buried in a Navoi-built caravansary located between Samarqand and Khudjand, i.e. on the way where a Pshagar caravansary Turtkultepa was located. This is a rare but not a single instance. Particularly, Kara-tegin, a governor of the Ispidjab region under Nasr ibn Ahmad (864-892) was buried in him-built rabat bearing his name. Near him there was the grave of his son al-Mansur who died in 951 (Bartold, 1963, p. 233, 378). According to ar-Ravandi, ruler of the Khorasan town Tusa Arslan Jazib found his last asylum in him-built rabat Sangbast located between Nishapur and Serakhs. The ruins of the rabat and the ruins of the mausoleum over his grave have been conserved up to now (Orazov, 1973, p. 82).

Interesting information pertaining to the rabat Mahi on a road from Tusa to Serakhs, one day's march from rabat Sangbast is given by Khafizi Abru. The rabat allegedly was built in the memory of Firdovsi by sultan Mahmud Gaznevi (p. 83). The wife of Seljuk sultan Sandjar (1118-1157) Turkan-khatun was specialized in restoration of the destructed caravansaries. Following the so-called "Oguz time of troubles" when tribes rose in a rebellion around Balkh (in 1153), the caravansaries Makhi and Rabati Sharaf (p. 84-85) were restored upon her order right in 1154-1155.

Caravansaries often surprised contemporaries by grandiose splendor of their decoration and internal comfort. Sufficient it to recall world famous caravansaries Akcha-kala, Daya-Khatyn, and Rabati Malik (Pugachenkova, 1958, p. 225-241; Khmel'nitskiy, 1992, p. 182-197; Nemtseva, 1983, p. 112-136; 2000, p. 7-13; Khujanazarov, Nemtseva, Saparov, 2002, p. 175-178.) The caravansaries were multi-functional. Not only caravans and travelers were received, and large trade fairs were held here. Depending on circumstances, caravansaries could become a fortress, a palace, a barrack, a stockyard, a warehouse, or even a spiritual center (Pugachenkova, 1958, p. 223-228; Khmel'nitskiy, 1992, p. 180; Nemtseva, 2000, p. 10-13). Al-Istahri told an interesting story. He says in Sogd he saw a rabat where the gate is opened wide, nailed to the wall. The gate hasn't been closed for more than 100 years al-



Fig. 93. Turtkultepa. General view of archaeological dig 3 from the north.

ready so a traveler was never refused staying there overnight. The rabat had enough room for 200 persons, horses and pack cattle (Smirnova, 1970, p. 139).

But let's return to the figure of 10,000 reported by al-Istahri and Ibn Haukal. How real is it? In the Sefevid Iran described by scientists as "the golden age of Iranian caravansaries" there were several thousands of rabats (Kleiss, Kiani, 1994, p. 755). The famous German scientist and his Iranian colleague, who have composed the fullest catalogue of public constructions of that period, also report the following figures: in Isfahan alone under shah Abbas I in operation there were 162 mosques, 48 spiritual schools, 274 bathhouses and 1,802 caravansaries (1,082, according to other data) (p. 775). In Ardebvil, in the vaqf of a large Sefevid mosque there were, apart from numerous various constructions, 8 caravansaries that brought a significant income (p. 7).

The aforesaid causes a different appraisal of al-Istahri's Maverannahr-related report; furthermore, this author won the reputation of one of the most reliable, trustworthiest informers. Probably, he included in this number not only caravansaries and coaching inns but also a great quan-

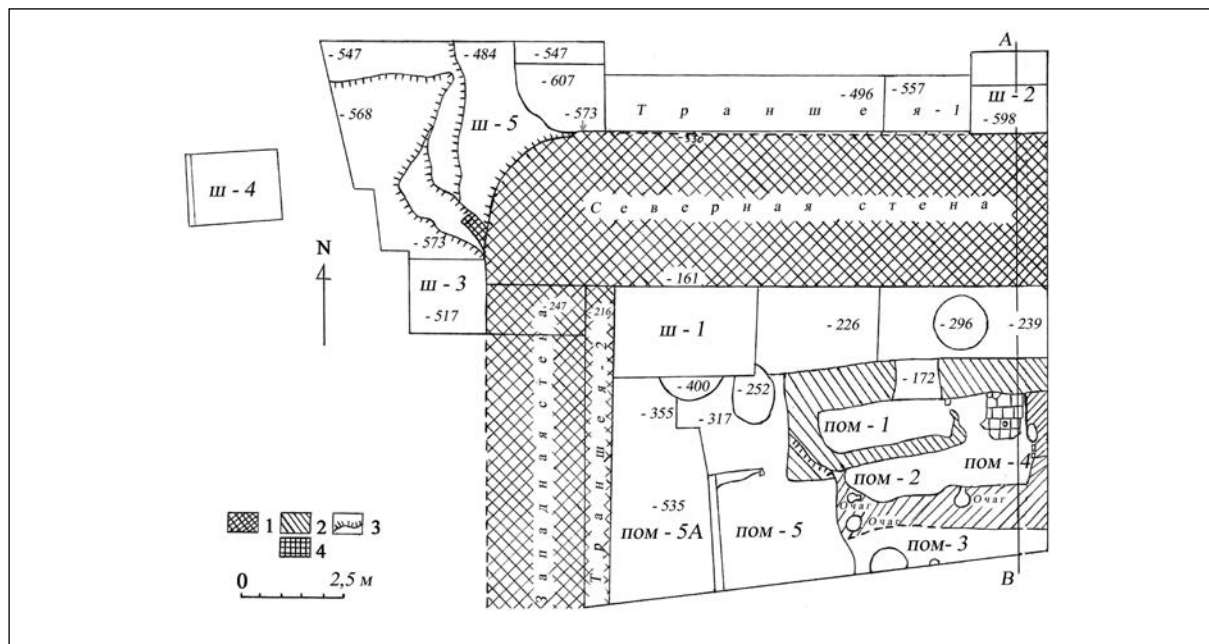


Fig. 94. Caravanserai Turtkultepa. Plan of archaeological dig 3.

tity of buildings and constructions designated to serve trade ways and caravans (post offices, guard posts, sardoba (a reservoir), etc.) Other facts confirming the reliability of the report of al-Istahri should be noted as well. Sources inform that each Bukhara settlement had a coaching inn (rabat) at the gates of Paykend, “a town of merchants”. There were at least 1,000 such coaching inns by the 10th century. The number of inns in Karminia (Kermin) was not smaller (Bartold, 1963, p. 169). After the Samanids State fell, Paykend fell into decay as well. As-Sam’ani with his own eyes saw the remains of rabats, the number of which he claimed had once reached 3,000. Many other settlements, not to mention towns of Maverannahr also had their own coaching inns and caravansaries. A great number of them were erected for “faith warriors” - gazies - around urban centers such as Dizak, Binket, etc. According to al-Mukaddasi, in Ispidjab (considered a part of Maverannahr in the 10th century) there were up to 1,700 rabats (Bartold, 1963, p. 233).

That there were many caravansaries in Ustrushana is known from written sources; some of them are specially mentioned. First of all, this is the caravansary Khudaysar (Khadis), which was located a couple of farsakhs away from Dizak. It was built by prominent Ustrushana ruler al-Afshin. “... This is the biggest caravansary. Samarqand residents have no better rabat than this,” Al-Istahri reported. The significance of rabat Khudaysar and vaqf was so great that Yakut even called it a town at Ustrushana’s border outskirts (Negmatov, 1953, p. 246). Another caravansary was called a rabat of Hasan and was built in the 10th century by a certain Badr Kushayr. According to as-Samani, it was located in Dizak or near it.

The whereabouts of both caravansaries was not identified until lately. On the whole, quite an insignificant number of constructions of that epoch have been conserved up to present. This substantiates the interest caused by Turtkultepa. Within the whole extent of the ancient road from Fergana to Samarkand it still remains the only truly identified caravansary.

In the architecture of caravansaries there was usually applied a deep ancient principle of a central-inn planning with a four-gallery spacious inn with living and utility rooms. Also, there was often erected an inner mosque (Pugachenkova, 1967, p. 106); one of such mosques has been conserved well in Rabati Malik (Nemtseva, 2000, p. 10; 2002, p. 237). A quadrangle of outwalls is high, dumb, with towers at the ends. Great attention was paid to the erection of the main, often the only entrance, a grandiose portal of which as if crowned a building. It was distinguished from the walls and represented a rectangular peshtak with an ogive, at the backwall of which there was located a rather wide entrance arch with massive, firm wooden doors (Pugachenkova, 1967, p. 108).

The very initial studies and excavations at Turtkultepa not only confirmed its functional designation but also identified a series of peculiarities. First of all, it has the striking dimensions - 106/106 m - that exceed all known constructions of such sort in Maverannahr. Unique is the thickness of outwalls (approx. four meters), which is apparently made for the reasons of defense. Stretching northwards was a boundless “country of Guz”, bellicose nomads who did not mind robbing caravans. Exactly

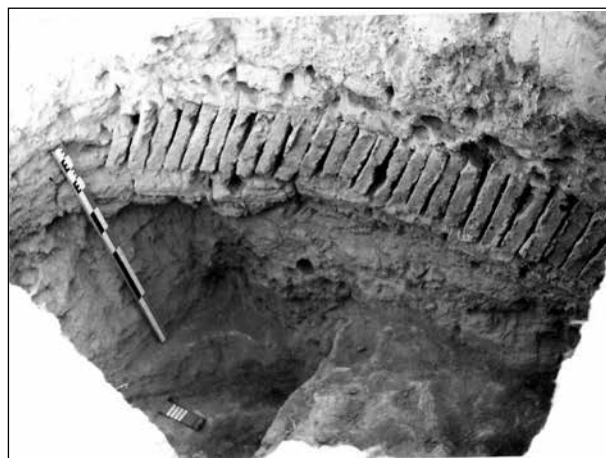


Fig. 95. Caravanserai Turtkultepa. Archaeological dig 3. Access to angular tower.

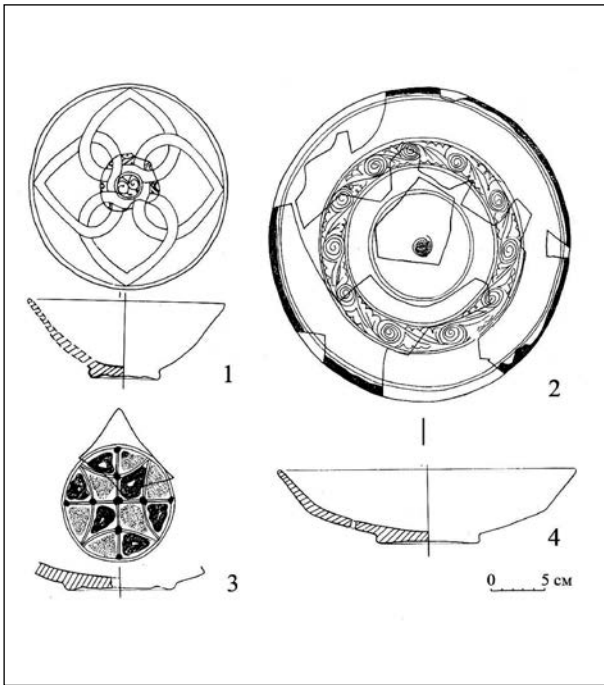


Fig. 96. Caravanserai Turtkultepa. Glazed ceramics, 12th century.

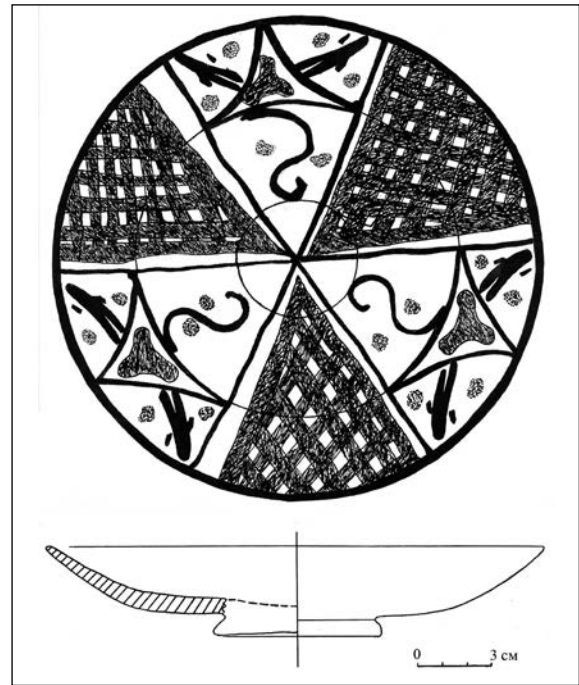


Fig. 97. Caravanserai Turtkultepa. Glazed bowl, 12th century.

this locality - the Jizak (under Burnamad) and Khavas steppes - saw fierce battles of the last Samanid ruler Ibn Muntasir (his troops included the tribes of the Guzs as well) against the Karakhanids (Gritsina, 1999, p. 68).

Besides, in the planning of Turtkultepa there was violated the four-gallery principle: a micro-relief of the monument is illustrative of bumps of only three galleries. In addition, the southern wall opposite the main entrance has a drop indicating most likely on the existence of one more, “black” passageway to the caravansary. Two passageways located one opposite another are typical for early caravansaries. This was also noticed at pre-Arab caravansary Azlyartepa (Ancient Zaamin, 1994, p. 25) and early Paykend caravansaries (Muhamedjanov, Adylov et al, 1988, p. 117, fig. 2). And of course, the most astonishing thing was that the entrance arch of the main gates has been conserved fully, a rare instance in the work of archeologists. Furthermore, it is erected of mudbricks and more than 5 meters high.

The excavations discovered a part of a 14 m-long entrance gallery that led to a spacious inn. Its walls are built of large tile blocks and mudbricks, the floor is covered by flat stone slabs and large pebblestones. It repeatedly endured repair and reconstruction over its long existence. Walls of the entrance gallery contain traces of several layers of plastering; total thickness of the layers reaches 10 cm. It seems possible to identify the date and reason of the caravansary’s becoming deserted. A complex picture of accumulation of cultural layers illustrates that this happened before the Mongols invaded the region. Most likely, this is linked with war actions of Khorezm shah Mohammad against Kara-Chinese in the early 13th century when he ordered to ravage many regions of Shah, Fergana and Ustrushana. Numerous discoveries of earthenware items, coins, baked and tile bricks allow rather confidently dating the caravansary back to the 10th century or even an earlier period. The issue of date of construction of the caravansary Turtkultepa is closely linked with its identification.

As has been noted, this rabat was built by Ustrushana ruler al-Afshin, i.e. in the first quarter of the 9th century, according to al-Istahri, Ibn Haukal and as-Samani. It was located a couple of farsahs away from Dizak. According to the same sources, it was the best rabat of Samarqand. Yakut, apparently with the rabat's sizes in mind, described it as a town of Maverannahr located at Ustrushana's border outskirts (Negmatov, 1953, p.246). Worthy of a note is observation of al-Istahri who said, "... there is no single rabat standing as close to enemy rabats as this one" (Materials of History of Kyrgyzstan, 1973, p. 27). He is repeated by Ibn Haukal (Betger, 1957, p. 20). "Enemy regions" apparently mean a nomadic steppe, a "land of Guzs", the present-day Hunger steppe that adjoined cultural regions and towns of Ustrushana. Another aspect mentioned by sources is worthy of a note: no other rabats existed north of the rabat Khudaysar (Bar-told, 1965, p. 216).

Naturally, the caravansary Khudaysar and its whereabouts drew specialists' attention for a long time. Making one of the maiden attempts to localize it was A. I. Bilalov, who suggested placing it at the site of reservoir Agachty 35 km north of Jizak (Bilalov, 1980, p. 35). However, the suggestion contradicted written sources, lacked any archeological proofs. More substantiated is U. Alimov's effort, later on backed by M. H. Pardayev, to localize the known caravansary at the site of Kukrabattepa (Alimov, 1975, p. 2; Pardayev, 1991, p. 65-66) located 7-8 km north of the site of settlement Kaliyatepa. This is a square (65/65 m), 3 meters high monument. Here there were found fragments of the earthenware of the 9th-11th centuries and baked bricks of the Samanid format (21/21/4 cm). No excavations have been carried out at the moment, which is strongly damaged at the moment. The monument was identified due to its name, planning, excavated earthenware, and distance (the latter, indeed, coincides with the one indicated by sources -1 far-sah). But this seems to be the only coincidence. Kukrabat is located within a chain of other similar constructions, is not notable for anything particular. For example, north of it there are located several caravansaries studied by N. B. Nemtseva. One of them - Kaltepa - is notable for its dimensions: 82/86 m and a height up to 5-6 m. (Nemtseva, 1987, p. 13; 1989, p. 43).

Excavations at the site of caravansary Turtkultepa have demonstrated that it was erected in the Samanid era. Traditional construction techniques of a preceding early medieval period (the use of large-size tile blocks and mudbricks in the proportion of 1/2) are also indicative of an earlier dating. Sizes of the caravansary (this was the largest caravansary of all other known in Maverannahr), Sasanid era materials, the architecture's monumentality, the absence of other rabats north of it, its being located at the border of Ustrushana lands (large caravansaries were usually erected at borders of estates, nearby potential enemies, see: Lokhovitz, 1978, p. 118) make it reasonable to identify Turtkultepa as the rabat Khudaysar. However, a distance from it to Jizak (the site of settlement Kaliyatepa where the Samanid Dizak is located) is greater than that indicated by sources: 3-4 farsahs against 1-2

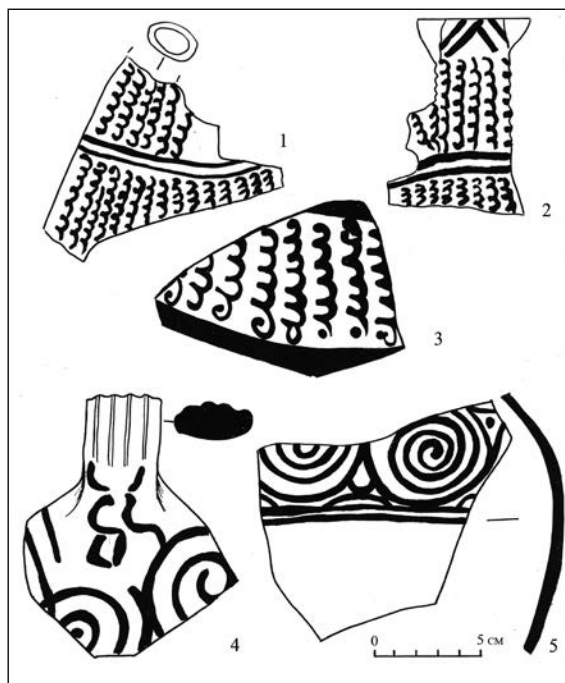


Fig. 97a. Turtkultepa. Painted ceramics, 12th century.

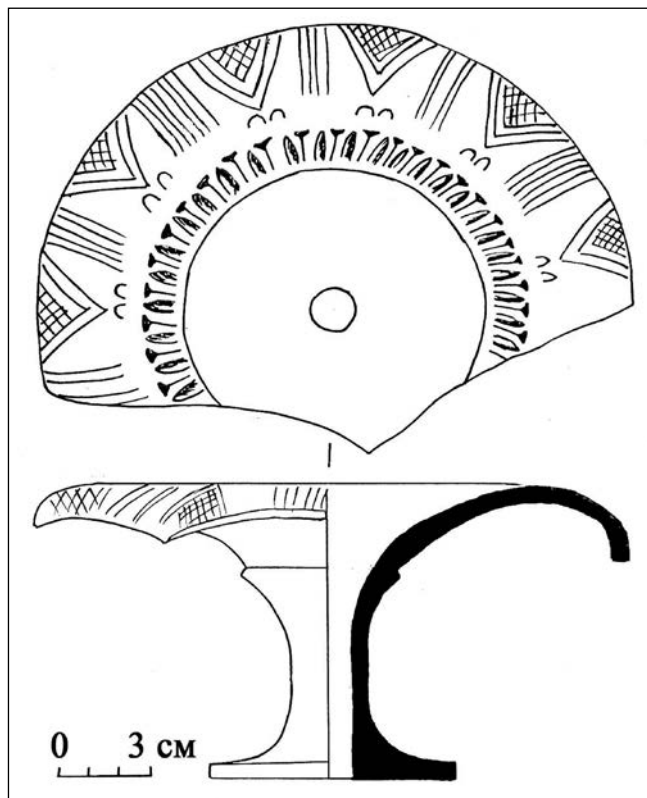


Fig. 100. Turtkultepa. Red-glazed vessel, 12th century. Detail.

mausoleum of Hojai Sirob. An exploration work in 1994 led to transposition of this title onto a nearby settlement (Gritsina, 1994, p. 17). However, local residents call the mausoleum in a bit distinctive manner: Hujayi Sar, i.e. “Owner of the Head”. In the view of S. Karabayev, this was the initial name of caravansary Khudaysar. As time lapsed, the following transformation became possible: Hujayi Sar - Hujay Sar - Khudaysar. The latter toponym is related to Arab historians who renamed it “Head of the God” due to the special role and dimensions of the caravansary. Conservation and link of the word’s initial meaning with the name of Khudaysar is not denied and indirectly confirms that the suggested identification of the caravansary is true.

As for the history of the end of the 10th century-beginning of the 13th century, written sources insignificantly add to the information provided by travelers of the 9th-10th centuries, repeat and often distort the information provided by their predecessors. Thus, numismatic and archeological data acquire utmost importance.

About 10 years ago B. D. Kochnev, upon my request, for the first time composed a catalogue of all Moslem coins of Ustrushana, including coins found in the course of our works. This helped receive new information and correct the already known information about political history (Kochnev, 1994, p. 64-73). Particularly, a thorough analysis of Ustrushana coins with the dating of 279 Hegira and 280 Hegira led to conclusion that the last afshin (ruler) Sayr B. Abdullah could rule the country longer than what scientists used to think (Bartold, 1963, p. 269, 282; Negmatov, 1977, p. 25). In other words, he preserved his rule over a short period of 894 as well, after which the mint of Ustrushana was closed for a long time while all its equipment was moved to Samarqand (Kochnev, 1994, p. 66). Coming to

farsahs respectively. It has to be kept in mind that a distance from Kharakana to Dizak and from Dizak to Zaamin (5 farsahs each) also does not correspond to the truth: it is much smaller than real as regarding the former and much larger than real as regarding the latter. Another thing is that multiyear excavations at the site of settlement Kaliyatepa have not revealed any substantial layers of the Samanid era (Pardayev, 2000, p. 119-129). With these remarks in consideration, the then Dizak should have been located farther than Kharakana and closer to Zaamin (hence, to the caravansary Turtkultepa).

In putting the issue of localization of Samanid Jizak aside, we’d like to note that the suggested identification of Turtkultepa with the rabat Khudaysar still needs to be specified more accurately, which can be done through either excavations at the very monument or studies in the area of present-day Jizak. Particularly, expert of local history S. Karabayev (Oga Burgutli) drew our attention to that the settlement Beshpshagar (see above) has a

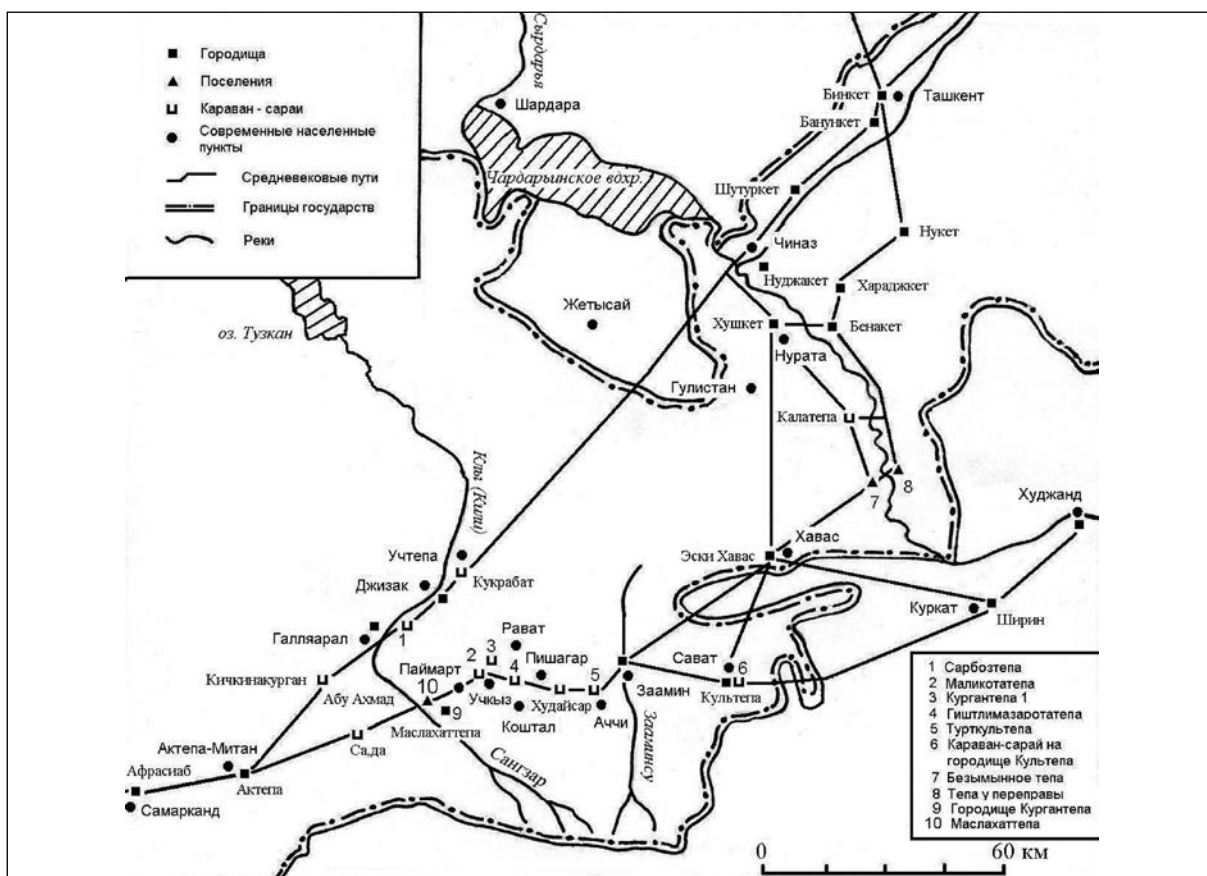


Fig. 103. Map of roads and populated localities of North-Western Ustrushana.

the same conclusion later was V. A. Kalinin who believes that this afshin “recognized his vassalage from Ismayil, as proved by putting the latter’s name onto the coins” (Kalinin, 2001, p. 58). The fact should be noted that the issue of a substantial number of coins in Ustrushana suggests the need in subsidiary coins. This proves that everyday retail trade in Ustrushana developed at a higher pace than that in the basin of Kashkadarya or Semirechye. This directly concerns Zaamin where the only mint, except for the main, capital mint, was operational in Ustrushana in the early 11th century (p. 72).

The very first Karakhanid conqueror of Maverannahr Bugrakhan Kharun in 992 seized Ustrushana for not a long period though. It seems that in 996 when the boundary between the Karakhanids and the Samanids passed the Katvan steppe Ustrushana for the first time was included in the composition of the Karakhanid kaganat. Finally, starting from 1059 when it was invaded by Ibrahim B. Nasr, it remained a part of the Western Karakhanid kaganat until the latter fell in 1212 (p. 69, 73).

As for archeological sources, they were informed about in details above, demonstrate a peculiar, developed material culture of Northern Ustrushana meeting the highest standards of its time. Here we’d like to lay emphasis on two unique discoveries uncovering certain aspects of ideological and political life.

An excavation of a potter’s kiln at Jartepa in Zaamin revealed fragments of a practically unbroken glazed plate. Owing to the totality of materials and closest analogies, it is possible to surely date the vessel back to the second half of the 12th century. In conformity with the then traditions the vessel’s mirror is divided by eight rays into eight sectors. Four of them are decorated with an ornament in the

form of oblique net while the rest four-with an amulet-shaped sign in the form of a “Neptune’s trident” with an excrescence in its lower part (fig. 77). As far as I know, amulet-shaped signs at glazed vessels of this period were not found in either Ustrushana or other historical regions.

The major part of the trident sign is a rather ancient sign that, combined with other supplementary elements was widely spread in the Sarmatian milieu. To be frank, here it was most often depicted in an overturned form, i.e. its dents were turned downwards (Solomonik, 1959, p. 17). From here the sign was spread all over the Great steppe up to Mongolia (Silimirskim, 1977, p. 108, fig. 5; Weinberg, Novgorodova, 1976, p. 179, fig. 8; Novgorodova, 1984, p. 116, fig. 53) where it later on turned into amulet (Weinberg, Novgorodova, 1976, p. 71-72).

In early medieval period tridents appeared on the earthenware items in various regions of Central Asia (Kabanov, 1981, p. 82, fig. 41; Gritsina, 1984, p. 86, fig. 21; Baypakov, Podushkin, 1989, p. 143, fig. 65, 8), including Ustrushana (Ancient Zaamin, 1994, p. 43, fig. 19, 36). E. M. Pesheroва cites a Tashkent area sign of mountainous Tajiks as a one very much resembling our sign. The only difference is that extreme dents of our trident diverge.

Tridents crown signs at Turgesh coins resembling coins of North Mongolia (Smirnova, 1981, p. 60, fig. 35). Coins see the appearance of simple fork-shaped and complex types of tridents, the so-called Chach sign (Smirnova, 1981, tables LXXXII-LXXXIV, table LXXXIX, 8-19, table XCIII, 95-105; Rtveladze, 1987, p. 164, 170; Ernazarova, 1974, p. 219; Ernazarova, Kochnev, 1978, p. 126-127, 147). Among the latter there has quite recently become known a sign in the form of a simple trident, an excrescence of which has the form of a semicircle with its edges turned upwards (Markov, Neimark, 2002, p. 76). In the early 8th century amulet in the form of a trident with a crossbar in its lower part appears in the Aral area at coins of local ruler Kerder Khusrav (Tolstov, 1948, p. 221; Weinberg, 1973, p. 114-117, fig. 2, 9). This tradition was later on interrupted. Family amulets cited by Rashid-ad-Din, Mahmud Kashgarskiy, Abu-l-Gazi, as well as the ones found at medieval graves contain signs resembling tridents (they most likely resemble III in various positions); however, they remain far from their prototypes (Rashid-ad-Din, 1952, p. 88; Mahmud Kashgarskiy, 1939, p. 309; Markov, 1961, p. 11; Polyakov, 1973, p. 190, table XXII, fig. 5). In terms of chronology and degree of complicity of the drawing, our discovery can be referred to as a kind of link between amulets of early medieval and late medieval periods.

Evidently, the appearance of amulet on our vessel is not occasional. Most likely this happened due to nomadic population’s settling towns in the 12th century: this population brought in and thus revived the so-called “animal style”: vessels started being decorated with the images or prototypes of animals (Ancient Zaamin, 1994, p. 30; fig. 7, 23; Gritsina, 2002, p. 55, fig. 1). It seems that the potter made the vessel upon an order of such a buyer who desired to depict his family amulet that had yet been unknown in science.

It should be noted that T. K. Hojayov, in describing medieval epoch, mentions the Mongolized population of Ustrushana as a nomadic one that “probably, initially inhabited Altay, Kazakhstan, or South Siberia” (Hojayov, 1987, p. 32). This is confirmed by archeological and anthropological materials from the site of settlement Kultepa identified as Ustrushana’s largest urban center-Sabat (Gritsina, Usmanova, 1992, p. 200-205).

As has been noted, excavations at the citadel of the settlement Kultepa (medieval Sabat) among Karakhanid-era materials revealed an unusual, in terms of form and ornament, earthenware glazed vessel of a flat, squat form with a horizontally stretched edge having the form of blades-festoons (fig. 104), of which four have been conserved unbroken, two have been damaged. At first look, an archeologically unbroken vessel was easily constructed. Having immediately suggested that the number of

blades-festoons was twelve, i.e. equivalent to the number of months of a year or of Zodiac signs, we conditionally called it “a cup-calendar.”

The cup has an uneven bottom; the diameter of orifice and bottom is 15 cm and 10 cm respectively; the height is 1.5 cm. The vessel is light green glazed. On the rear side only blades are partially glazed. Stains and glaze sparkles are also detectable at the bottom. The vessel's blades and mirror are decorated with a stamped ornament. For the reasons of clearness of image, the blades were fastened to the stamp-so fingerprints of a master have been conserved at the reverse. An additional element comprised green stains, which were, as a matter of fact, rather not a decoration but a magic symbol: stains at vessels had traditionally been a kind of guarantor of abundance since ancient times. Such a technique of decoration of glazed earthenware vessels, typical for late Karakhanid complexes, was spread widely at the time. A more exact dating of the cup is possible due to it-accompanying coin of the Karakhanid ruler Ibrahim B. Hussein minted in Uzgend (570-574 Hegira/1174-1179).

I haven't found analogies of this discovery among Central Asia monuments. A closest vessel, in terms of external appearance, is kept in the collection of the Berlin Dalem Museum. It takes origin from Gurgan (North Iran) and is dated back to the 11th-12th centuries. The vessel's edge represents twelve festoons. It is pale-green glazed, has no ornamentation. Of interest is a bronze miniature twelve-petal handmade article (diameter-4 cm) from Syria of the 12th-early 13th centuries, with the averse center depicting a bird and the reverse's center depicting a lion. The petals are decorated by single-type cruciform signs (Fehervari, 1976, pl. 43, n. 128). Farther analogies are also found with the metallic vessels of that period: for instance, an edge of a big basin of the Kalaibaland treasure is formed as twelve tapered corners (Negmatov, Kilchevskaya, 1979, p. 44, fig. 8).

Let's try to “decipher” symbols of the cup's ornament. In its center there is depicted a cross in the form of a four-petal rosette. Longitudinal petals consist of two dented folds with their edges interconnected. Among the petals of the cross-rosette there are depicted diamond-shaped figures. The whole composition is included into a circle, an exterior edge of which is framed by 33 relief triangles. The inner rim of the vessel is decorated by two rows of countless relief dents.

The cross and the circle are the most ancient symbols of the Sun. In combination with the circle-framing triangles symbolizing, probably, sunrays, the motif in the cup's center extrapolates the concept of solar disk as best as possible. More complicated are the things regarding images at blades where the ornament is not recurred. Supposedly, this principle was observed at the lost parts as well. Evidently, they are not simply ornamental patterns but certain symbols. All the conserved festoons contain elements of either solar or astral symbols. Some of them clearly display crescent-the Moon, circle-the Sun, and seven signs of longitudinal and triangular figures in the form of points, which could mean planets known at the time.

What the rest “main” signs at blades meant is hard to suppose. Probably, they contained Zodiac signs as well. In this respect of interest is a V-shaped sign at the first festoon found among painted and modeled ornaments of the Karakhanid era (Baypakov) and symbolizing horns of a ram. Sources of this sign should be sought in the Kaunchi culture where it is a widely spread symbol relating to a “farn” that, for its part, is associated with the image of a ram or its symbols. At the blade of our cup it could mean the Ram-the Zodiac's first sign relating to March. Exactly this festoon was glazed in the deep green color. The painter as if indicated that circannian cycle should be counted starting exactly from this festoon-month when the New Year was celebrated according to the Oriental calendar (a day of vernal equinox).

All these assumptions were based upon a key factor: the cup had twelve festoons. However, a thorough analysis has demonstrated that the number of festoons was most likely thirteen; otherwise, a potter would have needed to increase substantially either sizes of the festoons or a distance among them (or both simultaneously) in the second, by-gone part of the cup that inevitably would have led to the vessel's skewness. We have to deny this variant for the following two reasons: first, the quality of making the vessel was predetermined by its ritual-magic designation; second, all the proportions were ought to be observed yet when the stamp was under construction.

Thus, if the number of festoons were not twelve but thirteen, things are changed essentially. It became possible to explain our phenomenon thanks to information by Abu Reyhan Beruni. It is known that Khorezmians, Sogdians, and Persians used a Zoroastrian calendar in the pre-Moslem period. Supposedly, it could emerge in Eastern Iran or Central Asia and then spread over the Western Iran under the Akhemenids (Livschitz, 1975, p. 320). In the early Zoroastrian era there were used various options of the traditional ancient Iranian calendar assuming a year of 360 days (12 months with 30 days per month). However, under the early Akhemenids, court clerks used the Babylonian calendar that also consisted of 360 days and differed from the Iranian one quite a little. The difference was the names of the months and the time of intercalation of the thirteenth month once per 6 years, with the aim to accord a 360-day calendar with the change of seasons. The New Year, more exactly, the "New Day" was celebrated on the day of vernal equinox (Bois, 1988, p. 87-90).

The Babylonian calendar initially consisted of 12 months with 29-30 days per month. The first month of a year was Nisanu that corresponded to a period from approx. March 22 to April 22. It gradually turned into a lunisolar calendar. Inclusion of the thirteenth month was put into practice, yet arbitrarily though, under Khammurapi (1792-1750 BC). This lasted till the 6th century AD and was later substituted for a system of intercalation of an additional month due to certain cycles. Perhaps, Babylonians were the first to have traced the annual race of the Sun among fixed stars yet before 500 BC and divided it into 12 equal sections according to the number of lunar months in the solar year. This is a Zodiac. The twelve signs of Zodiac were named according to constellations starting from the Ram; have been used up to now (Seleshnikov, 1977, p. 107-108; Bikerman, 1975, p. 52).

Let's return to al-Beruni, who describes the calendar system of the Persians in details. "The totality of days of a year of the Persians reached to three hundred and sixty five. They ignored a quarter of a day until these quarters made up days constituting a whole month - this happened once per 120 years - and then added an extra month to the months of this year so a year turned to have thirteen months. This was called a lip-year..." (Beruni, 1957, p. 58-59). This event that happened once per 120 years was regarded by Persians as "a greatest, most known holiday", it was called "a holiday of a supplement to a year." Al-Beruni notes that the last intercalation was carried out under the rule of Yezdigerd I (399-421), a son of Shapur; note that two months were intercalated at once, put after aban, the calendar's eighth month. It is believed that this was the seventh consecutive lip-year cycle (Livschitz, 1975, p. 322-333). An important thing is that the intercalation of the additional, thirteenth month and it-related celebrations had deep roots in Iran and, probably, Sogd. At least, this tradition was remembered well in Khorezm and other Central Asia regions in the times of al-Beruni (the 10th-11th centuries).

As for the Moslem calendar, it was gradually put into practice in Central Asia as well, following the development and strengthening of Islam. This calendar was a purely lunar one, also divided into 12 months. However, it was strictly prohibited adding the 13th month to these months. For...as Allah said in his Book: "Truly, the number of months by Allah is twelve a year, according to Allah' Book

and from the day when He created heaven and earth” (Beruni, 1957, p. 56). Such a calendar was unsuitable for practical everyday needs because it did not correspond to the “correct” astronomic time. It was an official calendar; however, in practice they continued to use the Zoroastrian calendar.

Let’s return to the phenomenon of our cup in the light of historical information above. The last intercalation of Persians’ lip months under a 120-year cycle occurred under the rule of Yezdigerd I. This event was so significant that the Sogdians remembered the era of Yezdigerd even in the 8th-11th centuries (Livschitz, 1975, p. 332). However, al-Beruni does not elaborate a year when this happened; most likely, this happened at the very end of the rule of this king (in 421). Al-Beruni, in his another work, as well as some early medieval sources refer this event to a bit later period.

Our cup is dated back to the middle-third quarter of the 12th century. It is easy to count that if “a holiday of a supplement of a year” went on being celebrated once per 120 years, one of such holidays would have occurred exactly this century (in approx. 1161). However, sources give no direct information that such holidays went on being celebrated. Most likely, this did not happen. Such was unlikely in a Moslem period when the new religion diligently eradicated Zoroastrian traditions. However, this was quite possible in a narrow circle, especially in Ustrushana where Islam was planted with great hardships and was often professed only formally. Numerous facts indicate that Ustrushana residents professed the religion and customs of their ancestors until the Mongol invasion. At least, temples of idols and home chapels continued to exist up to the Mongols’ invasion (Smirnova, 1971, p. 105; Pulatov, 1988, p. 87-88).

Thus, it is assumable that local admirers of ancient traditions calculated the day of such a celebration. To commemorate this event, they ordered a limited number of “cups-calendars” with the 13th lip month; the cups were a part of ritual measures. In this sense, the “cup-calendar” that we’ve got in the single specimen is unique.

Part 3. On localization and history of rustaks and settlements

As has been noted, medieval travelers of the Samanid period provided the fullest information about rustaks and settlements of North Ustrushana. In stressing that this is largely a mountainous country, they at the same time provide scanty information about mountainous rustaks. As a rule, sources only list them. And even grains of this information most often confuse, not clarify the picture. One of such rustaks is Burnamad with a center of the same name (fig. 105).

According to al-Istahri and Ibn Haukal, Burnamad is reported among Samarqand Sogd’s twelve rustaks as a one located at the border with Ustrushana (Bartold, 1963, p. 145; Volin, 1959, p. 216, 322). Nevertheless, as-Samani and Yakut link it with Ustrushana (Bartold, 1963, p. 145). Among “floating” border rustaks there are two more neighboring rustaks - Bangam (or Bagnam) and Yarkat referred by sources to as a part of now Sogd now Ustrushana and having no towns (Betger, 1957, p. 21).

This is to conclude that the western boundaries of Ustrushana were not steady. Probably, this is connected with struggle between the rulers of Sogd and Ustrushana for influence on these most important, from the point of geographical location, rustaks. A study of the archive of Devashtich, the ruler of Sogdian rustak Bunjikat (Penjikent) and later on of the whole Sogd who is known at coins under the nickname of Afrig (Akhun-babayev, 1986, p. 82-84; 1999, p. 62-63) has demonstrated that in the early 8th century a part of North-Western Ustrushana was ruled by him. On the other hand, as-Samani and Yakut report that the indigenous Sogdian rustak Buzmajen with the center in town Barket for a certain period remained under the rule of afshins of Ustrushana (Bartold, 1963, p. 145). One of such examples is the mountainous rustak Bangam once located by N. N. Negmatov in the

central part of Ustrushana, above its capital-town Bunjikat (Negmatov, 1957, see the map). However, one of the editions of a work of al-Istahri definitely reports that this rustak earlier belonged to Sogd but was later seized by Ustrushana ruler al-Afshin (Khaydar ibn Kavus) in the first half of the 9th century (Volin, 1959, p. 323). Hence, it should be sought not in the central part of the region but at western boundaries that border Sogd. Probably, the rustak Bangam was located in the valley of Sangzar in the neighborhood of settlements Shaybek, Sartyuz, Bahmal and Supi and was restricted by the Turkestan and Malguzar ridges from the south, north and east and by the rustak Nujikat from the west (Gritsina, 2000, p. 150-151). Archeological explorations carried on by N. Nemtseva and R. Badakh revealed a whole series of medieval monuments in this region. Here, along Sangzar there passed one of the most important mountainous roads that stretched towards the largest centers of Ustrushana, Fergana, and other regions. Of no coincidence is a legend that says a great trade town “shahar” or caravansary existed at the settlement Bahmal (Shevyakov, 1990, p. 129).

As for Burnamad, “Rustak Burnamad was located aside Ustrushana, had no mosque, few settlements,” al-Istahri reported (Volin, 1959, p. 322). According to Ibn Haukal, “adjoining Ushrusana is also the rustak Burnamad that has numerous settlements. It also has no mosque”, i.e. Ibn Haukal repeats the saying of his predecessor word in word (Betger, 1957, p. 17). The report that there were numerous settlements should be viewed as a mistake because another edition of the work reads that “Burnamad has few settlements” (Volin, 1959, p. 217).

To localize the rustak, it is also essential to refer to a report by Kudama: “...a distance from Khushufagn to Furnamaz (Burnamad) - this is the mountains - is 5 farsahs. From Furnamaz to Zaamin on the desert is 4 farsahs” (Volin, 1959, p. 206). That the road stretched via a desert is also confirmed by Ibn Hordadbeh (Hordadbeh, 1986, p. 64-65). In the very beginning of the 11th century a steppe under Burnamad saw a large battle between the last representative of the Samanid dynasty Ismail ibn

Nuh (al-Muntasir) and a Karakhanid ruler; al-Muntasir won the battle (Utbi, 1939, p. 226; Gafurov, 1972, p. 388). However, in the next battle that also occurred in a steppe between Dizak and Havas he was crushed because of betrayal of one of military leaders and numerous tribes of Guzs who, after having seized rich spoils under Burnamad, returned to their nomads' camps (Utbi, 1939, p. 226).

Owing to juxtaposition of all this information with archeological data (Gritsina, 1992, p. 27-30), it seems to us that the most appropriate localization of this rustak is the basin of Ravatsay (fig. 106). Here there was also located the rustak's administrative center that we locate at the site of settlement Kurgantepa (fig. 107, 16). The shortest, most convenient route from Khushufagn via Burnamad to Zaamin passed exactly along it. The biggest part of the rustak was occupied by mountains; only in the east where Ravatsay

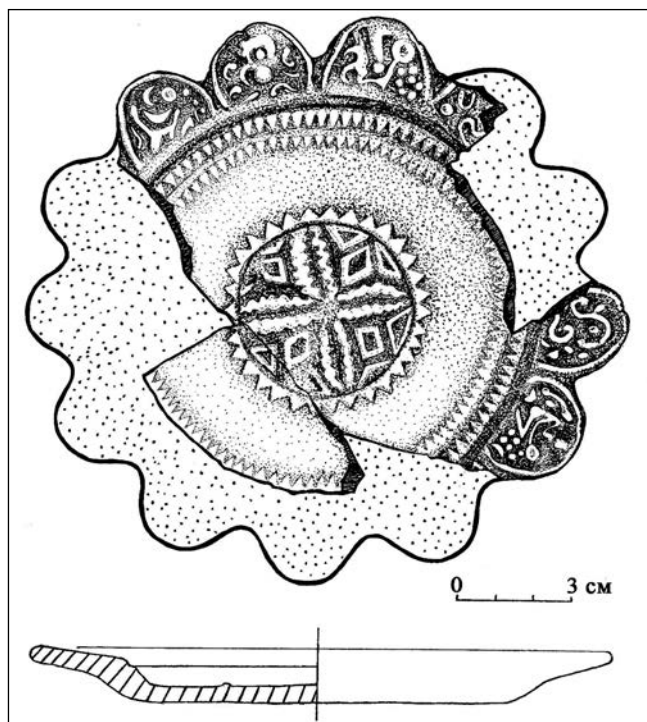


Fig. 104. Kultepa. Bowl-calendar, 12th century.

stretches from the mountains to a steppe it represented a tilled plain, in line with sources' reports. This steppe part of the rustak was directly linked with indigenous Ustrushana lands. Further the caravans led to Zaamin across a desert.

Archeological data fully confirm Arab reports that the settlements of Burnamad were not numerous. With this in consideration, it seems appropriate to localize Burnamad between Zaamin and Dizak, as once suggested by V. V. Bartold and N. N. Negmatov (Bartold, 1963; Negmatov, 1953, p. 246-247). Our researches have only detailed about its whereabouts. Locating the rustak Burnamad in the upper reaches of Sangzar (Akhunbabayev, 1994, p. 17-18) contradicts the data of written sources because here there is no desert road to Zaamin, there are mountainous localities everywhere, and the real distances are larger than that mentioned by sources.

Medieval sources mention the name of Bushagar (Shagar) in a common list of mountainous rustaks, give almost no other information. According to Ibn Haukal, it is only possible to say that in the 10th century there were no towns in it: "Rustaks where there are no towns are as follows: Bushagar, Meskha, Burgar, Bangam, Mink, Besken, and Isbaskent" (Betger, 1957, p. 21). According to al-Istahri, "...all these rustaks constitute a mountainous area hard to move in and with cold climate" (Materials of History of Kyrgyz....1973, p. 27). As the name of the rustak resembles that of modern settlement Pshagar (Pishagar) and owing to a nearby location of the mountains Shaudar, N. N. Negmatov localized it at the northern foothill of these mountains in the valley Sangzar (Negmatov, 1953, p. 247; 1957, see the map), i.e. south of the settlement Pshagar. Our studies of the basin of Pshagar say allowed to define its whereabouts more precisely.

The exploration works revealed more than 30 monuments linked, to various extents, with the medieval rustak. The main group of monuments indicating on its whereabouts is located in the middle reaches of the river, at a relatively even plateau from all sides restricted by mountains, a gorge, or waterless adyrs (Gritsina, 1996a, p. 101-102). Rushing from a rocky gorge, at this place the river makes an S-shaped bend thus causing favorable conditions for irrigation. At present, here there is located the settlement Beshpshagar that undoubtedly reflects the ancient name of the rustak (fig. 108).

Archeological monuments are located compactly on the both banks of the river. A group of 6 settlements is located a bit separately northwest of the settlement Laylak Uya. The administrative center was located, probably, in the eastern part of the rustak, remains of which are represented in the form of the site of settlement Beshbulaktepa. The settlement consists of a citadel, a territory adjacent from the west, and a shahristan located north of it. By a time of the Mongol invasion, this was a relatively large settlement or a small town with its area restricted by 4-6 hectares. At elevated sections suitable to observe there rise cone-shaped settlements that apparently performed guard functions. Turtkultivatepa is notable for its whereabouts (nearly in the center of the rustak), sizes, and square planning (fig 109). We do not rule out that it played a special role, particularly, a district temple could be located here.

Thus, we deal with an example of a compact mountainous rustak with clearly expressed attributes of an autonomous defense and life support system. The obtained materials (fig. 110, 111, 112), as well as the settlements Pshagar and Beshpshagar that have conserved their ancient names make us note with the larger share of confidence that it was the place for one of Ustrushana rustaks known by written sources as Bushagar or Shagar.

The rustak Beskun (variants are Biskun, Biskar, Besken) is one of Ustrushana mountainous rustaks, of which sources also report almost nothing. Without any solid ground N. N. Negmatov locates it straight north of the Turkestan ridge, in the upper reaches of Rivers Aksu, Dahkatsay and

Basmandisay (Negmatov, 1957, p. 84). The latest works in the Dahkat gorge have demonstrated (and it also seems quite appropriate to us) that here there was located the rustak Mink, a whereabouts of which caused a rather long discussion (Sverchkov, 1991, p. 17-20; 1994, p. 57-61, with references included). Located somewhere in the basin of River Basmandisay at the time also was, probably, the town Marsmanda, which is confirmed, apart from other things, by similarity of the names (Basmandi-Marsmandi). It is possible to identify the town Marsmanda as the settlement Kolai Kofar (Pulatov, 1993, p. 89). Hence, the rustak Biskun is laid over the territory of the rustak Mink. In our opinion, the rustak Biskun should be sought in a much more western area, more exactly, in the upper reaches of River Acchisay and its components. Perhaps, the ancient name has been conserved in the name of settlement Beshkube (Beskun-Beshkube), the largest settlement in this locality. Explorations have revealed here a group of monuments of early medieval and late medieval period. The territory of the rustak included upper reaches of rivers with the settlements Ual, Tamtut, Karamazar, and Karym. Of the discoveries, there is notable a bronze mirror depicting two sphinxes surrounded by vegetative sprouts and an Arab benevolent inscription along the edge of the disk. The mirror is dated back to the 11th-12th centuries (Bogomolov, 2012, p. 164-165) (fig. 113).

Thus, in the east the rustak Beskun was restricted by the full-water River Beshkube; there is also concentrated the largest group of monuments there, from the west the natural boundary was a high bluff of River Karymsay (Gritsina, 2000, p. 177-187).

A rather dense group of monuments identified in a place between Zaamin and Sabat makes us think that here there might be located one of Ustrushana mountainous rustaks that is hard to localize due to scanty information provided by written sources. In our view, this may be indicated by the name of mountains in the neighborhood of the settlement Beshbulak-Bakrtau (Gritsina, 2002, p. 56; Gritsina, Karabayev, 2002, p. 186-187). Prominent researcher of Ustrushana N. N. Negmatov located a rustak with a similar name (Vakr) in the upper reaches of River Zaaminsu (Negmatov, 1953, p. 247; 1957, p. 85). Offering another variant of localization were A. A. Gritsina and L. M. Sverchkov (a concept of L. M. Sverchkov) who placed it in the neighborhood of settlements Chakand and Balandchakyr. A reason for localization was a compact group of archeological monuments located here and a similar, in the authors' view, name of a nearby settlement Varkyn and channel of the same name (Gritsina, Sverchkov, 1990, p. 120). However, sources mention Vakr as a high mountain, hardly accessible rustak (Muqaddasi, 1994, p. 240), which is hard to say about this region representing a steppe hillock (Neiman, 1925, p. 51). Besides, the name of the mountains near Beshbulak - Bakrtau - is much closer to the original name. In our view, the rustak Vakr was located in the basins of Rivers Jalairsay and Turkmensay (fig. 114, fig. 115, fig. 116).

According to medieval geographers, Zaamin occupied the second important position after the capital in the hierarchy of towns in the 9th-10th centuries. This, information about it is more detailed than that of the rest towns. Nevertheless, this information is scanty, fragmentary (Ancient Zaamin, 1994, p. 20-21; Buraykov, Baipakov, Tashbaeva, Yakubov, 1999, p. 59-61; Buraykov, Gritsina, 2002, p. 169).

The first mentioning of the Zaamin estate dates back to the early 8th century AD (Smirnova, 1970, p. 62, 64). Providing more detailed information is Arab-language author of the 9th century al-Yakubi who describes Ustrushana as a country with 400 fortresses and several large towns. Among the latter there is also mentioned Zaamin (Volin, 1959, p. 294). A younger contemporary of al-Yakubi - Ibn Khordadbeh, one of nadymy-"table companions" of caliph Al-Mutasim - not only reports distances regarding Zaamin but also devotes his special chapters "A Road from Zaamin to Fergana" and "A Road from Zaamin to Shash" to the town, stresses the importance of its location as saying: "Zaamin



Fig. 4. Ossuary from burial ground Koshtepa.



Fig. 5. Ossuary from burial ground Birlashgan.



Fig. 6. Ossuary from burial ground Birlashgan. Back view.



Fig. 7. Ossuary from burial ground Birlashgan near Zaamin.



Fig. 8. Ossuary from burial ground Bagishamal.



Fig. 9a. Zaamin. Coin from interment in hum (imitation to drachms of Sassanid ruler Peroz (459-484)).



Fig. 10. Zaamin. Bronze bracelet from interment in hum.



Fig. 11. Site Kultepa. Bronze pendants in the form of hand-bell, idol and goat from interment in hum, 7-8th centuries.



Fig. 12. Site Kultepa. Bronze pendant in the form of winged "genius" from interment in hum, 7-8th centuries.

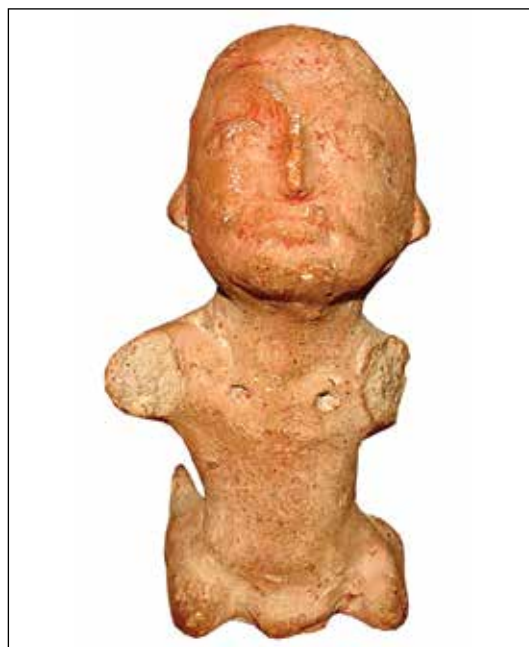


Fig. 14. Zaamin. Terracotta idol.



Fig. 35. Jartepa. Citadel.



Fig. 49. Jizak. Site Kaliyatepa.



Fig. 55. Nurata. Inkpot, 10-11th centuries.



Fig. 56. Nurata. Spherical-conical vessel, 10-11th centuries.



Fig. 61. Kultepa. Glazed dish, 10-first half of the 11th century.



Fig. 62. Kultepa. Type of sufa laying in room 1.



Fig. 65. Kultepa. Type of sufa laying in room 2.



Fig. 68. Kultepa. Glazed lamp, 12- earlier 13th century.



Fig. 70. Kultepa. Mouth of red-glazed vessel, 12th century.



Fig. 72. Kultepa. Painted vessel, 12th century.



Fig. 75a. Kultepa. Bronze usmadon and cover attached, 11-12th century.



Fig. 78. Jartepa. Glazed spherical-conical vessel, 12-13th centuries.



Fig. 80. Jarropa. Pattern of kolyba for stamped ceramics, 12th century.



Fig. 84. Zaamin. Ceramic lamp, 12th century.



Fig. 85. Zaamin. Ceramic lamp. 12th century.



Fig. 87. Turtkultepa. Archaeological dig 4.



Fig. 90. Stone laying-out of entrance ayvan floor.



Fig. 91. Turtkultepa. Crashed portal of access to courtyard of caravanserai.



Fig. 92a. Turtkultepa. Sufa in room 5.



Fig. 98. Turtkultepa. Red-glazed vessel, 12th century. Side view.



Fig. 99.Turtkultepa. Red-glazed vessel, 12th century. Top view.



Fig. 101. Caravanserai Turtkultepa. Ironware, 12th century.



Fig. 102. Turtkulpepa. Decorations, 12th century.



Fig. 109. Rustak Bushagar. Turtkultuvatepe.



Fig. 112. Rustak Bushagar. Samanide coins from village Hatab.



Fig. 113. Rustak Beskun. Mirror from village Beshkuba, 11-12th centuries.

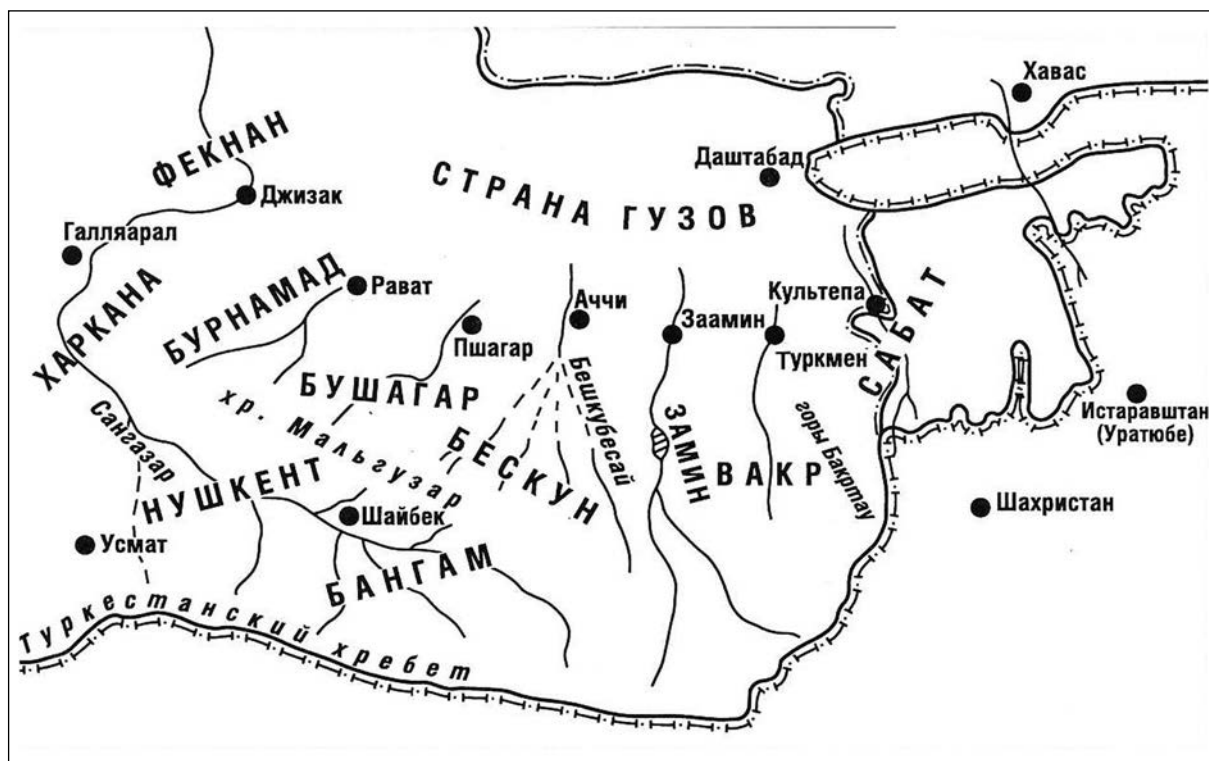


Fig. 105. Map of rustaks location in North-Western Ustrushana.

is a place where two roads cross: one leading to as-Shash to Turks, another one - to Farqana” (Ibn Khordadbeh, 1889, p. 20-21; Khordadbeh, 1986, p. 64-65). The same peculiarity was stressed by Kudama ibn Jafar and al-Fakih (Volin, 1959, p. 206; Livschitz, 1962, p. 77). Ibn Haukal and al-Muqaddasi provide the fullest information about Zaamin. According to Ibn Haukal, the second biggest town, after the region’s capital town Bunjikat “is Zaamin, which is located at a long road from Fergana to Sogd and has another name-Sarsanda. A ruined old town is located near it. Bazaars and cathedral mosque have been shifted to Sarsanda so all the residents settled there. There are no walls around these new buildings. Zaamin is a place where those traveling from Sogd to Fergana stay. It has running water, gardens, vineyards, and tillage...The town’s rear is turned towards the mountains of Ustrushana while front turned towards the land of Guzs represents a steppe where there are no mountains” (Betger, 1957, p. 20). He was more laconic in his another statement: “Zaamin consists of two parts, between them there is a river with small bridges across it” (Volin, 1959, p. 215). Al-Muqaddasi adds certain details to information above; particularly, he reports that the town was located at the both banks of the river’s output from the mountains. Bazaars were also located at the both banks of the river interconnected by bridges. The cathedral mosque was located north of a large road (Bartold, 1963, p. 224). According to al-Istahri, “The second biggest (after Bunjikat, A. G.) town Zaamin is located on the road from Farqana to Sogd and is called Sarsanda” (Materials of the History of Kyrgyz...1973, p. 19).

Let’s accentuate one more aspect cited in anonymous work “Hudud al-Alam”. While Ibn Haukal pointed out to the absence of walls around Zaamin-Sarsanda, this source reports that the town’s citadel was strongly fortified (Hudud al-Alam, 1970, p. 115). It is not clear what O. G. Bolshakov proceeds from in writing that a new part of the town was surrounded by a wall (Belenitskiy, Bentovich,

Bolshakov, 1973, p. 192) which apparently counters data provided by sources. There is often mentioned one more, the third, after Zaamin and Sarsanda, name of this town-Sabze, which is indicated in a known geographical dictionary ("A Dictionary of Towns") by Yakut. He notes that there were many rabats in this town (Kamaliddinov, 1993, p. 100). However, this name appeared as a consequence of confuse: this dictionary distorts the names of lots of other toponyms that this author attempted to interpret in the writing intelligible for Arabs (Bartold, 1963, p. 82). Particularly, he reads the region of our interest as Asrushana, i.e. in the form nobody else has ever used (Kamaliddinov, 1993, p. 98).

As noted above, 893 or perhaps the first half of 894 is a year when the last afshin (ruler) Sayr ibn Abdullah ceases to issue his coins and Ustrushana finally joins the composition of the Samanid State (Bartold, 1963, p. 282; Negmatov, 1977, p. 25, Kochnev, 1994, p. 64-65). If so, where from, when and why did Zaamin shift to a new place? Sources tell nothing directly. It is, however, assumable that this happened after the last, probably, most brutal devastation of Ustrushana in 822. The Bunjikat palace of afshins was burnt due to a certain hand of the famous al-Afshin. The Arabs managed to attack suddenly, rapidly, forced the father of al-Afshin Kavus to surrender. It is not denied that the men of al-Afshin opened the gates to the enemies. Anyway, a huge arsenal of cobblestones and stone balls remained unused (Negmatov, 1973, p. 98; Negmatov, Sokolovskiy, 1975, p. 438).

Having killed the disfavored afshin Kavus, the Arabs destroyed other large towns: Zaamin, Sabat, and Dizak. Early medieval citadels and shahristans of these settlements were desolate, "new" towns were under construction. Ibn Haukal could see Zaamin at the end of the 10th century, i.e. less than a century after the town's residents resettled in another place. For this period the old town's ruins apparently had not yet turned into featureless hills, as proved by his remark that a nearby (emphasis mine -A. G.) old town was in ruins (Betger, 1957, p. 21).

Of interest is also a report that the mosque shifted to the new town (p. 146). First, this is to conclude that a Moslem mosque had been operating in Zaamin yet in the 9th century. Second, it is possible to suggest that its transposition to a new place could mean that either it was destroyed as well or the old town with a mosque was located too far from the new town. According to one opinion, the old town could be located at the site of settlement Karatepa near Dashtobad (Ulyanovo) (Sverchkov, 1990, p. 92-93). However, sources locate Sarsanda near the old town, while Karatepa is located 20 km (3 farsahs) away from Zaamin. Located 3 farsahs away from Zaamin was also the town Sabat; however, no one source reports that it was located near. Second, the road to Zaamin from Fergana, as al-Istahri, the trustworthiest author, reports, led via Sabat not Havas (Volin, 1959, p. 336), otherwise, it would have become necessary to go a long way round (see fig. 103). Excavations at the site of settlement Aktepa located at the Right Bank of River Zaaminsu in the quarter of the same name, as well as survey of the surrounding locality demonstrated that the old town might have located exactly here and that Aktepa was its citadel (Gritsina, 1992, p. 43-44; Ancient Zaamin, 1994, p. 26-28). As noted above, at the monument there have been identified two main cultural layers: an early medieval layer and a layer of the 11th-early 13th centuries. No Samanid era layers have been revealed. From the western side there has been conserved an adjacent territory occupied by a Christian cemetery. At the same time, a microrelief around the monument, nowadays with compact residential planning, illustrates that its territory stretched westwards to the hokimiyat. Hillocks and overall elevation of the locality are also observed south and north of the central hill. It is extremely hard to specify dimensions of the site of this settlement more precisely without additional excavations. Non-glazed earthenware items are found practically at every side, at a rather large distance from Zaamin (Ancient Zaamin, 1994, p. 95). This is to conclude that the mosque, which had been one of the earliest mosques in Ustrushana,

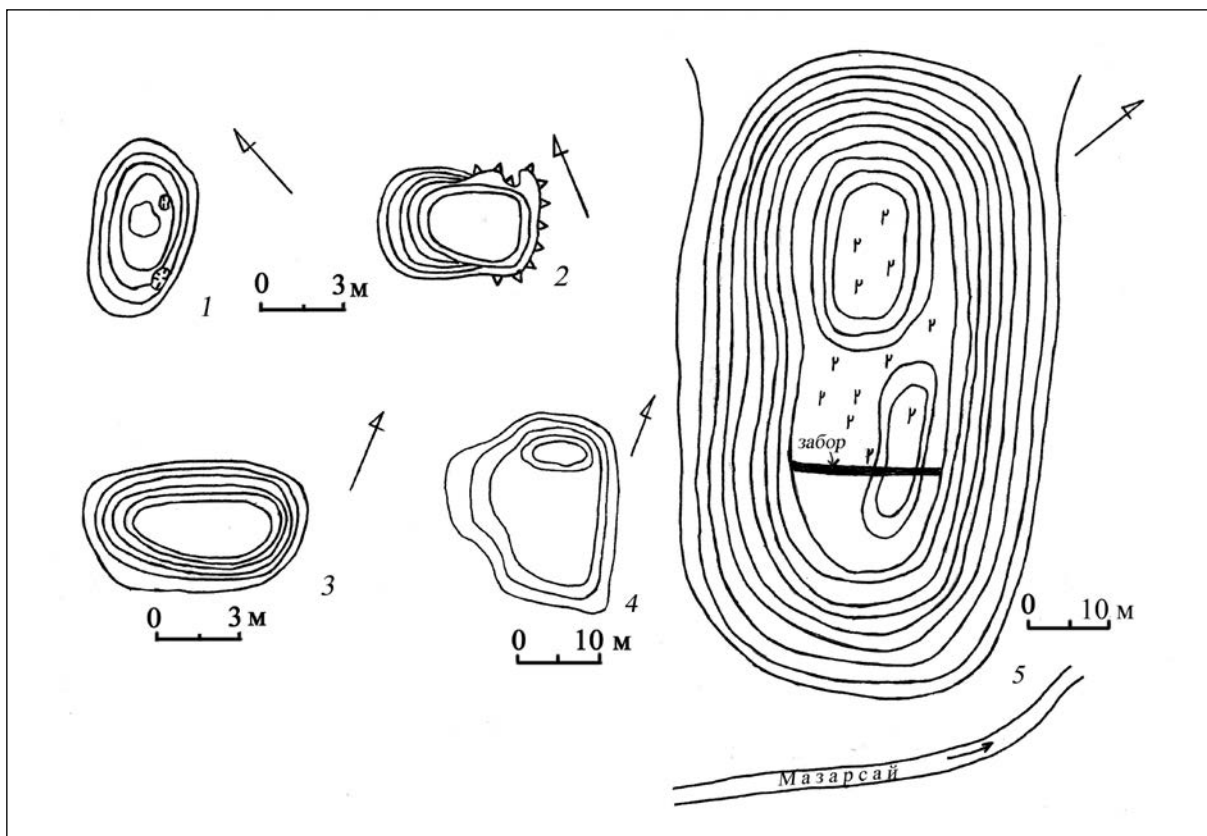


Fig. 107. Plans of settlements (1-4) and plan of site Kurgantepa –supposed center of rustak Burnamad.

was destroyed and then rebuilt in Sarsanda. However, it is strange to view Arabs as destroyers of a mosque. Most likely, it was not good to them. But why? Written sources tell nothing directly about this but cite numerous facts of conversion of temples devoted to local deities into mosques, something what happened to the Ustrushana temple of idols (Belenitskiy, 1954, p. 59; Negmatov, 1957, p. 74; Brykina, 1982, p. 101). It is a “complaint” of one of Moslem leaders that those converted to Islam prayed to God only formally in such a mosque, continued to profess the old faith. It is the known atmosphere of the temple that, by the way, did not endure any substantial changes that made them fear to be punished for betraying the thrown down gods (Smirnova, 1971, p. 101-106). All this could induce the conquerors to destroy the old mosque and build a true Moslem mosque in the new town.

Naturally, it is currently hard to say what god or gods the Zaamin temple destroyed before the Arab invasion was devoted to. However, it is to suggest that a key to the answer is the very name of the town Zaamin, which is interpreted as “Earth” (the Tajik-Russian Dictionary, 1954; p. 149; the Uzbek-Russian Dictionary, 1988, p. 159). Along with water, air, and fire, earth was one of four holy elements of Zoroastrians. The nineteenth yasht - “Zamiyad-yasht” - is devoted to the deity of earth -Zam in Avesta. The yasht’s main content is the past and the future of the Earth in connection with Hvar-divine essence, comprehension of which gives happiness and mightiness. It is believed that God determines a further fate of the dead people through weighing their terrestrial deeds (Avesta, 1990, p. 126-127; Yakubov, 1997, p. 89). It is highly likely that Zaamin residents for some reason pre-

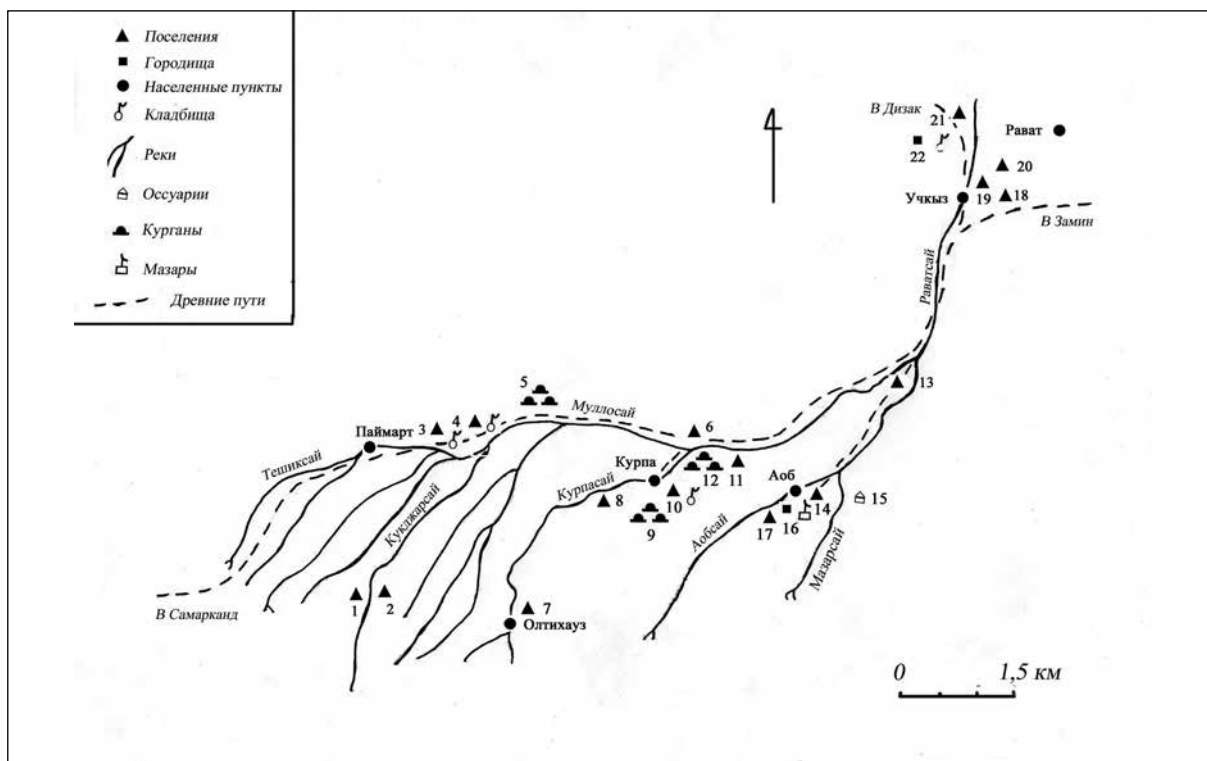


Fig. 106. Map of archaeological monuments in rustak Burnamad.

ferred exactly this god, erected a temple in His honor. Note that there existed temples devoted to water elements, particularly, to the God of River Oks (Pichikyan, 1991, p. 171). It should be noted that a similar suggestion was later expressed by Y. Yakubov independently from us (Yakubov, 2002, p. 96).

Where could the new mosque in Sarsanda be located? According to al-Muqaddasi, it could be located on the right side of those moving toward Samarqand, i.e. north of a great road (Muqaddasi, 1994, p. 247; Negmatov, 1953, p. 247). Given that the medieval road rounded the Sarsanda citadel from the south, passed where the modern road from Jizak to Zaamin is, its remains should be sought north of it, probably, in the territory of a bazaar or, more likely, cemetery Hoja Kahhar. It is not denied that Samanid-format baked square bricks that have long been used by local residents are exactly the remains of this cathedral mosque.

Medieval Sabat, the center of North Ustrushana's steppe rustak of the same name, was a nearest point from Zaamin at a large trade way leading from Sogd to Khujand, Fergana and further to China. According to Ibn Khordadbeh and Ibn al-Fakih, it was located two farsahs away from Zaamin (Khordadbeh, 1986, p. 65; Livschitz, 1962, p. 77); according to al-Istahri - three farsahs away (Istahri, 1973, p. 21), according to al-Muqaddasi - two farsahs away (Muqaddasi, 1995, p. 247). Some medieval authors call Sabat a town of Ustrushana (Istahri, Ibn Haukal, Ya'kut). However, al-Muqaddasi and Qudama report that it represented a large settlement (Negmatov, 1953, p. 247-248; Volin, 1959, p. 206).

Suggesting localization of medieval Sabat initially was P.S. Skvarskiy, who yet at the end of the 19th century compared it with Eski Savat (modern Savat-Ravat) located 10 km north of the settlement Savat (Skvarskiy, 1896, p. 50). Not confirmed by on-site explorations, this assumption has since then joined a number of scientific works, including ones devoted to North-Western Ustrushana (Berdimu-

radov, 1985, p. 12). However, yet in 1974 N. B. Nemtseva stressed the need of seeking a medieval town not north but south of Savat, in the neighborhood of the site of settlement Kultepa (Nemtseva, 1974, p. 10-11). However, only a thorough exploration of the basin of River Hojamushkentsay and the excavations carried on by the author at the site of the settlement made it possible to identify it as Sabat, as reported by medieval sources (Gritsina, 2000, p. 20-22).

Sabat's being localized at the site of settlement Kultepa as if straightens a line of medieval road at this section. Otherwise, caravans would have needed to turn north deep into the Savat steppe and then return to the "great road" once again. Besides, the suggested localization of Sabat is another proof that Ustrushana's capital, town Bunjikat should be identified at the site of settlement Shahrستان (Negmatov, Khmel'nitskiy, 1966, p. 191-196). According to al-Istahri, "...between the main town of Ustrushana and Sabat there are three farsahs south-eastward" (Materials of the History of Kyrgyz...1973, p. 21). Located southeast of the settlement Kultepa is exactly Shahrستان, while Uratube (present-day Istaravshan) that once claimed to be a capital of Ustrushana (Negmatov, 1953, p. 241, Belenitskiy, Bentovich, Bolshakov, 1973, p. 191) is located east of it. It should be noted that despite a relatively broad recognition of Ustrushana capital's localization in Shahrستان, there is a rather substantiated point of view of O. G. Bolshakov that this localization not fully corresponds to information provided by written sources (Belenitskiy, Bentovich, Bolshakov, 1973, p. 191).

Medieval Sabat is one of Ustrushana's few settlements, of which sources report details. It is particularly reported that the town had running water, was surrounded by gardens. Beyond any doubts, Hojamushkentsay (in the lower reaches of Saganaksay) is a "source of running water" (Negmatov, 1953, p. 248). The significance of the town was also due to "bazaars covered by low passage-style roofs" (Negmatov, 1953, p. 248). This remains a single instance of such constructions in Ustrushana, which is known from written (and archeological) sources and mentioned not coincidentally. O. G. Bolshakov believes that the Sabat bazaar "probably, was covered by flat wooden shed (sukur)" (Belenitskiy, Bentovich, Bolshakov, 1973, p. 297).

Another important aspect accentuated by sources is that Sabat was located at a crossroads. One of the roads led to the "main town" (Volin, 1959, p. 208) of the region - Bunjikat. According to al-Istahri, a distance from it was three farsahs. To all probability, this road led upwards along the bank of Hojamushkentsay towards Shahrستان. It was once explored by an expedition led by N. N. Negmatov (Negmatov, 1959, p. 126; Negmatov, Khmel'nitskiy, 1966, p. 193, 195; Negmatov, Pulatov, Khmel-

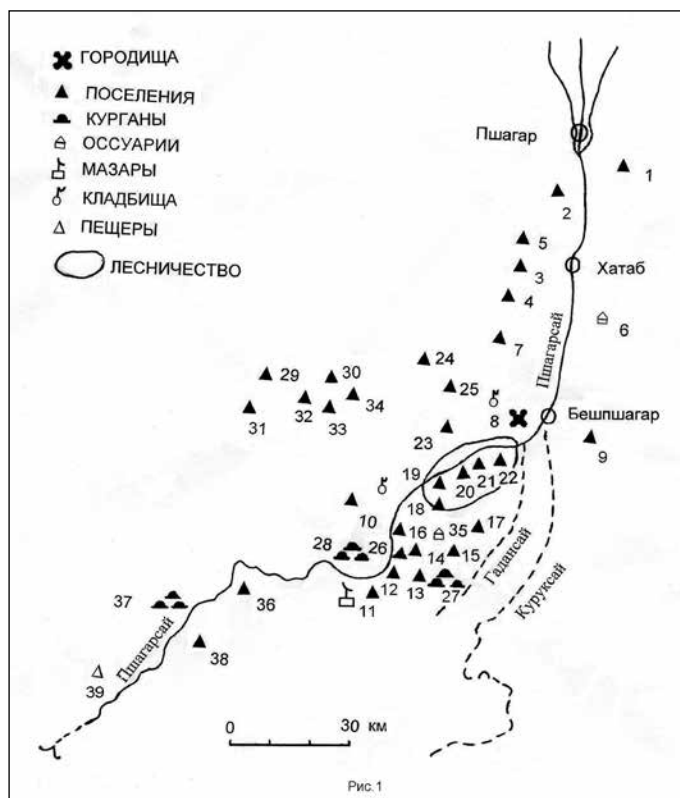


Fig. 108. Map of archaeological monuments in rustak Bushagar.

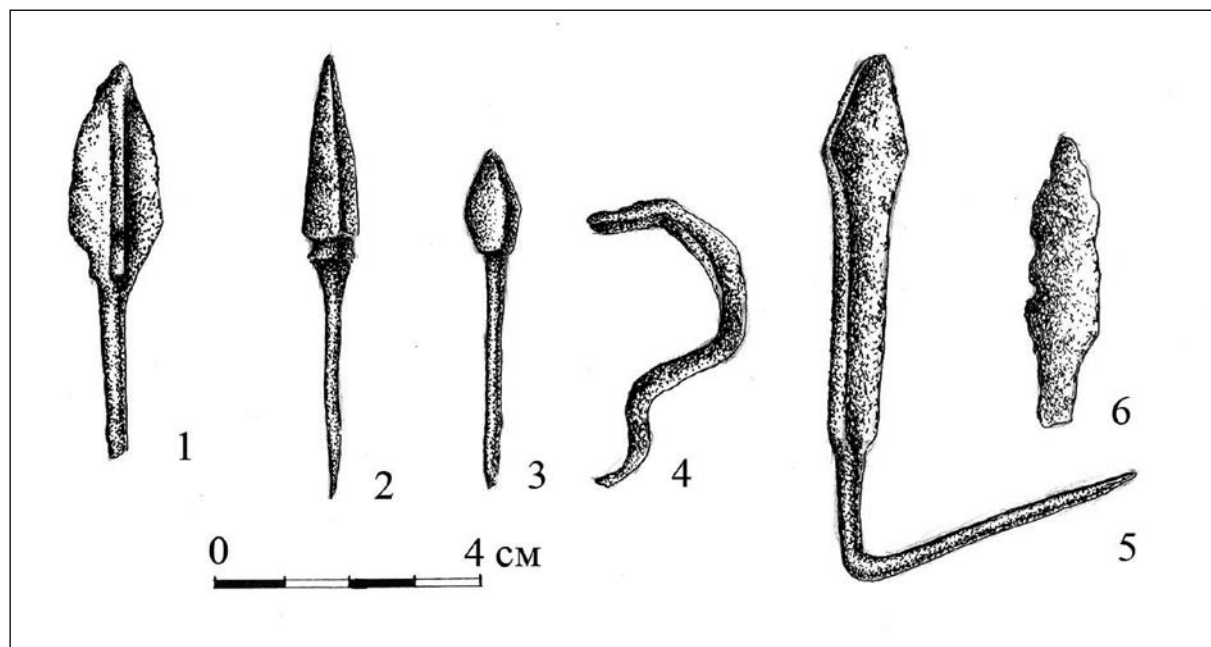


Fig. 110. Rustak Bushagar. Early medieval iron arrowheads.

nitskiy, 1973, p. 105-108). However, Khordadbeh informs that a distance from Sabat to Ustrushana (Bunjikat - A. G.) was seven farsahs, of which two farsahs were a plain and "...five farsahs stretched against the stream from the side of the town" (Khordadbeh, 1986, p. 65). Qudama repeats approximately the same, with certain additions: "Let's return to Sabat. There are 7 farsahs from it to the main town of Ustrushana. Of them, two stretch across a plain, then a valley and settlements at the left and right slopes of a mountain. The road stretches to meet the upstream that follows two ways. The river stream flows from the town" (Volin, 1959, p. 208). All these indications most of all correspond to the gorge of Hojamushkentsay saturated with archeological monuments (Gritsina, 1992, p. 11, fig. 2). In this case there is apparently indicated another, earlier road circumventing the mountains (Gritsina, Sverchkov, 1990, p.120; Ancient Zaamin, 1994, p. 41). From Sabat it led first to the east, then turned southward and continued to move upwards on a currently dried up river (now there is a highway from Hasast to Balandchakyr there). That this was a medieval road is to conclude from constructions, which are located at predominant heights and evidently performed guard functions. Maybe, certain branches of this road stretched along the spring waters of Tagobsay and Mugolsay thus decreasing the distance from the capital, to extent (Gritsina, 1992, p. 11).

From Sabat there was also a road for those desiring to get to Havas and further to Shash. Qudama mentions it (Khordadbeh, 1986, see the comment, p. 183). Probably, this way first coincided with a large road and then turned north-eastward bypassing Mazarbabatepa where there is currently a spring with drinking water. The route further stretched along settlements and fortresses of Shurbulaksay and finally led to Havas (Gritsina, Pardayev, 1990, p. 164, fig. 23; p. 178).

Given that Sabat was located at a fork of three roads, etymology of the town's name suggested by A. R. Muhamedjanov seems to be convincing. He interprets it as "Se-bat", which should mean "three caravansaries" (Muhamedjanov, 1991, p. 63). In turn, local residents interpret their settlement as a "woven basket" in full accordance with the dictionary (the Uzbek-Russian Dictionary, 1988, p. 365). It might have been an indication of origin of the town or main occupation of its residents. The point

is about *sabatbafs*, i.e. basket weavers. They in some Central Asia settlements still remember this ancient craft and even keep its secrets. Regrettably, it is a disappearing craft. Note that it prospered quite recently. Of flexible willow twigs masters wove every kinds of baskets, birdcages, trunks, fishing tackles and many other implements of everyday practice. This craft enjoyed no less popularity in medieval times as well. Its significance is accentuated by the fact of existence (in Khorasan's largest town Balkh under the Gaznevids in the 11th century) of a specialized quarter *Sabatbafan* (basket weavers) mentioned in a famous work of Abu-l-Fazl Baykhaki (Baykhaki, 1969, p. 236, 238, 246). However, it was no possible to receive any information about the craft from local residents (Ancient Zaamin, 1994, p. 41-42).

Excavations in various parts of the settlement *Kultepa* have revealed main planning contours and allowed to identify paces of development of the urban territory, as well as main stages of development of the town's economy.

The early medieval *Sabat* with its outlined citadel was located in the southern part of the site. The appearance of a *shahristan* west of the citadel coincided with the operation of the citadel's second residential horizon (Ancient Zaamin, 1994, p. 43-44, 47; Gritsina, 1989, p. 124-125). According to our data, its territory covered no less than 10 hectares. Southwest of the citadel there was apparently formed a handicraft quarter where there have been found lots of potter's slag and a potter's kiln; in the excavated area 3 there has been identified an earthenware bank with defective vessels. Hence, *Sabat* of this period is a settlement, more exactly, a medium-size town. Broad relations of that period are illustrated by the discovery of a treasure of jewels and silver Sasanid coins (Gritsina, 1992, p. 27; Rtveladze, Gritsina, 2001, p. 98). The treasure's basis comprised *drahmas* of Peroz (459-484) minted in various towns of Iran and a coin of Hosrov II minted in 619-620 (Baratova, 2002, p. 52). The coins apparently were a part of the tribute that Peroz paid the *Eftalits* (Masson, 1971, p. 231).

The *Samanid Rabat* was located north and west of the early medieval town, partly occupying the latter's territory as well. The new citadel was located northwest of the *shahristan*. Excavations at the citadel revealed a part of a monumental building. The territory of the *Samanid Sabat* went on being inhabited till the middle of the 11th century when it became desolate: in the 12th century-early 13th century here there was located a cemetery (Gritsina, Usmanova, 1992, p. 193-205). The cemetery crosses the settlement west-eastwards as a wide bank, as if separates the territory of the "old town"

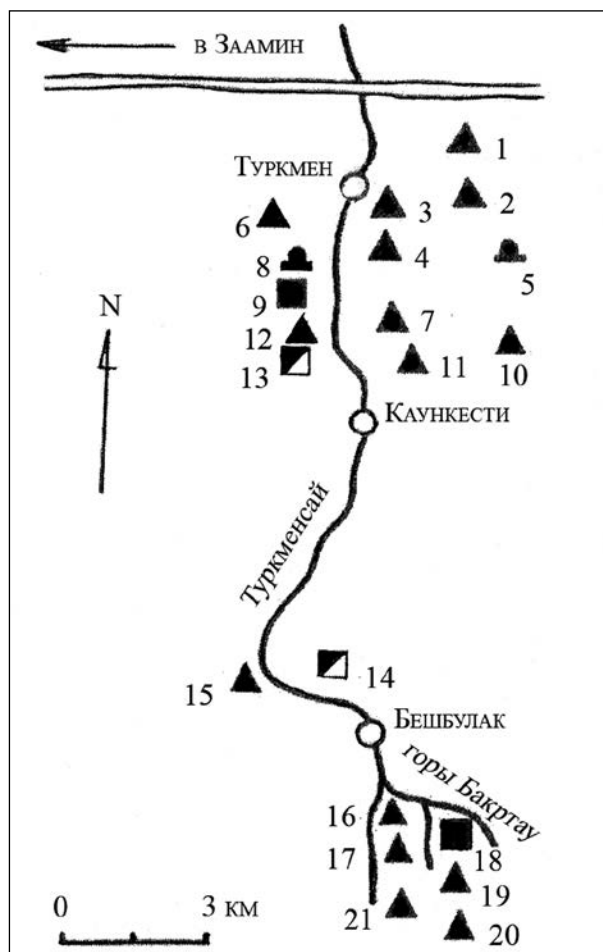


Fig. 115. Rustak Vokr. Archaeological monument of Turkmensay.

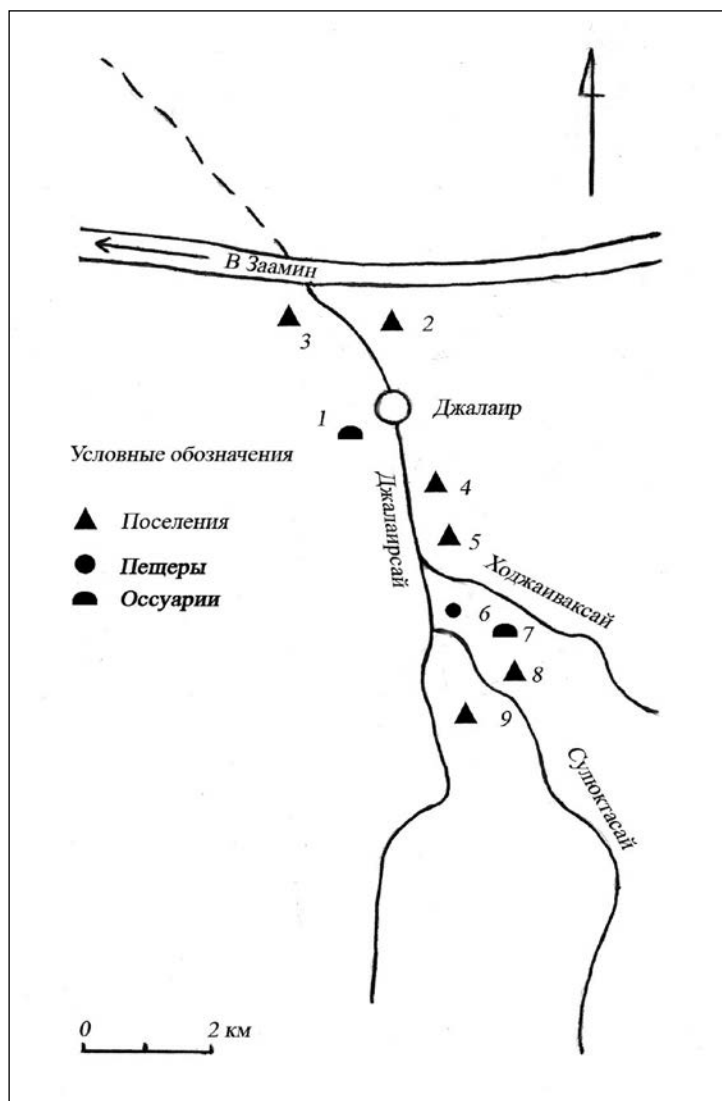


Fig. 114. Rustak Vokr. Archaeological monuments of Jalairsay.

tified: for instance, Kattakyrtepa under Sarmich in the Yangiabad region. The region's capital town Bunjikat was reliably fortified during the whole period of its existence (Negmatov, Khmel'nitskiy, 1966, p. 194; Negmatov, Mamadjanova, 1989, p. 82). At a peak of its prosperity the town had an area of no less than 45-50 hectares. A wide rural neighborhood was formed around the town. The town's location at an international caravan way contributes to its economic development. The obtained materials indicate on its broad links with not only nearby but also relatively remote regions of medieval world. In the early 13th century life in the town came to a standstill, so the Temurid Sabat shifts toward the Right Bank of River Hojamushkentsay.

Thus, sources and archeological data prove that the medieval period represents, probably, the most impressive, finished stage of establishment and development of the statehood of Ustrushana, including its significant part that is currently a territory of Uzbekistan.

(early medieval, Samanid one) from the "new", Karakhanid town that continues to grow northwards along the river due to relief peculiarities. An early medieval citadel is explored anew. The istence of remains of monumental architecture, unique specimens of high-quality vessels indicates that it was the place of a palace complex of Karakhanid Sabat rulers. In the micro-re of the site's northern part there is outlined a П-shaped hillock that, probably, hides remains of a small caravansary. The excavations have revealed a tile and mudbrick construction that was stroyed by great fire: timber struts of the frame wall became fully charred; there were remains of the burnt roof the floor (see fig. 66). The obtained materials are dated back to the 12th-early 13th centuries.

A typical peculiarity of the site of this settlement is the lack of external fortification. It appears from written sources and archeological data that medieval Zaamin (Sarsanda) had no fortification walls as well (Betger, 1957, p. 20; Ancient Zaamin, 1994, p. 20-31). Probably, this was a peculiarity of towns located in a steppe zone. At the same time, settlements in mountainous locality were appropriately for-

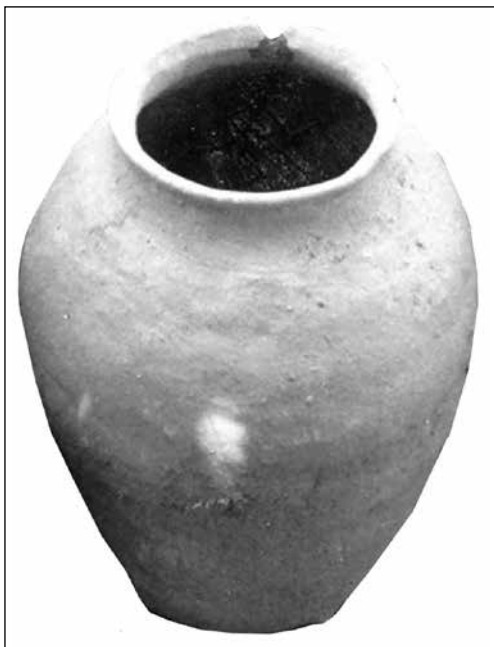


Fig. 116. Rustak Vokr. Hum-Ossuary from village Jalair.

To sum up, the ancient Ustrushana is one of the Central Asia's major historic regions where as far back as in the Early Iron Age there was established a distinctive culture that put a beginning to a long historical tradition in the material and spiritual spheres, which has still been traced. Located at a geographic center between Sogd and Bactria, on the one hand, and between Chach and Fergana, on the other side, it played a considerable role in social-economic and ethnic-cultural transit between them and throughout the northern Central Asia (Negmatov, Belyayeva, 1986, p. 187-188; Ancient Zaamin, 1994; Buryakov, Gritsina, 2006; Gritsina, 2011, 86-120).

Multiyear archeological excavations not only yielded a lot of historical information but also accentuated the significant role played in this process by North Ustrushana, which is currently a part of Uzbekistan and Tajikistan. At present, it is possible to comprehend a whole picture of historical development, identify the distinctive contribution of Ustrushana residents to the treasury of Central Asia and world civilization.

CHAPTER II

NORTH-EASTERN USTRUSHANA IN MEDIEVAL PERIOD - (4TH-EARLY 13TH CENTURIES)

Part I. Conditions of development of Ustrushana's architecture

People are always interested in ancestors' life: comparing the past with the present helps understand appropriateness of historical processes and twists of the being. In the sphere of art and architecture such a comparison gives a rise to the sense of national traditionality and peculiarity of folk creativity, and makes seek artistic discoveries. In this regard, of permanent importance are written sources, material culture monuments, ancient music, and poetry of the past. Not only do they allow comparing arts of various epochs but also sensing the past and watching it with eyes of contemporaries.

Addressing the architecture of the 6th-10th centuries is not occasional because architectural works reflect the prosperity of creativity of Ustrushana masters-builders. Exactly this period marked an end of formation of the Tajik nation, appearance and development of a medieval state ruled by the dynasty of Samanides (Negmatov, 1977, p. 38). Ustrushana was one of this state's largest, high cultural regions that played a significant role in the historical fates of Central Asia.

The study of material culture, including architectural monuments of Ustrushana began primarily in the second half of last century, i.e. after Central Asia joined the Russian Empire. There were established the Russian Archeological Commission, the Turkestan Department of the Russian Geographic Company (TDRGC), the Turkestan Archeology Study Group (TASG), the Russian Committee for Asia, and other organizations. However, studies carried out at the end of the 19th century-beginning of the 20th century resulted, as a matter of fact, just in the description and fixation of separate monuments.

Scientists and those fond of collecting ancient materials were largely orientalists, ethnographers, travelers, and state officials who usually did not aim to conduct an architectural-artistic study of monuments of various epochs (Markov, 1901, p. 171; Semenov, 1903, p. 46). Civic architecture and especially mass housing architecture of the early 20th century were beyond public interest. Study of the planned and volume-spatial structure of buildings and specific construction techniques of architecture was paid to the same extent little attention. Core attention was paid to monuments of Moslem cult architecture; of them, Advantageously Samarqand constructions were really described.

The initial mentioning of architectural-artistic monuments in the territory of North Tajikistan was made by Hodjent province chief, Colonel A. A. Kushakevich who yet in the early 1870s noted some antiquities of Ustrushana and them-related legends (Kushakevich, 1872). Visiting this place in 1890 was N. Lykoshin who, in his review of research works in Turkestan, gave the first description of the hill Chilhujra (Lykoshin, 1896). Of more systematic character were researches by Russian orientalist V. V. Bartold who, during his trip to Central Asia in 1894, traveled from the town Hujand to the settlement Shahrستان. He was the first to have drawn researchers' attention to the necessity of study of the early medieval region of Ustrushana, stressed that this would yield valuable information about purely local culture of Central Asia (Bartold, 1896; 1897; 1963). Visiting these localities at the end of the 19th-beginning of the 20th centuries were local history researchers P. S. Skvarskiy and I. A. Castanier who spoke at the Turkestan Ancient Studies Group, published the ruins of Kalai Kakhaha

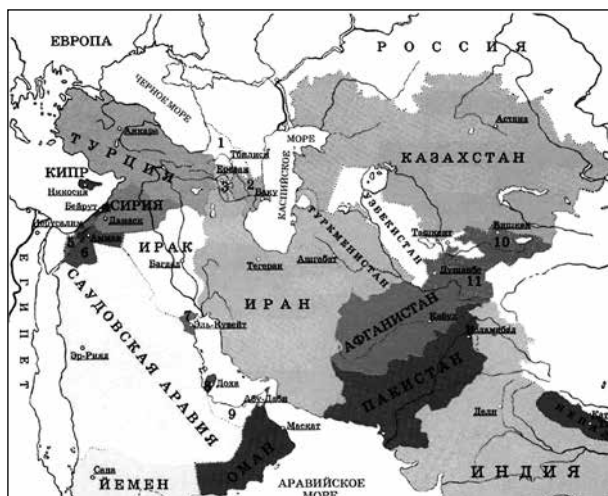


Fig. 1. Map of middle part of Asian continent: 10 - Kyrgyzstan, 11 – Tajikistan.



Fig. 2. Map of Tajikistan Republic. Administrative division into regions and districts of republican subordination.

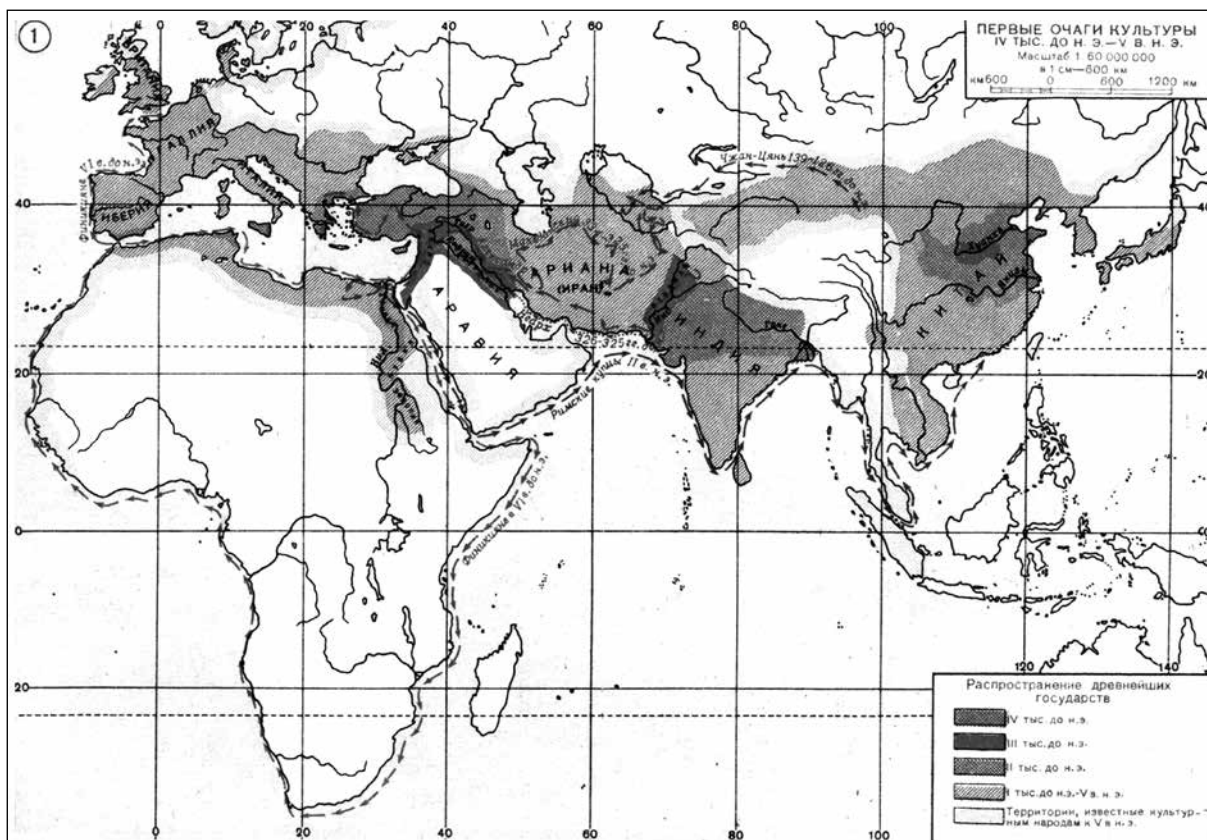


Fig. 3. Map of the Ancient World. Area of distribution of Aryan tribes.

and Chilhujra, and some other monuments of the Shahrستان hollow (Skvarskiy, Castanier, 1915, p. 159-162). Modern authors write that similar publications of authors of the late 19th-early 20th centuries gave the opportunity to regard Ustrushana as a highly cultural region that had played a substantial role in the historical fate of Central Asia (Negmatov, 1977, p. 38).

Studies of scientists were episodic before the end of the 1940s. Particularly, having visited the North Tajikistan in the middle of the 1920s, A. A. Semenov gave a description of Shahrستان's ruins in his historical-archeological review (Semenov, 1925, p. 113-150, 1944). The systematic research work begins in 1950 following the establishment of the Ustrushana crew of the Tajik archeological expedition (Smirnova, 1953, p. 189-230; Negmatov, 1952). Though the team's task was to carry on archeological exploration of the North Turkestan part of Ustrushana, the discovered materials and descriptions of the sites of settlements were, in specialists' view, of great value, substantiated raising the question about Ustrushana's place in the history of culture and architecture of Central Asia.

Systematic and stationary excavation works conducted in the area of Shahrستان by teams of N. N. Negmatov-led Tajik archeological expedition were an important stage in the study of Ustrushana. Since then, interest in the history of medieval Ustrushana has not been decreasing. Suffice it to note that during field seasons of 1955-1958 and 1960-1965 in the Shahrستان hollow there were discovered approx. 100 monuments of material culture, there were completed excavations of objects such as the site of settlements Kalai Kahkaha II, Tirmizaktepa, the complex of constructions Childukhatron, Kalai Kahkaha I, and there were commenced excavations of the settlement Honyailov. An appropriate result of the first stage of study of Ustrushana was the appearance of a monograph titled "Medieval Shahrستان" where the authors summed up the results of surveys of the sites of Shahrستان's three settlements: Kalai Kahkaha I, II, and III (Negmatov, Khmelnitskiy, 1966). Also, there were for the first time ever highlighted issues of Shahrستان's architecture, visual and decorative-applied arts, and there was carried out a graphic reconstruction of the palace of Kalai Kahkaha II. The study of these three monuments of Shahrستان led to the identification of two types of buildings: a type of buildings with a corridor-comb-shaped planning (at Kalai Kahkaha I and Tirmizaktepa) and a type of palace buildings (at Kalai Kahkaha II).

In the authors' view, the first type of planning was for many centuries attributable to buildings of a specific, comparatively narrow designation pertaining to defense and troops deployment tasks. The second, palace type was attributable to inn-portal complexesspread over the territory of Central Asia and Iran. Apart from identification of architectural-planning peculiarities of Shahrستان monuments, there was made an assessment of the historical-cultural value of painting and carved wood monuments discovered at the palace of Kalai Kahkaha II. Particularly, there was stressed a direct analogy between the Penjikent painting, wood sculpture and the Shahrستان painting and carved woodworks, which confirmed the existence of ancient traditions of the Sogdian-Ustrushana woodcarving art, painting technique. Besides, it was proved that the Upper Zeravshan woodcarving belonged to the local Sogdian-Ustrushana artistic school, though this had earlier been argued by some scientists in special references (Masson, 1927; p. 7; Voronina, 1950, p. 216; Filimonov, 1962, p. 267-278). As a matter of fact, the appearance of the "Medieval Shahrستان" marked the completion of the first stage of the study of Shahrستان architectural monuments that provided a rich factual material about planning and construction techniques, formation of the artistic image of a building depending on its designation, and its interior and compositional forms. However, the authors admit that the first stage of the study has not identified a general picture of the town ensemble, has not confirmed interconnections

of separate architectural buildings, failed to specify the inner structure of palace-type buildings (Negmatov, Khmel'nitskiy, 1966, p. 139-140).

The second stage of Ustrushana studies was summed up in a monograph titled “Urtakurgan and Tirmizaktepa” (Negmatov, Pulatov, Khmel'nitskiy, 1973). Apart from providing historical-stratigraphic characteristic of Urtakurgan, the work's part I analyzed one of medieval planning techniques typical for many feudal fortresses of Central Asia of the 7th-9th centuries: placing the system of residential rooms around a center formed by the crossing of two corridors. The study of discoveries - fragments of woodcarving, traces of column bases at the angles of crossing of corridors - not only helped reconstruct a timber ceiling with a light manhole at the zenith but also made it possible to identify ancient Shahrstan as a center of artistic woodcarving of Central Asia. The second monument (Tirmizaktepa) was characterized as one of the corridor-comb-shaped barrack-type buildings located around a nearby large capital town (Kalai Kahkaha I, II, and III). At this stage of studies it'd be appropriate to accentuate a monograph of U. P. Pulatov (1975) composed on the basis of study of a known monument of Ustrushana's early medieval architecture - fortress Chilhujra. Though this monument seems to be one of typical Central Asia fortresses due to many of its outward signs, nevertheless, it gives researchers an important material regarding construction of fortresses in the mountainous conditions of Ustrushana.

A monograph by N. N. Negmatov titled “The State of Samanides” marks the completion of the second stage of historical-cultural study of Ustrushana and adjacent estates. Apart from consideration of social, ethnical-cultural and historical development of the society in the period of formation of the Tajik nation and its statehood, this work sums up the material and artistic culture of Ustrushana, describes monuments of cult and civic architecture and rural settlements of Ustrushana, their distinctive peculiarities, and specifies the unsettled problems and key directions in the study of material culture of the reviewed period.

The similarity of architecture and culture of the reviewed region with that of the adjacent regions is important for the identification of the area with widely spread and common nature of construction types in Ustrushana, Sogd, Khorezm, Fergana, and mountainous Badakhshan. Thus, it is essential to study the architecture of regions above in order to make a historical-artistic analysis of monuments of Ustrushana. Here it'd be appropriate to accentuate a fruitful work of V. L. Voronina as a researcher of the architecture of not only North Tajikistan but the whole republic as well. She's the author of our work-related researches of the architecture of ancient Penjikent (Voronina, 1960), the culture of which is closely interconnected with that of the neighboring Ustrushana. In these studies she often addresses directly the architecture of Ustrushana as a participant of the Ustrushana archeological team (Voronina, 1976). Of importance are the works of E. E. Nerazik devoted to rural settlement of the Afrigid and subsequent periods of Khorezm. She is the author of the first typological characteristics of construction of early medieval fortresses in flat regions of Central Asia, which is of particular value for making an analysis to compare them with the architecture of mountainous Ustrushana and Sogd (Nerazik, 1966; 1976). Of no less interest are studies of Central Asia rural architecture carried out by V. A. Nielsen (Nielsen, 1976). A study of a part of the mountainous region, Pargara (Yakubov, 1968; 1977; 1973; 1979; 1979a, etc.) is exceptionally important for the reproduction of architectural image of Ustrushana constructions, its building materials and constructions, as well as architectural-decorative elements of a palace and peasants' dwellings.

Given that the work is to consider issues of succession of traditions up to the late medieval period, it is appropriate that we address studies of folk creativity of North Tajikistan, mountainous



Fig. 4. Map of the Ancient World. Formation of the Persian state.

Badakhshan and a series of adjacent regions of Central Asia (Voronina, 1968; 1977; 1959; 1951, p. 251-281; 1956, p. 125-144; 1951a; 1953; Mamadnazarov, 1977; Kondaurvov, 1940; Pugachenkova, 1956; et al). Though these works are devoted to the architectures of various periods, it seems possible to us to make necessary comparisons, draw parallels in architecture in general and in modern architecture of Tajikistan in particular.

A serious scientific study and critical exploration of best traditions of the Tajik architecture are necessary for the development of modern architecture of Tajikistan. Masters of the latest generations have brought us old techniques of architectural shaping prompted by the then construction techniques. Obviously, direct use of traditional forms of the past cannot take place in modern construction. Nevertheless, it is no possible to ignore the volume-spatial principles of local architecture; it is appropriate to develop modern architecture of Tajikistan in line with its own course, which hasn't lost its link with its roots. The point is that it is necessary to identify in the creativity of ancient masters those positive features, which meet the new requirements of life, new political and social concepts. The latter includes the ability of ancient architects to link architecture with the environment. Particularly, analysis of early medieval settlements, castles and fortresses in the territory of Sogd and Ustrushana makes it possible to conclude that the nature was often a determinative factor under the choice of a construction site. The conserved early medieval constructions represent specimens of art accurately fit into the magnificent background of nature and conserving the natural beauty of the surrounding landscape.

Though construction matters are frequently settled in an inseparable link with nature protection, nevertheless, designers often treat them from the angle of technical-economic criteria, ignore the impact of environment on the human. It is essential to study the experience of ancient architecture, work out recommendations how to use the aesthetic qualities of the environment in the composition

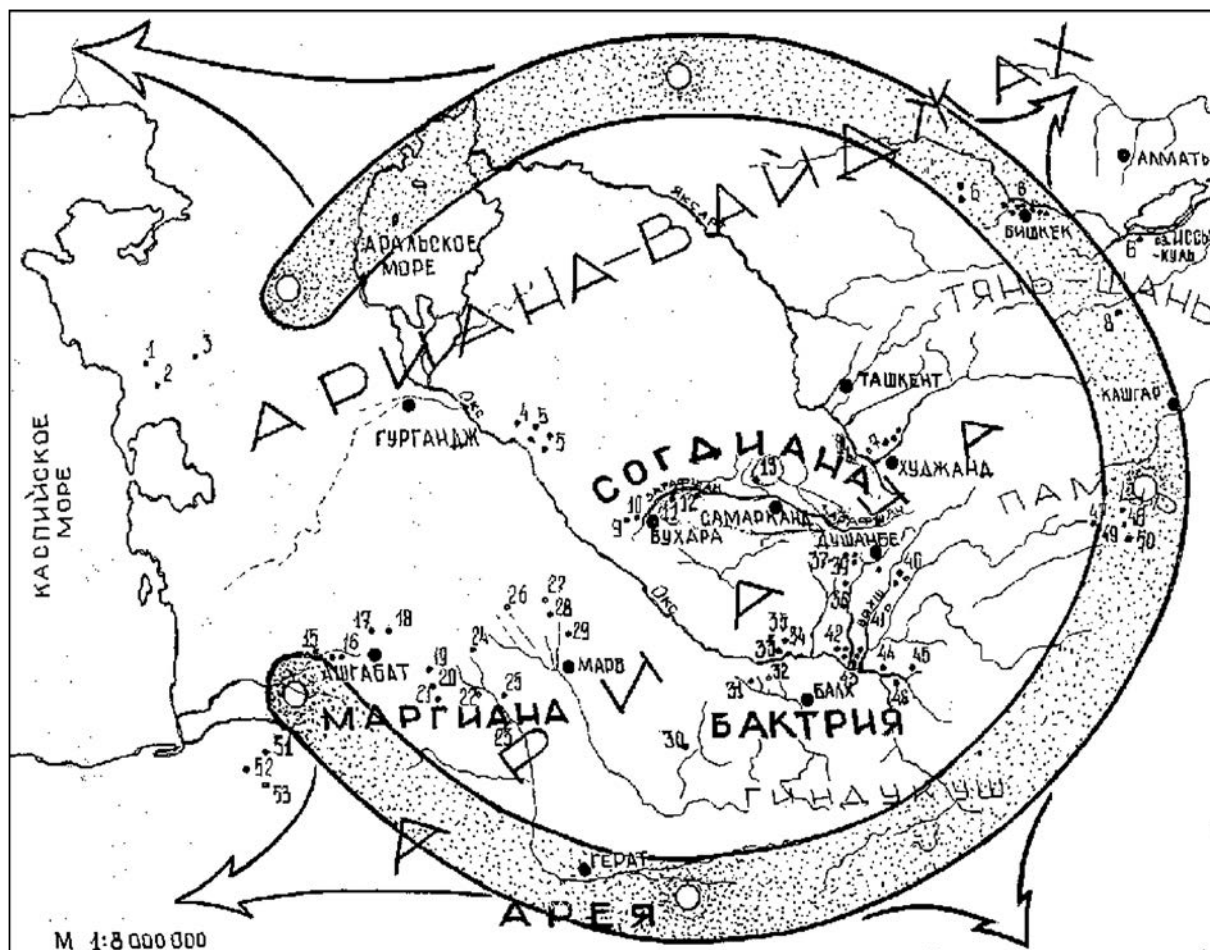


Fig. 4a. Aryan «Golden horseshoe in the Central Asia (according to N.N. Negmatov).
Fig. 1-3. Burial grounds of timber type (Karalematasay, Patmasay, Paray); 4. Burial ground Kokcha-3. 5. Sites of Priaralye steppe bronze. 6. Andronov monuments near Issyk Kul. 7. Monuments of Kayrakkum culture. 8. Burial ground Arpa. 9. Zamanbaba. 10. Burial ground Gudjayli. 11. Burial ground Muminabad. 12. Sarazm. 13. Burial ground Dashtikozy. 14. Shelter Aktanghi. 15. Burial grounds Parkhay I and II. 16. Burial grounds Sumbar I and II. 17. Aktepa. 18. Anay. 19. Karatepa. 20. Namazgatepa. 21. Tekketepa. 22. Ulugtepa. 23. Altyntepa. 24. Geoksur oasis. 25. Khapuztepa. 26. Kelleli oasis. 27. Gonor oasis. 28. Togolok oasis. 29. Tahirbay-3. 30. Davletabay oasis. 31. Farukhabad. 32. Dashly. 33. Sapallitepa. 34. Jarkutan. 35. Bustan. 36. Molaly. 37-39. Burial grounds of Gissar valley (Zarkamar, Tandryul, Kumsay). 40. Mountain settlements (Dahana, Teguzak, Kangurtut, Baraki Kuruk). 41. Site in Kirov sovkhov. 42. Burial grounds of Beshkent valley (Beshkent1-III. Early Tulkhar. Early Aruktau). 43-44. Burial grounds of Vakhsh culture (Vakhsh, tiger gully, Oykul, Jarkul, Amu Darya, Makonimor). 45. Shortugay. 46. Tulukan. 47. Burial ground Karadimur. 48. Rocky shelter Kurteke. 49. Rocky shelter Mashale. 50. Burial ground of Jaushangoz (yuzhbok). 51. Turengtepa. 52. Shahtepa. 53. Gissartepa.

of modern ensembles, residential areas and quarters. Another side of study of heritage of the past is a scientific assessment of positive distinctions of town planning of the reviewed period meeting specific requirements of the epoch, taking natural-climatic conditions into account, and at the same time reflecting progressive features of the future. The identification and development of Tajik masters' positive experience on a new construction basis would help (in the conditions of modern town planning) settle not only matters of establishment of optimal conditions for human life in the conditions of hot climate of Tajikistan but also issues of national and international establishment of the Tajik architecture where natural-climatic characteristics of geographical milieu are the basis of formation of national traditions.

Many constructions in the territory of North-Eastern Tajikistan represent prominent architectural monuments that should be conserved as museum exhibits of the ancient culture of Tajik nation. Suffice it to say that the monuments of architecture and visual and applied arts of ancient Penjikent and Shahrstan became famous worldwide, while the techniques of their study glorified the Soviet science on the whole. Periodization of culture by social-historical stages, dating, classification by techniques and technology, by kinds and forms, description of subjects of ancient and medieval visual art, especially painting and woodcarving are far not the full list of merits of historians and archeologists.

Architectural concept, like the whole artistic concept, assumes not only a theme, a subject or an image, for it includes, apart from specific knowledge and notions of its time, a manner of thinking, seeing, feeling, and imagining, i.e. it is not indifferent to a form an architect felt and comprehended at his time. All this once again stresses the need of study of architectural heritage of the past for the sake of full, deep cognition of a richest culture of the Tajik nation.

To comprehend architectural distinctions of the epoch of development of feudalism in Central Asia, particularly, Maverannahr, it is necessary to consider the characteristic of development of its culture in the ancient and early medieval period. Nations inhabiting Central Asia in the ancient times created their distinctive culture, a peculiarity and high level of which found its parallel in the works of modern scientists. The architecture of this territory is characterized by similarity substantiated by the linkage of historical fates of Central Asia nations, identical social and close natural-climatic conditions. It is not denied that local distinctions of architecture were formed in separate regions of the country yet in the ancient period.

In the 5th century B.C.-6th century ad Central Asia saw breakdown of the tribal system and subsequent formation, development and crisis of the slaveholding system (fig. 3, 4) (Gafurov, 1972, p. 46-54; Litvinskiy, 1960, p. 91-92). Ancestors of present-day Central Asia nations - Khorezmians, Sogdians, Ustrushanians, and Bactrians - erected either monumental buildings or large irrigation constructions, an illustration that the tribal system was substituted for the centralized power of a multiform slaveholding state (Dyakonov, 1966, p. 47-52; Gafurov, 1972, p. 177-184).

At the end of the 4th century B.C. the southern and eastern parts of Central Asia joined the composition of monarchy of Alexander the Macedonian and, after his death, of the State of Selevkids, i.e. joined a circle of Hellenistic culture with a broad international communication (Gafurov, 1972, p. 99-100). It is known from historical sources that this period saw construction of towns, which, like separate buildings, are now by-gone (Cherikower, 1927).

The fall of the State of Selevkids in the middle of the 3rd century B.C. led to the formation of two slaveholding states in the territory of Central Asia: the Parthian State in the west and the Greek-Bactrian State in the east where there developed its own culture assimilating and distinctively interpreting Hellenistic elements (Pugachenkova, 1951, p. 188-199; 1958; Koshelenko, 1966, p. 40).

The Greek-Bactrian State that existed till the middle of the 2nd century B.C. included, apart from Bactria, Sogd, Ustrushana, and Marg. The culture of Central Asia nations developed substantially at this period. Rural settlements represented separately standing fortified common houses fully consisting of residential rooms (Tolstov, 1948, p. 88-98).

Economic and political ties expanded, new towns were erected, and large construction works were underway in the times of the Kushan kingdom (1st-4th centuries). In the Kushan period, apart from the then existing Zoroastrian cult, in the southern part of Central Asia there was spread Buddhism that impacted on the character of architecture. One of the most striking monuments of this period was a complex in Hapchayan (near Denau of Uzbekistan's Surhan-Darya region) (Pugachenkova, 1966). Following its breakdown in the 5th century, the Kushan kingdom was substituted for a new state led by a union of tribes called *eftalits*. In this period of history Central Asia nations saw the breakdown of the slaveholding system. In the middle of the 5th century in Central Asia there was formed a vast state of nomads - Turkic Kaganate - that invaded the territory of the *Eftalits*. Separate regions of Central Asia - Sogd, Toharistan, Chach, and Fergana - were governed by local rulers who remained independent, to extent. As a result of a further breakdown of the Turkic Kaganate, Ustrushana was distinguished as an independent political and economic unit (Negmatov, 1957; 1959, p. 115).

Impressive features of succession under the traditional conservation of the synthesis of architecture, monumental painting and sculpture are attributable to the early medieval architecture of Central Asia Mesopotamia (fig. 5) (Yakubovskiy, 1949, p. 33). The existence of small independent estates formed after the breakdown of ancient-era large state formations is typical for *Maverannahr* and the whole early feudal Central Asia. This caused the appearance of fortified settlements and estates of landowners. Written sources of the period of birth of the new social system inform us about an excellent state of irrigation, agriculture, and handicrafts (Bartold, 1965, p. 186-187; 198-199). In turn, historical-architectural studies give us the opportunity to judge about the state of material culture, particularly, architecture and visual art. Chinese chroniclers' reports about frescoes in the palaces of Central Asia rulers were confirmed during the study of palaces and temples of *Varakhsha*, *Penjikent*, *Shahristan*, *Quva*, and *Balalyk-Tepe*. The discovered carved woodworks, wall paintings and sculpture demonstrated the high level of development of decoration, monumental painting, and sculpture.

This period's architecture represented by citadels of feudal rulers is expressive as well. They were monumental buildings put onto high wattle and daub platforms. The hardly accessible citadels expressed the essence of new social relations as best as possible. The severe nature of architecture of this period can be illustrated by examples, such as *Chilhujra*, mountainous castle *Mug*, *Balalyk-Tepe*, etc. However, it'd be erroneous to assert that the circle of architectural images was limited by such monumental techniques. The results of archeological studies and analysis of visual art items (the *Annik* plate, the hearths of *Afrasiab*, a bronze plate from the Berlin Museum, *Biyanayman* ossuaries, etc.) make us suggest that this period saw the spread of framehouses. However, wooden frame-based houses have not been conserved to nowadays due to the short life of the building material - timber.

Having joined the Caliphate, Central Asia entered the orbit of world caravan trade. Social-economic shifts led to growth of agriculture, handicrafts and trade, to the strengthening of the stratum of merchants and to an increase of the number of craftsmen. *Rabads* were acquiring a greater importance in the life of towns; there were formed prerequisites of qualitative changes in the planning structure of towns. A strong denial of the synthesis of arts, which had previously been spread widely, was typical for the Arab rule-era architecture (the 7th-9th centuries) of Central Asia. This caused a huge loss for the culture and art of Central Asia nations.



Fig. 5. Map of Near and Middle East in the Middle Ages.

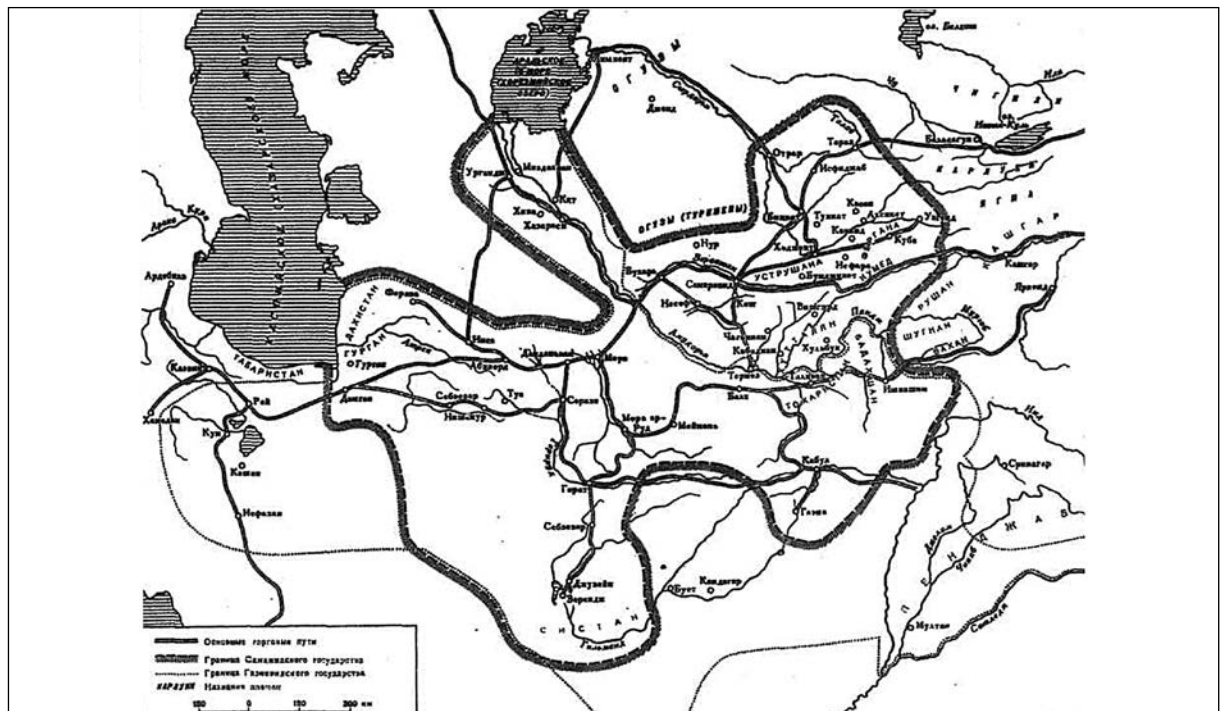


Fig. 6. State of Samanides, 9-10th centuries.

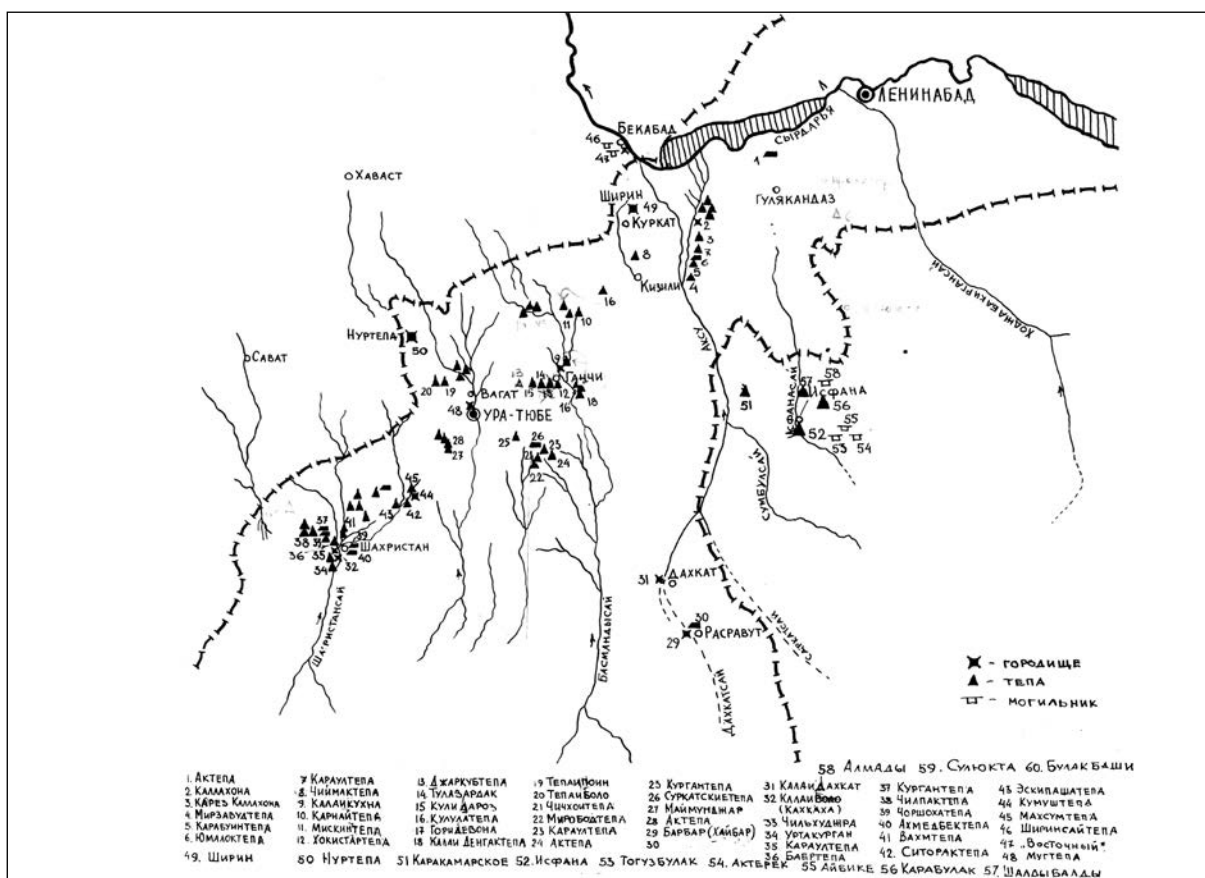


Fig. 7. Location of Ustrushana monuments on the territory of modern Uzbekistan, Tajikistan and Kyrgyzstan: 1. Aktepa. 2. Kallahona. 3. Karez Kallahon. 4. Mirzavudtepa. 5. Karabuintepa. 6. Yumaloktepa. 7. Karaultepa. 8. Chiymaktepa. 9. Kalaikuhtepa. 10. Kar-naitepa. 11. Miskintepa. 12. Hokistartepa. 13. Jarkubtepa. 14. Tulazardak. 15. Kuli Daroz. 16. Kululoatepa. 17. Gori Devon. 18. Kalai Dengaktepa. 19. Teraipoin. 20. Teraibolo. 21. Chichkontepa. 22. Mirobodtepa. 23. Karaultepa. 24. Aktepa. 25. Kurgantepa. 26. Kurkat-tepa. 27. Maymunjar. 28. Aktepa. 29. Barbar (Haybar). 31. Kalai Dahkat. 32. Kalai Bolo (Kahkaha). 33. Chilhujra. 34. Urtakurgan. 35. Karaultepa. 36. Baertepa. 37. Kurgantepa. 38. Chilpaktepa. 39. Chorshohtepa. 40. Ahmadtepa. 41. Vahmtepa. 42. Sitoraktepa. 43. Es-kipashatepa. 44. Kumushtepa. 45. Mahsumtepa. 46. Shirinsaytepa. 47. «Eastern». 48. Mugtepa. 50. Shirin. 51. Nurtepa. 52. Karakamar. 53. Isgana. 54. Toguzbulak. 55. Akterek. 56. Aybike. 57. Karabulak. 58. Almady. 59. Sulukta. 60. Bulakbashi. 61. Dungchatepa. 62. Toshtemirtepa.

In the 9th-10th centuries when the country got rid of the Arab rule there arose a state of local dynasties - Tahirids and Samanids (fig. 6). This epoch - the 9th-10th centuries - is identified as a period of formation of a feudal town as a consequence of economic development triggered by a growth of agriculture and handicrafts and development of external and internal trade (Negmatov, 1977, p. 17-33; Voronina, 1957, p. 83-92; 1959, p. 84-104, etc.). This period saw the appearance of new types of buildings, such as caravansaries, mosques, spiritual schools, residential houses of the nobility

and merchants; the territory of town was expanding as the center of political and economic life was shifting towards a rabad (Negmatov, 1977, p. 38).

The economic growth led to a rapid development of many Central Asia towns that became centers of cultural life, particularly, Merv, Bukhara, Samarqand, and Bunjikat (Rempel, 1978, p. 30.). The prosperity of economy and culture, architecture and art was so significant that the art study literature saw the appearance of a notion “Oriental Renaissance” though such stylistic comparison of various “renaissances” in art and architecture is impossible, according to Rempel (Mamadjanova, Mukimov, 1980, p. 82-90). On the whole, in the 9th-10th centuries Maverannahr saw the emergence of a solid architectural school based on the best traditions of the past. This school became determinant in the epoch that followed (the 11th-13th centuries) and “...avoided being imitated directly by specimens from other regions of the then East...Masters of Maverannahr have the full right to everything what was created in the territory of Central Asia Mesopotamia at that period...”(Rempel, 1978, p. 90). Same is true for art and literature that for centuries used a common language of artistic and construction forms meeting the conceptual content of the epoch.

Natural-climatic conditions. In the 6th-10th centuries the territory of Ustrushana was made either of flat or mountainous regions of Central Asia. Agricultural districts-rustaks were Bunjikat, Sabat, Zaamin, Burnamad, Harkana, Feknan (Dizak is the main town), Havas, Shavkat and Vagkat. Ustrushana’s mountainous part included rustaks Mink, Asbanikat, Biskar, Bangam, Vakr, Shagar, Burgar, Mascha, and Buttam (fig. 7, 8). (Negmatov, 1953, p. 249-252).

North Ustrushana represented an agricultural plain; its northwestern part consisted of separate small green oases surrounded by a steppe. The area’s southern part was occupied by verdure-rich mountainous and sub-montane valleys and gorges and highland pastures of the Turkestan, Zarafshan and Gissar ridges. Ancient Ustrushana’s part that is richer with architectural monuments and is under our consideration occupies the regions of Shahrستان, Upper Zarafshan, Ura-Tyube, and Nau of Tajikistan (fig. 2).

Building materials and implements of production. Numerous studies of Ustrushana’s architectural monuments over the past decades produced a rich material. Thus it is necessary to systematize and sum up local regularities of development of early medieval architecture, peculiarities distinctive from the construction culture of adjacent regions.

It is essential to identify an independent school of architecture because some Central Asia researchers of the end of the 19th century-beginning of the 20th century assumed lots of controversial ideas of many phenomena of the region’s economic and cultural life. For instance, having visited Central Asia in the 1860s, A. Vambéry left the following categorical written note: “There is no occupation of special builders here. Everyone imagines that he has enough architectural knowledge to build anything he wants. And given that no plumb is known yet, it is no surprise that all the walls are crooked, concave, convex and collapse very soon after they are built” (Vambéry, 1968, p. 106). However, dumb witnesses of the history - monuments of architecture of the past - irreversibly prove the contrary. Suffice is to cite studies of M. S. Bulatov who identified the distinction of local construction-artistic traditions and style peculiarities of the architectural schools of Maverannahr, Khorezm and Horasan, and pointed out to a highly developed medieval architecture science of countries of Middle East (Bulatov, 1978).

Ustrushana’s construction culture viewed by us as a unity of production, construction and artistic bases gives examples of high technical level of performance of constructions of various designations. Though the construction techniques were permanently sophisticated, the used materials were traditionally local (fig. 12, 13), the choice of them was predetermined by real natural conditions. The

absence of timber, the limited availability of stone, and an all-round spread of loess in Ustrushana's flat and steppe regions yet in the ancient period substantiated a wide use of loess's derivatives - tile and mud brick - in either mass or monumental building.

Loess served primarily as an excellent cementing material; its mortar was used for the laying of walls of stone, mud-brick and guval-dry walks. Besides, loess was used to decorate walls and plaster floors. For instance, a combination of clay plasters of various tins (gray, green) with red mud-brick, like in the rooms of palace Gardani Hisor (settlement Madm), attached a peculiar tint to the interior (Yakubov, 1979a, p. 140-141).

Best loess for construction works was subsoil, unused loess. Thoroughly wetted and kneaded loess mortar had to settle within several days (3-6). Building of stone fundaments required semi-liquid loess mortar; of walls- average-dense loess, of ceiling-very thick loess mortar. To improve the quality of loess mortar (increase its firmness, hydro-stability, etc.), it should be added by ganch, cane ashes, lime and other materials. The compositions of loess are different but primarily include silicates and sand (27-90%), alumina (4-20%) and lime (6-67%) (Zasyppkin, 1961, p. 143).

Pahsa, i.e. wattle and daub work, was a material spread elsewhere across Central Asia and neighboring countries. In the lowest layers of Tepe Sialk near Kashan erected on the ruins of Iran's Neolithic agricultural settlements there are traced remains of clay brick walls (Ghirshman, 1938, p. 10). Pahsa was built by thick, around 1 meter-high layers divided into blocks. Such a construction technique is excellently illustrated by the palace building Kalai Kahkaha II where the lower part of the walls is notable for smoothness of polished granite (Negmatov, Khmel'nitskiy, 1966, p. 119). Once laid, every layer is cut from the lateral faces, thanks to which the pahsa, when it dries up, cracks towards not random but prescribed direction. An above layer is cut with the first one in a manner to avoid coincidence of joints so monolithic, beautiful blocks appear as a result. Impressive specimens of this type of walling are the walls of the upper tier of Ak-Tepa near Tashkent (Voronina, 1949, fig. 1; 1953, fig. 9). Pahsa requires clay of definite quality: enough fat and viscous. Otherwise, it is used with a substantial admixture of pebble-stone. This is the composition of the walls of ancient constructions in mountainous areas of the Turkestan and Zarafshan ridges.

Adobe brick is no less ancient building material: its use in the Near East began approx. 10,000 years ago. Researches of Soviet and foreign scientists make it possible to judge about the construction of Lower Neolithic dwellings erected of clay, especially of adobe brick with flat beam-and-girder constructions. Of course, the ancient prototype of adobe was quite alike the modern one: it passed a long way of development before it converted into correctly formed blocks. In the 5th millennium B.C. dwellings in South Turkmenistan (Jeytun and Chapan-Depe) were built of clay oval-section blocks with the sizes of 20-25 cm in diameter and 60-70 cm long. In the 4th millennium B.C. they were substituted for rectangular adobe that remained the key walling material until the raid of Alexander the Macedonian (Masson, 1964, p. 27).

In the view of V. L. Voronina, forms were bottomless (1950, p. 196) so a brick while being formed was put straight onto the true ground. This explains various thicknesses of brick that sometimes oscillates within several centimeters while the rest dimensions are usually observed more accurately.

A square brick was used in the construction techniques of the lower reaches of Syr Darya and Amu Darya (Voronina, 1952, p. 89). The central regions of Central Asia (Ustrushana, Samarqand Sogd) the used brick was nearly always rectangular, with the correlation of sides as 1:2. (Yakubovskiy, 1934, p. 25-48; Voronina, 1950, p. 196). Certain deviations from this format were assumable. For example, in Madm's palace-type fortress Gardani Hisor there was used Adobe brick with the dimensions 55/25/9

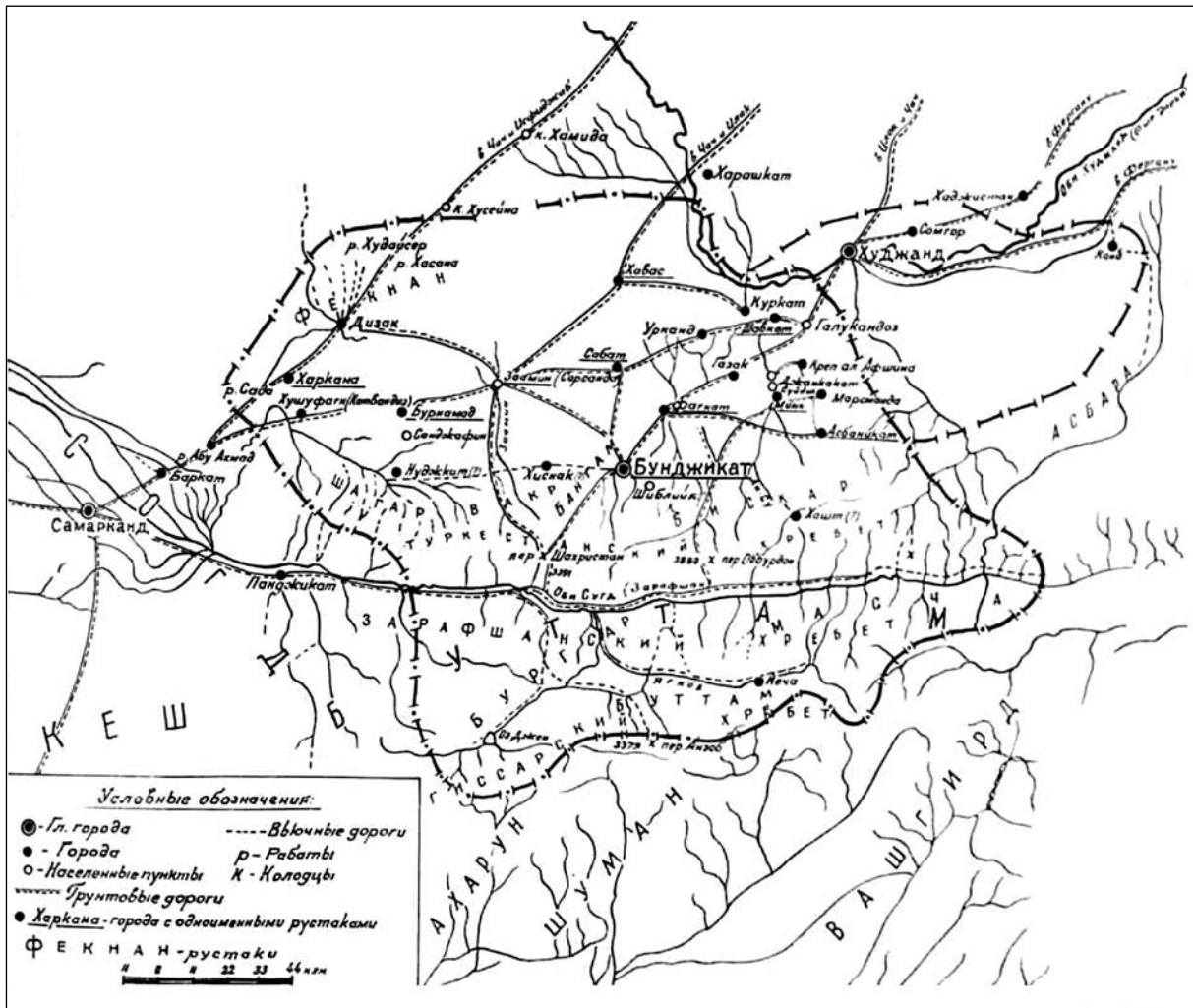


Fig. 8. Map of early medieval Ustrushana.

cm (Yakubov, 1979a, p. 140). The brick's 1:2 format allowed alternating the walling by binder and stretcher.

The upper part of Adobe brick was marked by a stamp - "tamga". Nine kinds of such stamps are detected on the bricks of Chilhujra. Such signs were also registered at many early medieval monuments of Central Asia (Voronina, 1953, p. 6; Pugachenkova, 1970, p. 350, fig. 1.). All they are made through pressing natural clay by fingers at a moment of forming. V. L. Voronina links this detail to the organization of labor: stamps were used to register the work of builders (Voronina, 1975, p. 48).

Baked brick, known in Central Asia since the first centuries A.D. was used in Ustrushana's architecture very seldom. It was used to pave floors, make stairs, and as a brickwork in the basement of arches, as well as in construction-responsible parts of a building (Smirnova, 1953, p. 199; Negmatov, Khmel'nitskiy, 1966, p. 91).

Owing to the limited use of baked brick as a building material (the most ancient baked-brick building that has been conserved up to nowadays is the Bukhara-based Mausoleum of Samanides, the end of the 9th century), it was produced by small baking ovens, construction of which resembled that of potter's furnace. In the territory of Ustrushana such ovens dated back to the early centuries



Fig. 9. Site Kalai Kahkaha I. General view.

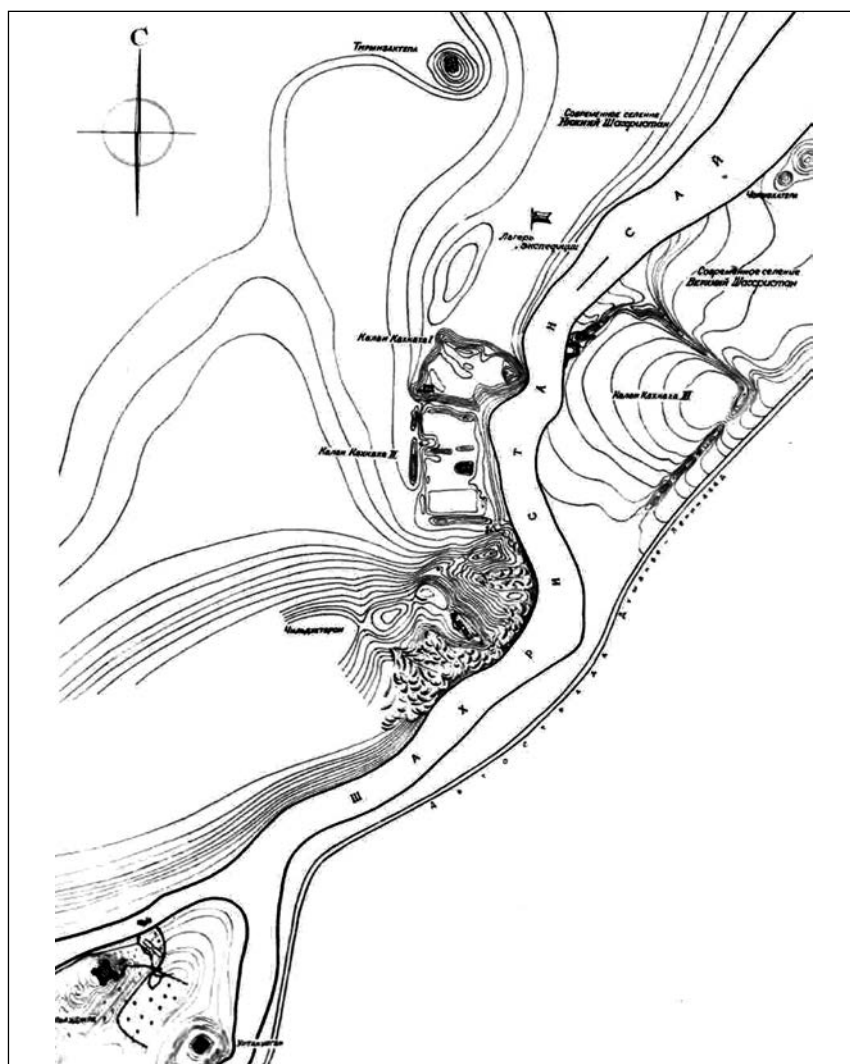


Fig. 10. Scheme of location of Kahkaha group of monuments.

A.D. were initially discovered in 1943-1944 during construction of the Farhad hydro power plant. They were two-cell, rectangular (later on substituted for oval) ovens, with lower cell's fire making hot air move through special air-holes towards the upper cell where a work-piece was (Haydukovich, 1948, p. 77-82; Samoylik, 1978, p. 161, 163, fig. 36). By now, more than 7 baking ovens of the 8th-9th centuries have been found at the eastern boundary of settlement Shahrstan: five of them were used for baking brown ware and two-for baking bricks (Samoylik, 1978, p. 166).

Natural stone (shale, sandstone, limestone, granite, etc.) was used as a building material largely in mountainous and sub-montane regions of Central Asia. It was used either in substructures of stylobates used for erection of Ustrushana's medieval towns or for walling. In the mountainous part of the region there have been discovered constructions fully built of stone. That is the ensemble currently called Childuhatron (Negmatov, p. 149). The western wall of fortress Kum at the settlement of the same name in the Upper Zarafshan is up to 50-cm height made of stone (Yakubov, 1978, p. 125).

Clay-brick walls of the site of settlement Karabulak are put onto stone fundament (Negmatov, 1978, p. 149; Negmatov, Khmel'nitskiy, p. 49; Yakubov, 1979a, p. 97). The stone was usually applied without pretreatment; preference was given to layered rocks (fig. 13). In the case of absence of the latter, there were frequently used sledged stones of various rocks. Particularly, the majority of walls of constructions of settlement Hon Yaylov were erected of formless stones at a thick clay layer.

Of wide use was ganch-alabaster, an irreplaceable material in walling, decorating, and making utensils. Particularly, ganch was used to plaster the walls of bins (hamba) of the palace Gardani Hisor (Yakubov, 1979a, p. 141) while small alabaster tables have been found in residential rooms of the settlement Karabulak (Negmatov, 1978, p. 149).

The wood was the main construction element of floors, ceilings, and backup abutments in the mountainous part of Ustrushana. The slopes of the Turkestan, Zarafshan and Gissar ridges were full of such timber until recently. Not only columns and beams but also arches were made of wood. The existence of such specimens in the architecture of Central Asia could only be guessed from the reliefs of Biyanayman ossuaries and wall painting of ancient Penjikent. As V. L. Voronina testifies, excavations of the palace of Bunjikat revealed the first material evidence - a fragment of a light bent T-shaped arch (1977, p. 156).

Construction techniques. The study of medieval monuments helps us understand construction techniques applied by Central Asia architects. Analysis of monumental buildings and written sources of that period is illustrative of high building culture of ancient masters, existence of architectural designing, calculation of construction of cupolas, arches and vaults, as well as financial and construction control (Rashid-ad-Din, 1945, p. 225-226).

Yet in the early medieval period architects, who had no deep mathematical knowledge, could reproduce a three-dimensional volume-spatial structure of a construction by simplest methods through operating a cord, a peg, and a compass at a construction site (Pugachenkova, Masson, 1958, p. 74). A detailed study of architectural monuments of the 6th-10th centuries in the territory of Ustrushana has made it possible to identify a series of construction traditions of architects of the past confirming the aforesaid. Let's trace some aspects pertaining to the construction culture of Ustrushana.

Supporting structures. Local construction traditions in the structure of foundation and socle may be studied after patterns of monumental buildings of mountainous Ustrushana. Particularly, interesting results have been obtained from the exploration of Kalai Kahkaha II where there was fixed a solid-foundation up to 3 meters high platform consisting largely of loess and strengthened by stone breast-walls (Negmatov, Khmel'nitskiy, 1966, p. 49). Such structure of the foundation of a construction

is a distinctive feature of the ancient construction technique (fig. 12). We're observing a bit different picture in the foundation of fortress Chilhujra located at a natural hill. The archeological study of the substructure of the monument's foundation has identified the existence of artificial stylobate consisting of a series of around 1-meter wide and high wattle and daub blocks. The internal space, the so-called case was filled by layers of gravel, loess, and sand. The outer surface of the stylobate is inclined. (Pulatov, 1975, p. 112, 111). As has been noted, a castle at the Mountain Mug stood on the stone fundament made of shale pieces, in some places 3-meter high (Yakubov, 1979a, p. 101).

V.A. Nielsen has fairly noted that introducing stone in the substructure of stylobates was a local peculiarity of mountainous-submontane regions (Nielsen, 1976, p. 219). The floor of rooms was usually laid onto dense wattle and daub filling of the stylobate's surface (Chilhujra). A castle at the Mountain Mug had a floor made of backup shallow pebble-stone fastened by clay plastering (Yakubov, 1979a, p. 101). The floor of the palace Gardani Hisor resembles that of object II at the site of ancient settlement Penjikent (Voronina, 1953, p. 116) - it is made of clay-plastered Adobe brick (Yakubov, 1979a, p. 129). Adobe flooring has also been found in a barrack-type construction Tirmizaktepa located not far from the sites of Shahristan settlements Kalai Kahkaha I, II, and III (Negmatov, Pulatov, Khmel'nikskiy, 1973, p. 117).

Niches of residential and official constructions were fully made of Adobe. Sometimes, adobe was used to frame the edges of a niche whereas the resulting hollows were filled in by land or gravel backfill and further plastered by clay. For instance, niches in the palace Kalai Kahkaha II are laid of 24-centimeter thick wattle and daub blocks and two rows of Adobe brick (Negmatov, Khmel'nikskiy, 1966, p. 61), while that in the palace Gardani Hisor - are laid of clay-plastered Adobe (Yakubov, 1979a, p. 129).

The walling in Ustrushana's construction technique is not different from generally recognized Central Asia techniques. There were used three types: Adobe, wattle and daub, and the combined walling. Stone walls were popular only in mountainous and submontane regions. Adobe was fastened by clay mortar with joints bonded vertically and layerwise. When thickness of walls exceeded one meter, the bonding was used primarily at the outer rows of the walling. As has been noted, Adobe brick of Ustrushana monuments was rectangular, had the sizes within 48-52/25-25/8-10 cm, i.e. the correlation of sides of 1:2. Along the wall's facade there alternated rows of binders and stretchers; other combinations also existed. A local distinction is a "dotted" decoration of walls. This artistic technique is achievable through alternating rows of long and short incised dotted lines that expressively outline the alternation of bonded and stretched rows of brick. This is the decoration of all the walls of the palace Kalai Kahkaha II (Negmatov, Khmel'nikskiy, 1966, p.117).

In Ustrushana, wattle and daub walling was performed through dividing the wattle and daub works into blocks, i.e. thick layers of clay were laid in continuous line and further cut by upright joints. However, in the studied monuments continuous wattle and daub walls are found seldom: in the majority of cases we find walls laid of wattle and daub blocks layered by one, two or more rows of Adobe brick (Pulatov, 1975, p. 118). This technique provides a known architectural effect and, as suggested by V. L. Voronina, the introduction of rows of bricks "provided a certain elasticity of the walling, desirable for the reasons of seismicity" (Voronina, 1953, p. 195).

Study of the spatial-construction system of the palace Kalai Kahkaha II has made it possible to identify a kind of module used by ancient Ustrushana architects for the wattle and daub walling: a wattle and daub block with a section of 70/95-100 cm multiple, on the one hand, of a smaller element - the combined walling layer and of the sizes of walls and spans of the very rooms, on the other side (Negmatov, Khmel'nikskiy, 1966, p. 118-119).



Fig. 11. General view of hill with Bundjikat palace.

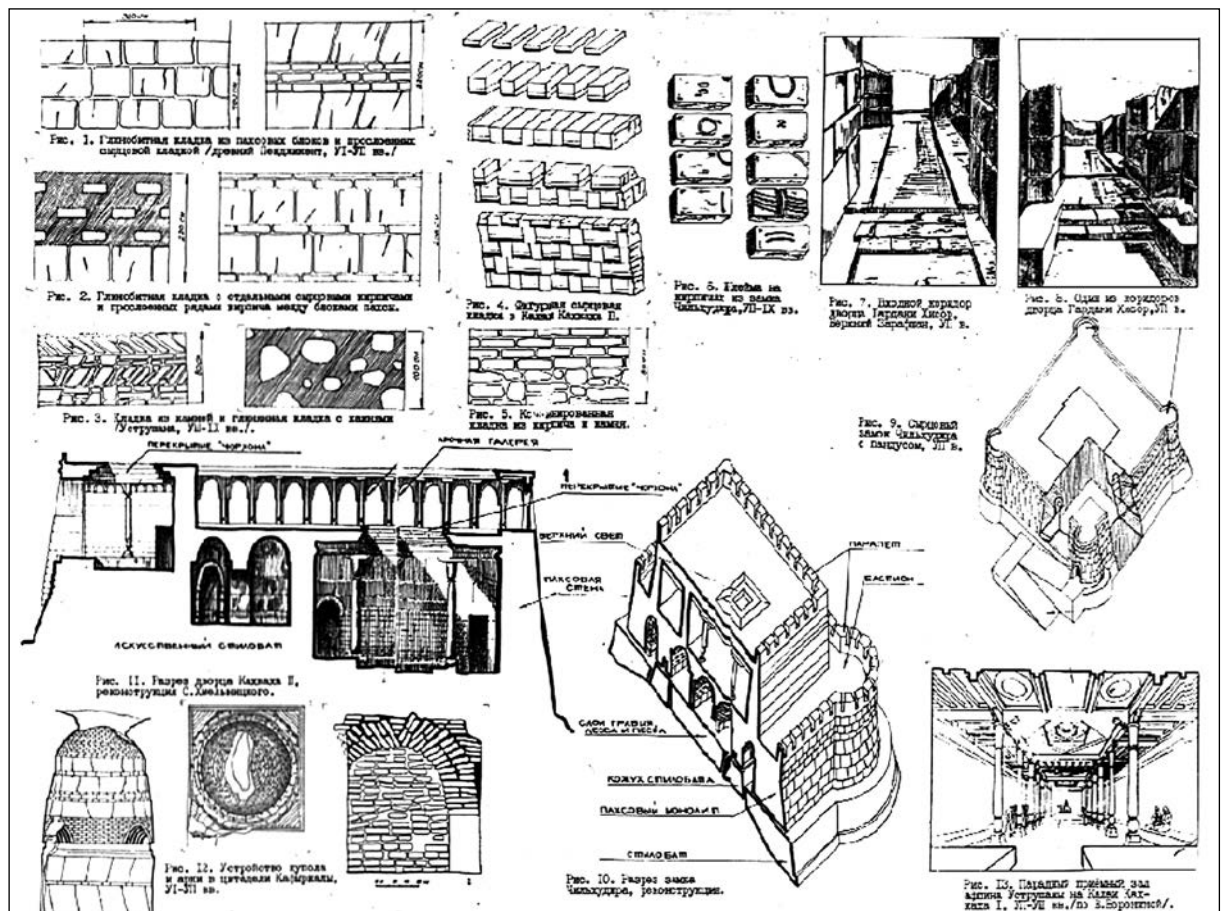


Fig. 12. Building culture of Ustrushana.

The most popular type of walling was the combined walling, i.e. alternation of the Adobe brick layer and 10 to 25 cm-thick wattle and daub work. The bricks were bonded in one row. The advantage of the combined walling is that it is less labor-intensive and more monolithic than the Adobe one. Sun-dried baked clay and Adobe acquired considerable mechanical firmness. The system worked through material weight pressure, i.e. the thicker the wall was the firmer the construction was. A brick-layered wattle and daub work cannot yield large solid cracks, it can yield only small cracks within every layer very seldom. Under the combined walling wattle and daub brick is not cut by vertical joints. Walls of all kinds were covered by clay plaster that served the only means of decor of dwellings of peasants. In urban residential houses and in rural castles of landowners clay plastering was also applied as a separate kind of covering of a picturesque decor base.

Floors and ceilings. No beam and girder constructions have been conserved due to their short life. That they were used in ancient times can only be guessed from archeological data. According to latest information, front halls of palaces and temples had beam and girder floors and ceilings everywhere, while common residential and utility rooms were often arched (Negmatov, Avzalov, Mamadjanova, 1979, et al). A wooden construction of rooms of the palace Kalai Kahkaha II was covered by cane and thatch and plastered by clay. There was a light hole over a hearth construction in the center of the ceiling. The roof was supported by wooden columns. The entire construction is very similar to popular techniques of construction with a flat ground roof (Mamadjanova, Mukimov, 1978, p. 6).

Arched-cupola tectonics born by a similar system of construction was spread yet in the ancient epoch (Pribytkova, 1975, p. 59). However, development of the arched-cupola system in Central Asia was completed at the boundary of the 9th-10th centuries. A rise of general artistic culture of Maverannahr, the spread of Islam, the erection of cult buildings, and the use of baked brick substantiated development of the arched-cupola structure (Mamadjanova, Mukimov, 1978, p. 83, 84).

Arched were performed through the use of inclined transversal sections of adobe brick in the form of elliptical or parabolic curves. Their construction was examined in details by V. L. Voronina, who proceeded from the measurements of monuments of Khorezm, Penjikent, and Shash (Chach) (Voronina, 1948; 1952, etc.) This very important construction of monumental architecture of countries of the Orient appeared early. In seeking most appropriate solution, architects simultaneously created several kinds of an arched construction. Yet in the beginning of the 3rd millennium B.C. they erected dummy arches with a gradual carryover of stone flags (Eshnunna in Mesopotamia). Mariana farmers in the 3rd-2nd millennia B.C. erected arches of rooms through adobe corbel. This technique left its imprint on Ustrushana's medieval (6th-9th centuries) constructions: a "Vestibule" of the lower tier of the Shahristan palace - Kalai Kahkaha II was covered by an adobe arch formed through corbel of horizontal layers of brick, i.e. a dummy arch (Negmatov, Khmel'nitskiy, 1966, p. 121). In Ustrushana's architecture there were also two other techniques of arching: inclined arching and transversal-section arching. V. A. Nielsen believes that the appliance of "inclined arches in Central Asia was a kind of tribute to the Hellenistic traditions" (Nielsen, 1976, p. 247). In Ustrushana's construction techniques this classical method was used rather frequently in the reviewed period. Particularly, this is the kind of arching of some rooms and apertures of the fortress Chilhujra, Urtakurgan. However, the majority of arches of monuments are transversal-section arches that laid the basis of architecture of Central Asia of adjacent countries (Negmatov, Pulatov, Khmel'nitskiy, 1973).

Study of the excavated materials of constructions of various designations in the territory of Ustrushana also provides information of arching techniques, often of local character. For instance, a study of the structure of arching at fortress Kum has allowed Y. Yakubov to note that a special Adobe

brick was used for the sake of arching here; on the whole, this is a unique case for the construction techniques of Ustrushana and Sogd (Yakubov, 1973, p. 142). Worthy of a note is that a transition from the wall to the arch has the form of a small Adobe brick ledge (Yakubov, 1979a, p. 102), which, as A. M. Pribytkova notes, is an ancient technique (Pribytkova, 1973, p. 18, fig. 2).

Cupola is the most perfect arched construction. Egypt's residential and utility constructions in Mesopotamia yet in the 3rd millennium B.C. were covered by corbel Adobe cupolas. Cupola tombs date back to the same period (Pribytkova, 1973, p. 18, fig. 2). As viewed by some authors, the technique of Adobe cupola constructions in early medieval Ustrushana and so throughout Central Asia was caused by the outlining of rooms of cult and ritual character (Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 32,33; Nielsen, 1976, p. 260). In sharing this opinion, V. L. Voronina assumes a wider spread of cupola as saying that they were placed over fortress towers as well and that the entrance of some public centers of ancient Penjikent was crowned by a semi-cupola (Voronina, 1977, p. 122).

Forms and techniques of erection of cupola constructions in Ustrushana are diverse. Excavations of a series of buildings (Urtakurgan, Chilhujra) have identified local techniques of erecting cupolas of the form of trapeze or quadrant, particularly, over rooms (Pulatov, 1975, p. 135). Worthy of a note are the conserved unique tromps in the form of "perspective" small arches that aren't detected in the early medieval architecture of Central Asia (p. 137). Of interest is suggestion by V. L. Voronina that there were boarded cupolas in the palace of Afshins of Kalai Kahkaha I. This is illustrated by archeological data and a similar construction in the early medieval architecture of North Tajikistan that has a very old tradition: the mosque Hauzi Sangin and the burial vault Ishana Mavloni in Ura-Tyube, in Kostakoz (Voronina, 1959, fig. 34,76; 1976, p. 134, fig. 1).

The arching techniques in the construction practice of Ustrushana and neighboring regions were diverse, peculiar. Suffice it to say that Ustrushana constructions had doorways and window openings with elliptical, semicircular, basket-handle, parabolic, segmental, and pointed arches (Negmatov, 1977, p. 15-16). The bigger part of kinds of arches above is frequently traced on a single monument, for instance, fortress Chilhujra. In the latter there have been conserved 15 arch spans having the elliptical, basket-handle, pointed, and parabolic forms.

Doors and windows. Wall openings were covered by arches that, as a matter of fact, were vaults given that the walls had large thickness. They were laid in sections. To support the first sections, they put centers or supports. Subsequent sections were attached to the first ones. The construction of doors can be characterized on the example of Chilhujra. Here there has been conserved a rectangular opening between rooms 18 and 19 with arched constructions (p. 126).

There have also been found remains of doorframe in room 14 leading to the Grand hall. As U. P. Pulatov suggests, the arched doorways' top was supplied with a wooden lattice letting sunlight in, as proved by the conserved fragments (p. 127, 131). The cleaning of room 6 of the palace Gardani Hisor has revealed, apart from some fragments of the doorframe, a wooden threshold hollow with a rounded pin that is called "turm" in the folk architecture of the 19th century-beginning of the 20th century (Yakubov, 1979a, p. 130).

Rooms were illuminated through the use of arched and rectangular area lights placed in walls or arches. Particularly, the existence of a large window opening with the conserved wooden straight arch in the palace Kalai Kahkaha II is viewed by researchers as a unique one because no analogies have been found anywhere (Negmatov, Khmel'nitskiy, 1966, p. 125, fig. 33, 32, 39, 41). In the castle Chilhujra the arch opening (lights) was cut wholly in the vaulted cover of room 1. In this monument there are total 6 types of area lights and air-holes (Pulatov, 1975, p. 126, fig. 62; p. 69). The system

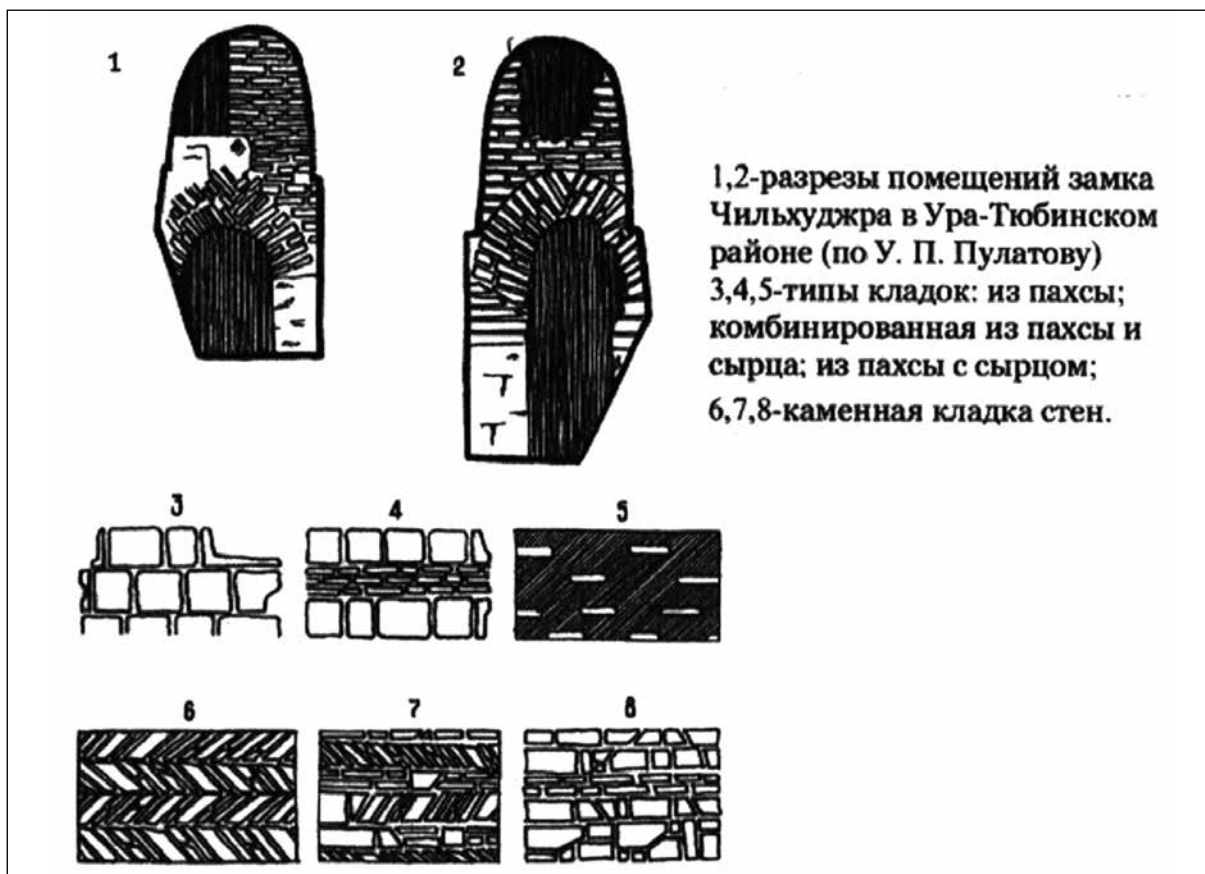


Fig. 13. Arches and laying types of pahs, brick and stone.

of illumination was notable for its purely local peculiarities. For instance, while studying remains of wooden fragments discovered at the obstruction of joint of corridors of the castle Urtakurgan, researchers of the monument could restore a construction of coffered ceiling of “ruzan” skylight type (Negmatov, Pulatov, Khmelnitkiy, 1973, p. 60-68, fig. 21).

In analyzing the construction techniques of Ustrushana, it'd be appropriate to point out to a series of local techniques illustrating high technical skills of architects of the reviewed epoch. As for example it is possible to note the construction of a well-conserved ramp representing an arched stepless rise around a round spiral post (Pulatov, 1975, fig. 67). Unique feature of this construction is a round central post, around which there is a smoothly waving ramp, while the conserved ramps of the palace Kalai Kahkaha II, the second early medieval layer of the hill Urtakurgan in the Shahrستان of ancient Penjikent, bent a spirally square post (p. 141).

In their work Ustrushana masters used a series of implements that made it possible not only to lay a high-precise plan and erect walls but also to perform most perfect arched constructions-cupolas. However, the limited number of discoveries-implements relating to the early medieval period makes it hard to describe their variety and types in details. Particularly, special references about the region's material culture practically lack information about special implements in use at the time. Only study of the folk architecture of the 19th century-early 20th century of North Tajikistan where ancient traditions of the construction business have been conserved allows to partially highlight this part of Ustrushana's construction culture of the 6th-10th centuries.

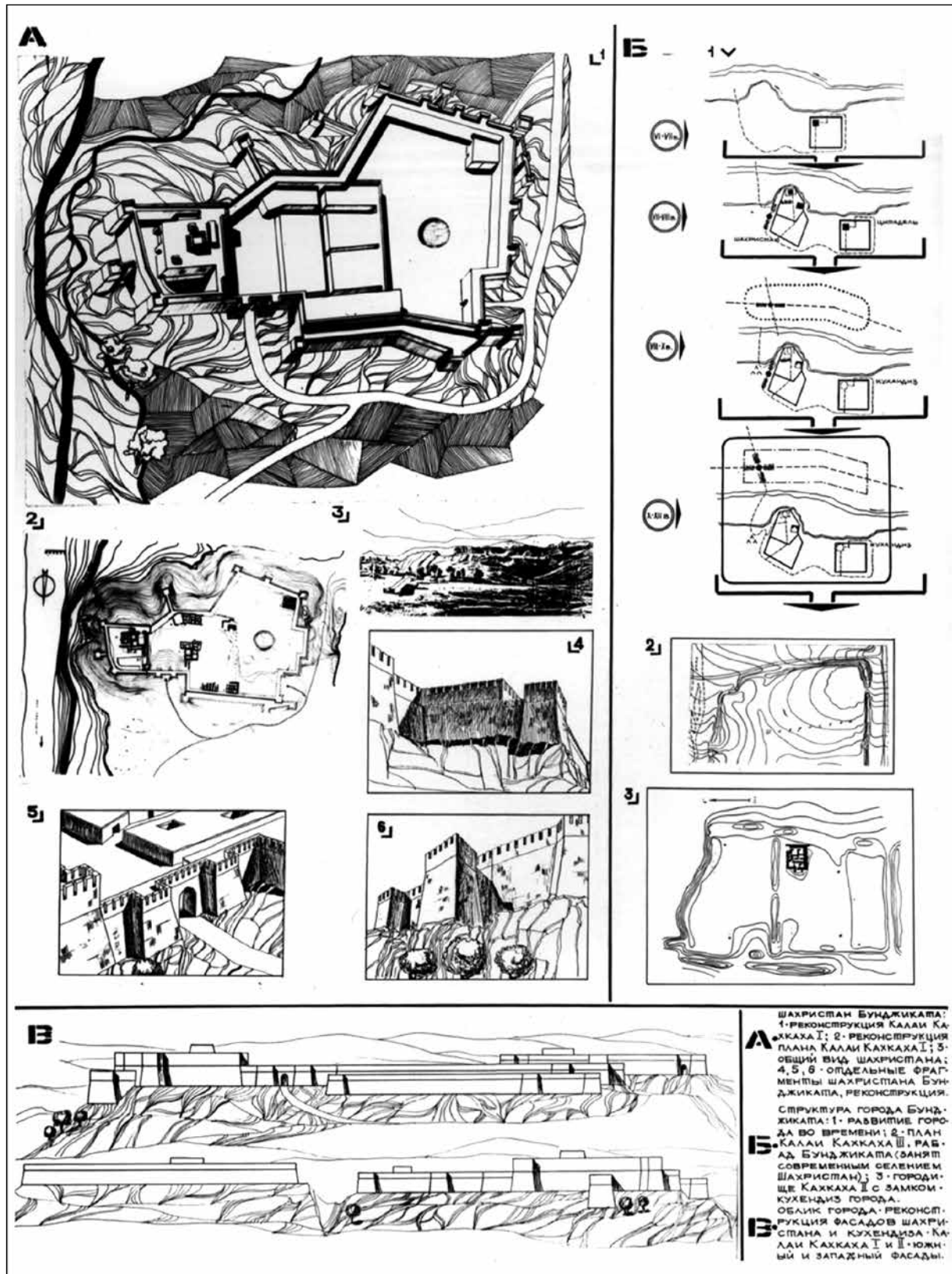


Fig. 14. Bundjikat – capital of Ustrushana.

Large and small axes, saws, hammers, and carpenter's levels had been used in the folk architecture of the Upper Zarafshan since ancient times. Masters used strings and pegs for the reasons of planning. For rough processing of architectural details (columns, beams, posts) there were applied addices or cell-shaped hatchets. Beams were cleaned by a vaulted knife with wooden handles. A metallic crescent-shaped item with a concave sharp blade found at the ramp of the palace Kalai Kahkaha II was apparently designated for leveling the surfaces of beams (Negmatov, Khmel'nitskiy, 1966, p. 176, table XX, fig. 7). For the reasons of artistic woodworking there were used chisels of various types and forms, wooden hammers, punches, compasses, and triangles (Ruziyev, 1976, p. 94-96, fig. 96).

In the early medieval period an Ustrushana architect was, in the first turn, a skilled master-builder. His activity was inseparably linked with the site of construction where the very architecture was under formation in specific conditions. Researches carried on by scientists (M. S. Bulatov, P. Sh. Zahidov, G. A. Pugachenkova, L. I. Rempel, A. Y. Yakubovskiy et al) pertaining to the status and competence of a medieval architect of the Middle and Near East have demonstrated that the architect was primarily a builder-practitioner with high technical and artistic skills (Bulatov, 1978; Pugachenkova, 1965 et al). For instance, A. Y. Yakubovskiy, having examined a K. Behzod's illustration to "Zafarnameh" where an architect holds a model of building under construction in hand, wrote: "The image of the model raises one of interesting technical questions, more exactly, whether the chief master-architect made any preliminary calculations or only drew a schematic plan of a construction (we're aware of such traces) and performed a model, the right correlation of parts of which could be identified by a purely empirical way. Beyond any doubts, these questions are interesting but, regretfully, have not yet been solved by science" (Yakubovskiy, 1933, p. 26-27).

Let's consider some aspects of construction works in the territory of the Upper Zarafshan where ancient methods of erection of buildings in the conditions of mountainous landscape have been conserved until lately. They are of particular interest for the reasons of comprehension of architecture of medieval Ustrushana. Under construction of houses at steep slopes of the Old Mach posts were hammered in at a distance of 30-40 cm between them onto the outer boundary of a to-be socle. The socle was laid in a manner to level the posts with its outer surface and remained at sight. Later on, the socle was inundated with clay and, after it dried up, the whole internal space up to the level of a to-be floor of a house was filled with stone and clay (Hamidjanova, 1974, p. 35). The said method of erecting the socle very much resembles the construction of foundation of the castle Chilhujra, but in a simpler form. Study of the castle's substructure by archeologists has demonstrated that a case of stylobate consisting of rows of wattle and daub blocks was first laid on a natural hill. Then, the internal space of the case was filled with layers of gravel, loess and sand*

Horizontality of the fundament was traced by special implements, like carpenter's level - "ob-tarozi". Correctness of the configuration of walls is checked at site through comparison of measurements of diagonals. A string and a wood strip are indispensable implements of an architect in laying out a building and at further stages of construction. As viewed by M. S. Bulatov, using a string alone it is possible to make complex calculations to lay out and proportion a building (Bulatov, 1953).

The technique of walling in the Old Mach is also worthy of a note. Stones were laid in two rows on the outwall, so a space between them was 15-20 cm. At the wall's height of 50-60 cm the empty space was filled in with small stones and slurry; once it dried up the process of walling continued. Covering the stonework by slurry is a very ancient technique. This technique was identified in the construction techniques of Penjikent of the 7th-8th centuries and was the most popular one in the Old Mach (Hamidjanova, 1974, p. 36).

Anti-seismic measures. The builders of Ustrushana, as well as of other regions of Maverannahr took the detrimental consequences of natural disasters into account. During centuries they worked out and improved construction techniques, vaulted constructions and architectural forms in seismically dangerous areas. To attach stability to monumental buildings, builders introduced into the fundament's substructure horizontally laid wooden beams as an elastic anti-seismic gasket (the southern fortress wall of the site of settlement Kalai Kahkaha I) (Negmatov, Khmel'nitskiy, 1966, p. 19). This tradition endured practically no change till the 19th century-early 20th century: stone fundaments of the majority of mosques in the mountainous Zarafshan are always crossed horizontally by large arched beams. Besides, we've noticed the following peculiarity of construction: the fundament's stonework was fortified by vertical uprights put flush with the outside surface of a building. A peculiar wooden frame of socle that was fastened to the ground prevented a building from climbing down from a slope. It is highly likely that such fundaments were laid under the buildings of majority of mountainous settlements of Ustrushana. The anti-seismic resistance was strengthened considerably, particularly, by a combined laying, i.e. wattle and daub blocks of the wall were alternated with rows of bricks.

Sometimes, a thin layer of sand was scattered over under the columns as anti-seismic gasket (a multi-column hall at the southern side of the wall of Kalai Kahkaha I). The use of wooden columns in the rooms of monumental buildings served to the same goal.

On the whole, under common principles of architecture development throughout Central Asia, the construction culture of Ustrushana of the 6th-10th centuries kept its distinction and peculiar features substantiated by natural-climatic conditions and succession of traditions. It has become clear that carrying on construction works stimulated by socioeconomic development of towns were architects, who perfectly knew the materials and technologies, applied geometry, means of construction of architectural forum, and the tectonic systems of constructions of various designations.

There are few conserved monuments of the 6th-10th centuries in the territory of Central Asia, particularly, Central Asia Mesopotamia; besides, their conditions leave better to desire. Thus, it is beyond any doubts that the constructions of Ustrushana discovered by archeologists help judge about not only the construction techniques of the reviewed region but the whole Central Asia as well. The latter circumstance attaches particular status, urgency to such studies.

Part II. Peculiarities of planning of Ustrushana settlements

Rural settlements. In the 5th-8th centuries, "thousands of towns" of the antiquity were substituted for numerous fortresses of aristocracy and rich landowners. The rural life of that epoch has become known in science due to archeological excavations in the territory of Central Asia flat regions, especially ancient Khorezm. Berkutkalin oasis's monuments that were explored in various years by S. P. Tolstov, V. A. Lavrov, E. E. Nerazik, V. A. Nielsen, O. A. Vishnevskiy and others reflected the process of establishment of feudal relations (Tolstov, 1948; 1962; Nielsen, 1976; Nerazik, 1966; 1976, etc.)

It is a widespread opinion in special literature that rural population lived in fortresses in the early medieval period. Every mansion represented a large family, i.e. a family commune. In the opinion of S. P. Tolstov, an isolated fortification with its construction identical to the Khorezm one was the main kind of settlement in other regions of Central Asia as well (Tolstov, 1948, p. 197, 204). This viewpoint received backing from another researcher of the early medieval architecture of Khorezm- E. E. Nerazik. She also noted that a new type of constructions - a fortified mansion that caused the appearance of a new stratum of small and large peasants - was spread over Central Asia's ancient cultural regions: Sogd, Ustrushana, Bukhara oasis, Mongolia and Fergana in the early medieval period (Nerazik, 1966,

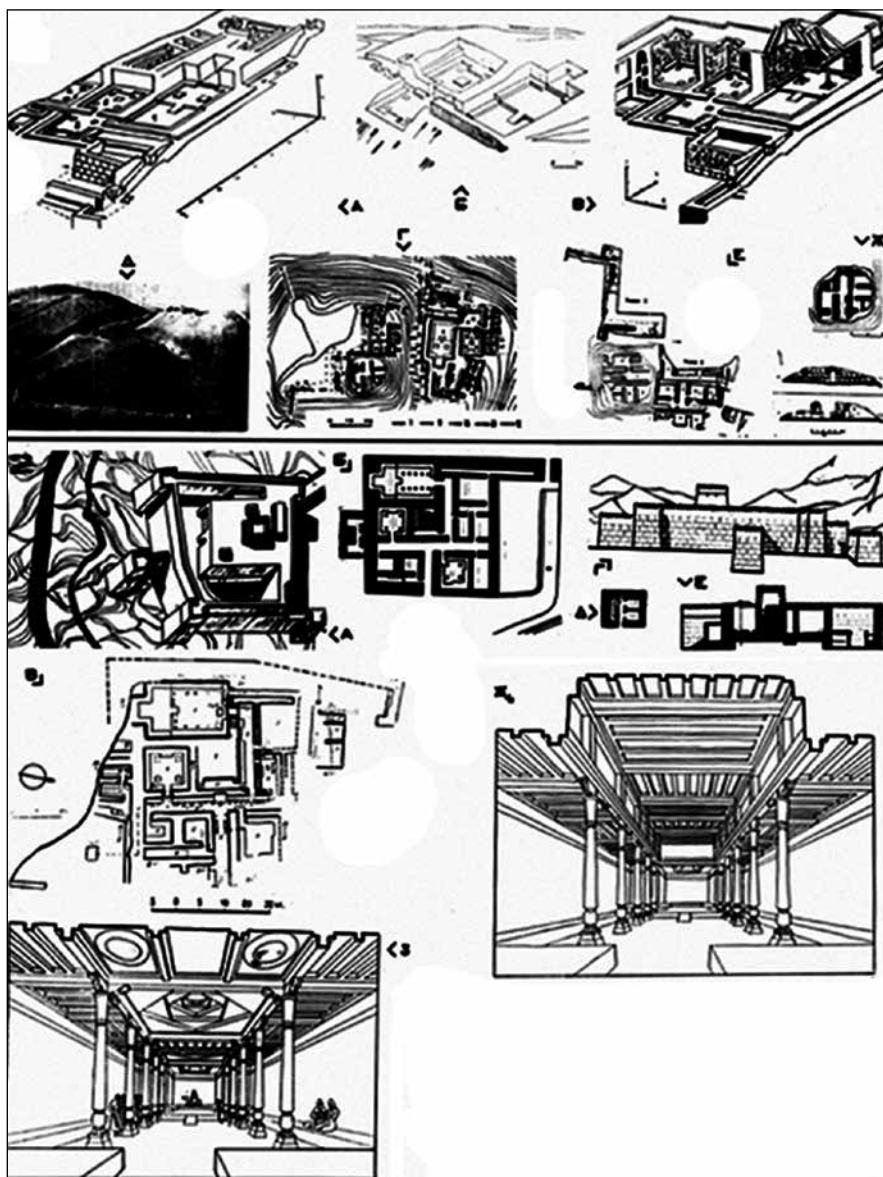


Fig. 15: 1 – Citadel with palace of ancient Pendjikent: A – axonometry of palace complex; B- axonometry of archaeological dig of large throne and state rooms of palace; C – variant of reconstruction of room ceiling; D – general plan of citadel and palace complex; E – general view of archaeological dig of citadel on hill top; F – plan of citadel’s defensives; G – plan and sections of citadel’s donjons; H – palace-arch of Afshins of Ustrushana on site Kalai Kahkaha 1: A – variant of palace reconstruction with defensive elements; B– reconstruction of palace’s main level; C – plan of palace rooms; D – reconstruction of palace’s sleeping donjon; E – reconstruction of eastern façade of palace with defensive elements; F – Section of palace with demonstration of sleeping donjon and entrance level into strengthened arch; G – graphical reconstruction of large throne hall, according to S.Mamadjanova’s roof concept; H – reconstruction of the same hall, according to V.L.Voronin’s variant.

p. 6,7). Keeping a bit different view is V. A. Nielsen, who suggests his own scheme of the structure of rural settlements of the 5th-8th centuries (Nielsen, 1964, p. 177).

Multiyear researches in the territory of North Tajikistan's mountainous and submontane regions that in ancient times were a part of Sogd and Ustrushana inform us about the architecture of rural settlements of mountainous regions (Negmatov, 1977, p. 146-164; Yakubov, 1966, 1977, p. 576-577; 1979, p. 126-166; 1977, p. 51-52; Brykina, 1974 et al). Though monuments of the region have been studied insufficiently, the existing materials from Ustrushana make us suggest that a special regional architectural type of a rural settlement was formed here in the 5th-8th centuries. It was formed on the basis of specific public demands, natural-climatic conditions and constructive-technical means, and on the whole expressed a certain architectural image.

In tracing how the rural dwelling evolved, it is possible to identify stages of formation of rural settlements. This continuous chain of modifications from the ancient monolithic patriarchal-tribal settlements with inactive defensive character to separately standing castles-fortresses indicates on the common regularity of development of a fortified house. Thus it'd be appropriate to refer to famous Soviet scientist N. I. Vavilov who said most ancient civilizations were concentrated in geographically closed, hardly accessible areas. In developing this idea, N. I. Vavilov stresses that the period of ancient civilizations was forerun by tribes' scattering across the region; the situation generally tended to counteract the process of their strengthening and unification (Vavilov, 1967, p. 170-171, 196-197). In such case it'd be appropriate to suggest that development of the planning structure of rural settlements of Central Asia initially occurred in mountainous regions, including Ustrushana as well.

Noteworthy is that while Ustrushana was more or less studied archeologically, the architectural typology, planning and town-planning peculiarities of the monument have begun displaying evidently only over some recent years. On the basis of analysis of the obtained materials there has been identified a common character of the region's rural settlements, there has been suggested their typology (Negmatov, 1968, p. 56-58). Further studies in this sphere will help identify distinctions of socioeconomic character. In the scientist's view, there are some local distinctions in the planning, construction, building materials, etc.

At present, the majority of known monuments in the mountainous part of Ustrushana are represented by three types of rural settlements. The first one is a settlement Hon Yaylov excavated by the North Tajik archaeological expedition and located on the plateau Tagana deep in the Gorge Aktangi on the Turkestan ridge's northern slope, 22 km south of Shahrstan (Negmatov, 1977, p. 158, 159, fig. 29, 30). This type of settlement, still the only one of its kind in the territory of Ustrushana is stretched east-westwards at a length of 500 m under the central part's width of 140 m (p. 156). It includes the remains of a complex of solid utility and residential stone constructions separated by narrow streets. Here there have been discovered approx. 100 rooms constituting 7 complexes. Hon Yaylov ("royal pastures") is a large rural settlement of mountainous Ustrushana of the 10th-11th centuries "with an apparently cattle-raising lifestyle of its population". A detailed familiarization has identified a definite planning: the central main street runs through the development west-eastwards, is split into branches in the western part. In the northern side there is detected a bypass street restrained by stone barriers and linked with the central street at the settlement's northeastern boundary (Negmatov, 1977, p. 102).

In considering the general view and layout of Hon Yaylov, it'd be appropriate to single out two types of dwellings: continuous sectional area of utility and residential constructions, and separate multi-room buildings with yard-type areas (fig. 34). The settlement apparently was developed with

one-storey, flat-roof houses. Besides, it has been identified that Hon Yaylov had no fortification walls (Bubnova, 1973, table 30).

Having included Hon Yaylov in the list of settlements with an inactive defensive character developed solely within the mountainous regions of Central Asia, it seems appropriate to add this type by the early medieval monuments Ilak and Badakhshan, neighbors of Ustrushana. Particularly, there are identical mountainous settlements in the area of Karamazar (Bubnova, 1976, p. 147, fig. 1), Vashez II in the West Pamirs (Bubnova, 1973, table 30), and Bazardara in the Eastern Pamirs of the 10th-12th centuries (Nielsen, 1964, p. 180, fig. 3b). Separately standing settlement of common peasants Chayantepa regarded by V. A. Nielsen as a one of type above can be considered only as an example that developed in the flat conditions of Central Asia (Yakubov, 1968, p. 40-45; 1977, p. 576-577; 1976; 1977, p 137-155; 1975, p. 196-198, 210; 1979, p. 46-49, fig. 11).

The second type of the rural settlement includes Ustrushana's three non-simultaneous monuments fully explored by archeologists. The first two of them are settlements of the 5th-8th centuries: Gardani Hisor and Kum in the Upper Zarafshan where mountainous rustak Buttam was located at the time (Brykina, 1974, p. 7). The third settlement, Karabulak is located at the site of village of the same name 10 km east of Isfana of Kyrgyzstan's Laylak region (Nielsen, 1964, p. 177).

The first two monuments are compact, fortified rural settlements under protection of a feudal fortress. The layout we've typologically singled out is close to a V. A. Nielsen's classification that in its first group unites largest rural settlements consisting of a feudal fortress and it-adjacent residential constructions, for example, Kindintepa in the valley of Angren (Yakubov, 1977, p. 53; 1979, p. 138, fig. 1; Voronina, 1974). Similar characteristics of settlements of the mountainous Ustrushana and flat regions of Maverannahr are probably an indication that rural settlements of such type were spread widely in the early medieval period.

However, in hard natural conditions of the Turkestan and Zarafshan ridges in Ustrushana there was developed a distinctive principle of spatial structure of a residential formation. The surrounding landscape and climatic conditions of locality were the main reason, particularly, in Gardani Hisor classified by Y. Yakubov as an urbanized settlement of the 7th-8th centuries (Yakubov, 1977, p. 53). It is the mountainous landscape that creates a certain tradition of material culture carried down to us from the deep of the centuries. Though Y. Yakubov believes that "the settlement is on the whole built according to a preliminary plan", we, in stressing particular mastership of architects, think that the thoughtfulness and consistency of the planning of settlement were typical for the whole mass architecture of the early medieval period, stemmed from a multiyear experience. Most likely, the construction was caused by either natural-geographical conditions of locality or social-historical functions of early medieval settlements. We're getting convinced in this through considering the spatial organization of mountainous settlements of Voru, Esiz, and Madavra (Yakubov, 1973, p. 185 and next; 1978, p. 122-146).

Another example of the first type of rural settlements of the 5th-8th centuries is a monument in the **settlement Kum** located near Gardani Hisor. Excavations of the fortress Kum were carried on here for many years. A 1975 additional exploration of the fortress foot's lower terrace revealed constructions dating back to the period of the fortress's existence. A 1976 excavation gave the opportunity to discover, not fully though, residential constructions of peasants structurally resembling the continuous area of small residential sections of Gardani Hisor. Fortified by the wall, the settlement apparently was under protection of a large castle erected on a high artificial platform. As the excavations haven't

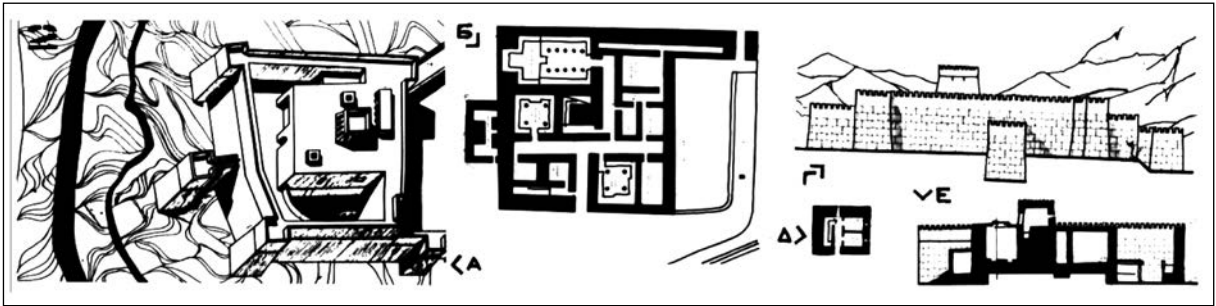


Fig. 16. Ustrushana. Site Kalai Kahkaha I. Palace of Afshins.

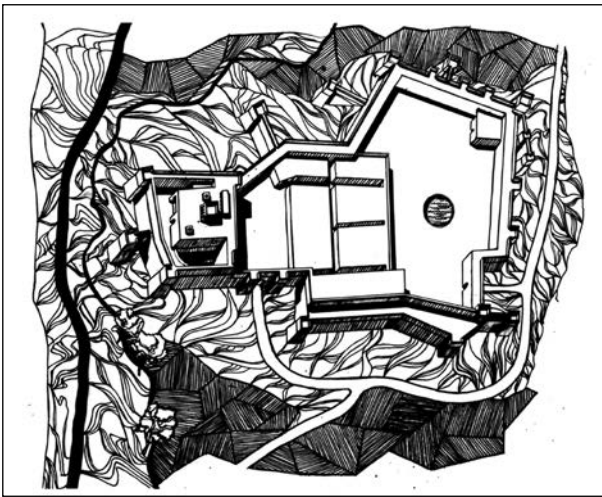


Fig. 17. Site Kalai Kahkaha I, axonometry, 7-8th centuries. Reconstruction.

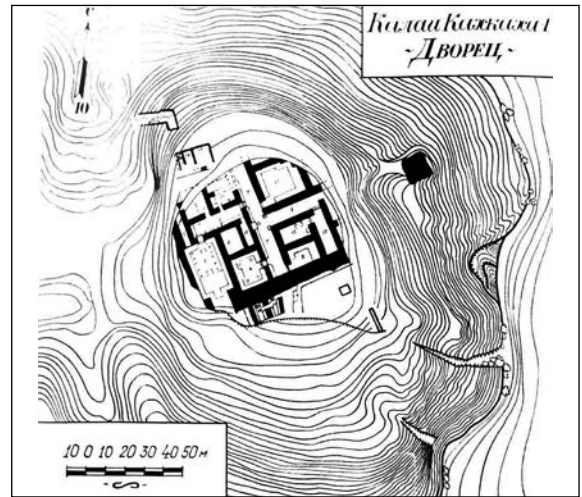


Fig. 18. Ustrushana. Palace of Afshins in Kalai Kahkaha I, 7-8th centuries.

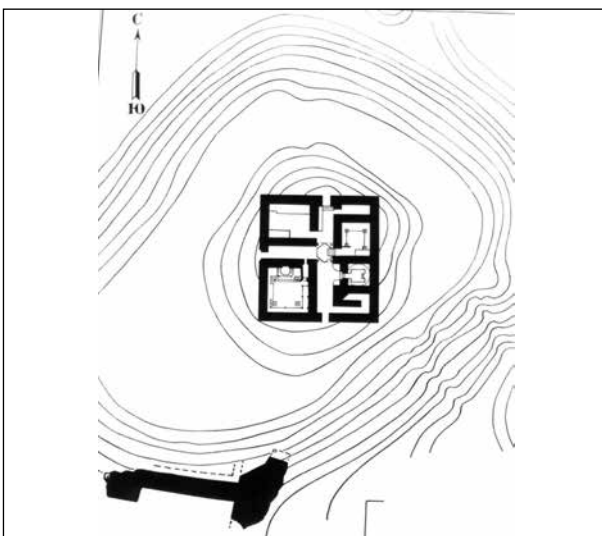


Fig. 19. Ustrushana. Castle Urtakurgan. Plan, 7-8th centuries.

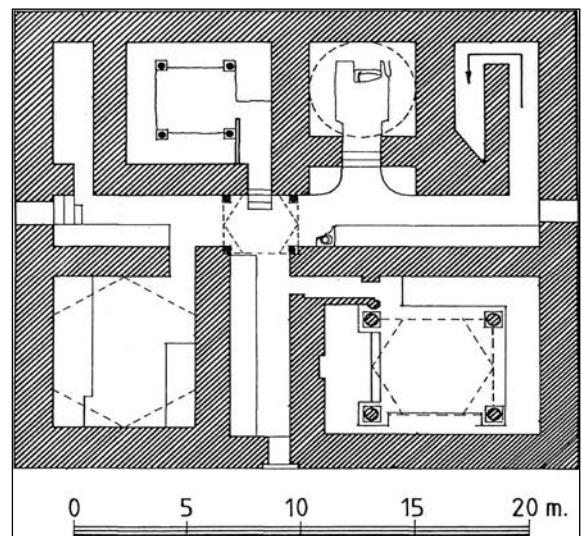


Fig. 20. Bundjikat. Castle Urtakurgan. Plan.

finished, it seems no possible yet to detail about town-planning techniques of early medieval builders of this large rural settlement.

The third monument - **the Karabulak settlement** - is dated back to a later period, characterizes a further stage of development of the reviewed type of settlement, now in the Moslem era. According to N. N. Negmatov, this object is one of Central Asia's few medieval compact settlements, materials of which make it possible to have idea of the life of common peasants (Brykina, 1974, p. 115). The high degree of urbanization of the settlement (the centralized water supply system, a developed network of crafts, brisk trade, etc.) seems to have been impacted by the settlement's favorable location on a transit way connecting Ustrushana's mountainous regions with the rustaks of South-Western Fergana (Smirnova, 1950, table 32, fig. 1). The singled out type of rural settlements should also be added by several yet-unstudied settlements in the upper reaches of Zarafshan. One of them is a castle with settlement Mugtepa (The History of the Uzbek SSR, 1955, p. 151).

The third type of rural settlements in the territory of Ustrushana assumes residence in separate mansions and castles, like practiced throughout Central Asia. However, while fortified mansions-castles became the main type of dwellings of peasants in the early medieval Khorezm (Nerazik, 1976, p. 173), living in castles in the mountainous part of Ustrushana were only the medium- and high-rank land-owning nobility. The majority of Ustrushana rural population settled, as noted above, in compact fortified and non-fortified settlements.

Ustrushana's fortresses differed from popular fortified mansions of the flat regions of Central Asia by its space-and-planning structure. The excavated materials have demonstrated that the architecture of a flat rural mansion comprised two- and three-storey closed cubic volume (Shishkina, 1961). The specificity of environment of Maverannahr's submontane and mountainous regions led to the formation of fortified castles (fortresses) notable for their volume-spatial structure. Such diversity of the image of construction of Ustrushana fortresses is demonstrated by several groups of constructions, of which we're interested in "fortresses with a complicated individualized planning" (Negmatov, 1973, p. 13, 14). Exactly these fortresses characterize the third type of Ustrushana settlements. It should be noted that N. N. Negmatov subdivided the group of constructions above into two subtypes respecting general planning structure and specific weight of a fortified construction. The first subtype included only one fortress-Chilhujra. As viewed by scientists, the citadel of Munchaktepa can also be referred to this subtype of fortresses (Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 97) where there have been identified architectural elements similar to that of Chilhujra: the existence of a yard, a gallery with internal rooms, and a high platform (Gaydukovich, 1947, p. 1). An additional study of monuments in the territory of Ustrushana makes it possible to expand this subtype, add it by Kalai Dahonai Falgar, a non-excavated castle with a yard in the Upper Zarafshan (Yakubov, 1979, fig. 6; Smirnova, 1953, table 31, fig. 2).

Key peculiarity of this kind of settlement is the fortified character of the castle itself. Particularly, Chilhujra's natural adaptation (natural high comb of the mountainous "tongue" at a place of Gorge Kulkutan's entering the Shahrstan Hollow) for solution of a specific task predetermined the castle's structure. This is a strong two-storey fortification with a southern side's small yard developed along the western and eastern sides by the system of one-storey residential and utility rooms. The construction's fortification was determined by a strong wattle and daub stylobate to where there was raised the dumb parallelepiped of a two-storey building with angular towers on the northern side. The yard was surrounded by a high wattle and daub wall with a complex angular entrance and a gate tower from the southern side. The upper part of the walls, probably, had a notched parapet and a

passage gallery for warriors in the form of a roof over utility rooms of the yard. The creation of the gate labyrinth was caused by the reasons of defense of the only entrance from the southern, most vulnerable side (fig. 38).

Though the fortress by all its appearance reflects readiness for standing the siege, an Ustrushana architect is artful enough in choosing the site of construction, from the artistic-aesthetic point. Indeed, simplicity and severity of the fortress's external appearance, its successful, in terms of either fortification or composition, location on a high natural hill at the background of gray rocky mountains with greenery and bright blue sky undoubtedly made a strong visual impression on Ustrushana residents.

The second subtype of settlements consists of two monuments: Urtakurgan (Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 10, fig. 4) and Toshtemirtepa (Pulatov, 1975, p. 541-542, fig. 28) having one peculiarity in common: there is a dominance of monumental main residential construction elevated onto a high artificial platform, with the existence of fortifications surrounding the yard.

Urtakurgan is located 2.5 km south of settlement Shahrستان at the Left Bank of the valley of River Shahrستانsay, near the Gorge Kulkutan. The settlement occupies a pre-hollow hilltop that dominates over an adjacent part of the valley. At a high artificial platform at the hill's center there is built the main one-storey construction of the fortress, while the surrounding yard's perimeter was passed by the walls fortified by rectangular angular and risen towers. The excavations have demonstrated that the yard's entrance was located in its western, widest part. The fortress stood aloof, did not join any fortification system and, like many other fortifications, was designated for a long siege. Solely for this reason its barrier-outwall was equipped with frequent towers and a platform for defenders who shot the enemy from the walls equipped with a parapet (fig. 19-22).

Generally speaking, this is the image of fortresses joining the third type of rural settlements. It is not possible to say that Ustrushana's fortresses were unique and developed independently from the traditions of fortress construction of Central Asia. A great similarity is displayed, for example, under comparison of Urtakurgan with Berkutkalin donjon mansions (Nerazik, 1966, p. 32, 133, 151-155) with settlements of the South Turkmenistan (Pugachenkova, 1958, p. 46).

The closest analogy of Chilhujra is the fortress Aktepa dated back to the 5th-7th centuries. This closeness is expressed in either planning and fortification elements of the main two-storey building or the existence of a strongly fortified, partially developed yard located at the southern side (Terenojkin, 1948, p. 71-134; Voronina, p. 135-158; 1955; p. 139-153).

Reasons of genetic (not artistic-planning) links of the reviewed types of rural settlements should, probably, be sought in the social-economic milieu that substantiated a mass construction of fortresses in the early medieval period. This is disclosed in details in works of E. E. Nerazik and V. A. Nielsen (Nerazik, 1976, p. 58-67; Nielsen, 1976, p. 111-201).

On the whole, all the three types of the rural settlement of mountainous Ustrushana are characterized by a common principle: particular attention to the development of private fortification. Even compact, non-fortified settlements of common peasants such as, for instance, the Karabulak settlement had elements of fortifications. Particularly, 4 km of Karabulak, at its most vulnerable southwestern side there was constructed a mkat (Brykina, 1974, p. 117) while 12 km east of it there was located the site of a small settlement built as Karabulak's outpost (Zadneprovskiy, 1960, p. 163).

In the architecture of rural settlements there is clearly expressed the strength of manor house: high stylobate, thick, high walls, towers, etc. In rising over an area of not high houses of common rural residents or over a surrounding area, these castles-mansions were the embodiment of the power of the ruling class.

A most suitable place was thoroughly chosen under the construction of Ustrushana's any settlement without exception. Fortifications were built at the scrolls or junctions of rivers, at a steep plateau, etc. For example, Chilhujra was located at the junction of Kulkutan and Shahristansay at a three-side steep natural hill. Certainly, water supply aspects were taken into consideration. Particularly, at the foot of Chilhujra and near Gardani Hisor there existed a large spring, while in a series of settlements of Ustrushana's mountainous and submontane regions (Old Mach, Falgar, Ganchi) there have been identified a water pipeline system and concealed water entries-obduzds (Smirnova, 1953, p. 180; 1953a, fig. 33). Worthy of a particular note is also the aesthetic aspect of activity of Ustrushana masters, particularly, their ability to compositionally link the settlement's image with the environment, rationally use the natural landscape, etc.

On the whole, consideration of architectural-planning, fortification structures of rural settlements contributes to the general understanding of Ustrushana's town-planning culture of the 6th century-early 13th century. In turn, this expands and enriches our knowledge about the art of architects of the pre-Moslem Maverannahr, gives a new material to identify its local peculiarities attributable to mountainous regions.

Medieval towns. Consideration of aspects of formation of the early medieval town of Central Asia is accompanied by great hardships. The reason is not only the scantiness of written sources pertaining to the reviewed period but also the fact that archeological works at many sites have not yet been completed. Samarqand, Varakhsha, Merv, and Penjikent have been studied best of all. Of them, only the latter is strictly characterized as a town of the early period of formation of feudal relations in Central Asia because it has no consequent layers (Belenitskiy, 1959, p. 195). However, publications of several past decades devoted to the issue of formation of an early feudal town, materials regarding the methodology of study of urban fortifications (Voronina, 1960a; Lavrov, 1950, Yakubovskiy, 1951; Litvinskiy, 1953; Kurennoy, 1970 et al), as well as data on the complex historical-architectural study of the sites of settlements in the territory of Ustrushana (Negmatov, Khmel'nitskiy, 1966; Z.A. Dneprovskiy, Masson, Negmatov, 1977, p. 7-9; et al) make it possible to try to make a first-ever analysis of formation of the town-planning structure of this region.

The appearance of early towns in the mountainous part of Ustrushana dates back to the Ahemenid era (Brykina, 1974, p. 112). There has been identified the existence of settlements, such as Dizak, Zaamin, Havas, Sabat, Vagat, Shavkat, Kurkat, etc. The largest, most developed town was the region's capital Bunjikat excavated by N. N. Negmatov-led North Tajik archeological expedition. Though the works are not over yet, the materials of study of the fortification, housing area, accommodation make it possible to sum up and understand general picture of development of Ustrushana's town-planning.

In the early medieval period Ustrushana saw the emergence of a new form of organization of settlements - a fortress - that substituted the Kushan system of non-fortified settlements. Not numerous towns of mountainous Ustrushana of this period were the centers of handicrafts and trades surrounded by dwellings of peasants and land-owners. At this period Ustrushana played a great role in the economy of Maverannahr due to its favorable geographical location and a wide fork of roads. Particularly, passing via Ustrushana and a neighboring Fergana were caravan roads that linked Mediterranean countries with the East (Negmatov, 1959, p. 118), while one of the largest Central Asia fairs took place in Marsmanda (Negmatov, 1977, p. 43). The capital of Ustrushana - town Bunjikat - was characterized by a high level of material and artistic culture, with the successful development of handicrafts, including metalworking, weaving, pottery, mills, arts (Yakubovskiy, 1933, p. 4). A theory

of the structure of early medieval town (Lavrov, 1950, p. 50-52) was corrected by S. P. Tolstov, A. Y. Yakubovskiy, as well as A. M. Belenitskiy and O. G. Bolshakov.

On the whole, formation of the early medieval town of Ustrushana was in conformity with the general development of Central Asia architecture. According to a strictly formulated concept of A. Y. Yakubovskiy, a fortress-mansion concentrated a trading-handicraft quarter around it. As time lapsed, the newly settled territory was being surrounded by walls thus forming “Shahristan” - the nucleus of a Central Asia town. In the 1960s, not arguing this concept, V. L. Voronina suggested a more progressive scheme of formation of towns in the 6th-8th centuries. She believes that the formation and development of Central Asian towns were not of a single type but proceeded from lots of social and geographical factors. In her view, the town emerged:

- within the frames of an antique town;
- of a complex of separate fortresses;
- as part of a fortress;
- under the protection of a rabad or at the walls of a caravansary;
- at the site of bazaars;
- as part of cult ensembles.

This scheme makes it possible to identify the path of development of Ustrushana’s early medieval town as an urban settlement formed of a complex of separate fortresses. What was the structure of Ustrushana early medieval towns? Works of V. V. Bartold demonstrate that in this period a Central Asia town consisted of three parts: a pre-feudal urban center “shahristan”, a citadel “diz”, and a handicraft suburb “rabad” growing at the latter’s walls (Voronina, 1959, p. 87). However, such a three-part structure is not necessary for all early medieval towns of Central Asia: a medieval town could consist of one part or even four parts (Negmatov, 1977, p. 38-39).

The study of Bunjikat illustrates that it is a three-part town that was being formed in the 8th-9th centuries. Initially the town consisted of one part (so-called citadel-diz) identified by N. N. Negmatov as Kalai Kahkaha II. The diz consisted of an internal palace and a spacious yard representing “a certain stage of evolution of the architectural-fortification type of a fortified early feudal “kuhendiz” (Negmatov, Khmelnitskiy, 1966, p. 78) (fig. 14). By the beginning of the 9th century it was destroyed; during the existence of Kalai Kahkaha I it was called kuhendiz, i.e. the old fortress. At this period town Bunjikat was being formed as a settlement near an old fortress, the residence of the Ustrushana ruler. Kalai Kahkaha II was a kind of the town’s embryo though it had no urban signs. For unclear reasons no residential area was developed here, though an approx. 5-hectare flat platform with a system of fortification walls had been developed as its site (Voronina, 1959, p. 87, fig. 29, 30, 31). As a matter of fact, the town-shahristan was being formed not around the diz but near it. No matter whether the diz joined the system of town walls or stood aloof from the town’s residential area, it was isolated from the Shahristan. Kalai Kahkaha I saw the formation of its own center with a palace of afshins. As the estate’s administrative-political function strengthened and complicated, there appeared attributes of a town: at one of its gates there was formed a trading center - a bazaar square where trials took place and verdicts of afshins were announced. Not far from the town there is necropolis viewed by some researchers as a part of the town (Negmatov, 1977, p. 42, fig. 14A).

Further growth of Bunjikat in the conditions of a stable social and economic development was provided by the housing area development. The established town-planning structure was not violated. Though urban life in the early medieval period was concentrated primarily within the ring of town walls, territories adjacent to the town were being settled, to various extents. Beyond the town walls

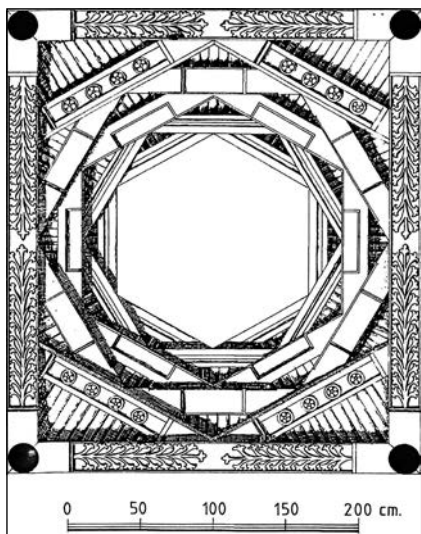


Fig. 21. Bundjikat. Castle Urtakurgan. Reconstruction of skylight «ruzan».

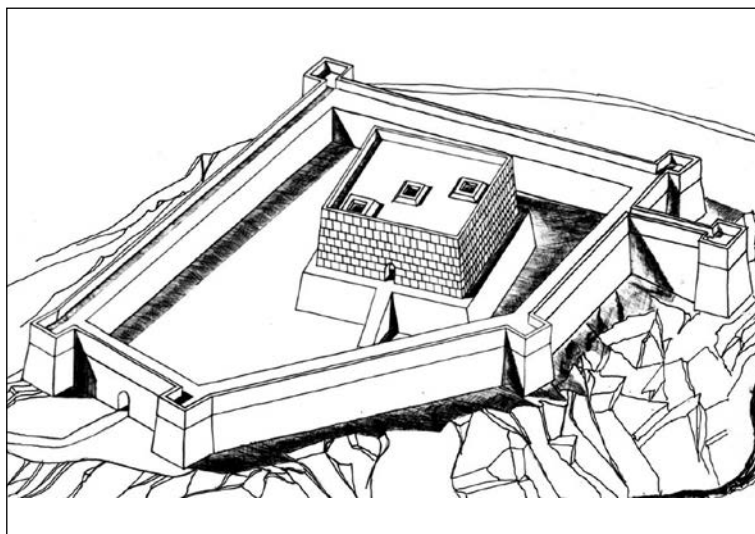


Fig. 22. Ustrushana. Castle Urtakurgan. Graphical reconstruction, 7-8th centuries.

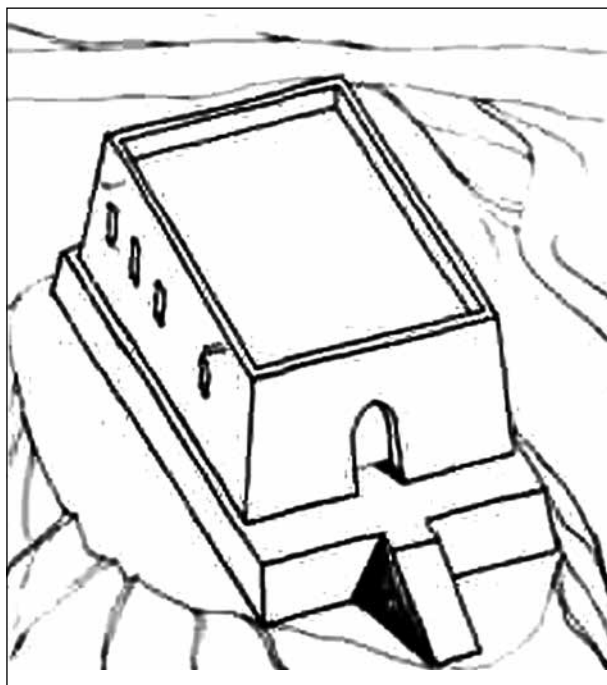


Fig. 23. Ustrushana. Castle Tirmizaktepa. Reconstruction, 7-8th centuries.

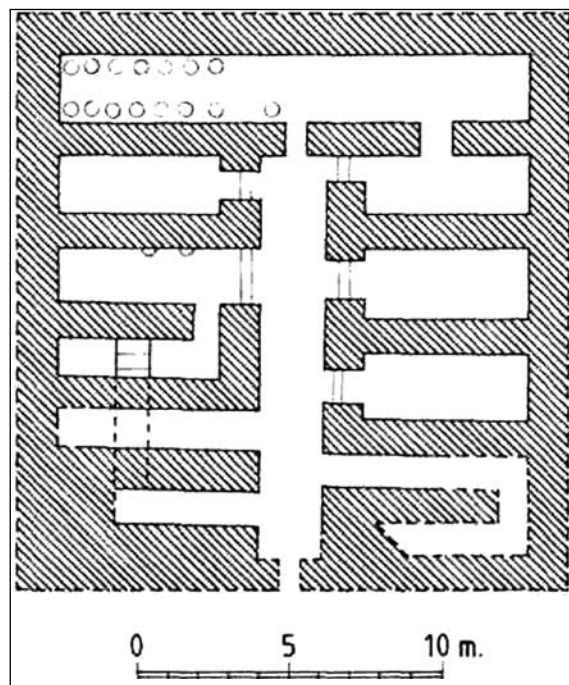


Fig. 24. Bundjikat. Castle Tirmizaktepa. Plan, 7-8th centuries.

there were located the residence of the ruler (Kalai Kahkaha II), castles-fortresses (Chilhujra, Urtakurgan), cult centers, and sometimes handicraft quarters. However, these areas were settled chaotically, regardless from a specific architectural-spatial environment. These isles of suburban life did not join the town-planning structure. However, at the boundary of medieval centuries settlements were gradually becoming a constituent part of the formed town center through turning into town's trade and handicraft suburb designated in sources by the term "rabad" (p. 42, 43). N. N. Negmatov notes that urban life here was developed so intensively that eastern and northern outskirts started being settled soon (fig. 14B2). Thus, in the 9th-10th centuries Bunjikat already turned into a town with a three-part structure: shahristan, rabad, and citadel. Let's consider the constituent parts of Ustrushana towns in details.

The shahristan of Bunjikat, a typical residential area of Ustrushana's early medieval town, has, like towns elsewhere in Central Asia, an irregular plan determined by specific conditions of a locality (Avzalov, 1984, p. 81-83). The shahristan of Bunjikat (now Kalai Kahkaha I) was located at the West Bank of River Shahristansay, at a high terrace with well-conserved walls (fig. 14A, 17). East of an approx. 5-hectare site of the town there rises the hill of arch-citadel where the North Tajik archeological expedition excavated a palace of afshins-rulers of Ustrushana (fig. 16). The site was surrounded by strong (up to 10 meters thick) outer and inner fortification walls. A spectator beyond the town saw, apart from the huge front of the wall with endless squares of wattle and daub work, the tops of the palace with glaring dead walls of its bedroom donjon. According to Ustrushana architects' construction plan, the architectural expressiveness, appearance of the capital had not only to delight by its grandeur but also make the enemy fear (fig. 14A-4, 5,6).

Along the northern interior of the town's site there has been discovered a part of the town's housing area of medium-rank strata of population in the form of a residential quarter (Negmatov, Avzalov, Mamadjanova, 1979, p. 580; Avzalov, 1980, p. 37). Besides, in the territory of the shahristan there was a cult center - a temple of "idols" that, after the Arabs conquered Ustrushana, was used as a mosque (Nielsen, 1976, fig. 3). This temple adjoining the residential quarter from the eastern side had its northern wall and the entrance turned towards the town square-registan. In addition, a barrack and utility-production rooms have been discovered in the shahristan (in its southwestern angle and in its northern part respectively).

The territory of the town was divided by a wattle and daub wall into two parts north-southwards. It should be noted that having a similar structure was also the site of town Paykend in the lower reaches of River Zarafshan (Voronina, 1959, p. 88). According to other information, for instance, fortification guidance, the division of the town aimed at a phase-to-phase defense (Kui, 1889, p. 22-24). In the view of V. L. Voronina, the shahristan's being divided into two parts was intentional: artificial barriers were suitable for suppression of popular revolts (Voronina, 1959, p. 89).

While the first, eastern part of shahristan represented a rather developed urbanized system (a palace, cult, trade, administrative and residential areas), the town's western half was a military-defensive complex. It was the place for a barrack, a square for military training exercises and apparently other constructions as well. Besides, in the middle part of this half of the town there was built a reservoir-sardoba to stand a potential siege. Given that this object was of vital importance, the rulers of the town preferred isolating it from the residential area, placing it near the barracks (fig. 15-2b).

The shahristan had two gates: the main northern entrance (fig. 14-5) and the western entrance. Though this number did not correspond to Central Asia standards that assumed four entrances according to the number of directions (see Narshahi, 1897, p. 69), here it was substantiated by local

conditions. Steeper slopes of the shahristan's eastern and southern sides denied placing gates there. The character of the town's development is also not in line with the Central Asia generally recognized structure of mansion-type urban dwelling. Bunjikat's shahristan was developed by a system of quarters of joint residential areas having different structures (Voronina, 1953, p. 106). Such a joint urban development formed by regular town-planned quarters (fig. 36) was also identified under the excavations of Penjikent (Narshahi, 1897, p. 70). The only difference is that Bunjikat's shahristan was developed by one-storey constructions compared with two-storey constructions as the developed area of the biggest part of Penjikent.

Given that the residential area of Kalai Kahkaha has been excavated not fully, it remains unclear where Bunjikat's quarters were divided by status. However, considering reports of medieval historians that many towns were divided into quarters with families having kindred links (Voronina, 1953, p. 87), something like is assumable for Bunjikat as well.

Citadel (diz and arc). According to a V. L. Voronina-suggested classification, there are three variants of citadel's location regarding shahristan: 1) within the system of town walls; 2) inside the town; 3) beyond the walls. V. L. Voronina notes that "the choice of location of a citadel was connected with the latter's functions, determined by social reasons" (Voronina, 1953, p. 7). In her view, one of the tasks of the citadel is to "oppose not only a stranger's assault but also popular revolts, if necessary" (p. 92).

As has been noted, Bunjikat's new shahristan formed near the citadel (diz) of Kalai Kahkaha II independently converted into a two-part town with all the components of urban life. Thus, we refer the citadel (arc) of Kalai Kahkaha I as a part of the system of Bunjikat town walls, i.e. the first variant of location of the fortress regarding the shahristan. As a matter of fact, the arc of the shahristan Kalai Kahkaha I is located in the eastern part of the hill. River Shahristansay flows along the hill's eastern side (Nielsen, 1976, p. 34) (fig. 16).

The choice of a place of citadel in general view depended on main roads leading to the town. This was the tallest construction from where all the roads to the town had to be visible (Negmatov, Khmel'nikov, 1966, p. 195). Indeed, the arc-citadel of Bunjikat controlled not only the town's life but also the medieval road leading from Savat to the town. According to written sources (al-Istahri, ibn Haukal, al-Muqaddasi, Yakut), Bunjikat's rabad surrounded by a separate wall had four gates: the Zaamin, Marsmanda, Nijan, and Kekhlyabad. Each of the shades of the rabad was approx. 6-8 km long. Uncommon wall surrounding three parts of the town has been identified (Negmatov, Khmel'nikov, 1966, p. 194). It should be noted that development of the reviewed town's rabad generally reflected the being strengthened feudal relations, typical for the whole Central Asia. For instance, the rabad of Bukhara was surrounded by a fortification wall only after the Arabs invaded it (Narshahi, 1897, p. 47).

Rabad of Bunjikat. In the 7th-8th centuries its boundaries were, probably, rather conditional, included primarily a trade and handicraft suburb. However, owing to a rapid growth of the settlement north-east of the shahristan and development of urban life here by the 10th century, the Bunjikat's rabad was surrounded by a separate wall, as we've identified it among the remains of Kalai Kahkaha III located at the site of modern settlement Shahristan (Negmatov, 1976, p. 83).

Town's equipping with services and utilities, Playing an important role in the life of Ustrushana towns were the urban services and utilities, including water supply and sewerage system, utility and trade services. Trade life of a medieval town focused at crowded bazaars that served as trade and handicraft centers of rustaks of Ustrushana. As has been noted, one of trading centers was the town Marsmanda, "a large center of iron ore works and metalworking" (Narshahi, 1897, p. 118). However, there has been identified no single evidence of presence of bazaar buildings or caravansaries in

Ustrushana. It seems that the trade was concentrated at the walls of the town's square. However, M. Narshahi informs that markets did exist in Central Asia large towns, for instance, Bukhara, and that they represented a complex of special constructions.

The water supply system of Ustrushana towns consisted of a network of channels and basins, as well as hidden sources for siege purposes. Ustrushana valley towns were supplied with water from aryks (irrigation channels) and havuzs like that in Samarqand and Merv (Bartold, 1963, p. 223-234; 1965, p. 216; Negmatov, 1957, p. 84). Multi-kilometer ground and underground channels were under construction in the mountainous regions. According to Arab-language geographers, Bunjikat was supplied with water by six streams: Sarin, Burjan, Manjan, Sengjan, Ruijan, and Senkbujan (Bilalov, 1978, p. 169). One of the channels delivering water to the shahristan of Bunjikat took its beginning from River Shahristan, approx. two kilometers south of the village Jarkutan. Also, water was supplied to Bunjikat through underground channels-kahrizs called by A. Metz "quite genial irrigation constructions" (Bilalov, 1977, p. 46). Remains of such a channel with lateral purifying wells have been conserved at a place 4 km south of the settlement Shahristan (Rapoport, Trudnovskaya, 1958, p. 356-358). A basin-sardoba detectable in the territory of the shahristan's western part apparently was used to stand siege, resembled the sardoba of Merv, in terms of construction. This can be concluded from the example of Guyar-kala where rain water flew from roofs on stoneware pipes to stone flags-faced roofed tray and onward to a basin amid the fortress (Brykina, 1974, p. 12).

The existence of a no less developed system of town's equipping with services and utilities is beyond any doubts. Suffice it to cite the example of Karabulak, one of the largest rural settlements of Ustrushana of the 10th-12th centuries. Archeological excavations have unearthed a stoneware water pipe - kubur - here. Its analogies have been known since deep ancient times. Particularly, such pipes were found in Ayrtam (Vyazmitina, 1945, p. 38), Penjikent (Belenitskiy, 1953, p. 55), and Ustrushana (Gritsina, 2000). According to V. L. Voronina, the kubur system of water supply was suitable for small densely populated towns, like Penjikent (Voronina, 1959, p. 101).

Systems of Ustrushana town's equipping with services and utilities can also be studied due to the materials of excavations at the sites of other urban settlements of Central Asia (Kabanov, 1956, p. 95, 102, fig. 7, 9, 10; Gulyamova, 1969, p. 40-45). Used as the sewerage system of local type here were stoneware pipes-kuburs, specimens of which have been discovered in the layers of the 10th-11th centuries in Hulbuk, the capital of the early medieval region Huttal in the south of Tajikistan (Marshall, 1951, p. 91, 94, 95; Korotskaya, 1979, p. 409). It should be noted that this type of the pipe sewerage was astonishingly similar with that in the houses of Taksipa (Pakistan, the 11th century B.C.-the 5th century AD). They are made of ganch, connected by pipe sockets. In the settlement's yards and kitchens there were constructed special absorbing wells in the form of an overturned vessel with a broken bottom from where water yields freely soaked into the ground (Masson, 1941, p. 55). The main sewerage system in the form of an underground baked-brick vaulted gallery has been discovered in Termez of the 11th-12th centuries (Bernshtam, 1950, p. 42; Shishkina, 1973, p. 135). Fragments of a sewerage system have been found in Saryg and Afrasiab.

The citadel of the site of settlement Kank of medieval Chach (Ancient and medieval Central Asia, 1979, p. 84) and a palace in Hulbuk (Gulyamova, 1969, p. 40-45) were supplied with a sewerage system. Other kinds of equipping with utilities can be judged about according to written sources. Arab-language geographers inform that the streets of Bukhara and Samarqand of the 10th century were paved by stone. Muqaddasi reports that in Kyat "dirt is collected in cesspits and subsequently brought to fields in bags".

Thus, study of the town-planning system of the shahristan of Bunjikat and other towns of Ustrushana and Central Asia rather illustratively discloses the process of formation of an early feudal town of the reviewed region, a set of peculiarities of its planning, historical topography, as well as elements of engineering beautification and fortification. On the whole, there is opinion that Ustrushana early medieval towns did not yield to large cultural centers of Central Asia, such as Samarqand, Bukhara, Penjikent and other, in terms of urbanization and equipping with services and utilities. In turn, individual features of the ancient town-planning art of Ustrushana were displayed in the proportions and relative location of parts of the town, in the use of the surrounding natural landscape, in the image of town development, monumentality, as well as in ensembles of separate unique constructions. The construction activity of architects in the mountainous part of Ustrushana in the 6th-8th centuries resulted in the creation of a densely populated town (Bartold, 1963, p. 224; Smirnova, 1953, p. 190; et al) with an integrated town center system consisting of a palace of afshins, a cult complex, residential-production areas, etc. The simplicity of the architectural image of the whole Kalai Kahkaha I is here contrasted by a picturesque surrounding of the Shahristan hollow restrained from the south by a wide panorama of severe gorges of the Turkestan ridge.

With the aforesaid in consideration, it'd be appropriate to believe that in the period of formation of feudalism the territory of Ustrushana saw an intensive development of towns with a high level of fortification and beautification. Further complex studies of Ustrushana urban settlements will clarify many disputable aspects of the architectural-planning system of early medieval towns. At present, the material above makes it possible to formulate a number of regularities and compositional techniques in the planning and volume-spatial organization of settlements:

1. In Ustrushana there were practiced three types of rural settlements:
 - Compact non-fortified settlements of inactive-defensive character of common peasants;
 - Compact fortified settlements under the protection of a feud's fortress;
 - Settlement of rural population in separate mansions-castles with a complex individualized planning.
2. Rural settlements of Ustrushana are characterized by:
 - Organic interconnection of architecture and the surrounding landscape;
 - Particular attention to private fortification development.
3. Progressive features of Ustrushana settlements are:
 - Harmonic interaction of the environment and the architecture, i.e. the ability of medieval architects to synthesize nature and architecture;
 - High artistic-compositional quality of the architectural volume, ensemble, town;
 - Creation of historical modern environment capable of providing aesthetic impact on a human;
 - Rational use of land in the conditions of mountainous landscape.
4. Development of the Ustrushana medieval town was determined by:
 - Participation of towns in the world transit trade;
 - The town's belonging to a closed feudal estate system - rustak - where the town is the economic, administrative and cultural center.

Let's note in conclusion that the Ustrushana medieval town emerged from a complex of separate sites of fortresses-towns with a three-part town-planning structure, is characterized by the intensive development of towns with a high level of fortification and beautification.

Part III. Civil, cult and engineering constructions

Civil constructions. Rural folk dwelling represents an important sphere of architecture. The character of the surrounding landscape is reproduced, and tastes and needs of wide strata of population are satisfied to the fullest extent in this branch of construction. As a rule, the architecture of a residential dwelling meets the demands of a family's lifestyle reflecting definite features of social organization of common peasants, and settling the task of creation of everyday comfort. Of course, the specific weights of these factors are not equivalent, vary depending on the class and property status of an owner, and thus caused a difference in the appearance of residential houses of common peasants and of the rural nobility. In this regard Ustrushana dwellings are not an exception, illustrate a great variety of layouts that are still hard to classify in full. The analysis of the available archeological material, with respect to a N. N. Negmatov-suggested general typology, makes it possible to divided them into three groups depending on general planning, interconnection of different rooms, and the principles of organization of habitats in special natural conditions.

The first group comprises houses of the rural settlement Gardani Hisor at the village of Madm. This residential formation is notable for compactness of its planning composition typical for the development of mountainous slopes, which is caused by the need to prepare territories and erect constructions. Similar compactness is attributable, for instance, to all the conserved mountainous settlements of the Upper Zarafshan - Voru, Madavra, Zimtut, Veshab, Esiz, etc. (Yakubov, 1977, p. 52).

Let's consider residential dwellings of Gardani Hisor where there have been excavated 23 houses that had one to six-seven rooms (Yakubov, 1975, p. 200). Dwellings at natural terraces are located together in the form of a ribbon of residential rooms with their facades turned towards the sunny side: southwards and south-westwards. By the number of rooms the dwellings are divided into three types: one-room, two-room, and three-room dwellings. The dwellings are rectangular, almost square. The most popular, two-room dwelling consists of an entrance room with food-storing compartments-hammas attached to a wall opposite the street entrance. The next room was apparently a living room because along its walls there were built niches forming a Γ-shaped 70-cm wide, 30-cm high clay platform opposite the entrance. An outwall adjoining the hill is attached by a cake baking hearth (Mukimov, 1980, p. 15) and another hearth resembling fireplaces of modern residences of the Upper Zarafshan.

In the middle of the room there were two columns supporting the beam-and-girder constructions. Such a solution of the interior visibly halved the room; we've identified this in many old houses of the upper reaches of Zarafshan. For instance, in the village Madm such houses are called "honai harinok", i.e. a room with a span. In describing old houses of Mach, M. A. Hamijanova stresses that the oldest type of dwelling has been conserved only at the top upper settlements of Mach and is called "honai hari" (Hamijanova, 1974, p. 33). Evidently, this kind of dwelling is functionally correctly divided into the residential part and the utility part. Though the rooms were not large, they provided the comfort of living by its minimal arrangements.

The construction basis of the dwellings is very simple. For the reasons of hydro isolation, walls 25 cm high are built of large lime flags, while higher walls-of Adobe brick with the sizes of 52/26/10 cm. The same technique of walling has been identified at Ustrushana's later settlement-Karabulak (Brykina, 1974, p. 37). The dwellings had flat, wooden roofs. The wall's interior was usually plastered by clay mortar, while compartments-hammas were covered by the ganch plastering. That is the system of a common dwelling of Gardani Hisor. The discovery of wooden parts of columns, doors and roofs make us suggest a rather high level of the construction culture and the art of woodworking. Comparing the planning structure of Gardani Hisor to that of a mountainous dwelling of the Upper

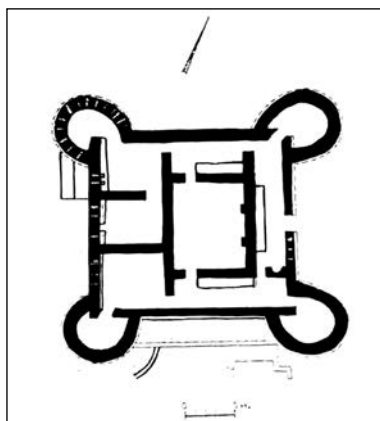


Fig. 25. Ustrushana. Castle Tirkashtepa, 7-8th centuries, 11-12 centuries (according to S. Mamadjanova's materials).

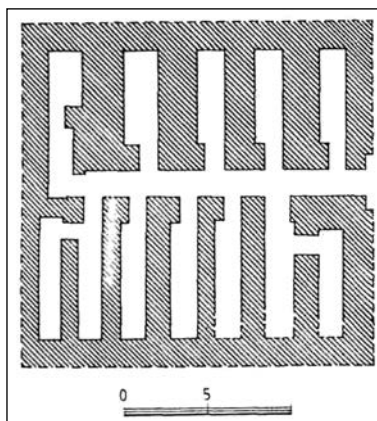


Fig. 26. Bundjikat. Kalai Kahkaha I. «Barrack».



Fig. 27. Bundjikat. Arched pass into watch-house in Kalai Kahkaha I, 7-8th centuries.

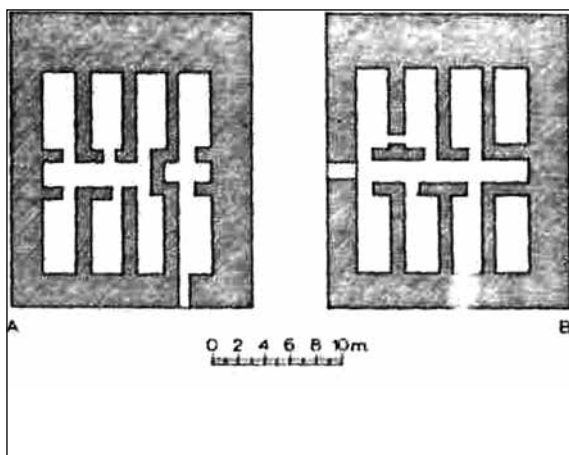


Fig. 28. Bundjikat. Toshmirtepa, 7-8th centuries. Stages of formation.

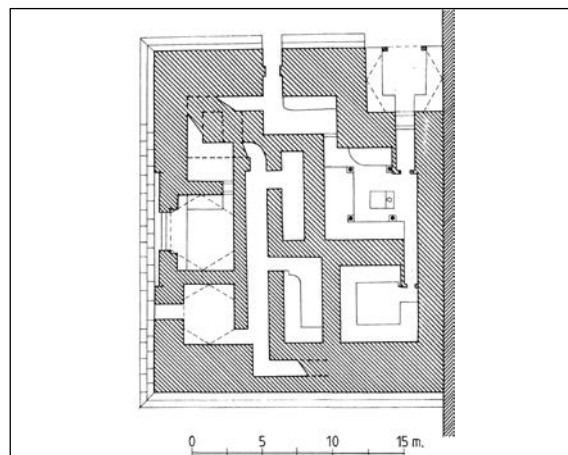


Fig. 29. Bundjikat. «Minor» palace (Kalai Kahkaha II). Plan.

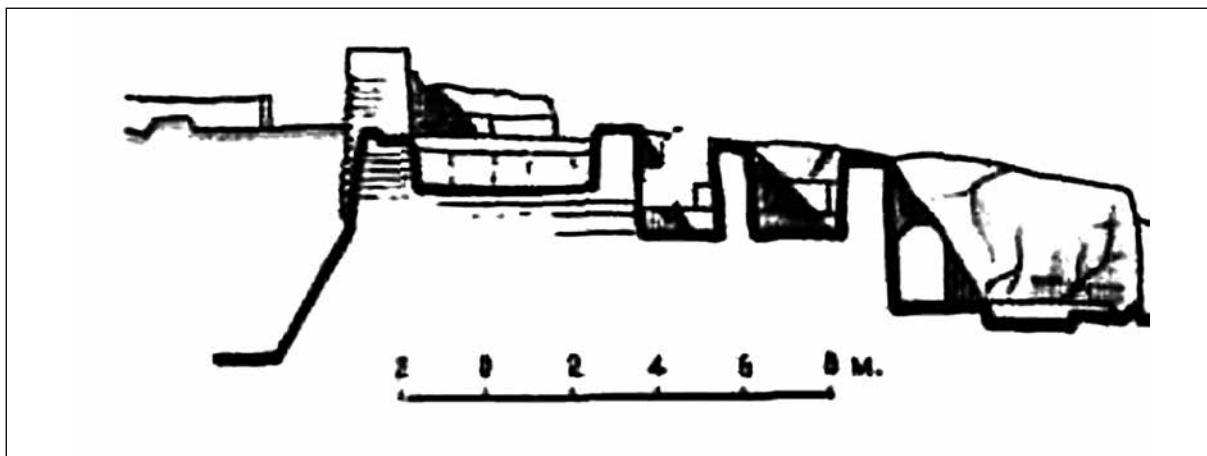


Fig. 30. Castle on site Kalai Kahkaha II. Plan of second level and section, 7-8th centuries.

Zarafshan of the 19th century also reveals identity of many principles of the interior, separate details of the constructions, interconnection of rooms, etc.

On the whole, in comparing the reviewed settlement with settlements of the 19th century, it is possible to suggest that early medieval constructions of residential designation had a closed, strict facade accentuated by the contrast of light and shade at multi-faceted curvilinear planes of the walls of rooms with small doorways. The unpretentiousness of the architecture of residential houses generally corresponded to the character of their interiors: the dwellings had irregular configuration, corners rounded, roof beams blackened; walls of the rooms were mostly not plastered, though this attached a kind of picturesqueness but caused an uncomfortable view. However, the architecture of the dwelling functionally met the requirements of a family's lifestyle, took into account the natural-climatic peculiarities of landscape, as well as available local building materials and constructions.

The second group consists of residential houses of the settlement Hon Yaylov located in the gorge of Aktanga (fig. 34). As we've mentioned, this settlement includes the remains of continuous utility and residential stone rooms that comprised 7 complexes. Consideration of the plans of two types of dwellings - a continuous area of utility and residential rooms, and separate multi-room buildings with yard sections - helps identify certain architectural-planning techniques. Comparing them with the communal houses of the high mountainous Yagnob that have been conserved up to the 20th century (fig. 35) makes it possible to confirm that suggestion of N. N. Negmatov that the population of Hon Yaylov had a communal lifestyle is true (Negmatov, 1973, works, p. 157).

The continuously developed houses of Yagnob that were once owned by a single tribe and then divided into a number of residential quarters of separate groups of kinsmen after the commune broke down are identified as the most ancient types of dwellings in the territory of Sogd and Ustrushana (Voronina, 1957, p. 121). Particularly, one group of dwellings studied by S. Andreev in settlement Sarhadi-Kul in Yagnob consists of several unified residential and utility rooms (Andreev, 1970, fig. 6) (fig. 35). That the rooms are unified, probably, indicates that separate families did not break their links with the tribe that had constituted a family commune in the past (Lavrov, 1950, p. 12). In the view of V. L. Voronina, the unified developed area of ancient Penjikent (object III) was, as a matter of fact, a large house, a whole residential quarter, "so the building III represents a prototype of "bomi kapon" of modern Yagnob residents," she noted (fig. 36).

Comparisons above make it possible to suggest that the grand patriarchal commune of Ustrushana evolved in a way similar to that of Sogd. While in the building III of ancient Penjikent we see a whole family commune, the materials of Hon Yaylov dating back to the 8th-12th centuries demonstrate a singled out small family. The result of a further split of a family is detected in A. S. Davydov-explored later dwellings of Yagnob, the planning of which is closely associated with that of the excavated houses of Hon Yaylov, i.e. the separate complexes II and III (Mamadjanova, 1980, p.6). Here there are similar irregular contours of the stone walling, corridor-shaped rooms, as well as enfilade of rooms of various designations. Even the excavated construction in the southern part of settlement Ak-tange (the complex IV) identified by N. N. Negmatov as "alou-hona" - a public living room - convincingly proves the medieval settlement's closeness with communal houses. Consideration of the ethnographic materials of the Old Mach, Yagnob located in the territory of Ustrushana and Sogd makes it clear that alou-hona is one of traditional local types of public buildings that have conserved their most ancient relicts (Negmatov, 1977, p. 106). Particularly, in the Old Mach (Mach is the medieval rustak of Ustrushana) alou-hona until the recent past performed the functions of a public living room where all men of the settlement had their evening leisure time and where strangers were allowed to spend

a night (Hamijanova, 1974, p. 25). In the view of N.A. Kislyakov, as a more archaic type of a public building, *alou-hona* started being substituted for mosques as Islam was strengthening in the Upper Zarafshan (Kislyakov, 1961, p. 63). For example, a Rog settlement's one-room mosque had a fire lighting hole in the middle of the room, around which they sat in winter (Hamijanova, 1974, p. 26). Supposedly, the aforesaid *alou-hona* at the Ak-tange settlement of the 8th-12th centuries, having conserved the main features of a public "fire house" (Negmatov, 1973, p. 161-162), performed the functions of a rural mosque as well.

As the excavations of Hon Yaylov have not yet finished, it is not possible to make a complete architectural-planning analysis of a rural mountainous dwelling. However, viewing the Ak-tange dwelling as an intermediary link between the large tribal house of ancient Penjikent of Yagnob and the dwellings of the late medieval period makes it possible to identify the final phase of social development of the ancient dwelling, i.e. a private house of a house owner, who hasn't yet broken links with his tribal commune.

Residential constructions of the Karabulak settlement represent examples of the third group of architecture of common peasants' residences of the 10th-12th centuries in the submontane part of Ustrushana, at the border with the medieval Fergana (Brykina, 1974, p. 25) (fig. 40, 41, 42). Here there has been discovered a rather substantial residential area consisting of several complexes built at various times. In the view of G.A. Brykina, it seems not possible to identify links between separate groups of rooms; only creation of living space by rooms separated by parallel walls is identifiable (p. 33, 35).

Indeed, the chaotic planning of separate buildings at first look is not indicative of any consistent planning interconnection. However, it has to be kept in mind that the living houses of peasants were never a static phenomenon in volume-spatial respect. Note that a house that was under construction as planned and by hands of its to-be owners and as a vital, flexible organism permanently modified according to the lifestyle of a family or a tribe: some rooms were attached, others were destroyed, all parts of a house were improved and decorated due to one's strength and wealth. This is the only reason of a multi-stage character of construction of Karabulak's residential complexes, with G. A. Brykina being unable to give an appropriate explanation (p. 37).

Examination of the planning of separate residential buildings-complexes demonstrates that a peculiarity was that the structure comprised closed and semi-closed entry rooms-vestibules, around which living rooms were arranged (fig. 11, 15, 17). To find out typicality of the identified technique, it is essential to turn to ethnographic parallels, for there is almost no single type of building that would not have caused present-day associations. Moreover, the appearance of medieval rural dwellings, which looked alike, had a series of principal peculiarities common with the local type of a house of the 19th-20th centuries. Some of its utilitarian details, for example, hearths-fireplaces have practically endured no changes up to nowadays.

Exploration of dwellings of the 19th century-early 20th century of settlements of the Upper Zarafshan makes it possible to single out the most frequent principle of planning of a mountainous or submontane residential house. This is a functional division of two residential rooms or a group of rooms by interim volume of a semi-closed multi-purpose *ayvan*-vestibule (a summer *baldachin-verandah*, a division hall, and a kitchen) (Mukimov, Khmel'nitskiy, 1978, p. 183, fig. 42, 44). In stressing universality of the interim *ayvan* in a mountainous dwelling, it should be noted that it was used for various purposes in the climatic conditions of mountainous landscape. In the lowlands of Zarafshan - Falgar - this semi-closed *ayvan* was used primarily as a summer room. In the highland part, for instance, Yagnob, the same division vestibule acquired the form of a narrow corridor-shaped

closed room - kucha - that interconnected residential and utility rooms (Mukimov, 1979, p. 109, fig. 20. In the interim settlements between Yagnob and Falgar, particularly, Darkh the division volume acquired the form of an internal corridor-shaped small yard with passages to rooms of the second floor called "dolon" (p. 109).

Of interest is that residential houses of Armenia of the 19th century also had semi-closed inner yards functionally very similar to the "kucha" of a Yagnob dwelling or to the "dolon" of a Darkh residential house (Happahchyan, 1971, p. 66, fig. 34, 37, 43). Such unbelievable, as it appears, similarity of arrangement of a house's internal space around a certain volume of universal designation is quite explainable by taking into account natural-climatic conditions that were the primary cause of singling out a differentiated division room. The planning composition of a dwelling with the interim division center appeared not randomly, not in the 19th century. Scientists testify that houses with a yard or another space, around which residential and utility rooms were grouped, were popular in the Near East in deep ancient times (Koshelenko, 1966, p. 130). Ancient roots of the mentioned planning principles that later, probably, became the basis of formation of early medieval types of rural dwelling in the whole territory of Central Asia are linked with comparatively common natural-climatic conditions. Comparison of this planning structure of the mountainous and submontane dwelling of the 19th-20th centuries with the above-identified technique of placing rooms around a semi-closed or closed "vestibule" in Karabulak buildings demonstrates the principal similarity in the arrangement of the internal space substantiated by specific natural-climatic conditions of Ustrushana. Thus, a complex (archeological-architectural and ethnographic) consideration of the rural dwelling of Ustrushana peasants makes it possible to single out three planning groups characterizing the residential architecture in the region's various natural conditions during the 6th-12th centuries

Urban residential houses. As G. A. Pugachenkova fairly notes, "...the core of towns, their architecture-forming milieu consisted of the housing area that, as a result of mass construction, caused the ripening of principles that were afterwards embodied in the monumental architecture of palaces and temples at their full" (Pugachenkova, 1976, p. 38). Thus, it is more correct to start studying architecture with a living house, not palaces and temples because in developed forms we can frequently guess a basis stemmed from a simple hut.

As noted in modern special literature, the excavations of ancient Penjikent give the idea of planning and types of early medieval constructions (Voronina, 1953, p. 189-199, etc.) On the basis of their study B.L. Voronina singled out a number of types of urban house: a fortification (citadel), a sectional (continuous residential area), and suburban one. Similar materials obtained from other early medieval towns of Central Asia over the past decades have considerably increased our knowledge about the planning, volume-spatial organization and beautification of dwellings. For instance, a living quarter explored in the northwestern part of Afrasiab represents an example of "a single architectural complex" of a group of residential, production and utility rooms in the first period of exploration, i.e. the 8th century (Shishkina, 1973, p. 117-118, fig. 1). The central part of shahristan I, II, III of Kanka, the capital town of Chach, was densely developed by continuous residential areas with narrow streets and blind alleys (Ancient and Medieval Culture of Chach, 1979, p. 61-63, fig. 28, 29, 31).

The materials of excavation of such early towns of Central Asia as Janbaskala (the 2nd century B.C.-the 1st century AD), Toprakkala (the 3rd-4th centuries AD) and other demonstrate that the traditions of housing development as continuous houses-quarters with small yards for separate families emerged yet in the early medieval period (Tolstov, 1948, p. 119-123; 1948a, p. 111-115; Lavrov, 1950, p. 16-17, 24). In this period the old foundations of the tribal commune became much weaker, so in

separate residential complexes scientists would note a class differentiation displayed through the level of beautification and decoration. The latter is clearly confirmed by the above-cited examples of the systems of internal planning of Central Asia towns of the 5th-8th centuries.

The urban dwelling of Ustrushana (fig. 33) acquired the real shapes only after the arc as well as a living quarter in Kalai Kahkaha I were excavated (Negmatov, 1977, works, p. 121; 1973, p. 90-97; 1976; etc.) The materials of study of the Bunjikat urban housing area allowed the researcher to identify four types of the planning of residential houses (Negmatov, 1977, p. 14).

The first type of the planning comprises the objects II and III of Kalai Kahkaha I where a wide long room is divided by transversal partitions into three rooms: the deep room, the medium room, and the ayvan room (Sergin, 1966, 29-58). This group of rooms united as separate sections is located at the site's north fortification walls and characterized by the lack of decoration and minimal possible beautification. The room had flat beam ceilings; inside the walls there were niches of utility designation.

The second type is represented by the object VI consisting of residential isolated sections in the form of a continuous row of constructions adjacent to the site's southern wall. The planning of the discovered sections reveals a "vestibule", through which it is possible to get to two absolutely isolated rooms. One of them is apparently a living room, the other one is the main room. Apart from them, the section included two utility rooms. The discovery of this object has identified the compact character of the development of a quarter where common urban residents-owned sections' dead walls adjoined the town's walls, while corridors of these sections led to the town, more exactly, a street leading towards its center-registan.

The sectional planning of the object V near a town square in the center of Kalai Kahkaha I that includes entry ayvans, front halls and rooms with richly decorated interiors (lobbies, stages, the internal column space, and mural painting) refers to the third type of urban house of the Bunjikat aristocracy-nobility. The status of an owner is illustrated, in particular, by a more complex interconnection of rooms of various designations, the inclusion of public, utility and cult rooms in the common structure of the whole developed area, as well as the discovery of signs of beautification in the excavated areas. Particularly, on the floor of room 11 there have been found sections of stonework, baked facing figured bricks. Besides, that a beautified quarter with elements of public and cult services is located near registan, in the center of the town, is illustrative of a more privileged character of the reviewed type of urban house.

The fourth type of urban dwelling comprises a square multi-column centric-type residential house with the central square hall and it-surrounded enfilade rooms on the main axis of the hall's entry vestibule-a chamber stanza in the complex Childuhatron (Negmatov, 1978, p. 14).

A seven-room residential house (fig. 32, 33) in the ensemble of stone buildings of production, cult and utility designation of the 9th-11th centuries partially resembles similar modern constructions of Merv, Termez (Negmatov, 1977, p. 154), Yaztepe, as well as Khorezm. A front stone stairway leading to a flat wooden roof effectively singled out in Childuhatron should be emphasized as a peculiarity unusual for the Central Asia architecture (Negmatov, 1964, 34-44, fig. 1, 2). The very principle of the building's centricity is worthy of a note. Unlike the aforesaid common urban residents' houses erected with their own hands (as a rule, they lack the strict division into axes, have non-parallel walls and disproportionate rooms), this construction is notable for strictness of its planning scheme, strict axial composition, and central nucleus. In terms of compositional solution, the multi-room house in the complex Childuhatron resembles centric buildings of defensive character, particularly, a series of fortresses in the Khorezm oasis: the medieval house #18 in settlement Akhcha-Gelin I dated back to

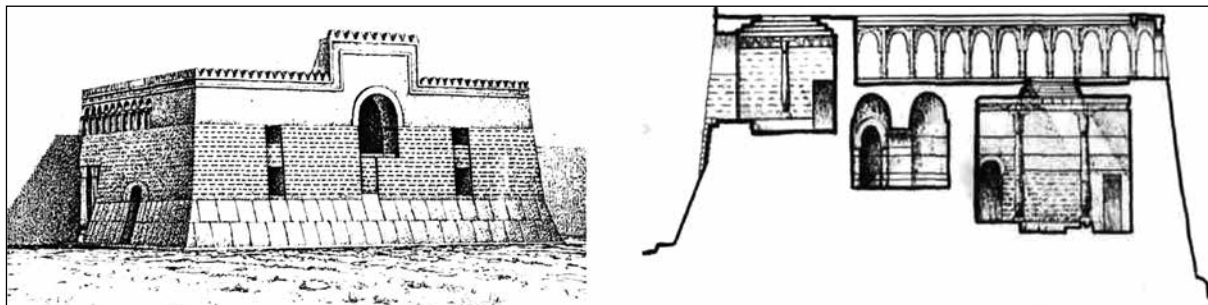


Fig. 31. Castle in site Kalai Kakhkaha II, 7-8th centuries. Section and reconstruction.

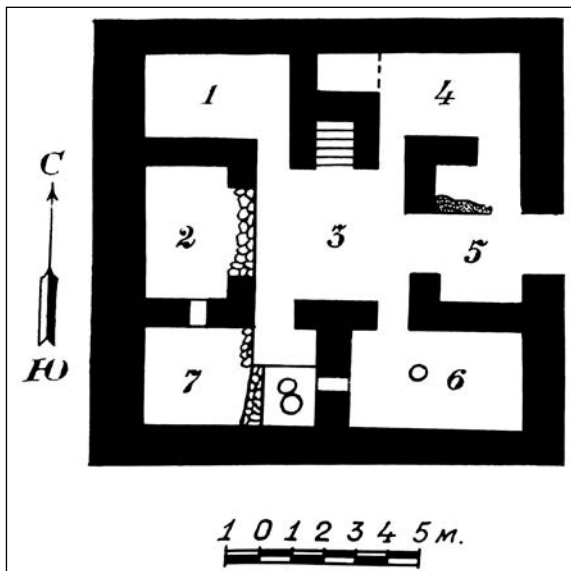


Fig. 32. Ustrushana. Residential house in the complex of stone structures Childuhtaron, 7-8th centuries.

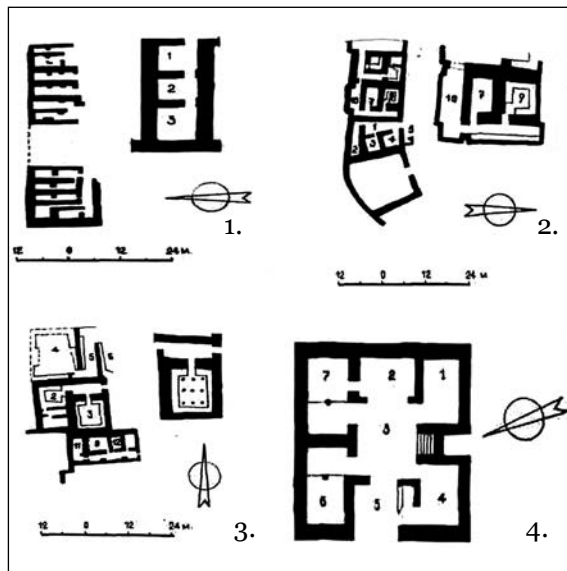


Fig. 33. Kalai Kakhkaha I. Types of town habitation, 7th centuries. 1. Sectional building of Kalai Kakhkaha I; 2. Quarter building of Kalai Kakhkaha I. 3. Houses of rich townfolk of Kalai Kakhkaha I. 4. House in the complex Childuhtaron.

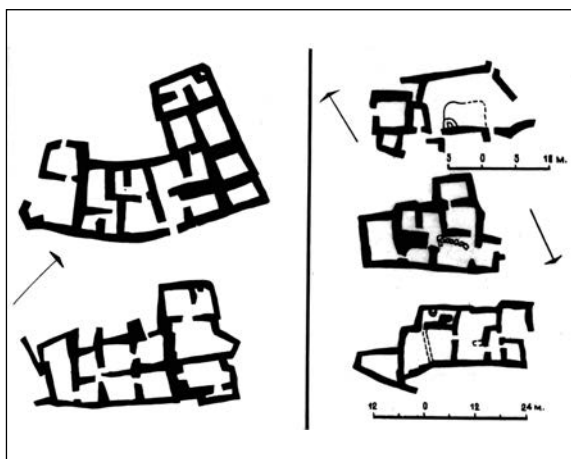


Fig. 34. Ustrushana. Settlement of Hon Yaylas. Individual housing and public estates, 11-12th centuries.

the 19th century, house #2 in Aygeldy of the 12th-13th centuries, houses #41 and 60 in the Kavatkalin oasis of the 12th-13th centuries (Nerazik, 1976, p. 77. Fig.40, p. 90, fig. 48, p. 96, fig. 52, p. 133, fig. 81).

Detailed consideration of centric fortresses, as well as dwellings with the centric division hall makes it possible to say that this technique had been spread widely from the ancient times to the 12th century. It now appears that such a planning of a residential house with the central division room was formed under the influence of natural-climatic conditions, and landscape characteristics of the mountainous, submontane and valley regions of the Near and Middle East (Mukimov, 1979, p. 108).

Let's consider some distinctions of the architecture of urban house of Bunjikat represented by the objects II, III, V, and VI in Kalai Kahkaha I. Supposedly, separate sections of constructions were occupied by small families. The results of the excavations demonstrate that the central quarter at the town's square (object V) consisted of a complex of residential, production and cult rooms. At the same time, wall groups of constructions from the southern and northern sides (the objects VI, II, and III) represent unified sections erected of wattle and daub mass. It seems that the entrance doors of dwellings were turned towards the street leading, as we've noted, to the town's center at the foot of the fortified palace of afshins of Ustrushana. The residential rooms are supplied with wattle and daub niches along the walls. The lower part of the walls is made of wattle and daub blocks, the upper one - of Adobe bricks. No elements of a vaulted Adobe roof of rooms and corridors have been found either at the upper parts of the conserved walls or in the ruins of rooms. This circumstance differs, to extent, urban houses of Bunjikat from that of Penjikent where the majority of rooms are covered by roofs with small light holes.

N. N. Negmatov believes that the roofs of dwellings in the urban quarters of Kalai Kahkaha I were flat wooden beams put onto the walls and columns. The existence of wooden columns in the urban dwelling interior is to conclude, for example, from the discovered hollows bearing the traces of rotten wood and fragments of columns in room 10, as well as "clear niches from the roofing's six columns" in room 3 in the central urban quarter of Bunjikat's shahristan. The latter room having the entrance in the middle of its northern wall resembles the structure of 4 front halls of Penjikent, but with a distinctive planning composition of a three-nave hall with a central-axial entrance. Like in Penjikent, their designation is close to "mehmonhona", a folk residence of North Tajikistan, which was decorated by a bright painting, carving, and wall niches in a richest possible way.

Though early medieval dwellings strongly differ from late medieval ones in terms of the principle of rooms' grouping and interconnection, solution of the interior of mehmonhona, and technique of the walling, the living rooms of the former are notable for the front character of interior, like that of the latter. However, early medieval architects had distinctive means of designing: the hall was framed from its three sides on the perimeter by not wide niches, with singling out an honored place opposite the entrance or expanding the niche. The solemnity of these reception rooms was strengthened by rows of columns and a doorway along the axis of the middle nave, like in room 3 of the object V of shahristan of Kalai Kahkaha I. The walls were plastered, sometimes painted. For example, the walls of room 4 in the stonework complex Childuhatron were covered with a pale green plastering. In the same complex there has been identified another solution of designing a residential room. The decorative figured Adobe walling of room 11, which is an effective designing, is an illustration of one of rare or maybe, even unique techniques of interpretation of the wall tectonics in the architecture of early medieval Central Asia (Negmatov, 1962, p. 39, fig. 1, 2).

Closed rooms with flat roofing were illuminated through small ceiling holes resembling the ruzan of the Mach houses of the 19th century (Mukimov, 1979, p. 20, Hamijanova, 1974, p. 39-40). The same

holes apparently also served as ventilation and a chimney. The doors were wooden and closed by wooden locks, like that in Penjikent (Voronina, 1956, p. 86-87). Analogies of the latter are still found throughout the North Tajikistan, Pamirs, Darvaz, and Karategin (Voronina, 1953, fig. 13).

Residential rooms were heated by portable hearths like small earthenware pots or vessels filled by hot coals. Fragments of such earthenware hearths have been found in Kalai Kahkaha I and II (Negmatov, 1959, p. 36). Also, in the dwellings of urban residents there were placed simplest hearths very much resembling present-day "otashdons" of Mach (Voronina, 1956, p. 88-91). Interesting hearths made of fireclay have been found in Karabulak. The edges of a ledge are formed by oblique deep reliefs. In the view of G. A. Brykina, the hearths were also used as sandals - the portable hearths designated for heating residential rooms (Brykina, 1974, p. 69).

An interesting detail of Ustrushana urban dwellings represented alabaster small tables widely spread over Central Asia as "dastarkhans". Round small tables having the massive platform and three cone-shaped feet have been discovered in Ustrushana (Gritsina, Pardayev, 1990, p. 176), Karabulak and Semirechye (Brykina, 1974, p. 98, fig. 64). Their images are also present in Penjikent (The Painting of Ancient Penjikent, 1954, tables VII, X).

It is hard to judge about peculiarities of the urban house and lifestyle of Ustrushana residents because the archeological material from this region has not been studied in every detail. However, no conclusion should be made that the urban residential culture of Ustrushana was not developed. A set of materials, as well as information provided by Arab-language medieval geographers testify that Bunjikat acted as a developed town with a high level of urbanistic culture, including the residential one.

Palace buildings and citadel refer to the second type of construction of dwellings of towns of early medieval Ustrushana. The town's citadel - ark and kuhendiz - played the most important role in the fortification. Location of the citadel in the town's plan, as has been noted in chapter 2, depended of its functional-political designation, as well as relief and direction of main approach roads. In some towns the citadel stood aloof, near a shahristan (Bukhara, Penjikent), sometimes inside the town (Samarqand). Most often it joined the system of town fortifications at the town's outskirts. That's the way characterizing the location of the ark in the plan of shahristan of the capital town Bunjikat in Kalai Kahkaha I, which, like the citadels of Varakhsha, Penjikent, and Kafyrkala (Isakov, 1977, p. 42) represents a complex of constructions of various designations. In other words, the citadel was not only a fortification but also an administrative center of town.

The Bunjikat arc together with the palace of afshins occupied the town's eastern part that stretched longitudinally at a flat hilltop (fig. 15-2, 16, 17, 18). A palace with the area of 38/47 meters rose 57 m above the riverbed at the hill foot. The building's wattle and daub and Adobe walls had the interior covered by clay plaster. The palace is notable for the absence of vaulted roofing; though the walls were massive, the roof was made of beam and girders (Voronina, Negmatov, 1974, p. 55). Study of carbonized remains allowed scientists to identify the character of wooden parts of the building. For example, wide openings of the walls and floor were boarded by planks, while the walls of room 6 and room 7 at the junction of corners were supported by wooden columns, forms of which were printed in the plaster's layer. Comparison of these elements with the ancient architecture shows similarity of the techniques of buildings' openings, and the existence of the same columns at the turn of corridors of some residential buildings of Penjikent (Voronina, 1958, 1964). Of great interest is the discovery of a beam from light hole frame in room 4. In the opinion of the palace's researchers, the discovery is a documentary evidence of reconstruction of the ceiling of four-column halls that were earlier

judged about only on analogy with the residential dwellings of mountainous Badakhshan (Voronina, Negmatov, 1974, p. 55).

A palace excavated in 1965-1972 (fig. 18) includes around twenty rooms, including front, three-tier hall with the throne stanza (17.65/11.77 m), the small reception hall (9.65/9.50 m), the living tower-donjon, several residential and utility rooms, and a whole system of intercommunicating wide, long corridors. A temple and an arsenal joined the number of main parts of the palace complex. Particularly, of great interest is the arsenal where there have been found more than 5,000 stones each weighing from one quarter of a pood to 3 poods, and a large number of fist-size balls for ball-throwing slings (Negmatov, 1973, p. 98).

In the middle of the building there rose a square residential tower (room 9), of which only a massive wattle and daub socle has been conserved. With the tower not taken into account, this was a one-storey building surrounded by a yard and fortification wall from the south and the east. The town had gates carved in the ark's western wall. Besides, at the eastern rocky slope there has been conserved a semi-destroyed tower, which was a part of the whole ark's fortifications (fig. 17).

Halls, rooms and corridors of the palace had niches, lobbies with wooden walls-screens (a typical feature of living rooms) that, in combination with the mural painting, wood-carved columns, borders and ceilings, stressed that these rooms were main ones. According to N. N. Negmatov, this is "an excellent monument of the Ustrushana monumental architecture—one of the largest Central Asia early medieval classical palaces" (Negmatov, 1977, p. 39).

Worthy of a note is the palace's multi-column hall where a broad doorway, once boarded by carved wooden planks and decorated by beautiful wood-carved tympanum, was located in the northern wall opposite the throne stanza (fig. 15-1). As an indispensable component of Central Asia palace buildings (Nielsen, 1976, p. 45-65; Litvinskiy, Zeymal, 1973, p. 155 and next; Isakov, 1977, p. 78), the planning of the grand hall resembles the basilicas of ancient Rome (for instance, the basilica of St. Peter in Rome, 324-349 AD, Mikhailov, 1973, p. 680, fig. 8). Here there is the same structure of hall with a central-axial entrance, the same outlined throne stanza where a ruler once sat. We find no less astonishing parallels in mural paintings that decorated the western wall of the central corridor. This is a six-meter composition; the fifth scene depicts a she-wolf breastfeeding two infants (fig. 55). Beyond any doubts, the plot is a reproduction of a famous legend used in the ancient mythology of many nations and canonized in the antique Rome (Negmatov, Sokolovskiy, 1975, p. 438-458; Voronina, Negmatov, 1974, p. 51-71; et al).

In the view of researchers, the variant of the ancient Rome legend resulted from a closest cultural and trade exchange between Central Asia and the West, especially in the Kushan epoch and in the early medieval period (Voronina, Negmatov, 1974, p. 70; of the art of Kushans, see Pugachenkova, 1972). An eloquent confirmation to the latter is the discovery of a Byzantine gold sign with the Rome emblem during the excavations of ancient Penjikent. Such connection of the traditions of various cultures of the antiquity (despite a time difference of several centuries) prompts an image of the main room, which a bit differs from the one suggested by V. L. Voronina (Voronina, 1977, p. 97). Particularly, it is highly likely that the roofing of the palace's grand multi-column hall was similar with the construction of Roman basilicas in the form of a risen medium opening of the row of the columns, which made it possible to illuminate the interior through lateral openings of the risen part. In such case light was directed towards the planes of side walls continuously covered by a colorful painting of narrative character (fig. 37).

In considering the structure of the front hall of the Ustrushana palace of afshins, the organization of its interior should also be noted. Particularly, a rectangular hall has two tiers: the floor and niches of its northern part are located lower than its southern part. Such separation of the throne stanza surrounded by niche is a typical peculiarity of such constructions of Central Asia, according to materials obtained from other palace halls. The approx. 250 square-meter grand throne hall of Penjikent rulers is also divided into two parts: a stage with niches along the walls, and the throne stanza risen above the stage. According to A. I. Isakov, two columns put onto the first level (the stage) supported the beam-and-girder roofing with a pyramidal illumination board of a peculiar construction (Isakov, 1977, p. 120, fig. 32).

A multi-column structure of reception halls of palaces as well as the compositional separation of the throne stanza of kings was greatly influenced by 4-column guesthouses in the residential quarter of early medieval towns. After the Arabs conquered Central Asia, the 4-column composition of a dwelling in combination with various kinds of portals served as a basis for the variety of mass constructions in Central Asia towns and settlements. According to B. L. Voronina, this substantiated spatiality, picturesqueness, and abundance of shades typical for the folk architecture (Voronina, 1977, p. 97).

Also, consideration of decoration of the interior of reception halls illustrates the existence of traces of a baldachin covering the “throne” niche. In the view of the palace’s researchers, a bas-relief of a female figure in the pose of caryatid and a series of boards with bas-reliefs of human heads, which have been discovered in the throne hall, were elements of a baldachin and a wooden sofa, a common attribute of houses of the nobility (Voronina, Negmatov, 1974, p. 57-58). Wooden pieces of the Urtakurgan reception hall’s columns are also an eloquent testimony to that a baldachin was once hung over “the throne”.

Apart from front halls, the palace had, as has been noted, a residential tower-donjon located at the level of the second floor, which is also one of the elements of the citadel (Isakov, 1977, p 111-112; Belenitskiy, Bentovich, Bolshakov, 1973, p. 21). The separated structure of the palace makes it possible to share the opinion of A. M. Belenitskiy that “as the most elevated point of the citadel, they (donjon towers - S. M.) during battles apparently served as the chief commandment point and at the same time the last asylum for defenders” (p. 41). He further writes that donjon towers were used either as places of residence or for storage of reserves. They were the place for a permanent garrison and the ruler’s servicing personnel (p. 21).

Apart from performing defensive, utility and duty functions, the donjon of the Bunjikat palace was the compositional dominant of the building, distinguished for its strict geometrical volume, figured baked brick wall facing, and traditional stepped dents “kungra”. These decorative elements of architecture have been found in the course of excavation of this palace and at some other objects of Kalai Kahkaha I. Particularly, a ceramic cylinder with a cruciform hollow, as well as v-shaped baked bricks have been discovered in room 2 of the object III (Sergin, 1966, p.151). Such decorative elements of architecture are rather frequent in the archeological materials of the sites of Central Asia settlements. For example, L. S. Kyzlasov believes that rectangular baked bricks found amongst the remains of a tower in Akbeshim and in the fortress Aktepa near Tashkent also were elements of the architectural decor (Kyzlasov, 1958, p. 155). Terra cotta dents like Bunjikat ones have been identified by A. I. Terenojkin in the course of excavation of Aktepa near Tashkent (Voronina, 1947, p. 43; Terenojkin, 1948, 119-121, fig. 20-23).

The most remarkable aspect in the architecture of the palace of Kalai Kahkaha I is the architectural decor closely linked with the visual art. A masterly performed, colorful, rich-in-subject mural painting

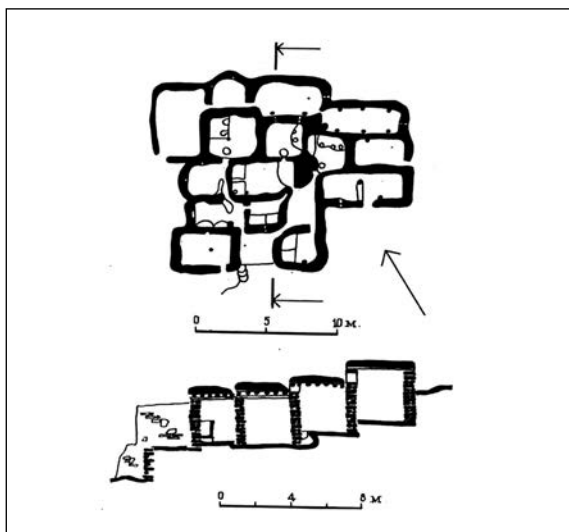


Fig. 35. Yagnob habitation. Plans of residential complexes-villages with relief sections (architectural parallel).

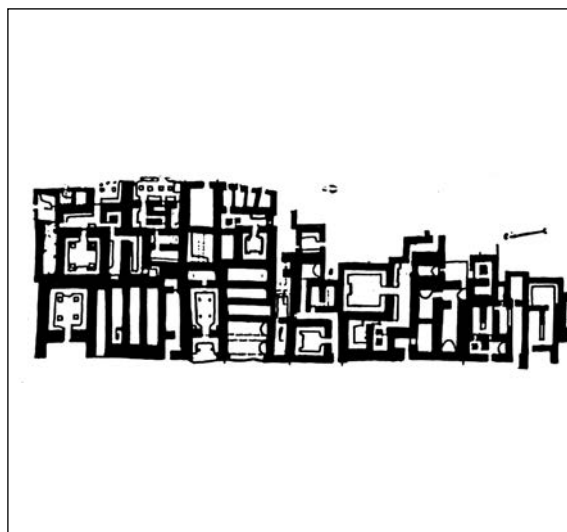


Fig. 36. Ancient Pendjikent. Fragment of apartment block (architectural parallel).

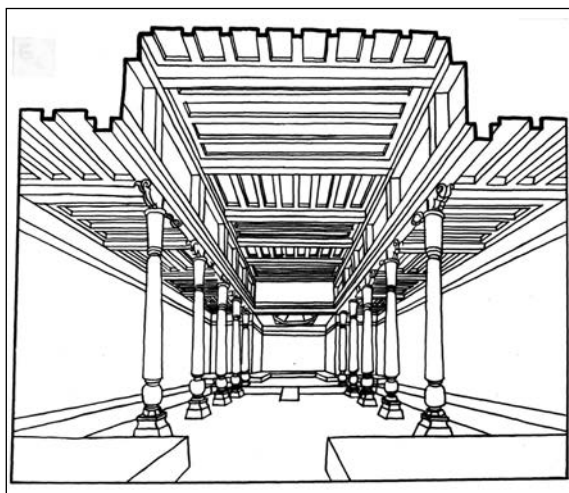


Fig. 37. Ustrushana. Palace of Afshins in site Kalai Kahkaha I. Throne stateroom Reconstruction, 7-8th centuries.

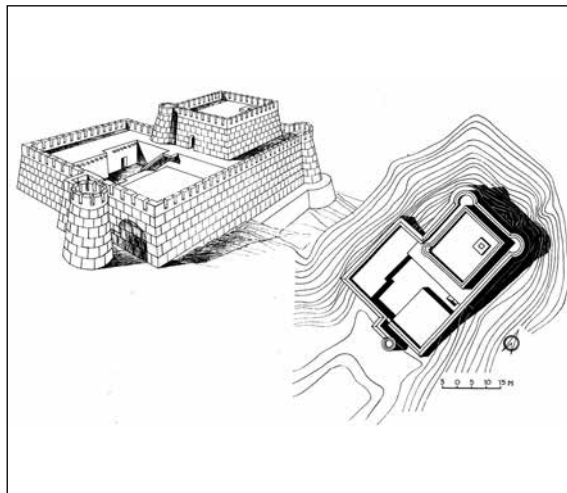


Fig. 38. Ustrushana. Castle Chilhujra. Reconstruction of exterior view and general layout, 7-8th centuries.

of reception halls and front corridors is an eloquent testimony to the high artistic skills of Ustrushana architects who created works that, perhaps, have no equivalents in the Central Asia architecture of the reviewed period. Suffice it to note that approx. 200 fragments of carbonized woodworks, including several tens of true masterpieces of art have been extracted from the ruins of the palace's rooms. They are several sculptures of humans and birds, numerous friezes and panels with topical compositions, and a unique tympanum of the throne hall's doorway depicting a subject from the heroic epic of the struggle between the good forces and the evil forces (Negmatov, 1970, p. 55-54; *Art of Central Asia of the Avicenna Epoch*, 1980, table 18-21) (fig. 53, 54, 56, 58). Besides, the excavations have revealed several thousands of fragments of plaster of painted walls containing many tens of square meters of remains of picturesque scenes. They include the above-mentioned 6-meter picture of a "She-wolf breastfeeding two infants", as well as a composition titled "War Council", etc. The paintings were largely polychrome, bright, with the prevalence of blue and ochre-yellow tints.

The compositional structure and topical content of the paintings of rooms of the Ustrushana rulers' palace are similar with the paintings in the rooms of ancient Penjikent, an illustration of closeness of the schools of monumental art of Sogd and Ustrushana and succession of their traditions. Suffice it to cite one of the masterpieces of Ustrushana painting - the image of a harpist in the Minor hall of the palace Kalai Kahkaha, which is identical to a well-known picture of the front hall of object VI of the site of ancient Penjikent (*The Sculpture and Painting of Ancient Penjikent*, 1959, table VIII, IX, X; Negmatov, 1974, p. 130, fig. 10). The stylistic connection is also detectable in other specimens of monumental painting of Shahrستان and Penjikent, Varakhsha and Afrasiab (*The Art of Central Asia of the Avicenna Epoch*, tables 1, 2, 9, 10, 11, 25, 28, 29, 30). A great similarity of traditions of Sogd and Ustrushana is also demonstrated by the comparison of woodcarvings. In the view of V. L. Voronina, Shahrستان woodcarving specimens are the closest, direct analogy of Penjikent's (*The Sculpture and Painting of Ancient Penjikent*, 1959, p.129). The shahrستان monuments contain the same elements, have the same interpretation of ornament and carving technique: rhombic incision, palmettes, wavy stem, and four-petal rosettes (*The Art of Central Asia of the Avicenna Epoch*, 1980, table 18, 19; Voronina, Negmatov, 1974, p. 56 and next).

Diverse, high-fantasy architectural decor of the palace of afshins later became the source of the Tajik visual art. Many ornamental motifs of paintings and woodcarvings of the palace of Bunjikat rulers have been handed down to us in the folk creativity of North Tajikistan thus illustrating the inseparable character of cultural development of the Tajik people, local origins of national art and architecture.

Castles-fortresses. As the residence of a feud-landowner, castles-fortresses as citadels of urban settlements were fortifications providing security of the owner. Thus, their structure has much in common with the citadel. Owing to this similarity, a definite type of a fortified residence raised onto a strong stylobate and surrounded by an additional fortification wall forming a yard with utility and residential rooms was formed in the construction of Central Asia early medieval fortresses. In the opinion of the majority of researchers, the image of the fortress is typical for the majority of Central Asia regions. It is substantiated by common social milieu, identical natural-climatic conditions, ethnic kindred of the population and close interrelations of its separate groups (Nielsen, 1976, p. 183; S. P. Tolstov, 1948, p. 151; Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 95; Isakov, 1977, p. 28 and next).

In terms of planning, these fortified residences are subdivided into various types. The compositional-planning structure of one group of Central Asia fortresses reflects the development of a common concept: the center of composition is a square or large rectangular room surrounded by smaller

rooms of various designations (Kyzkala, Yakkaparsan) (Nerazik, 1976, p. 175-178). Another group of Central Asia fortresses - Balalyktepa, Zangtepa, Jumalaktepa, Badassia - is characterized by a large, most frequently 4-column front hall with niches along the walls with a separated stage opposite the entrance, which compositionally accentuates the whole plan. Other early medieval fortified residences (Teshikkala, Hayrabadtpepa, a building north of Kulaglytepa and the northwestern complex of Varakhsha, a large room among the residential area of Penjikent in the 9th quarter) represent the so-called “yard-ayvan” composition, a typical peculiarity of which is that the building’s facade is accentuated by stanza-ayvan crowned by a vaulted roofing and turned towards the yard.

Excavations of fortress-type constructions in the territory of Ustrushana reveal the existence of local peculiarities in planning, construction, building materials, etc. By present, here there have been excavated and fully studied the fortress-palace Kalai Kahkaha I, fortresses Urtakurgan, Chilhujra, Toshtemirtepa, Gardani Hisor, and partially Munchaktepa. Comparative analysis of rural settlements, in terms of general typology, was given in chapter 2 of this part. From the point of general planning structure and specific weight of military-fortification elements, castles-fortresses are divided into two groups representing Urtakurgan and Chilhujra respectively. The Urtakurgan group of monuments is subdivided into two variants: the capital one (Kalai Kahkaha II) and the rural one (Urtakurgan) (Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 95-96).

The palace-fortress Kalai Kahkaha II, fully studied and published in 1966, refers to the type of palace buildings with a yard-ayvan composition (Negmatov, Khmel'nitskiy, 1966, p. 44-89). The fortress’s compact plan resembles a square with a three-part composition of rooms stressing a gradual transition from a large space of the yard to a small space of the sanctuary (fig. 29, 30, 31). The complex’s rooms were tied by a ramp. The ramp corridor was roofed by an arch forming a kind of “corridor-ramp” system. The latter has also been identified at a hall of the fortress Kalai Bolo in Isfar (Davidovich, Litvinskiy, 1955, p. 89-91). Several kinds of heating have been identified in the building. In the center of room 2 there is found a hearth construction in the form of a not high platform with a hollow in the middle of it (Negmatov, Khmel'nitskiy, 1966, p. 58, fig. 31). Such platforms with a hearth have been found in the 8th century rooms of Aktepa near Tashkent. In Khorezm hearths-platforms have been discovered, starting from the 6th-5th centuries B.C., in Kyzeli-Gyr and Koy-Krylgan-Kala. In Kushan and Afrigid constructions they occupied the middle of living and front square rooms (Tolstov, 1948, p. 141, 142, 143). An open-type hearth has also been found in one of constructions of Kyzylkyr near Varakhsha dating back to the 1st century B.C. (Nielsen, 1959, p. 67, 68). Another type of hearth identified in room 7 consists of a cup-shaped low-walled “hearth” pressed into the room’s wall. Also, the owners of the fortress used portable hearths, remains of which have been found here in the form of fragments of ceramic hearths.

Occupying a special place in the architecture of the fortress-palace Kalai Kahkaha II is a throne ayvan at the western facade located high above the earth level (this is a distinction of yard-ayvan compositions of monumental buildings of the Ancient Orient) and framed by an arch (fig. 31). The existence of the ayvan, as well as the front character of separate rooms help scientists identify the designation of a building erected specially for receptions, feasts, and numerous gatherings (Negmatov, Khmel'nitskiy, 1966, p. 86).

Analysis of the architecture has made it possible to identify that this is a public, representative building, which is strongly differed from common residential buildings of this period: feudal castles and urban houses. Its specificity determined a complex interior of the building: a distinctive but reasonable combination of front halls where the traces of initial dikhan keshk are hardly detectable.

Here ayvan-verandah is a fence roof in front of the southern facade turned towards the yard. From the east its socle was adjoined by storehouses and warehouses accessible through a stone staircase. The door frames at some places kept traces of carving; on the threshold there is a hollow with a door pin (room 6). Remains of wooden doors make it possible to reconstruct the structure of doorways.

Referring to the same type is the castle Gardani Hisor where the planning composition apparently contains a number of elements similar with that of Kalai Kahkaha II. This is the lack of fortress character of the building itself, the existence of ayvan-stanza along the southern facade turned towards the yard, as well as a square four-column front hall with a hearth-altar in the middle. Researcher of this monument Y. Yakubov not only believes that a series of rooms were of main, front designation but also views Gardani House as a front building of a palace type (Yakubov, 1979, p. 167) identical with constructions of such sort in Penjikent and other towns of Central Asia of the 6th-8th centuries.

Urtakurgan, a fortified castle of a landowner, in terms of its planning-spatial structure resembles the first type of Central Asia castles with the system of living rooms centering around the main hall-vestibule. However, the grand hall - so traditional for Khorezmian monuments - here is not dominating, just represents a crossing of two corridors. The reason of a bit distinctive interpretation of the composition of early feudal centric buildings is determined by its designation assuming a combination of front reception halls, a cult complex, and residential rooms (Negmatov, Pulatov, Khmel'niksiy, 1973, p. 37).

Local peculiarities of this type of castle are most clearly displayed under the examination of its interior. Worthy of a note is either general planning structure of the building or separate elements of its architecture: the southwestern hall's being decorated with a throne and Adobe column, a vestibule wall, the separation of a cupola cult "chapel" with a front chamber ayvan and distinctive niches, as well as compositional separation of the building's eastern hall. The walls of Urtakurgan are built of rows of wattle and daub blocks layered by rows of Adobe bricks. Such technique of walling has also been identified at other Ustrushana monuments: Tirmizaktepa and Chilhujra. They had flat roofing of wooden beams; however, one of the rooms (#8) had a cupola roof (p. 29).

The most interesting part of the building's plan is a distinctive hall-vestibule formed at the crossing of corridors. Analysis of the discoveries - fragments of wooden constructions, traces of columns at the junctions of corridors - allowed researchers to graphically reconstruct a very interesting structure of the wooden roofing of this hall referred to the type of "ruzan", i.e. a stone-block stepped well with a hole in the zenith (p. 56, fig. 1). It should be noted that the profiling of construction's beams fully reproduces the profiling of stone beams of a Bamian cave arch, which repeats the wooden roofing "ruzan" (fig. 21) (Voronina, 1970, p. 373, fig.7).

A significant part of Urtakurgan is occupied by a reception hall-the building's largest room (9.55/7.90 m). The entrance has the form of a traditional vestibule wall ending with a three-quarter octahedral column. The planning of this room differs from that of other rooms by a special line of a niche formed in the northern side as a two-stage platform with traces of a "throne" sofa. Floor holes at the site of the platform, four hollows in the middle of the room, and traces of bases of columns make it possible to reconstruct this front hall with columns that served as supports of the ceiling beams and light hole "ruzan" with a "baldachin" over the throne of the castle's owner, niches for guests, and a heath in the center of the room. These architectural elements of the interior in combination with woodcarving, colorful paintings are indicative of splendor of receptions. Such techniques found their reflection in some paintings of Penjikent.

Another room - #5 - that also had a small vestibule served as a minor hall. It appears from discoveries that it had a beamed ceiling supported by four columns. Worthy of a note here is the conserved decoration of the screen wall of the vestibule in the form of a panel with modeled clay border. In terms of its planning and interior decoration, this hall is close to rooms of the lower tier of fortress Kalai Kahkaha II (Negmatov, Khmel'nitskiy, 1966, p. 76, fig. 44) and fortress Badassia near Paykend where the entrance was formed as an angular vestibule with a screen (Shishkina, 1963, p. 90, fig. 7).

An exceptional thing in the planning of Urtakurgan is a room with the entrance in the form of a cupola-covered ayvan. Such structure of the entrance space in combination with a small cupola room led scientists to identify the building as a cult construction, a home "chapel" of a castle (Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 30).

The roof of Urtakurgan, like that in the ancient Penjikent, was adapted for summer conditions; a picturesque panorama of the surrounding locality was seen from here (fig. 22). A special ramp at the very southern end of the axial corridor led to the roof. Thus, residential, public and cult rooms, common centric planning-spatial structure with the system of rooms centering around the nucleus here in Urtakurgan acquire a distinctive local variant of the type of buildings with a similar planing scheme.

The two-storey castle Chilhujra is a construction with a complex planning reflecting features of various composition-planning types of a fortified residence, a result of several stages of construction during a long period of its existence. The excavations have identified that there was initially built the nucleus of the ground floor as "a sentry post with a typical corridor-comb-shaped planning" (Pulatov, 1975, p. 155). Under the second construction period Chilhujra was reconstructed from a building of a narrow fortification designation into a residential castle of a large landowner. As the function of the construction changed, its planning structure changed as well. The nucleus is being expanded using through bypassing corridors around it, so the front second floor emerges on the basis of this platform. The rebuilt ground floor with bypassing peripheral corridors and round angular towers of the planning composition resembles the ground floor of a number of Central Asia castles: Munchaktepa (Gaydukovich, 1947, p. 103; Nielsen, 1976, p. 139-140; Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 95), Aktepa near Tashkent (Terenojkin, 1948, p. 71-135) and Aultepa at the middle stream of River Kashkadarya (Kabanov, 1958, p. 144-151).

In terms of planning solution of its second floor where the key compositional component is a large front hall with 4 columns and niches across the three sides of the walls, Chilhujra is close to the second type of Central Asia monuments. However, this two-storey castle, still the only one of its kind in the architecture of Ustrushana, represents a special type of a complex individual planning-fortified residence including front halls, living rooms, a sanctuary-chapel, as well as utility and corridor rooms (Negmatov, 1977, p. 13-14).

Analysis of compositional distinctions of the planning of floors demonstrates the use of a unique, as it appears, technique of proportional building of either separate rooms or the ground and second floors. This fact makes us think that the building was preliminarily "designed" by a technique of proportioning. Particularly, analysis of construction of the ground floor and second floor, as well as separate rooms by the technique of proportioning has demonstrated that Ustrushana architects applied a technique of harmonization of architectural constructions in order to attach monumentality, impregnability to fortresses in accordance with the social-historical demands of the early medieval period. Assuming that a school of architectural practice existed in Ustrushana in the reviewed period, it is possible to trace strictly the architectural concept of Chilhujra builders. For instance, in building

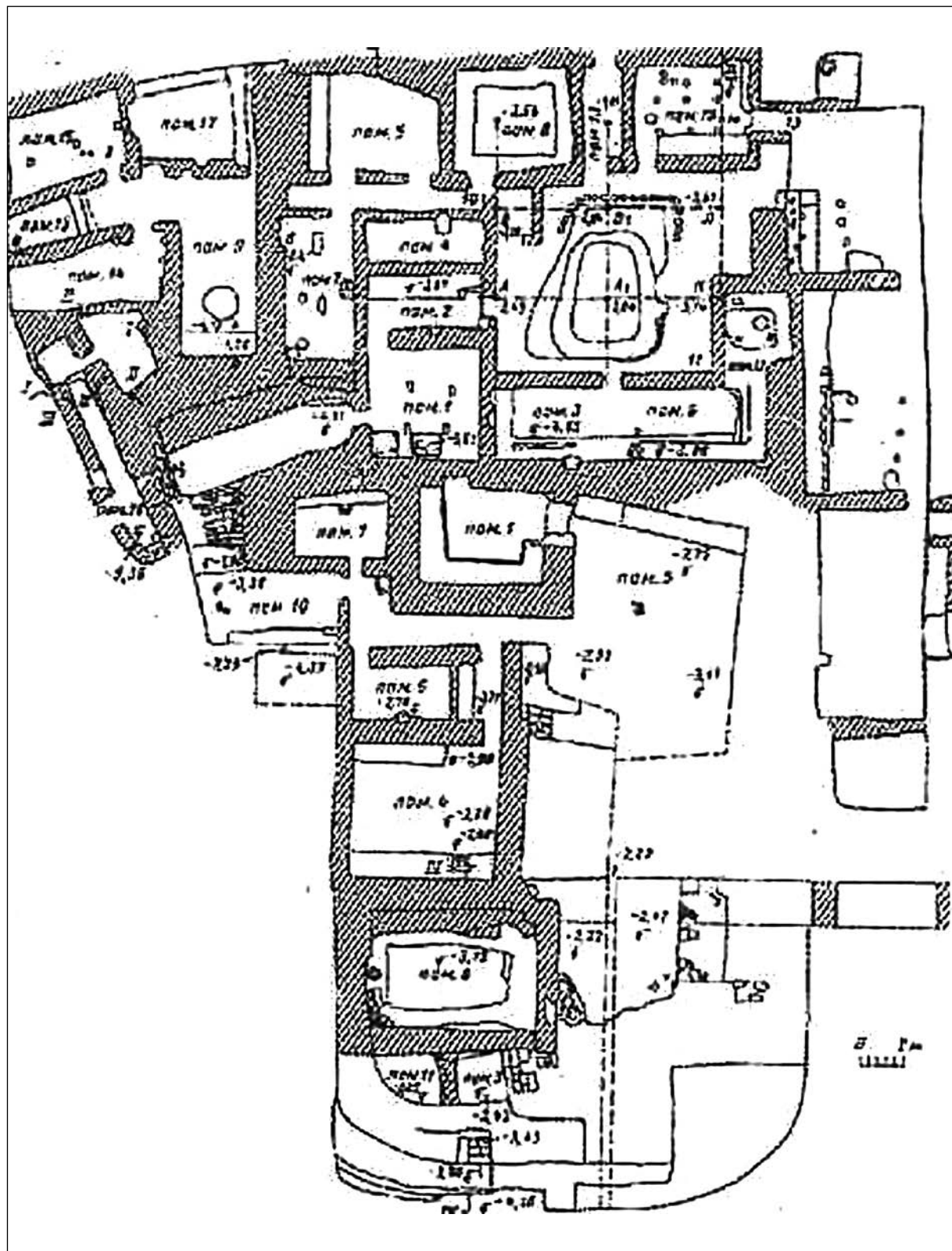


Fig. 39. Ustrushana. Mansion house, 1-4th centuries.

a sentry post (the nucleus of the ground floor), the architect defined its external shapes by a simplest method of “erratic square” coinciding with the gold section “function”, i.e. relation of the diagonal of two squares to the large side. Under the second construction period the master repeated the ancient method in expanding the nucleus assuming the construction of bypassing corridors, and regarded a square as the basis of the whole floor. Apart from the proportioning the whole plan of the second floor, the architect also managed to build proportionate separate rooms, functionally tie them.

Consideration of creative techniques of Chilhujra builders identifies two periods of constructions of the castle; however, U. P. Pulatov believes that there were three or even four periods of construction (Pulatov, 1975, p. 150 and next). Note that the planning structures of both stages of construction of the building were designed and subsequently realized at various times as finished, aesthetically sensible compositions. It seems to us that the offered variant of reconstruction of the castle with a system of yards most of all resembles the image of Ustrushana’s keshk Chilhujra (fig. 38). It demonstrates the first stage of fortress construction, evidently reflects that endless diversity of individual solutions that was substantiated by specific natural conditions of a mountainous area (Negmatov, 1977, p. 13). While building a sentry post, architects used a simplest, square diagonal-based technique of proportions; however, in the second period of construction, in making the building a residential castle they applied a more sophisticated technique of harmonization, artistic-aesthetic interpretation of all rooms of the second floor. However, this required an extension of the castle’s foundation using bypassing corridors around the nucleus. The construction of a yard with a gate tower and one-storey residential and utility rooms should be referred to the same period. A certain-type proportional construction - a system adopted by Ustrushana architects - is an extremely important fact for the interpretation and generalization of the building practice of the early medieval period. The existence of a theory of construction of architectural forms in the creativity of masters of the 6th-10th centuries makes it possible to identify construction techniques of that period as an art of architectural designing. A research work of M.S. Bulatov confirms the existence of a common, strictly developed typology of buildings and a concept of proportions of architectural forms in the medieval East, testifies the high artistic culture and width of aesthetic architectural outlooks (Bulatov, 1978, p. 307).

The material above makes it possible to generalize some regularities of the architecture of civil constructions of Ustrushana:

1. Rural folk dwelling, in terms of its planning characteristics, is subdivided into three groups:
 - The first group consists of compact, single-row ribbons of sectional dwelling located as terraces at slopes of a hill. The interior is formed of residential and utility rooms unified into separate cells;
 - The second group consists of complexes of continuous sectional-type utility and residential stone constructions, which are the independent units of small families, i.e. an interim link between the large tribal house and mansion residences of private house-owners;
 - The third group of dwellings of peasants is characterized by the planning of a building vestibule, around which there are formed the building’s residential and utility rooms.
2. Urban residential houses are subdivided into two types: defensive type (a palace or a fortress) and a non-fortified continuous residential area. The first type of the dwelling is characterized by the existence of palace, temple and fortification rooms in a complex.
3. Urban continuous residential area consists of four groups of planning:
 - The first group includes series of rooms located in the form of sections separated into functional areas;

- The second one represented a compact continuous area of isolated sections that consisted mainly of an entrance vestibule, a living room and a front room;

- The third one comprised the dwellings of aristocratic nobility including entrance vestibules, front column halls with a richly decorated interior;

- The fourth one was characterized by a multi-room centric-type living house with a central square hall surrounded by rooms of various designations.

4. Castles-*keskhs* were divided into:

- Castles with the centric planning;

- Front ones with the yard-vestibule system of planning;

- Castles with the individualized planning characterized by the existence of reception halls.

Cult and memorial constructions. The distinction of Ustrushana cult architecture is that Zoroastrianism, Mazdaism, Manichaeism, and Buddhism coexisted in the Central Asia Mesopotamia in a pre-Islamic era. Acquaintance with the religious beliefs and folk rituals in the territory of Maverannahr helps identify the image of a series of public-cult constructions that were mentioned in religious texts (Gafurov, 1972, p. 284).

Materials of Central Asia scientists and travelers, legends and folk epics, and written sources inform about “otashkada” and “butkada”, i.e. “houses of fire” and “houses of idols.” A “History of Bukhara” mentions a great number of fires around town (Narshahi, 1897, p. 25, 30, 31, 40). Tabari mentions “a house of fire” and “a house of gods” of the Bukhara settlement Tavavis (Bartold, 1927, p. 14). In his work “Monuments of the Past Generations”, prominent Khorezmian scientist of the 11th century Biruni describes holidays of Sogdians in a fire temple of the village Ramush (Biruni, 1957, p. 258). According to sources, many years after Islam was established they in Ustrushana continued to worship their idols in respective sanctuaries (Annales..., 1879-1901, III, p. 1309).

Material culture monuments are also an eloquent testimony to the existence of various religious beliefs. The discovered number of ostadans-cemeteries in various regions of Maverannahr (a cemetery of the 6th-7th centuries at Kyfurkala in Samarqand, as well as cemeteries in Paykend, Khorezm, and Kubatau near Ustrushana’s Zaamin) are indicative of Zoroastrianism. Buddhism was spread widely over southern regions of Central Asia starting from the Kushan period, as testified by monuments located at the Right Bank of River Amu Darya in South Tajikistan (Strelkov, 1927, p. 23-30; Masson, 1939; Grek, Pchelina, Staviskiy, 1964).

Do these cults of fire represent idols or deities? Having examined in details all reports of sources about “temples of fire” and “temples of idols”, A.M. Belenitskiy concluded that they (the cult of fire and the cult of idols) existed separately, belonged to the Zoroastrian religious system (Belenitskiy, 1954, p. 52-62). Though no strict dogmatism was developed in this religion of Central Asia (unlike Persia), it transformed into “Mazdaism” after having provided a certain influence on local heathen cults (Yakubovskiy, 1954, p. 21-22; Bolshakov, Monchadskaya, 1953, p. 88).

Other religions were also spread in Maverannahr. Some scientists tend to think that the position of Buddhism at this time was not firm, as it had been pulled out by other religious beliefs (Gafurov, 1972, p. 289; Belenitskiy, 1954, p. 39). However, other scientists believe that in the early medieval period Buddhism was spread over not only Sogd but also Mesopotamia and Fergana. Moreover, on the basis of written sources they concluded that Buddhism had a certain influence on Ustrushana (Litvinskiy, Zeymal, 1971, p. 124, 125) and so had Zoroastrianism, Manichaeism, and local cults (Belenitskiy, 1954, p. 58; Negmatov, 1959, p. 145). Christianity (Bartold, 1964, p. 275) and Manichaeism (Belenitskiy, 1954, p. 39-52, 62-81) took its roots in the early medieval Mesopotamia.

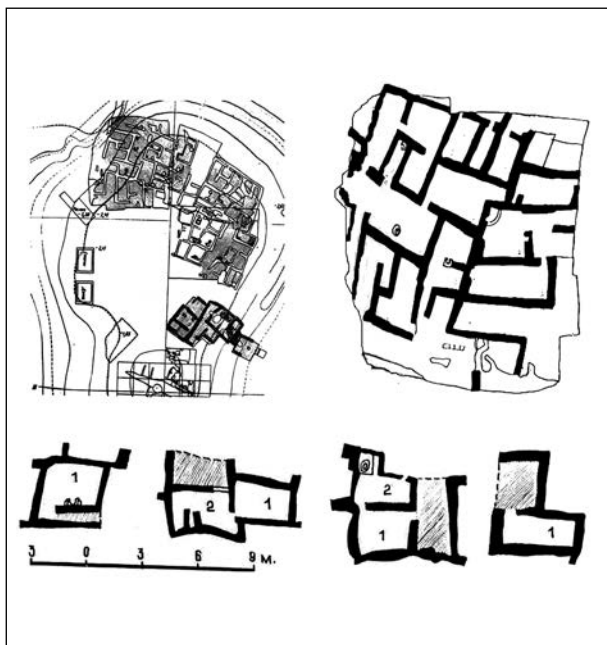


Fig. 40. Ustrushana. Residential «sections» in the settlement Karabulak, 11-12th centuries.

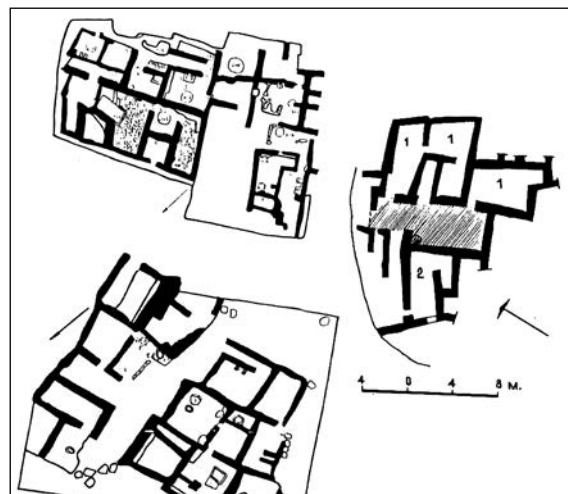


Fig. 41. Ustrushana. Residential house in the settlement Karabulak, 11-12th centuries.

Fig. 42. Ustrushana. Karabulak settlement. Fragments of archaeological dig (upper left – settlement with feudal castle), 11-12th centuries.

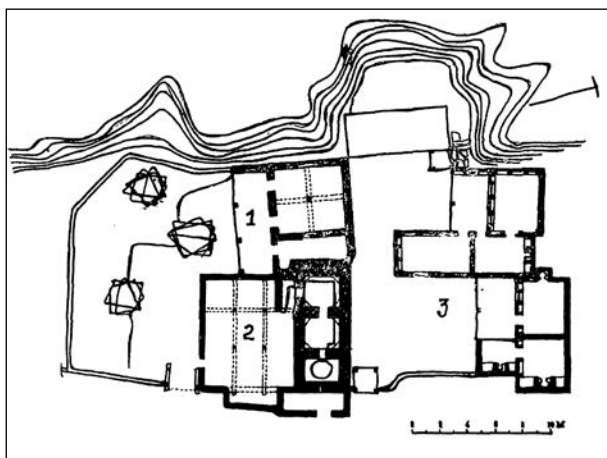


Fig. 43. Complex of bathhouse and mosque in the village Dasht. Plan: 1 – mosque; 2 – bath-house; 3 – two-part residential house in Old Matcha.

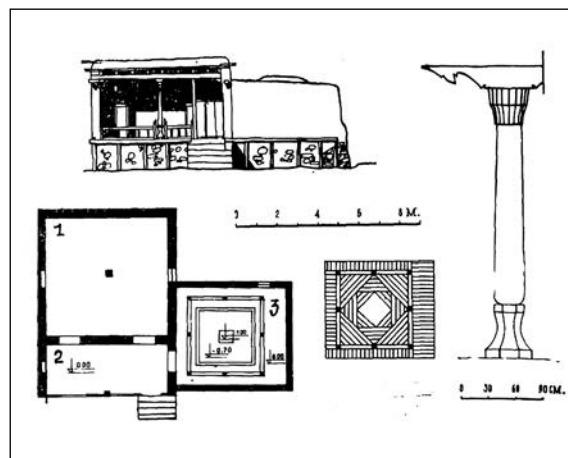


Fig. 43A. Mosque with school in the village Esiz in Old Matcha. Façade, plan of dars honeh plafond; ayvan column: 1 – winter room; 2 – ayvan; 3 – dars honeh room.

A variety of religions in Maverannahr substantiated syncretism of local beliefs (Gafurov, 1972, p. 289). The diversity of Central Asia religious system is confirmed by the existence of material and artistic culture monuments, particularly, temples of various cults. For instance, in the south regions of Central Asia there have been discovered Buddhist sanctuaries, cave cloisters, as well as sculpted images of the religion's founder (Albaum, 1958, p. 9-10). In Khorezm area there were excavated "a house of fire" in Janbaskala, "a temple of fire" in Toprakkala, and a "chapel" in the palace Teshikkala (Tolstov, 1948, p. 95-98, 123, 142, fig. 62, 81, table 34). In the South Turkmenistan there have been found remains of Haroba Koshuk, a Christian church of the 5th-6th centuries (Pugachenkova, 1958, p. 60. 79 and next), in Penjikent - local cult temples (Voronina, 1960, p. 44), while in Fergana there has been identified Gayrattepa, a Zoroastrian temple. Besides, in Central Asia there have been identified sanctuaries - urban, palace, castle and even house chapels (Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 28-37; Pulatov, 1958, p. 140, et al) which reflect deep local roots.

Not only material and spiritual culture monuments were destroyed as the Arabs invaded the region in the 7th-8th centuries. Forceful introduction of a new religion - Islam - led to a change of the spiritual world outlooks of the population. However, this could not interrupt the succession in the sphere of material culture and art. Local architects, potters, metalworkers continued the traditions of their ancestors through developing them in the established conditions of public relations (Abdullayev, 1977, p. 175-176).

As for cult architecture, ancient Zoroastrian temples had to serve for the new religion the conquerors had brought. In a post-Arab period they performed new functions with the further strengthening of the old form as a traditional, typical one. Particularly, sources inform about the facts of converting pre-Islam cult buildings (a sanctuary of idols in Bukhara at the site of mosque Magoki Attari, the temple of Jupiter in Damascus subsequently converted into a synagogue, a church, and a mosque, as well as a Christian church in Taraz) into a mosque. (Pribytkova, 1969, p. 209-210). Some of them comprised the basis of the structure of column-cupola mosques that developed until the 19th century, while others formed the basis of a type of column mosques with a flat beam roof that remain in use at present.

The structure of a temple-otashkeh in the form of a four-arched open kiosk formed the basis of the composition of, say, chortak. That the Bukhara-based Samanids museum has four small cupolas at the quadrant roofing angles associated with the keeps of early Central Asia feud lords is explainable only as a tribute to pre-Islamic architecture traditions. Naturally, examples above do not cover all the sides of cult architecture prior to and after the Arab invasion. In each separate region of Maverannahr forms of the cult architecture, monumental painting and sculpture got local features due to certain ideology and local traditions of architecture. This is clearly illustrated by study of cult monuments in the territory of Ustrushana.

Temples in sanctuaries in civil constructions. Excavations carried out in the territory of Ustrushana by the North Tajik archeological expedition allowed discovering not only sanctuaries-chapels in palaces and fortresses, wooden idols in Chilhujra but also a "House of Fire" at Aktepa near Nau, a moss at Chorshokhatepa near Shahristan, Kurkat rocky mounds with ossuaries and khum graves. All this indicates on "a special local variant of Zoroastrianism that combined elements of canonical Zoroastrianism with idolatry and other deities and cults (Negmatov, 1977, p. 17). This means that the religious ideology of Ustrushana residents hardly differed anyhow from that of Sogd (Gafurov, 1972, p. 292) which is testified by not only the manner of ossuary burial but similarity of the language of Ustrushana residents with that of Sogd as well (Livtshiz, 1962).

The first “House of Fire” in Ustrushana was discovered at Aktepa near Nau. The whole complex is nearly square, has four round towers and a series of loopholes (fig. 48). The building consisted of a central room-chapel and a four-side bypassing corridor resembling Parthian temples Hatry and Kukhi Hoja explored by E. Herzfeld in the 1930s (Herzfeld, 1933, p. 88-93, fig. 12, 13, tables VII-X). In the opinion of U. Pulatov, such interpretation is favored by the remains of a rectangular Adobe-brick construction where a holy fire hearth can easily be guessed (Pulatov, 1977, p. 78). A secret underground corridor in the form of an arch-brick vaulted entry should be considered as a local peculiarity. The Aktepa “House of Fire” dated back to the 4th-6th centuries was later on expanded, turned into a whole complex at the expense of various annexes.

Study of Ustrushana’s funeral rites helped identify three kinds of graves: 1) ground, pit graves: the sepulchres of Shirinsay, Tepai Pirmuhammad, Zosun, etc. dated back to the 1st-8th centuries; 2) ossuaries and khum graves - the group of monuments Obi Jomak, Sitoraktepa, etc., 3) tomb burials at the mountainous settlement Kurkat. The tombs were cut in the rock, had a spacious entry chamber (6-11 square meters) and a small niche where the deceased was buried (Mirbabayev, 1980, 295-302).

No less interesting information can be obtained from the very burial constructions - “dahmas” - designated, according to religious prescriptions, for cleaning the dead body’s bones from flesh. No true dahmas were known in Central Asia until lately. In the view of V. L. Voronina, the absence of special dahmas is explained by that their use was not associated with the ossuary burial rite (Mirbabayev, 1980, p. 295-302). Potter’s furnaces (for example, Kalalygyr, the 4th-3rd centuries B.C.) or hilltops covered by wattle and daub walls (Khorezmian Chilpykkala) (Tolstov, 1948, p. 71, 72; 1953, fig. 14-15) used to serve as a dahma.

No dahma has been found in Penjikent; however, the procedure of cleaning from flesh could take place at a hillock near a citadel of the site of settlement. Besides, the archeological excavations in Ustrushana led to discovery of a burial complex located south of the Shahristan (Negmatov, 1977, p. 41). The excavation of the highest hill of this group - Chorshokhatepa - allowed scientists to discover a kind “dahma of silence”. It represented a monolithic cubic wattle and daub volume with a ritual construction on top of it. To be frank, the absence of remains that once crowned the dahma makes it no possible to reproduce a specific image of a distinctive cult element; however, their presence in Ustrushana is to a certain extent confirmed by information about the character of architecture of local Zoroastrian cult.

Forming a special group of cult constructions are home chapels-sanctuaries identified in castles and palaces of pre-Moslem Ustrushana. Similar specimens have been found at Central Asia monuments Teshikkala (Tolstov, 1948, p. 41), Balalyktepa (Albaum, 1960, p. 87, 117, 203-2040, site of settlement Afrasiab, a palace of Varakhsha (Shishkin, 1940, fig. 1, 2; 1963, p. 54, 59), in Minor Kyzkala (Pugachenkova, 1958, p. 138), and castle Aktepa near Tashkent (Voronina, 1953, fig. 23). A distinctive peculiarity of these cult constructions is the existence of a cupola ceiling. In the view of scientists, the artistic effect of a high spherical sub-cupola space caused an association with the vault of heaven (Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 33).

Rooms with cult designation have also been found at the monuments of Ustrushana civil architecture of the 6th-8th centuries (fig. 47B). They are the home chapel at Urtakurgan, a cupola room-chapel in Chilhujra, Gardani Hisor (p. 34; Pulatov, 1975, p. 140; Yakubov, 1979, p. 132-134). Of interest is the structure of the Urtakurgan sanctuary with a cult altar. The entrance of a square room is formed as a deep ayvan-vestibule, width of which is equivalent to that of the very room (Negmatov, Pulatov, Khmel'nitskiy, 1973, p. 29). Semi-round niches framing the corners of the ayvan reflect the

architect's desire to accentuate solemnity of the entrance. The combination of the entry vestibule with a square vaulted room resembles a composition of portal museums (p. 30). The closest analogy of this composition is an ancient Penjikent shahristan's object III where the entrance of one of four-column halls is also formed as a niche, of larger sizes though.

Of no less interest is the room 12 in a palace-type fortress Gardani Hisor: this room is a sanctuary. The entrance of a rectangular room (4.80/40m) is formed as a small rectangular corridor-vestibule separated from the rest part of the room by two thin walls. An altar - a shallow Adobe niche formed as two columns and a hearth at the wall - is located at a small stage in the compositional center of the southern wall (Yakubov, 1979, fig. 32).

Remains of elements of the altar of Gardani Hisor make it possible to assert that they resemble the hearths of ancient Penjikent, particularly, the building III (Voronina, 1957, p. 120, fig. 4). The Penjikent and Gardani Hisor hearths find a broad circle of parallels. Such a form of hearths was known in Khorezm (Tolstov, 1950, fig. 26), at Afrasiab (Rempel, 1953, p. 27, 28, fig. 3), in North Afghanistan (Ghirschman, 1946, fig. 16, 17). In the opinion of V. L. Voronina, they, as a matter of fact, were the basis of formation of composition of mihrabs, for instance, the Iskodar one (Voronina, 1957, p. 138). Thus, study of sanctuaries above gives an additional material to comprehend religious beliefs of the population of ancient Ustrushana.

Mosques. For Maverannah architecture the 9th-10th centuries were a breakthrough as they signified an unprecedented rise in development. This was caused by not only the new form of public ideology-Islam but also the settlement of rural populations in urban handicraft-cultural centers. As a matter of fact, the architecture of the reviewed period not revived but completed a pre-Islam architecture direction with principally new techniques. The succession of traditions played the determinative role in this. That's why many temples of pre-Moslem cults were converted into Moslem mosques (Bartold, 1927, p. 12).

The most impressive example of an early medieval monument opening the whole world of inimitable images and subjects is a multi-column hall at the southern wall of the fortress Kalai Kahkaha I unearthed within the urban structure of Bunjikat (Negmatov, Avzalov, Mamadjanova, 1979, p. 580; Avzalov, 1980, p. 37).

On the whole, a rectangular hall from the south adjoins the town's wall that repeats the natural bent of the slope of the hill, and from the west has a common wall with the eastern "section" of the quarter's residential area. It seems that the northern wall with the entry passageway, like the corridors of dwellings of common urban residents, led to inside the town-towards a square or a street (Negmatov, 1973, p. 1240. The hall is large (14.7/13.2 m). A remarkable distinction is the abundance of wooden beams located lower than the level of the cleaned floor and formed as ledges over it. There is clearly detected a net of beams with the same step, either longitudinal or transversal (fig. 47A). The bulk of columns - 90 out of 98 - form a regular net with nine rows directed north-southwards and ten rows-west-eastwards. The distances between the beams are 1.5-1.64 m. A rather constant size makes us suggest a special module applied by ancient architects under the construction of this building. Indeed, studies in the sphere of proportioning demonstrate that the nations of Central Asia yet in antique and medieval times used poles that formed the basis of modularity (Buzjani, 1966, p. 56-70; Bulatov, 1953; Voronina, 1953; et al). Assuming that one of these poles, for instance, gyaz is equivalent to the initial module, it appears that the step of the columns of the reviewed hall is equivalent to 2 gyazs, i.e. 2 meters. Evidently, the system of proportioning was used throughout the building. The ancient

architect applied a technique of building on the basis of the system of diagonals, i.e. used the relation of the diagonal of two squares to the side.

It is essential to note that the cleaned foundation of the hall was most likely of later origin than the whole complex of the town's developed area dated back to the 7th-10th centuries (Negmatov, 1973, p. 124). Such a view is confirmed by the fact that wooden beams-columns were largely put 70-80 cm deep into the floor, located at flat stone "pillows". The hall's western wall has, approximately in the middle of it, a wattle and daub ledge with a deep vaulted niche faceted by brick and plastered by clay mortar. An interesting detail of this wall is that it contains small, 3-4 cm-diameter hollows. They are located on one side of the wall, 47 of the level of the floor, along a horizontal line at a distance of 25-26 cm between them. Generally speaking, this is a description of a multi-column hall where carved columns were the main decoration.

Woodworking played an important role in Central Asia architecture: this is testified by either historical sources (Narshahi, 1897, p. 30) or discoveries of the real architectural remains, the number of which increases from year to year (Andreev, 1925; 1927; Bachinskiy, 1947; Voronina, 1950, 1977; Ruziyev, 1976; Negmatov, Khmel'nitskiy, 1963, et al).

Comparisons of the plans or sections of forms of columns have made it possible to divide all the conserved columns (43) into 5 stylistic groups. The first group - 10 columns - comprises ones of multi-petal form. The second type of columns is unified into a single group with the common form of a "butterfly". There are 15 such columns. The third type of columns can also be referred to zoomorphic: the heart-shaped section is a clear resemblance of the form of beetles, insects: 9 such columns have been discovered. Not numerous columns depicting a royal crown or helmet can also be singled out as a separate stylistic four-column group. The latter group of columns represents sectors of a circle or a combination of semicircular curves.

The remains of columns of a hall at the Bunjikat shahristan impress us primarily by the absolute dissimilarity of the forms of wooden beams with the established traditional wooden forms of Ustrushana and Penjikent of the early medieval period. Nearly every conserved lower part of columns has a form of a vertical beam without any segmentation with various zoomorphic pictures that find no parallels with either Central Asia or ancient Orient patterns.

Thus, this is a multi-column hall of clearly not residential but public designation. This is proved primarily by a relatively large size of the hall with numerous columns. Comparable with it is only a three-tier front hall of the palace of Ustrushana afshins, which is one of the largest early medieval palaces of the Central Asia. However, none of the known public buildings of the 7th-8th centuries of Ustrushana and its neighboring Sogd has analogies with the multi-column structure of the hall. What is the designation of this hall? Is it a cult building?

N. N. Negmatov believes that a local variant of Zoroastrianism with idolatry and worshipping the deities of other cults existed in Ustrushana (Negmatov, 1977, p. 17). We cannot suggest that this construction was a house of fire because there is no traditional planning of a round passing sanctuary here. Possibly, the hall was the house of idols, for local cults in the form of worshipping nature's spirits - stone, wood and water - were widely spread in Ustrushana and Sogd (Shishkin, 1963, p. 208). Yet since the deep ancient times the elements of religious beliefs and them-related understanding of the magical meaning of selected motifs in Central Asia Mesopotamia's architectural ornament were depicted because the images of fauna and flora were regarded as ones useful, necessary for the well being of people (Rempel, 1978, p. 182). One of such motifs is a picture of the royal crown having specific symbols relating to Zoroastrianism. The existence of depictions of emblems on ancient Zarafshan

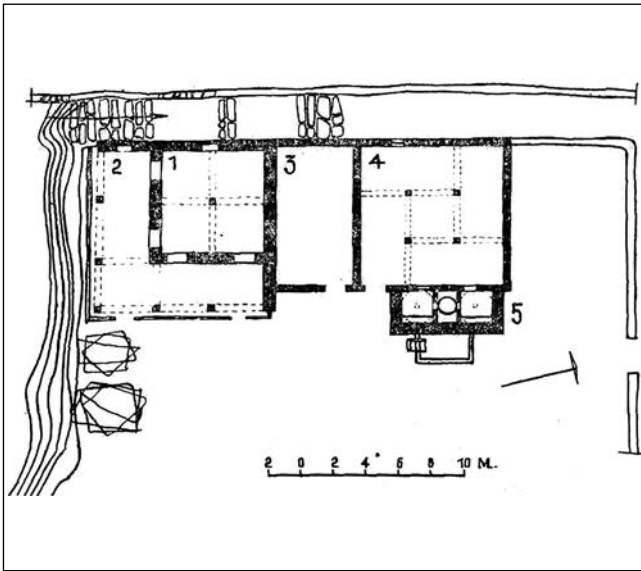


Fig. 44. Mosque with bathhouse in the village Sanghiston. Plan. 1 – winter room of mosque; 2 – ayvan; 3 – room of darshoneh; 4 – dressing room; 5 – bath group of rooms.

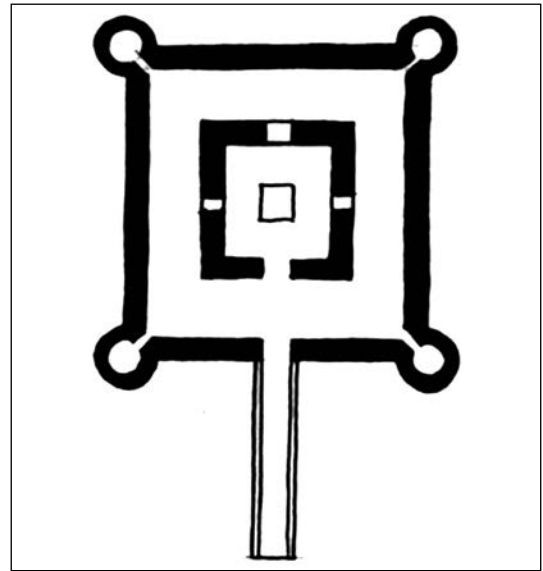


Fig. 45. Ustrushana. Temple of fire in Aktepa. Reconstruction of plan, 7th century.

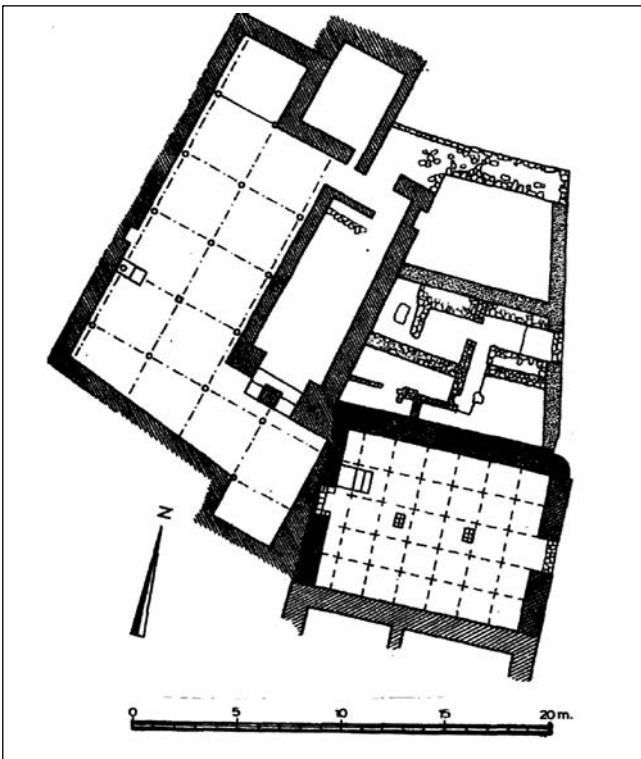


Fig. 46. Bundjikat. Mosques in the complex of stone buildings Childuhtaron, 11-12th centuries.

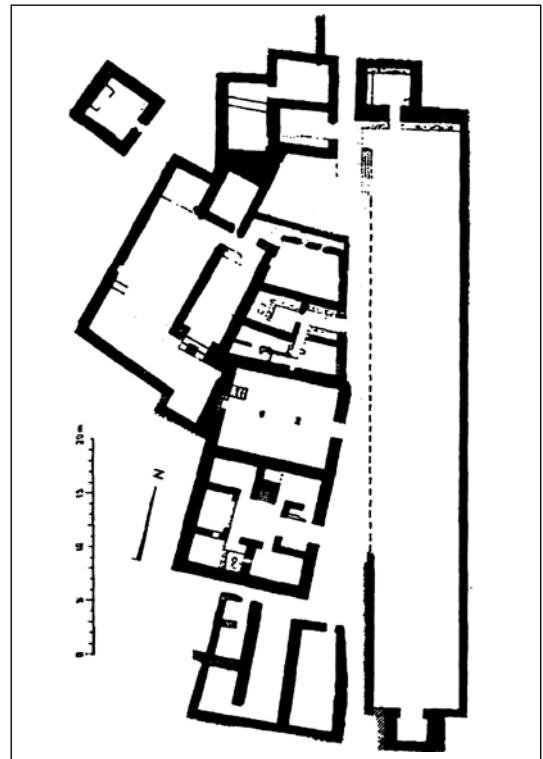


Fig. 47. Ustrushana. Ensemble of stone buildings Childuhtaron, 9-10th centuries.

columns demonstrates that the latter were not simply an architectural element but a certain belonging to a relicts-containing cult (Voronina, 1950, p. 217). These same images could also take place on the pictures of sections of hall columns where various forms of zoomorphic images, plants are relating to the symbols of Mazdaism (Lukonin, 1968, p. 46, table XVI (A-G); Creswell, 1932, p.199, 200, fig. 223-230).

Indeed, the similarity of the plans of columns with the forms of flora and fauna confirm to this suggestion: the images of wooden columns of the temple hall have links with certain symbols pertaining to the heathen, shaman ideas of Ustrushana residence. This is also the explanation of the existence of horizontal beams put above wooden figured bars along the southern wall. Here there was probably formed a narrow wooden niche-entresol where wooden idols similar to the ones found in Chilhujra were placed (Mandelshtam, 1954, #2, p. 97).

With these facts in mind, we and researchers-archeologists believe that the multi-column hall was a “temple of idols” and, hence, confirm the suggestion that the Central Asia form of Zoroastrianism represented a combination of fire worshipping and idolatry. In this case they in the case worshipped not only the wooden idols-statuettes but also the wood in the form of numerous columns. Furthermore, the very column, as A. Pope asserts, depicted a holy tree: this symbolical image was common for the West Asia art (Pope, 1933).

As is known, Islam that established itself in Central Asia in the 7th-8th centuries gave impetus to the appearance of buildings of new designation-mosques. It seems quite appropriate that the Arabs initially used buildings, the image of which corresponded to the ideological dogma of Islam, as mosques. Multi-column systems of halls where plenty of columns created an illusion of an unlimited space on the whole favored the establishment of the atmosphere of self-absorption and religious ecstasy. As for example, it is possible to cite a mosque in Kordova (10th century) and in Isfahan (12th century) (Voronina, Negmatov, 1974, p. 55).

As for other Bunjikat constructions, “a temple of idols” is the striking example of this image. Its vaulted-column system typical for palace mosques of the Orient was supplied by a column-and-beam structure of a hall with a wooden ceiling and earthen roof. This explains the designation of a ledge with a niche at the hall’s western wall pointing towards Mecca: the ledge was apparently a mihrab niche. Designation of holes drilled, as noted above, in the lower part of the western wall is also explainable. They were most likely holes of wooden pins that were used for pinning wooden panels at the lower part of the mosque’s walls. As for example, it is possible to cite the remains of carbonized planks that boarded the doorways of rooms of the palace of afshins in Bunjikat (Dimant, 1937, p. 294-299), wood-carved panels of the mosque of Takrit (Mesopotamia, north of Baghdad) dated back to the second half of the 8th century. It should be noted that the concept of a multi-column mosque, like the Bunjikat one, was not developed further. The Bunjikat type of symbolical columns - the sense of symbolical images was lost as appropriate cults died out - also was not applied in the order of columns of medieval period. However, in the decorative art of Central Asia of the 9th-10th centuries there was conserved appropriate interpretation of zoomorphic and vegetative subjects that were not removed by Islam for a long period of time (Rempel, 1978, p. 72; Negmatov, 1977, p. 158; Narshahi, 1897, p. 30, 31, 64). The existence of such subjects is illustrative of the continuing struggle of folk traditions and ideas against Islam’s ideology and bans foisted from the outside (Bolshakov, 1969, p. 1421-156).

Thus, an earlier constructed pre-Islam cult building through minor changes (raising the floor’s level, forming a ledge with a mihrab niche, decorating the interior as a wooden panel) was converted into a mosque where perception of the artistic image of a multi-column darkened interior of the hall

caused the atmosphere of tranquility necessary for prayer rituals of Moslems. In North Tajikistan and so throughout Central Asia there have not been conserved early types of mosques characterized by written sources as “roofed”, i.e. roofs having the wooden support. For them there was borrowed a plan of earlier Arab mosques, i.e. the inn surrounded by a gallery with wooden-support roofing (Pribytkova, 1969, p. 209). There have only been conserved some mosques with brick posts: the mosques Dandanakan in Turkestan, Mokh in Bukhara and Chor-Sutun in Termez. The architecture of these earlier mosques reflected the then evolution of spatial structure that under the impact of local ancient traditions acquired a more usual central-doom-shaped structure. However, this structure did not inculcate in the seismic conditions of Central Asia (p. 210).

However, it'd be wrong to say that the existence of such a unique construction did not influence on the architecture of Central Asia. Multi-post ayvans-namazgoh owes its formation to the Bunjikat multi-column hall. Their simplest variants are found in the folk architecture of North Tajikistan. Possibly, one of the stages of formation of a closed multi-column hall with a prayer niche was a partial opening of the space that made it possible to create a multi-column vestibule and a spatial area in front of it. This led to a positive solution of the matter of capacity of mosques, especially on the days of great Moslem holidays. Besides, a roofed vestibule protected against heat in during the midday and daytime prayers (Negmatov, Khmelnitskiy, 1966, p. 195). Cutting the southern wall of Kalai Kahkaha I has identified that the lower part of the wall was supported by a thick pebble-stone slope that, in the view of N. N. Negmatov, made the wall stronger against battering rams (p. 41, fig. 18). Special references assess such sloped buttresses as anti-assault ones (Ogorodnikov, 1950, p. 47).

Thus, consideration of types of mosques, their genesis and evolution makes it possible to say that the architectural-spatial structure of these constructions bears the succession of pre-Islamic traditions of not only cult but also civil architecture. In the period of establishment of the Tajik medieval architecture form-building process resulted in the selection of universal forms of separate kinds of buildings. While the multi-column structure of the “temple of idols” was not further developed after it served to the new public-cult formation for a certain period of time, the structure of pre-Islamic front four-column halls of palaces and fortresses of Ustrushana and Sogd, having transformed itself, in the Arab era found a new solution in the image of quarter mosques and other constructions of folk architecture.

Analysis of material disclosed in this chapter makes it possible to formulate conclusions regarding common regularities of development of cult architecture in either the 6th-8th centuries or the 9th-10th centuries:

- The cult and burial architecture of Ustrushana of the 6th-8th centuries represented by the “temple of idols”, burial construction of “dahma” type, tombs and mosques developed in general line with the cult typology of Central Asia on the basis of deep local traditions;

- Home sanctuaries in civil constructions of Ustrushana acquired the form of a dome-shaped room with a cult altar in the middle of it and an entrance ayvan-vestibule. The structure of local sanctuaries-chapels resemble that of a generally spread type of cult cells of castles, palaces and fortresses of Central Asia;

- The architecture of Central Asia was added by a type of cult pre-Moslem architecture - the “temple of idols” earlier known from written sources only;

- The Bunjikat multi-column mosque is a prototype of Central Asia column namozgoh;

- The wooden order of Central Asia was added by unique columns-symbols.

Engineering constructions. Fortification walls and barracks. Care about security of settlement was displayed primarily through choice of its location. Ustrushana medieval towns were formed at scrolls, on rocky plateaus, etc. A successful choice of the place provided natural defense of a site from two or even three sides where it was unnecessary to erect fortification walls. The type of fortification constructions was closely linked with the level of development of military hardware: kinds of weapons and techniques of battle. Wattle and daub and Adobe were the key building materials used for erecting fortifications (town walls, towers, gates, and citadel).

Living beyond fortified walls was dangerous in the severe, bellicose early medieval period. That's why towns of Ustrushana, like those of the whole Central Asia, were obligatorily surrounded by strong walls that defended not only town residents but also residents of the agricultural outskirts in case of danger. The shahristan of Bunjikat was surrounded by a strong wall (the southern wall's foundation is about 8 meters thick and more than 11 meters high) with fortification towers. In the north and partially in the west the walls were doubled for the reasons of strengthening the town's defense capability. Moreover, the shahristan itself was surrounded by a chain of fortified settlements. In the view of N. N. Negmatov, this phenomenon is not typical for other urban centers of Ustrushana, demonstrates "the existence of a thoughtful local fortification system" (Voronina, 1959, p. 94). Thus in Bunjikat, like in the ancient Penjikent, we're observing the initial stage of development of a certain element of fortification.

Bunjikat walls often form angles due to the complex relief of the locality. From the most vulnerable, northern side of the town the fortification line has double walls where the outwall is a bit lowered as compared to the interior wall. The double line of walls also existed in Kalai Kahkaha II, while ancient fortifications of Istravshan consisted of a triple row of walls (Voronina, 1964, p. 43, fig. 1). We can only guess whether there existed a line of loopholes, for the upper part of the fortification walls of Kalai Kahkaha has not been conserved. In early medieval constructions they were usually located over the gallery floor at the ledge of parapet. The loopholes were put at a distance of 1 to 6 meters between them (Hojaniyazov, 1981, p. 16). In the monuments of antique Khorezm loopholes were located at a distance of 1 to 2 meters between them (Voronina, 1964, p. 43, fig. 1). At the wall facade they were distinguished by arrow-shaped form of inclined Adobe bricks (Voronina, 1959, p. 95; 1957, p. 116). From outside the town walls were often supplied with a moss that was also located between the double walls, like in Kalai Kahkaha II. The defense line was created as a result of using clay at the foot of the walls.

Key centers of defense of town walls were fortress towers (there were some 15 of them) put at the angles of the turn, at most vulnerable places. Kalai Kahkaha I had rectangular (the width of the conserved towers in the southern side was around 6 m, open-type towers. They jutted out from the wall's plane outwards or strengthened with their ledge the angles of walls; distances between towers were different, for instance, the distance in southern wall oscillated from 10 to 20 m. Tower was usually higher than wall; however, we believe that here in the shahristan of Bunjikat they were of the same height. Apart from angular and wall towers in the site of the town there have been conserved up to 7 extension towers on the eastern, southern and western sides. This system made it possible to strengthen the flanking fire against the enemy. This type of a fortified construction was a typical peculiarity of medieval fortification (Hojaniyazov, 1981, p. 47-49). For example, an extensive tower safeguarded against getting access to the southern gates of the Penjikent shahristan.

Emphasis was laid on the fortification of entrance gates. Researcher of antique fortification of Khorezm G. Hojaniyazov singles out three types of gateways: 1. gate labyrinth; 2. gate tower; 3.

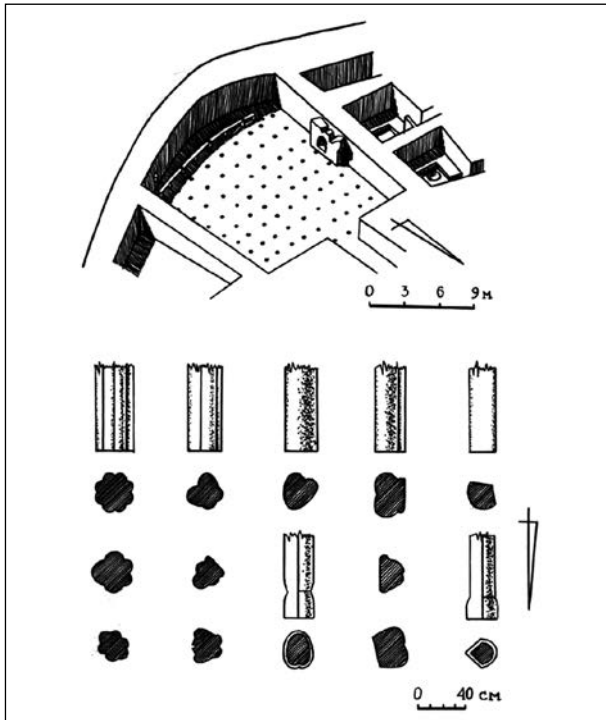


Fig. 47A. Kalai Kahkaha I. Temple of «idols». Axonometry and classification of positions, 7-9th centuries.

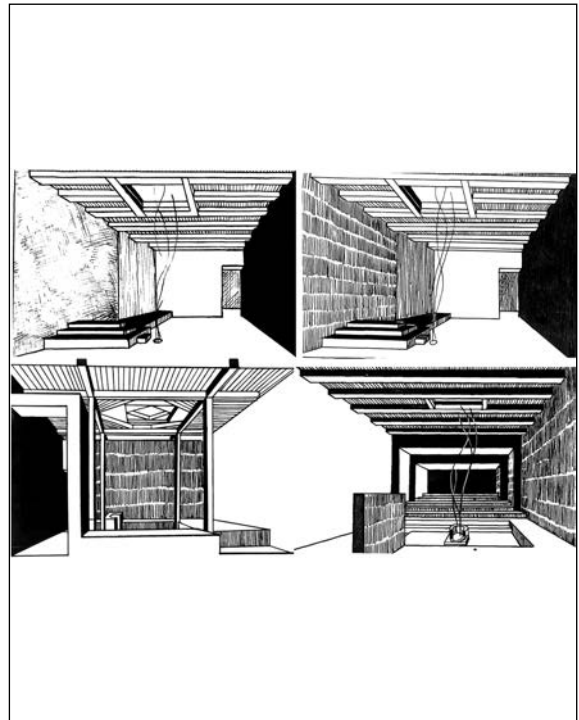


Fig. 47B. Ustrushana, 2-8th centuries. Graphical reconstruction of interiors of domestic sanctuaries of site Kalai Kahkaha I.

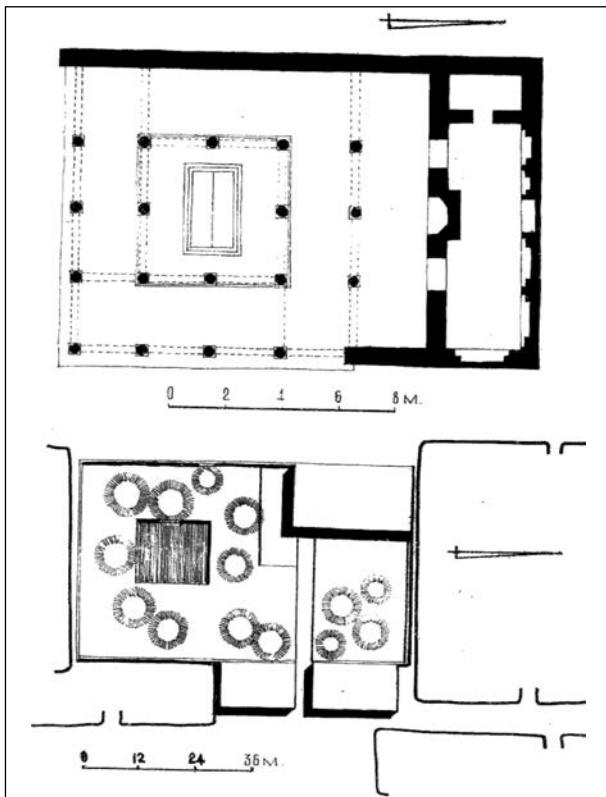


Fig. 48. Asht region. Mazar hashtsabo Vali in the village Asht, 8-9th centuries. Plan of mazar and area with adjoining side streets (1987 measurements).

simple type without additional devices. In his famous treatise ancient Roman architect Vitruvius recommended placing ramps so that enemy warriors were turned towards loopholes with their right side not protected by shield (Vitruvius, 1936, p. 32-33). It seems that the system of ramp rise along the northern walls of the Bunjikat fortification was also substantiated by strategic reasons.

Analysis of the planning structures of Ustrushana demonstrates that the most popular were the first and second above-mentioned types of gate systems. The northern, main gates of the Bunjikat shahristan were flanked by two gate towers, each approx. 12 meters wide. The road to the town passed here in the form of a ramp rise. The very ramp along the northern walls was used to defend the gates (Negmatov, Khmel'nitskiy, 1966, p. 106 and next). The western gates, as it was no possible to arrange a ramp here, were strengthened by double walls, an angular tower and an extensive tower (fig. 17).

One of typical constructions of defensive designation in the architecture of Ustrushana represented sentry posts that simultaneously served as barrack hostels. These constructions - Tirmizaktepa, a building at Kalai Kahkaha I, a castle at the Mountain Mug, etc. - yield an example of a uniform planning structure called by researchers "a corridor-comb shaped", "linear" or "corridor" one (Voronina, 1959, p. 190-191; Lavrov, 1950, p. 44). The planning scheme of this type of building consists of central corridor and its both sides-adjacent to narrow corridor-shaped rooms-sections interconnected by a corridor with plan's compositional axis. Here we deal with the type of planning that is typical for constructions of a relatively narrow designation, in charge of tasks of defense and deployment of troops. These town barracks (Toprakkala, Varakhsha, Kalai Kahkaha I) or fortified sentry posts (fig. 24, 26, 28) erected at strategically important sites (the castle at the Mountain Mug, Tirmizaktepa, the nucleus of Chilhujra) (p. 44).

Agreeing with many provisions of hypothesis that the corridor- sectional planning was spread elsewhere, it should be noted that it is the earliest technique of planning of a medieval residential house in the territory of Central Asia, expresses the simplest technique of construction of vaulted ceilings. V. L. Voronina believes that the linear system of planning is a distinctive peculiarity of monuments of Sogd, Ustrushana and the upper reaches of Syr Darya. Buildings with such a structure represented "a kind of long houses, a category of constructions established in the conditions of large-family communes of various nations" (Voronina, 1959, p. 191).

In taking into account the opinion of V. A. Lavrov and V. L. Voronina who, as a matter of fact, do not deny the ancient roots of the corridor-sectional planning, genetic links of these roots to the residential architecture, we can suggest our own variant of evolution of this kind of planning from the ancient period to the 19th century. On considering stability and succession of traditions, it is to suggest that in the early feudal period under the choice of a type of building for barracks or fortified posts the most acceptable was the corridor-sectional planning of a dwelling that allowed placing warriors in separate rooms-sections of a house. Also, we share the opinion that "the corridor-comb-shaped" system was further developed in the buildings of madrasah, honako and caravansaries of the developed medieval period and thus determined, to a significant extent, the specificity of the planning and volume-spatial solution of these constructions (Nazilov, 1977, p. 29; The important..., 1963; Derula Murhu, 1967).

Roads, bridges and aqueducts in the territory of the plain part of North Tajikistan are now by-gone. However, in the mountainous regions (for example, in the upper reaches of Zarafshan) it is still possible to detect remains of the engineering artworks, erection of which was based on centuries-old traditions established in specific geographic conditions. Let's give some information about them.

Roads and mountainous passes have since ancient times been the only link of mountainous settlements with the surrounding world-towns and trade and administrative centers. At steep slopes of the Upper Zarafshan roads were laid through cutting a part of a mountain and constructing stone support walls. That is how roads in all mountainous regions of Central Asia, the Transcaucasia and outside East were built (Kislyakov, 1966). At steepest rocks there were formed overhangs or *rafak vori* representing cantilever extensions of rock beams with a boarding of brush and earth (Voronina, 1961, p. 28).

Like in other mountainous regions of Central Asia, bridges were erected of wood through the use of gradual lapping of beams within a single span without interim supports (Rahimov, 1966). To transport water through mountainous rivers, there were built aqueducts that in the mountainous Tajikistan acquired the form of wooden channels on stone or wooden supports (Rahimov, 1966). The system of wooden or sometimes stone aqueducts is typical for the mountainous regions of Uzbekistan as well. Vaulted constructions were used in the majority of case of construction of aqueducts in Armenia and Dagestan (Khalpakhchyan, 1964).

Irrigation constructions (canals and carizs). As waters of the deep canyon Zaravshan were inaccessible, construction of canals had been practiced in the mountainous part since ancient times. In the Old Mach there have still been conserved several canals of ancient origin - Mugovod in Paldorak, the canal Ohuna in Kabutbunda, as well as the canal Bahodura, erection of which was ascribed to definite persons (Hamijanova, 1974, p. 22). Construction of canals-water pipelines was always accompanied by hardships, especially when main centers were located high in the mountains or in deep gorges. These canals are currently recognizable due to a smooth dark strip of verdure against the gray background of the mountainous slope.

Another kind of irrigation constructions - cariz - was designated for water supply to waterless areas of Ustrushana through underground galleries (fig. 49). Systematic study of the ancient irrigation constructions in the territory of the region by the North Tajik archeological expedition has made it possible to identify a series of large remains of these ancient works of the engineering art (Bilalov, 1975, 169-178; 1977, 219-230; 1978, 165-178; et al). One of the largest carizs was located at the settlement Kurkat. The entrance of the cariz is formed as a dome-shaped construction of a later origin (Bilalov, 1977, p. 221, fig. 2). The construction proper is an underground canal with vertical purification wells and a trapezium-shaped profile of the water pipeline splay. The purification wells having the form of a crater are 40 meters deep. When it was not possible to dig tunnels, particularly, on the slope of terraces, some carizs were built in the form of open channels. More than 40 remains of the irrigation system have been conserved in the area of settlement Kalininabad (Bilalov, 1975, p. 169-178). As has been noted, the capital of Ustrushana Bunjikat was also supplied with water through channels and carizs. Particularly, at the Left Bank of River Shahristsansay there existed a system of carizs that supplied water towards Kalai Kakhkaha (Bilalov, 1978, p. 169). One of purification craters near Kalai Kakhkaha I was identified by O. I. Smirnova and described as an underground prison-zindon (Smirnova, 1953, p. 191).

In the view of A. I. Bilalov, flexibility, universality and thoughtfulness of Ustrushana's interconnected irrigation systems made it possible to supply water to any section from any channel (Bilalov, 1978, p. 177). The being reviewed irrigation constructions were spread over the territories of not only Ustrushana and Sogd but also other countries- Afghanistan, Iran and Armenia (Khalpakhchyan, 1971, p. 12; Voronina, 1960, p. 87-98). The investigation of Ustrushana's engineering constructions demonstrates:

- High level of development of urban fortification adapted for the peculiarities of local natural conditions;

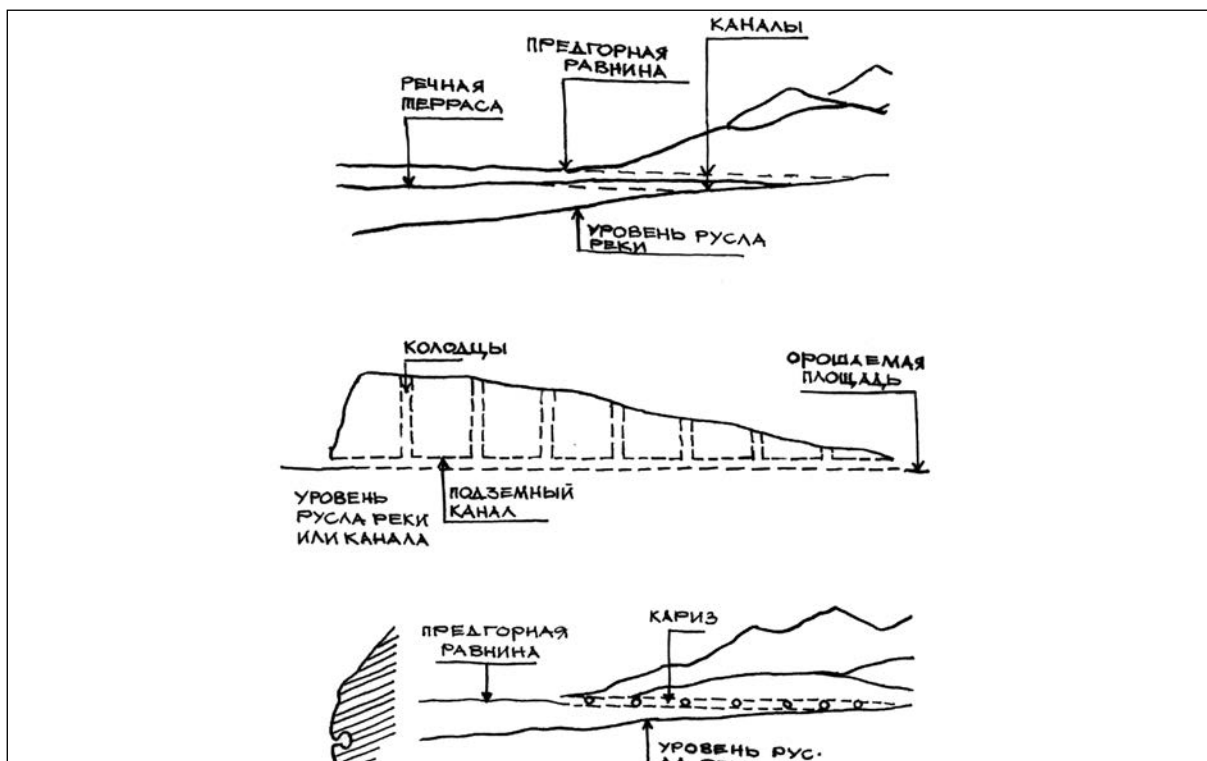


Fig. 49. Medieval kahriz construction scheme. Ustrushana.

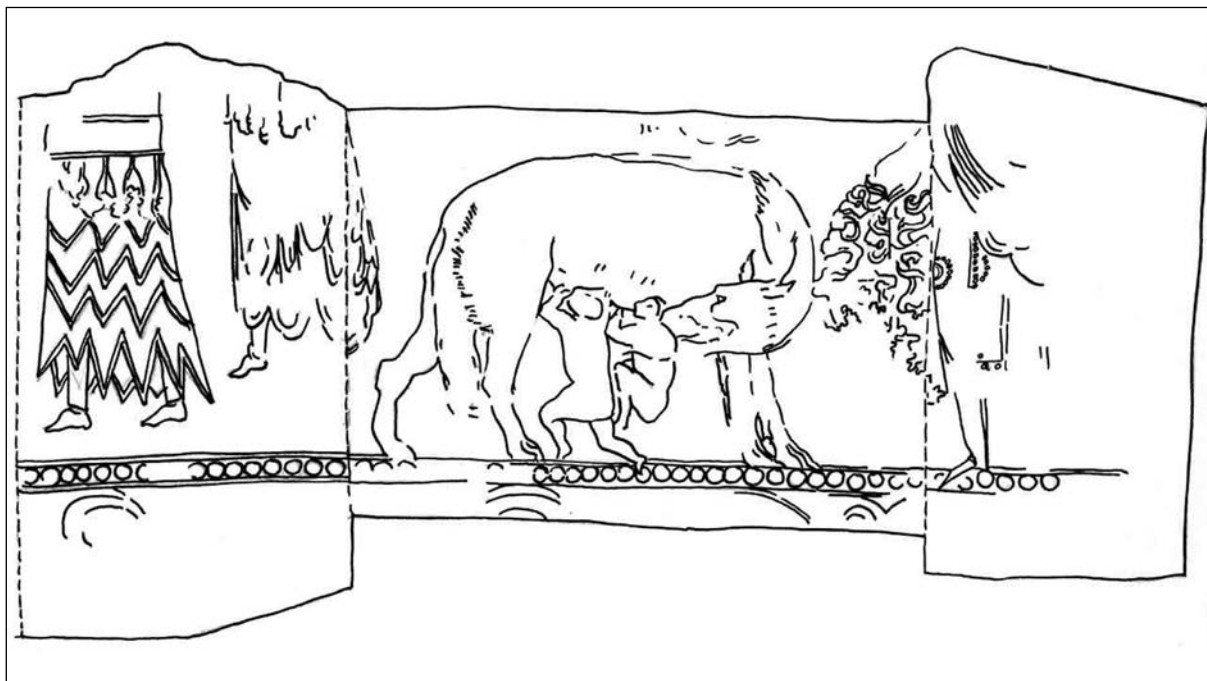


Fig. 50. Site Kalai Kahkaha I, 7-8th centuries. Composition "She-wolf suckling two babies". Linear detail.

- Sentry-post buildings with the corridor-sectional planning ascending to the most ancient types of dwellings in the territory of Central Asia served as the basis of development of the planning structure of public and cult buildings in a post-Arab period;

- Development of the irrigation and water supply in the early medieval period, as testified by the existence of an extended network of the irrigation system of Ustrushana.

Graphical reconstruction of monuments of Ustrushana. The issue of conservation of monuments of architecture is extremely complex. Apart from the necessity to safeguard monuments against the destructive influence of nature and humans, it is essential to keep the ability of monuments to cause certain aesthetic emotions of a viewer, which, in turn, sets new tasks of architects-historians. The first task is to increase the artistic expressiveness of material culture monuments through restoring them in order to regain their past image and beauty. The second task that aims to conserve the aesthetic and town-planning importance of monuments is to create an appropriate interconnection of the architecture with the environment.

Problems of creation of a harmonic, appropriate architectural milieu for human life in modern conditions are becoming urgent. Not only town-planners but also the international community currently focuses at issues such as interaction and protection of the environment and architecture (Kasalitskiy, 1978, p. 5; Zalesskaya, Mikulina, 1979, p. 4-5; Rimsha, 1979, p. 4-5; et al). In this respect, of great help may be the use of progressive traditions of the building art of the past by modern architects for the reasons of synthesizing the architecture and the nature. Thus, conservation and in some cases restoration of separate monuments and ensembles within their milieu is becoming particularly important. Given that architectural monuments are regarded as a part of landscape, in some cases they should be annexed by constructions that have no special architectural features but create colors and are inseparable from the landscape, according to scientists (Tselikov, Maximov, 1973, p. 9).

One of the methods of restoration under our consideration - graphical reconstruction directly linked to later stages of restoration of the natural architectural image - is a theoretical project that aims to restore a building in its original form. However, researcher of the Russian architecture V. Kostochkin fairly notes that the orientation of works on restoration of the destroyed monuments has not yet received scientific interpretation (Kostochkin, 1970, p. 56). With the latest studies of restoration of architectural monuments in mind, let's try to consider some constructions of Ustrushana (fortresses, temples, settlements and towns) to give a scientific substantiation to the theoretical method of restoration - graphical reconstruction in the latter's interconnection with other kinds of conservation of the image of monuments.

The restoration of material culture monuments includes concepts, such as conservation, disclosure, rehabilitation, restoration, etc. Choice of a specific method of restoration depends on society's requirements and demands regarding a specific architectural moment. In the case of objects of material culture of Ustrushana we deal with monuments having the key importance, representing an important stage of history of general culture of the Tajik nation. Particularly, Ustrushana constructions of the 6th-12th centuries reflect the cultural development of Maverannahr in the period of establishment of the Tajik nationality, an epoch of prosperity of creativity of local architects (Negmatov, 1977, p. 212-222).

The method of conservation is indispensable for deep ancient monuments like, for instance, Ustrushana early medieval constructions handed down to us in the form of ruins. However, the issue of conservation of early medieval monuments is still under consideration in Tajikistan. The reason is a specificity of the construction techniques: all the constructions without exception are built of short-lived building material: clay and Adobe brick. Thus, we deal primarily with the remains of walls and

fundaments, fragments of building constructions, such as arches, vaults, stylobates, etc. Strengthening Adobe walls is a question of future. At present, monuments are being safeguarded against any further destruction through placing hovels over the sites of archeological excavations (Mukimov, 1980).

Proceeding from native and foreign experience, as well as the aforesaid criteria of the method of conservation, it is possible to single out recommendations for the monuments of Ustrushana. In particular, the majority of castles located deep in gorges or in remote points of the Sogdian region (sentry posts-castles Tirmizaktepa, Toshtemirtepa, Urtakurgan, etc.) should be subjected to conservation. Also, of certain interest is conservation of such a unique compact rural settlement as Hon Yaylov in the Gorge Aktangi where curvilinear remains of the flagstone walls of rooms strengthen the keenness perception due to the picturesqueness and pastel gamut of the flagstone tints. The most appropriate method of strengthening the ancient Adobe walls should be thermal processing up to the formation of a firm anticorrosive crust. However, this is quite insufficient. It will be essential to create protection zones where areas occupied by architectural monuments should be kept inviolable. Beautification, landscaping, building hovels over the ruins and similar actions should be carried on to create favorable conditions for the conservation and exposition of a monument, in accordance with the state bodies in charge of protection of monuments of architecture (Libson, Kulchinskiy, 1973, p. 47, 48). Regretfully, many monuments are being destructed intensively under due to the atmospheric precipitation and indifference of people.

The fragmentary method of restoration of an ancient construction assumes a partial restoration. In Tajikistan this method may turn to be appropriate under consideration of many medieval monuments. Such constructions of the 8th-10th centuries as castles in settlements Madm and Kum, separate sentry post constructions in the Shahristan hollow, as well as some elements of the system of fortification of the Bunjikat shahristan require, apart from conservation works, a fragmentary restoration of arches, vaults, beam roofs, hearths, cult elements of dwellings, castles, etc. Of special need is conduct of a fragmentary reconstruction of the fortress walls of the sites of towns Kalai Kahkaha I, II, and III, entrance gates, as well as potter's furnaces in the capital's quarters of handicrafts.

Holistic restoration is a synthetic method of restoration of architectural monuments. In Tajikistan where no theoretical concept of graphical reconstruction and holistic restoration of medieval Adobe-brick monuments has yet been developed, there are series of constructions that can be restored fully to regain the past architectural image. In the first turn, this concerns one of Ustrushana's unique monuments - Chilhujra. Deep natural studies, formal and compositional analysis of the monument, as well as the use of written sources make it possible to carry on graphical reconstruction of the construction's initial appearance with a certain share of cautiousness. Given that the ground floor and separate architectural elements (for instance, helicline) have been conserved well, it is possible to carry on a holistic reconstruction of the complex.

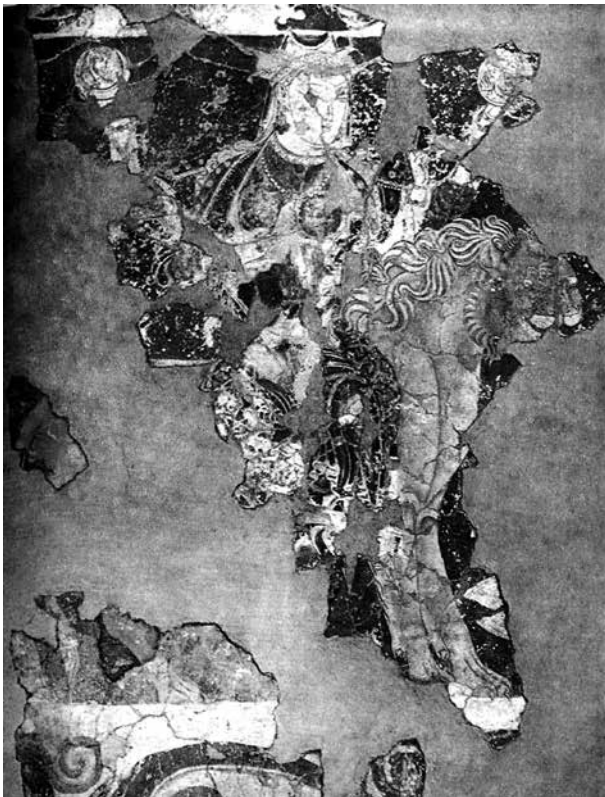
In some cases it seems appropriate to create a mockup with an organic inclusion of the remaining true parts into the new construction. Particularly, a scientifically substantiated mockup, which is equivalent to the ruined palace of afshins of Bunjikat, has the full right to exist. Though not being the original, a palace at a hillock in the shahristan's eastern part would have allowed solving not only aesthetic but also scientific problems of holistic restoration in Tajikistan. One of researchers of the history of architecture notes that appearance of a well-made mockup would have moved the history of architecture forward. Also, this would have settled many matters of artistic-compositional character, interconnection of a monumental building with the common developed area of shahristan, the system of fortification, etc. (Kostochkin, 1970, p. 60).



**Fig. 51. “She-wolf suckling two babies”.
Sculptural reproduction. Shahrستان pass,
Sogdian province, 2008.**



**Fig. 52. Spitamen. Site Shirin. Fragment
of grivna, I Millennium B.C. – earlier I Mil-
lennium A.D.**



**Fig. 53. Painting of Bundjikat. Four-hand-
ed goddess on lion’s back, 7-8th centuries.**



**Fig. 54. Painting of Bundjikat. Demon
in crown, 7-8th centuries.**

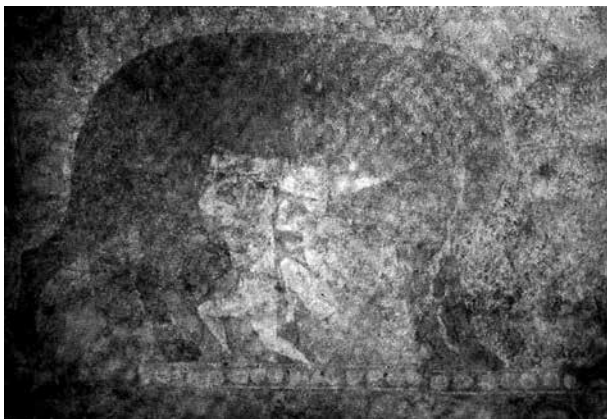


Fig. 55. Painting of Bundjikat. She-wolf suckling babies, 8-9th centuries.

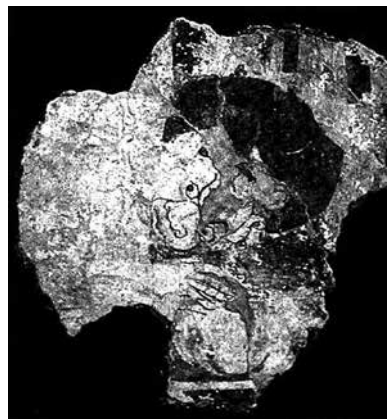


Fig. 56. Painting of Bundjikat. Head of defeated demon, 8-9th centuries.

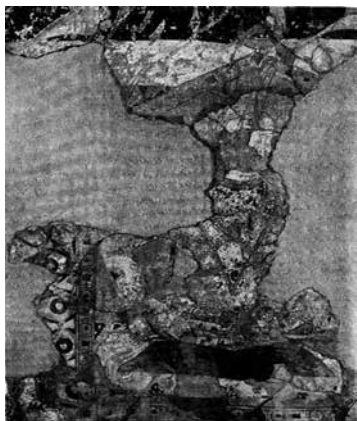


Fig. 57. Painting of Bundjikat. King in chariot, 8-9th centuries.



Fig. 58. Painting of Bundjikat. Four-handed goddess, 8-9th centuries.



Fig. 59. Woodcarving of Bundjikat. Tympan. Detail. 8-9th centuries.



Fig. 60. Woodcarving of Bundjikat. Lions' procession. 8-9th centuries.

Under the performance of graphical reconstruction it is also important to identify a direct visual perception of a monument in order to feel its style and typical architectural aspects that cannot be expressed by any graphical means. One of the factors influencing on the degree of emotional perception of an architectural construction is its interconnection with the architectural milieu or natural landscape. Study and identification of various links of a separate monument (or a complex of settlement) with the surrounding milieu is of great importance for the reasons of graphical reconstruction, and restoration on the whole. This provision acquires the basic character when the point is about monuments against the background of a mountainous landscape where a construction is compositionally tied with the environment most of all. Here it'd be appropriate to draw an opinion of prominent architect of the 20th century Saarinen who, in analyzing medieval towns, concluded that natural beauty was often the determinative factor in choosing a site of construction. In his opinion, medieval towns represented distinctive human art specimens accurately inserted in the splendid environment (Saarinen, 1943).

Issues of architecture's interconnection with the environment make it necessary to carry on compositional analysis to identify and then graphically reconstruct valuable features of interaction of the monument and the environment. Apart from visual links, it is essential to analyze the scale link of objects, a combination of their plastic and silhouette characteristics. This requires consideration of panoramas or scans of the whole complex during various periods of existence of a monument. Such material helps identify regularities and correlation of heights and volumes of constructions. In assessing links of a reviewed construction with other objects, it has to be kept in mind that the process of perception of any building always happens as time lapses. Thus, assessment of compositional qualities of a monument requires not only constructions or environmental characteristics associated with it but also the ones that foreran the perception and frequently to-be characteristics, which makes it possible to identify a place of an object within a larger system.

Same is true for the monument Kalai Kahkaha I. The specificity of this urban ensemble is that it is located near other simultaneously built constructions (Kalai Kahkaha II and III, Chikduhotron, Tirmizaktepa, etc.). Taken together, they made up a large conglomerate of visually interconnected urban constructions. Thus, assessment of any construction of this system makes it necessary to take the whole complex of architectural monuments of the Shahrستان hollow into account. In this respect, it is essential to identify typical points of observation of a monument, assess the perspective of subsequently changing views of the monument, juxtapose the proportions, and examine the plastics of nearby constructions, etc.

Thus, graphical reconstruction, as a theoretical part of the project of restoration, assumes a rather complex cycle of studies of a being reconstructed object, either a separate monument or a whole complex. It seems that the most effective, illustrative method of summing up the results of the conducted survey is summing up all researches in the series of graphical and volume reconstruction, with the identification of the initial appearance of every monument and analysis of its subsequent changes.

One of the methods of conservation of architectural monuments is creation of an open-sky museum. Restoration of architectural monuments that aims to improve artistic expressiveness of monuments should be combined with the solution of task of a monument's future practical use. It is no possible to let the restored buildings stand idle, for only their use will provide further existence and conservation of monuments. In the past architectural monuments' being uncontrolled destructed them as strongly as their wrong use as storehouses or production rooms did. Thus, it is essential to work out recommendations to adapt monuments for modern life. This particularly concerns ruined ancient buildings, fortress walls, towers, and cult constructions.

General ideological-political tasks of conservation and popularization of cultural heritage, architectural monuments in a specific mountainous milieu or within the ensemble of a modern town as a component of special artistic importance and, at last, economic prerequisites pertaining to the tourist industry (Abdurahmanov, Kabakova, 1977, p. 75) make us pay serious attention to the issues of exposition and use of monuments. The expositions of architectural monuments in regions with ancient complexes including the territory of North Tajikistan should be devoted a special chapter of a theoretical project of restoration of a town or a rural locality. An exposition of ancient architecture monuments will be considered either within the common town-planning scheme or in direct link with the designing and implementation of projects of beautification of the territory of architectural monuments, reserve zones and developed areas. The key objective of the architectural-planning organization of the territory of a monument itself is a maximal restoration and disclosure of artistic, compositional and historical peculiarities of this construction and its environment, creation of appropriate conditions for study of a monument and in some cases for having a rest near it. Thus we directly approach the task of creating reserve territories or open-sky museums.

Certain prerequisites for giving architectural and cultural monuments “the second life” have been created in our republics over the past decades. There is ending the designing of a Gissar open-sky Historical-Architectural Reserve; the territory of ancient Penjikent was declared a reserve (in 1979); museums of archeology and ethnography are being designed. Given that no scientific bases of designing open-sky museums in conditions of complex relief have been created in the republic and that it is essential to take immediate measures to conserve ancient architecture monuments, it becomes necessary to draft practical suggestions for construction of museums. The existence of ancient architecture monuments in the territory of Tajikistan, the diversity of its natural-climatic peculiarities, the richness of its landscape elements make it possible to create here a system of regional museums in order to “reflect the change of historical cultural processes of a certain nationality, a certain public group” (Potapov, 1960, p. 8).

The first museum needs to be created in the Upper Zarafshan that is distinctive for its original folk traditions and an excellent school of ornamental woodcarving and stone-working. Like nowhere else, in this site there have been conserved many ancient settlements located at steep slopes; specimens of dwellings reproducing the millenium-old culture of the Tajiks. The site of a museum should be determined on the basis of the ancient settlements that have conserved lots of features of the traditional residential, public and utility constructions. Besides, the territory of a 40-50-hectare museum should include various landscape groups reflecting the habitats of various corners of the republic.

The museum’s location along the tourist routes near Central Asia historical-cultural centers (Penjikent, Samarqand, Shahristan, Ura-Tyube, Leninabad) and open-air architectural exposition in the conditions of natural landscape of ethnographic zones will determine its vitality and degree of its cultural-educational importance for the society. Visiting a museum of such sort is a kind of travel to the past, which will help study and better comprehend sources of folk creativity, its positive qualities, as well as the artistic value of works of folk masters due to examination of specific constructions of folk architecture and material items of culture and everyday life.

The next stage of construction of museums in North Tajikistan should become creation of an architectural reserve on the basis of Ustrushana’s ancient town Ura-Tyube. Perhaps, it is currently the only town of Tajikistan that has conserved not only separate, unique buildings but also the ancient-time planning, town “landscape”, and silhouette. In the first turn, organization of a town-museum Ura-Tyube will require a historical-architectural analysis of the town’s developed area with the aim

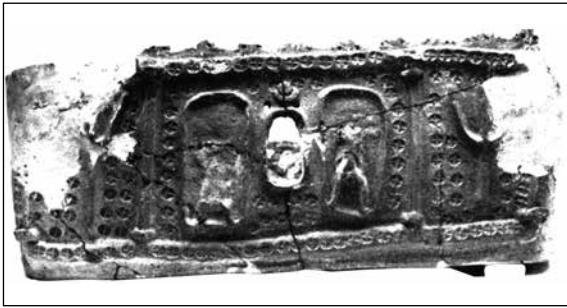


Fig. 61. Ustrushana (Istaravshan region). Ossuary, 6-7th centuries.



Fig. 62. Ustrushana. Kalai Baland. Bronze trivet, 12th century.



Fig. 63. Ustrushana. Kalai Kahkaha III. Figured aqua manale, 10th century.



Fig. 64. Ustrushana. Kalai Baland. Bronze bowl, 12th century.



Fig. 65. Ustrushana. Kalai Baland. Bronze tray, 12th century.

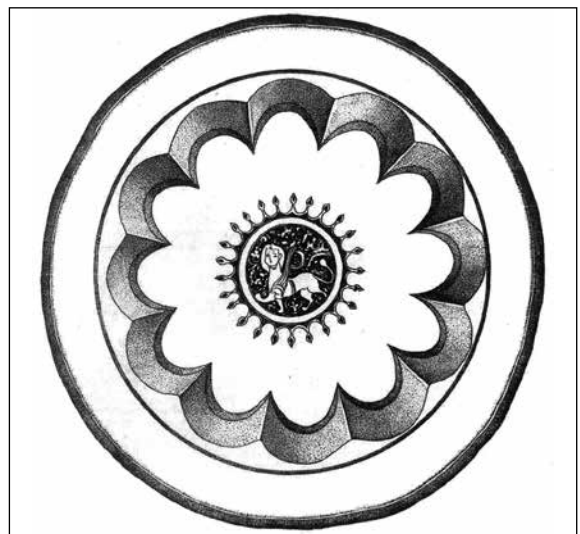


Fig. 66. Minor round bronze tray from Kalai Baland, 12th century.



Fig. 67. Childuhtaron. Bronze chased tray, 12th century.

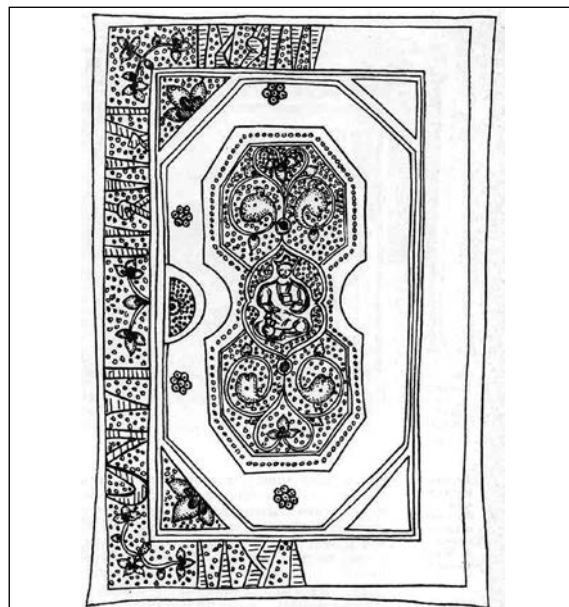


Fig. 68. Bronze tray. Pendjikent.

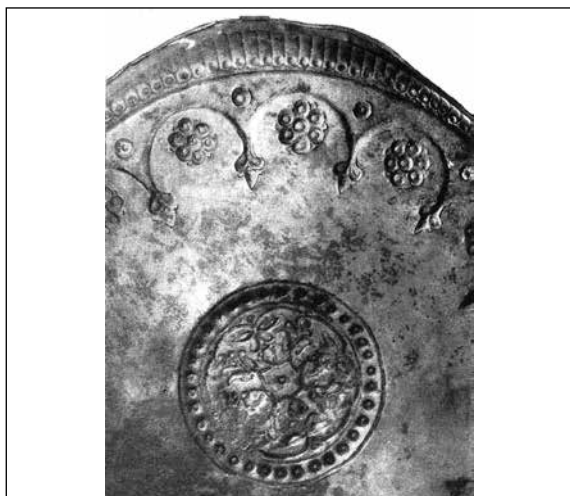


Fig. 69. Childukhtaron. Bronze tray. Fragment of reverse side, 12th century.

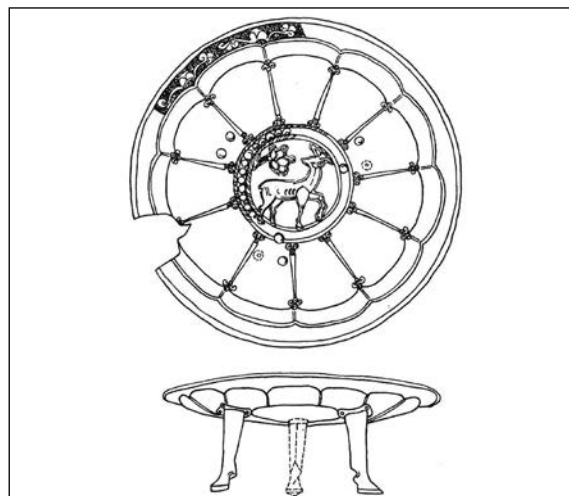


Fig. 70. Silver table (?) Top and side view. Hermitage.

to identify all the monuments, find out their town-planning role in the composition of ensembles, elements of beautification, color solution of the developed area's silhouette, etc. In addition, given that the complexes of monuments and constructions of the past standing aloof are located within not only the historical center but also at the town's outskirts, it is essential to identify the character of architectural-planning organization of their territories and historical-architectural value of each separately taken object. The latter will help identify the perspective of their use. Particularly, the remains of the site of ancient town at the Hill Mug, fortress walls, residential houses, cult and other constructions should be used only for the public-educational, scientific and aesthetic goals due to their high historical-architectural value or artistic peculiarities. They can include museums to show exhibits. Also, it is possible to identify a special category of monuments, which can be used as places of modern entities or enterprises, such libraries, exhibition halls, etc.

The second stage of creation of the reserve envisions demarcation of borders of the reserve area, as well as regulation of the developed area. Unlike the Upper Zarafshan natural reserve where the protection mode denies use of territories for economic reasons, the town historical-architectural "reserve" will continue to live the life of a town. Except for most valuable constructions to be shown as museum exhibits, all the rest buildings will continue to operate, like before, as residential, administrative and cultural buildings (of course, if the mode of operation does not damage their use).

A new kind of exposition is paving its way in the museum construction. Large-scale studies of settlements make it possible to reconstruct buildings in the form of mockups, carry on fragmentary or holistic restoration within the milieu of a historical-architectural reserve. Creation of a regional museum on the basis of the Shahrستان group would have been a third, noteworthy initial link in the continuous chain historical cultural process of development of the Tajik nation. Exhibiting monuments, planning the town's territories, and their beautification and interconnection with the environment in such a museum differs from that in town Ura-Tyube where the process of development is underway. In the shahrستان museum exhibits should include the very planning of town Kalai Kahkaha I, elements of its fortification, defensive sentry posts around the capital town Bunjikat.

Drafting a project of historical-architectural reserve in Shahrستان will require the conduct of all kinds of restoration works above. Besides, exhibiting things of the ancient material culture of Ustrushana - toreutics, numismatics, etc. - makes it necessary to create in the museum's territory an exhibition building, exterior of which would not have disturbed the holistic perception of exhibition, would not have become alien element in the historically established architectural-natural milieu. This building should also exhibit mockups of the by-gone buildings of pre-Islamic creativity: the temples of fire, idols, castles, sentry posts, etc.

Thus, the real implementation of suggestions over protection and use of architectural monuments in the territory of North Tajikistan not only will help settle matters of ideological-cultural education but also will create favorable conditions for workers to have a rest, as well as for the development of native and foreign tourism. It should be noted that the raised questions of use of the architectural heritage represent an exceptionally complex problem having lots of various aspects. Here we've discussed only one of these aspects - reconstruction and improvement of the system of practical use of architectural monuments. This aspect alone allows us to assert that the increasing attention to various forms of cognition of history, architecture, ethnography and art requires intensification of the protection and use of monuments, as well as the development of construction of museums and it-related tourism as active means of ideological education.

Thus, tasks of protection and practical use of Ustrushana monuments are:

- Restoration of monuments on the basis of scientifically substantiated graphical reconstruction in the form of fragmentary or holistic restoration;

- Creation of open-sky museums with a broad program of excursions and lectures with the aim to propagandize progressive features of ancient local architecture.

Further, scientific prerequisites of the graphical reconstruction of medieval monuments of Ustrushana should include:

- Historical-architectural analysis of formation of every object, identification of key principles of composition of its historical development;

- Detailed investigation of every monument, reconstruction of the initial image, analysis of subsequent changes of the image;

- Determination of the town-planning importance of separate architectural monuments either within an ensemble or within a system of historical town, with the aim to identify opportunities of practical use of monuments;

- Analysis of main links of monuments' interconnection with the environment in the historical aspect;

- Determination of borders of the reserve area of monuments, identification of key points of sight.

Broad generalization of material above leads to the following conclusions:

- Civil architecture of Ustrushana is a new source for study of non-fortified urban constructions and fortified palaces of the early medieval period in the territory of Central Asia, as well as it forms, elements and monumental, visual and architectural-decorative art;

- Ustrushana is one of Central Asia regions where development of a dwelling since the most ancient times is traceable and so is formation of a number of types of buildings of civil, cult and engineering designation;

- The cult architecture of Ustrushana gives examples of inseparability of local cultural development prior to and after the Arab invasion on the basis of succession of traditions;

- Engineering constructions of Ustrushana are illustrative of a high level of building techniques based on centuries-old local traditions of architecture;

- The protection and use of Ustrushana architectural monuments envision the establishment of three museums of folk creativity and life, architectural reserves on the basis of the towns Ura-Tyube and Shahrstan in the territory of North Tajikistan.

The architecture of Ustrushana in the architecture of Central Asia. We live in an epoch of an increased interest in all cultural values created by the mankind over many centuries. Each discovered civilization expressing a new ideal of beauty, a new variant of the wonderful testifies the inexhaustibility of the human genius. Discovery of such evidence is a great gladness. An eloquent testimony to this is the discovery of Ustrushana in its whole diversity, images, in which the ancestors of the Tajik nation expressed first of all themselves, as well as their efforts and higher aspirations. In addressing the architecture, i.e. the art of Ustrushana residents, we in the first turn speak about their epoch that is mirrored in the works of material culture, architecture, visual, monumental and decorative art.

The early medieval period has more than once produced examples of most valuable contributions to the history of world culture. They are the monuments of architecture and art of ancient Penjikent, Afrasiab, Varakhsha, Balalyktepa, as well as monuments of Khorezm, South Turkmenistan, etc. However, despite such significant creations of the epoch, the architecture of Ustrushana over several past decades has helped our contemporaries identify the organic link of Central Asia architectural art with the latest specific construction techniques and planning solutions. The very first stage of study of Ustrushana architectural monuments that covered the 1950s revealed a peculiar art using

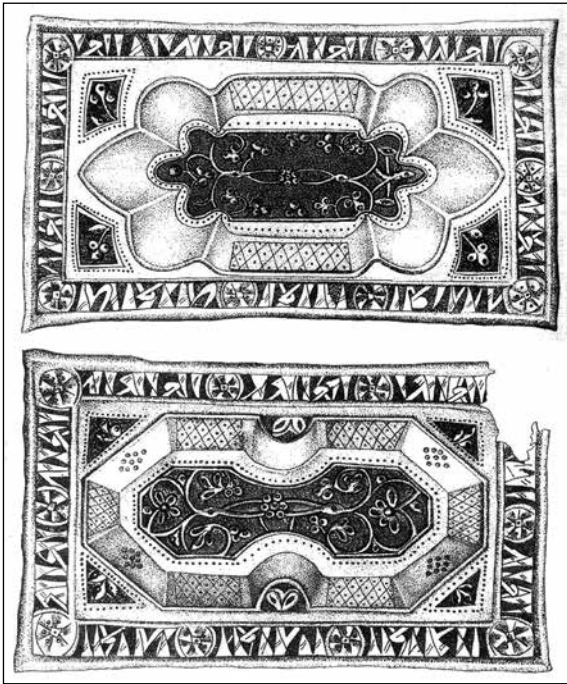


Fig. 71. Kalai Baland. Bronze chased trays, 12th century.

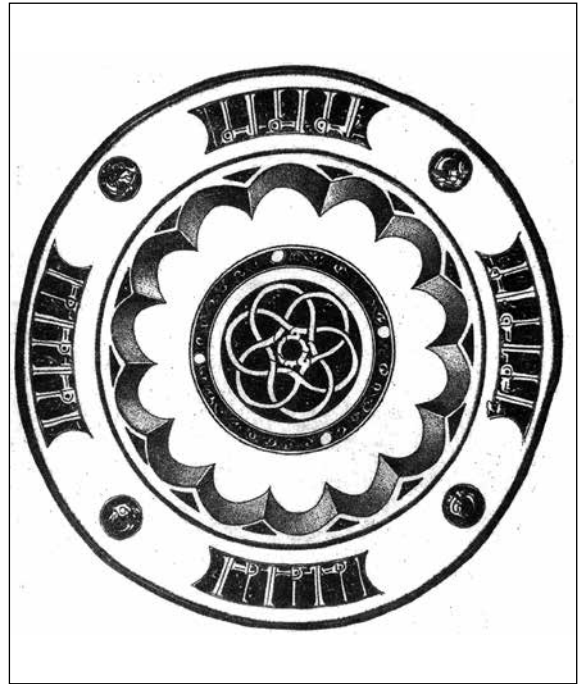


Fig. 72. Kalai Baland. Large round bronze tray, 12th century. Detail.

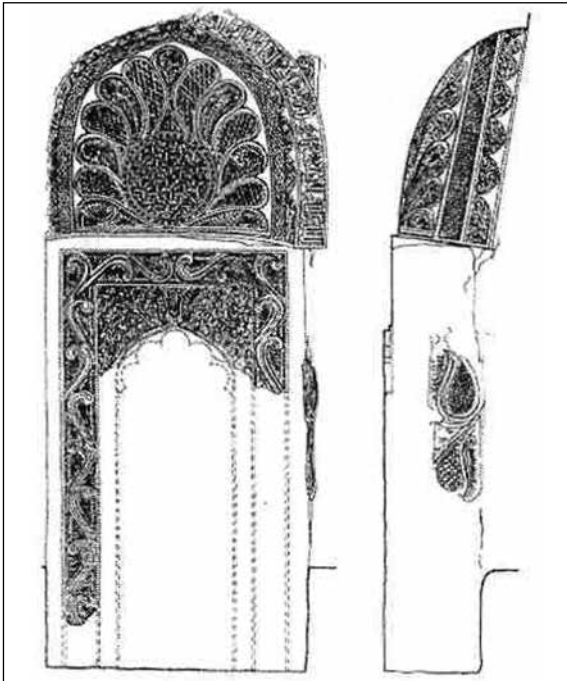


Fig. 73. Asht. Clay mihrab. Façade, cross-section, 10th century.

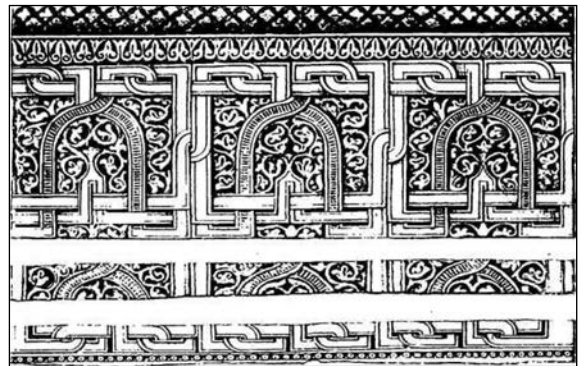


Fig. 74. Asht. Clay mihrab. Fragment of carving, 10th century.



Fig. 75. Asht mihrab. Clay, 10th century.



Fig. 76. Ustrushana. Site Shirin. Cameo in medallion, chalcedony, gold. Front face, 4-5th centuries.



Fig. 77. Ustrushana. Site Shirin. Cameo in medallion, chalcedony, gold. Reverse side, 4-5th centuries.



Fig. 78. Site Kurkat. Necklace, 1st century.

independent techniques and, to a certain extent, forerunning the architecture of other regions of Central Asia (Negmatov, Khmelnitskiy, 1966, p. 140). Particularly, analysis of the architectural of a front-residential building of the yard-vestibule composition (the shahristan castle at Kalai Kahkaha II) supported by the residential part of the complex of stone constructions of Childuhtaron has made it possible to identify their common compositional-artistic principles that for many centuries ahead determined peculiarities of the Central Asia architectural style, planning and volume-spatial solutions of the monumental medieval architecture of Central Asia. No less important conclusions can be made from the investigation of the architecture of sentry posts-barracks of the corridor-sectional type of planning: Tirmizaktepa, a castle at the Hill Mug, a building at Kalai Kahkaha I, etc. In stressing that this type of building is specific for Central Asia mountainous regions (Ustrushana is one of them), we should, nevertheless, note that it is the Ustrushana monuments that gave us the opportunity to trace Central Asia dwelling development from the ancient times to nowadays.

Occupying a particular place in the architecture of Ustrushana as well as of the whole Central Asia is the construction of castles. The existence of mountainous landscape in the territory of the medieval region favored the formation of a special type of castle characterized by a complex individualized planning, richest possible decor and strong fortification at a mountain ridge. Ustrushana castles clearly demonstrate what great attention was paid to the development of fortification, formation of a monumental image of a construction, its impregnability, link to the surrounding landscape. That one of these castles - Chilhujra - has been conserved in excellent conditions allowed scientists to get a unique material regarding the construction culture of Central Asia: the system of fundamentals, types of walling and ceilings. The construction of Chilhujra's helieline, angular keeps, the defense system of fortress are new, unique in the history of Central Asia early medieval architecture.

The importance of Ustrushana rural settlements in the history of Central Asia architecture is hard to overestimate. Rural residential formations yield excellent examples of mountainous settlements genetically ascending to the most ancient patriarchal dwellings of Central Asia. This type of construction was classified on the basis of analysis of planning solutions and principle of organization of settlements in the territory of Ustrushana. This type includes non-fortified compact settlements of inactive-defensive character (Hon Yaylov and Karabulak) and fortified compact settlements under the protection of a feudal lord's fortress (Gardani Hisor, Kum, etc.).

Such a main construction as the feudal lord's fortress in settlement Gardani Hisor is the unique, most valuable historical-architectural monument of not only mountainous Zarafshan but also the whole Central Asia (Negmatov, 1977, p. 146-147). Carved ornament, fragments of wooden constructions (cornice, stringer, bolster, frieze, decorative panels, etc.) of the fortress yield additional information about the established woodcarving school of Ustrushana that does not yield to such famous monuments of early medieval architecture as the ancient Penjikent.

In the early medieval period the Ustrushana architecture, painting, sculpture, ornamental woodcarving developed so highly that there were formed prerequisites of formation of such complex constructions as the palace of afshins at Kalai Kahkaha I. Though the beauty ideal of the architecture of Ustrushana residents of the 6th-10th centuries not quite corresponds to our understanding of beauty, nevertheless, the perfection of this monument is great. It so deeply reflects universal aesthetic values that the palace continues to delight us now, twelve centuries after it was built.

The Bunjikat-based palace of Ustrushana rulers is a key monument containing the established architectural-artistic concepts that formed the basis of a further development of some types and forms of Central Asia medieval architecture. Other palace buildings of the same or approximately

the same period are also known: the palaces in Varakhsha, Afrasiab, and Penjikent. However, these constructions have not yet given an integral picture of palace buildings. Following the discovery of the Ustrushana palace building, it is possible to note confidently that the structures of all these constructions are based on common principles that primarily stem from the planning of a residential dwelling. A palace represented an increased-scale structure of rich residential houses; the difference was that a palace was annexed by a large rectangular hall with throne stanza.

An outstanding importance of a palace is visually detectable under the consideration of woodcarvings and mural paintings. The main content of these works of art (wooden carved tympanum, boards with relief images from the throne hall, fragments of mural paintings in palace rooms, etc.) was the legends reflecting artistic-aesthetic tastes of the Ustrushana society on the whole. The heroic epics and parables occupied hardly the main place in this. It seems that telling, showing or depicting legends of the old in faces was the main demand of the art. It is no possible to say that the main aspiration was a desire to decorate anything: most likely, this was a demand to express certain poetical images and symbols, according to imagination of a master. The Ustrushana painter tells about life through not expressing his own observations of nature and life but as if retelling the words of a singer or a story-teller. They are the woodcarving depicting the struggle of the good force and the evil force - legendary Faridun and popular leader-gunsmith Kov who acted against enslaver Zohhak (from the ancient epic of the Iranian nations), the mural paintings depicting multi-hand goddesses with the symbols of sun and moon in hands, a three-headed demon, winged warriors-demons, a she-wolf breastfeeding infants, etc. The canonized variant of the ancient Roman legend, subjects of mythology indicate not only on the richness of spiritual culture of Ustrushana residents but also on the influence of West Asia, Middle Asia, and Central Asia art (Voronina, Negmatov, 1974, p. 55).

The Ustrushana visual art did not disappear without a trace. It entered the Central Asia art of the next centuries. Particularly, subjects of an ancient epic depicted at a wood-carved panel in the 10th century were canonized in Firdousi's immortal poem "Shahnameh". This art, especially painting, represents an encyclopedia of knowledge, tastes, moral-ethical norms and aesthetic ideals. It was organically linked and synthesized with architecture, for it included elements of various arts, a wide circle of images and themes borrowed from poetry and folklore. The artistic dignities of this school have not still been lost. The charm of Ustrushana art is the positive perception of the world, heartfelt lyrics and high poetics of images, sonority, impressiveness and musicality of its palette. Tajik masters of the next centuries conserved this flavor that has been handed down to us in the pattern of folk ornamentation. Thus, one Ustrushana monument alone - the palace - gave the history a number of masterpieces of world art. They are not only masterpieces of art but also new sources "substantially increasing the understanding of the level of mastership of painters and carvers of Central Asia" (p. 67).

The architecture and art of Ustrushana played an active creative role. They inherited from the antique period everything that could have a continuation in the culture of a feudal society, and developed their own features. This to the full extent concerns wood-carved monuments, which are separate elements of constructions of buildings. Despite close and direct analogies and the existence of a common Sogdian-Ustrushana woodcarving art, monuments of such kind in Bunjikat, Urtakurgan, Chilhujra, and Gardani Hisor are outstanding specimens of wooden constructions and forms of the Central Asia art of pre-Moslem era. The artistic woodcarving school formed in Ustrushana in the 7th-8th centuries saw its traditions continued at later monuments. According to scientists, wooden columns and mihrab from the settlements Old Mach and Falgar as well as an earthenware mihrab from Asht are excellent, first-class specimens of architecture and decorative art (Voronina, 1950,



Fig. 79. Ustrushana. Bundjikat. Hearth-altar in ceramists' quarter, 9th century.

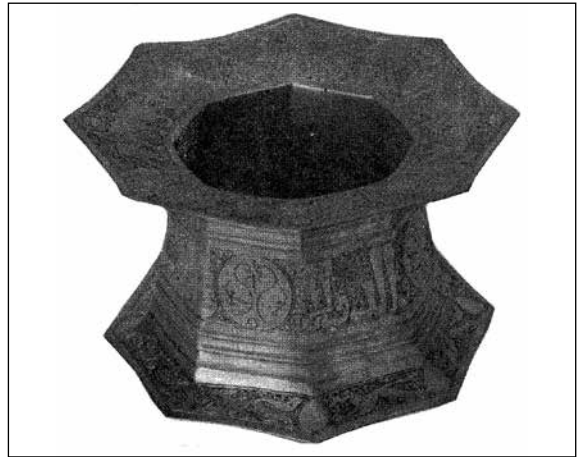


Fig. 80. Ustrushana. Kalai Baland. Bronze trivet, 12th century.

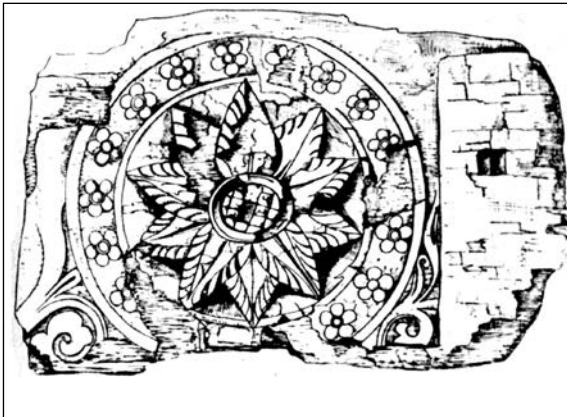


Fig. 81. Carved board of ceiling from main corridor in Bundjikat.

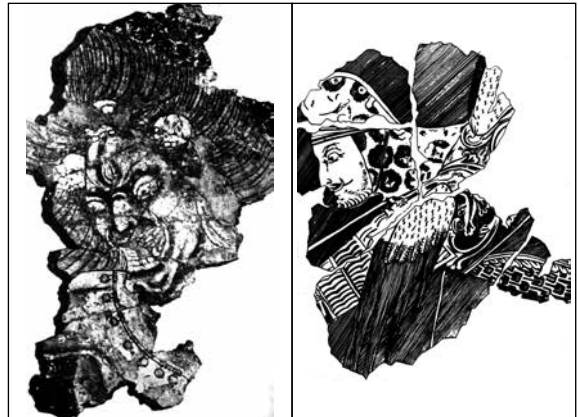


Fig. 82. Picture on the left: three-headed demon with three human skulls on head. Square hall of palace in Bundjikat. Mural painting. Picture on the right: winged demon-warrior. Square hall of palace in Bundjikat. Linear detail of mural painting.



Fig. 83. Four-handed goddess on lion's back. Square hall of palace in Bundjikat. Linear detail of mural painting.

p. 210, tables 9-19; Negmatov, 1977, p.158; Yakubovskiy, 1950, p. 47; et al). Note that Ura-Tyube, an ancient Ustrushana town located near Bunjikat, became a widely known artistic woodcarving center in later centuries.

Folk ideas of natural disasters and the morals code of priests of local cult of Maverannahr are better disclosed through the temple and mosque Kalai Kahkaha with a multi-column composition of the post-and-beam tectonic structure of the hall. This unique building with columns-symbols for the first time in Central Asia architecture represents a type of a pre-Islamic cult temple of idols that was earlier known only from written sources. The material obtained from this temple has made it possible to add another kind of columns that differs from the traditional kinds of Central Asia columns. The symbolical depictions at Bunjikat columns were long echoed in the decorative art of Maverannahr in the next, 9th and 10th centuries: in the interpretation of zoomorphic and vegetative subjects of Upper Zarafshan woodcarving monuments, in the architectural elements of a monument in Chorku, and in the mountainous valley of Isfara (Voronina, 1977, p. 16, fig. 9, 10; 1969, p. 178, fig. 3).

Parallels linking these monuments with the architecture of the Orient, Iran, Egypt and other regions are another illustration that the art and architecture of Ustrushana developed not separately from the cultural world but in line with the history of architecture of Central Asia and other regions of ancient Orient cultures. Here there is not a unilateral but a bilateral relation. Particularly, local culture was spread through Sogdian regions far towards the North and East (Siberia and Urals, Southeastern Asia and China) for centuries (Okladnikov, 1979, p. 147, 148, 151; Voronina, Negmatov, 1974, p. 70, 71). The Sogdian art and hence, its kindred Ustrushana one revealed something in common with the arts of many nations of the Near and Middle East of the Sasanid and post-Sasanid era (Kilchevskaya, Negmatov, 1979, p. 458; Negmatov, Kilchevskaya, 1979, p. 51; Voronina, 1977, p. 133-137). In the view of L. I. Rempel, “through Byzantine and Caucasus the so-called “Sasanid art” of Central Asia and Iran also penetrated South Russian steppes, the milieu of Eastern Slavs, the Azov, Volga-Kam area and then back to the Urals where it joined the impact of art that originated directly from Central Asia (Rempel, 1978, p. 28). Some elements of the ornamental woodcarving of the 9th-10th centuries of monuments of architecture of the Samanid State have something in common with the arts of such faraway countries, as India, Mesopotamia and Greece (Negmatov, 1977, p. 164). Owing to the discovery of elements Ustrushana wooden column order that has much in common with the columns of ancient Penjikent, it becomes possible to reconstruct the most ancient form of a column that later on widely spread in the architecture of Central Asia and was handed down to us as an element of folk architecture in an almost unchanged form.

Thus, comprehensive investigation of the architecture of early medieval Ustrushana makes it possible to have a deeper understanding of the history of our nation, identify construction traditions of ancient architects. Beyond any doubts, this is essential in terms of not only cognition but also creative interpretation of traditions that have historically been formed in modern architecture. It is no possible to create a national peculiarity in architecture in a special manner. Mastership alone is not sufficient to make the works of modern architecture the real national works. According to O. Shvidkovskiy, it is essential for “an architect to have a national artistic outlook, know deeply and feel the history and culture of his nation” (Shvidkovskiy, 1978, p. 6).

Indeed, many features of the ancient architecture of mountainous Tajikistan are consonant with stylistic searches in the republic’s modern architecture; both architectures have the picturesque planning, asymmetrical location of objects, organic link with the environment, etc. in common. Thus, addressing the creative heritage of the Tajik nation, organic development of the historically

established architectural principles at a new, modern level of science and techniques seem to be the most promising way of exploration of creative traditions in the architecture of Tajikistan.

What can modern builders draw from the creative heritage of ancient Ustrushana? The architectural experience of this highly cultural region of Maverannahr is a collective creativity of many generations. Particularly, this positive experience may help get adapted to new demands of life, new political and social concepts. It'd be fully appropriate to refer the interconnection of early medieval constructions with the environment to the latter. Formal-compositional analysis of these sites and separate buildings of Ustrushana demonstrates that ancient architects sensibly felt the unity of their creation and the nature and skillfully realized principles of delicate invasion in the environment in their town-planning activity.

The aesthetic qualities of Ustrushana constructions were also determined by building materials that usually gave birth to an architectural form. In this respect it'd be appropriate to recall the use of baked brick at the boundary of the 9th/10th centuries, particularly, at the Bukhara-based Samanid Museum. The artistic opportunities of the then new building material were genially realized here. The architects of the mausoleum extracted astonishing effect from a decoratively complicated, enriched brickwork through converting the building's interior and exterior into fairy ornamental-plastic pattern. Here, the decorative effect was based on the finish and plastics of the brickwork: at deep, shadowed joints stressing the rhythm of the brick patterns or at contrasts of light and shade formed by relief ledges of bricks. Is it the plastics of architectural works that should draw attention of modern architects and painters-monumentalists?

Other typical peculiarities of the architecture of early medieval Ustrushana should also become a true source of brand new shaping. For Ustrushana, like for the whole Central Asia, the period of the 6th-10th centuries was an era of greatest progress in the construction art that coincided with the progress in the development of all technical and humanitarian sciences. Geometrical techniques of harmonization of architectural volumes obtained from formal-compositional investigation of Ustrushana monuments are very instructive for our architects but not as an example for imitation. Modern construction art is creating a new system of proportionality based on module coordination and application of new building materials. Modern architecture assumes shaping with a richest possible arsenal of geometrical constructions ranging from elementary simple (traditional) to most complex spatial structures.

In turn, the concept of harmony in early medieval architecture had a specific content closely linked with the feudal society, its ideological concept. Nevertheless, the experience of the past of our nation is instructive from the point that modern methods of harmonization should meet the new requirements and technical conditions of construction with the same integrity of the logic of thinking and coordination that they met the whole content of the artistic culture and science of Ustrushana in the past. Thus, all this is a ground to create a bridge linking the far past with our contemporaneity to the resolve the problem of harmonization of the body-spatial milieu to help develop a harmonic personality of a human in it.

CONCLUSION

Ancient Ustrushana is a historical region of the Central Asia with its early Iron Age original culture that gave birth to the long-term historical tradition in the material and spiritual spheres whose traces are still extant. Located in the geographical centre between Sogd and Bactria, on the one hand, and Chach and Fergana, on the other, Ustrushana played an important role in the social-economic and ethno-cultural transit routes across the central part of Central Asia (Negmatov, Belyayeva, 1986, p. 187-188; Ancient Zaamin, 1994; Buryakov, Grotsina, 2006; Gritsina, 2011, 86-120). Years-long archaeological studies provided extensive information about the history of the region with special emphasis on Ustrushana's role on this track. It should be noted that today Ustrushana forms a part of Uzbekistan and Tajikistan. From now on, researchers have the opportunity to provide an integral picture of dynamically developing historical perspective and identify Ustrushana's distinctive contribution to the treasury of the Central Asia and world civilization.

For a long time, Ustrushana had been treated meagerly as compared with its distinguished neighbors; especially its possessions in the eastern part were lost in out-of-the-way mountains, of which even medieval sources knew not too much. Even despite the fact that the country was located at the crossroads of major transcontinental trade routes where Ustrushana populated localities played an important role, it had unfairly been regarded as a "transit" country of minor importance.

It should be noted that the role and significance of Ustrushana in different historical periods and its typical historical distinctions became clearly apparent in the course of North-Tajikistan and Uzbekistan complex archaeological expedition. Incontestable contribution of Ustrushana residents to the treasury of the world culture gave no rise to doubts. There was need in exploring the most urbanized region of Ustrushana, now part of Uzbekistan, One cannot imagine total historical picture of Ustrushana without this region, nor its influence on adjoining areas. Major discoveries notwithstanding, the latest studies failed to address the issue finally because of unexplored Zaamin, Ustrushana's second town and its densely populated rustak rich in mineral resources. This explains researchers' aspiration to sum up accumulated historical-archaeological material and link it with that of Tajik colleagues as attempted in this research paper.

As is known, in the ancients times and medieval period the geographical environment had an essential effect on the system of settlement and economic potential of a region. The same was true of Ustrushana. Its territory was divided into three historical-geographical zones characterized by the nature of landscape and natural-climatic conditions. In the south, there was a vast mountain populated universe made of watersheds of Turkestan ridge and its prongs. A middle, comparatively narrow sub-mountain part is made of cones of numerous mountain carryovers; in the north, there was boundless space of Barren Steppe.

It should be noted that a middle sub-mountain part stretches latitudinally along a varied strip across a northern extremity of Turkestan ridge and prongs and was the most habitable area of medieval Ustrushana. Water supply came from numerous sais flowing down from southern prongs of Turkestan ridge and forming its irrigation base. These were accompanied by ancient and medieval roads; economic and cultural potential of some appanages, rustaks and the state as a whole were shaped. It was changes in water balance, destruction of irrigation system that led to desolation and

displacement of populated localities and principal routes of trade caravans and thus to the substantial changes in the historical landscape of the region. For instance, a capital of early medieval Ustrushana could initially be located in place of site of Koshtepa, and then moved towards Shahrstan not earlier than 6 century AD. This could have been due to some military-political events. However, a main reason, as we see it, was an essentially reduced balance of water sources.

Arab geographers and historians provide detailed information about pre-Mongol Ustrushana. In Ahmad al-Katib's words, that was "a lengthy and important country which included ... 400 fortresses and several large towns". Written sources provide, in the aggregate, general representation about ancient and medieval Ustrushana. Archaeological discoveries of late enabled researchers not only to inflate historical information with new content but also essentially supplement them with new historical facts. The early medieval period (4-8 centuries A.D) both in Ustrushana and other regions of the Central Asia saw an unprecedented surge of vital activity. It was a stormy growth of the population that promoted assimilation both of plain and mountain areas while a rapidly growing trade across international routes via Ustrushana lands contributed to the acceleration of urbanistic trends. Note this period is the most explored archaeologically. It'd be appropriate to focus on the population to identify the role and importance of early medieval component in shaping the Ustrushana statehood, and retrace the dynamics of development of the reviewed territory in the course of time.

Archaeological materials are indicative of the following. Note that 1,5% of registered archaeological monuments are materials of ancient and classical periods; 61,1% - early Middle Ages; approx. 35% - finds of pre-Mongolian period. In so doing, percentage prevalence of monuments with early medieval materials over ancient and classical ones is reflective of essential degree of given territory's habitability, and as compared with monuments of pre-Mongolian period – of quantitative prevalence.

Large-scale archaeological excavations provided numerous materials about ideological views of local population. While a burial ceremony inside ceramic ossuaries was widely spread in the Central Asia, the population of mountainous regions and isolated Fergana kept on sticking to burials inside vessels only. A unique burial is the one in hum discovered near Zaamin. Besides strongly splintered human bones there was a coin minted to imitate drahms of Sasanid ruler Peroz (459-484) and a few bronze articles, including a bracelet, pendants in a form of animal (goat), a bell and human figurines obviously attributable to phallic cult. The most interesting find is a cross-shaped pendant in the form of human figure with outstretched arms. Most probably, it is an image of a winged man (genius), guardian angel widely spread in the art of ancient and medieval world. To be exact, this winged angel must have been borrowed from the Old World.

As for ossuaries, for some time past finds of this sort are mentioned more frequently. AS a rule, they were manufactured either in Sogd or as an imitation to Sogdian patterns. They are concentrated in Zaamin, an Ustrushana's second town. It is assumed that not locals but Sogdians were buried in ossuaries. Another center was located in the district of Jizak, an Ustrushana's third town. Note that an ossuary burial ground was discovered near Gallayaral. Ossuaries of this type are typical, of box sort with predominant band and "herringbone" ornaments. Of particular interest is a first ever children's ossuary. Also, deserving consideration are terra-cotta figurines from Zaamin that may be construed as home idols to represent local Ustrushana deities posed to rever, "service" and making of prayer with elements of borrowed methods of styling from adjacent countries.

Great strides were made in the research of Ustrushana architecture. Gingerly explored are various monuments, including a palace of Bundjikat rulers, Chiludjra and Termiztepe temples, as well as a number of erections that had once protected agricultural appanages in the valley of Sangzar. These

included Sanghirtepa, Almantepa, Pardakultepe, Kamilbabatepa, etc. Of interest is a fortress Myk-I with its model architecture and exemplary material culture of high-altitude regions of Ustrushana. Also explored was a pre-Arab caravanserai Azlartepa, one of the earliest victualling houses of Ustrushana and the Central Asia as a whole. All-round research into material culture and particularly architecture made it possible to fathom deep into the past of medieval Ustrushana, identify and retrace building traditions of ancient masters that are still used in construction practice.

The latest materials on early medieval archaeology, history and architecture have essentially changed our views on Ustrushana. The pre-Mongolian period (9-13 centuries) has better been explored in the western part of Ustrushana. Excavations in the largest urban centers of Ustrushana - Zaamin, Savat, Jizak, Harakana (site Kurgantepa), Havas, Hushkat (site Nurata), as well as a caravanserai Turtkultepe made it possible to obtain facts sometimes unique, providing information about economic and ideological life of the population, unveiled ways of spreading later Karakhanide painted ceramics. It revealed that Zaamin and its environs proved to be a centre of its manufacture. Also, medieval Sabat manufactured the so-called kashin ceramics rather exotic for eastern Maverannahr. Thorough exploration of steppe and mountain parts of populated universe made it possible to localize or specify a number of rustaks as referred in written sources - Nushkent, Bangam, Beskun, Vakr, Sabat, etc. Archaeologists were successful in localizing the largest caravanserai in Maverannahr – Hudaysar in place of Turtkultepe. According to a legend, the caravanserai was built by a distinguished person of Ustrushana - al-Afshin, and located halfway between Jizak and Zaamin near a village of Peshagar.

Authors are hopeful that the materials and views above will contribute to the further inquiry into this peculiar sphere of the medieval world with its brilliant examples of unconventional culture and uncommon worldview. The latest archaeological finds are illustrative that the medieval period is, perhaps, the most striking and consummate stage of formation and development of Ustrushana statehood prior to the Mongolian invasion.

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LIST OF ABBREVIATIONS

AO - Arkheologicheskiye otkritiya
ART - Arkheologicheskiye raboti v Tadjikistane
VDI - Vestnik drevney istorii
IA AN RUZ - Institut Arkheologii Akademii Nauk Respubliki Uzbekistan
IV RAN - Institut Vostokovedeniya Rossiyskoy Akademii Nauk
IMKU - Istoriya materialnoy kulturi Uzbekistana
IE - Institut etnografii
KSIA - Kratkiye soobsheniya Instituta arkheologii
MIA - Materiali po istorii i arkheologii
MKT - Materialnaya kultura Tadjikistana
MITT - Materiali po istorii turkmen i Turkmenii
ONU - Obshestvenniye nauki v Uzbekistane
PTKLA - Protokoli Turkestanskogo Krujka luybiteley arkheologii
RAIMK - Rossiyskaya Akademiya istorii materialnoy kulturi
SA - Sovetskaya arkheologiya
SAGU - Sredneaziatskiy Gosudarstvenniy univesrsitet
SE - Sovetskaya etnografiya
TKHAEЕ – Trudi Khorezmskoy arkheologo-etnograficheskoy ekspedicii
TYUTAKE – Trudi Yujno-Turkmenistanskoy arkheologicheskoy kompleksnoy ekspedicii

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