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# Urban Cultures of Central Asia from the Bronze Age to the Karakhanids

Learnings and conclusions from new archaeological  
investigations and discoveries

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# Archaeological Research at the Qarshovul Tepa Site, Uzbekistan

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**Abstract:** This paper is devoted to some of the results of the archaeological excavations at the ancient settlement of Qarshovul Tepa. The site is situated in the south-western part of the Tashkent oasis, on the right bank of the Chirchiq River, near its confluence with the Syr Darya (ancient Iaxartes, medieval Saihun), and was one of the stopovers on the ancient caravan road connecting cities of the Tashkent oasis (ancient Chach) with Sogdiana. Archaeological excavations have been conducted here since 2010 with financial support from the Society for the Exploration of EurAsia (Switzerland). The survey included the fortification, a ritual-cult complex, and the necropolis, which date back to the 7th and the beginning of the 8th centuries CE.

**Keywords:** Tashkent oasis, Early Medieval Chach, excavations.

**Резюме:** Статья посвящена некоторым итогам археологических раскопок городища Каршовул Тепа. Городище находится в юго-западной части Ташкентского оазиса, на правом берегу реки Чирчик, недалеко от ее впадения в Сырдарью (древний Яксарт, средневековый Сейхун), и было одним из пунктов на древнем караванном пути, соединявшем города Ташкентского оазиса (древний Чач) с Согдианой. Здесь, при финансовой поддержке Общества по изучению Евразии, с 2010 г. ведутся археологические раскопки. Исследуются фортификация, ритуально-культурный комплекс и некрополь, относящиеся к периоду 7 – начала 8 вв.

**Ключевые слова:** Ташкентский оазис, раннесредневековый Чач, раскопки.



Fig. 1:1: Qarshovul Tepa and Qarshovul 2 (Necropolis), Satellite picture by Google Earth.

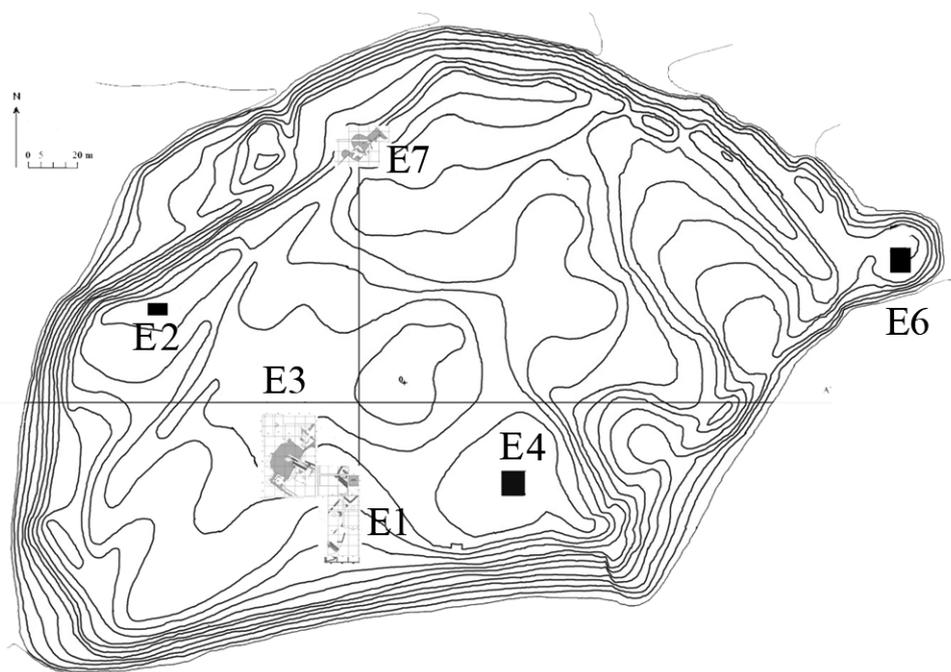


Fig. 1:2: Qarshovul Tepa, plan (elaborated by G. Ivanov).

## 1 Introductory remarks

Qarshovul Tepa site is located in the Tashkent region of Uzbekistan on the Chirchiq River (medieval name Parak), a right-bank tributary of the Syr Darya River. This is a territory in Chach, the ancient principality mentioned in the written sources beginning in the 2nd–3rd century CE (PODUŠKIN 2005: 133–139; SIMS-WILLIAMS/GRENET 2006: 95–111; SIMS-WILLIAMS/GRENET/PODUSHKIN 2007: 1005–1034; SIMS-WILLIAMS 2009: 153–172). In the ancient Chinese sources, it is named “Shi” (石) (a sign meaning

“stone”). In the medieval Arabic geographic and historic literature, this cultural and historic area is known as al-Shash (aš-Šāš from Persian Čāč).

The site forms an irregular pentagon aligned north-east to south-west and situated on natural high ground on the right bank of the Chirchiq (Fig. 1:1), 14 km north-east of the town of Chinaz. Its coordinates are: 40° 58′ 25.10″ N and 68° 54′ 35.11″. It covers an area of about 6 ha, being 330 m from west to east and 195–200 m from north to south.



Fig. 2:1: Excavation 1, stratigraphic trench: View from the south (photo by the authors).

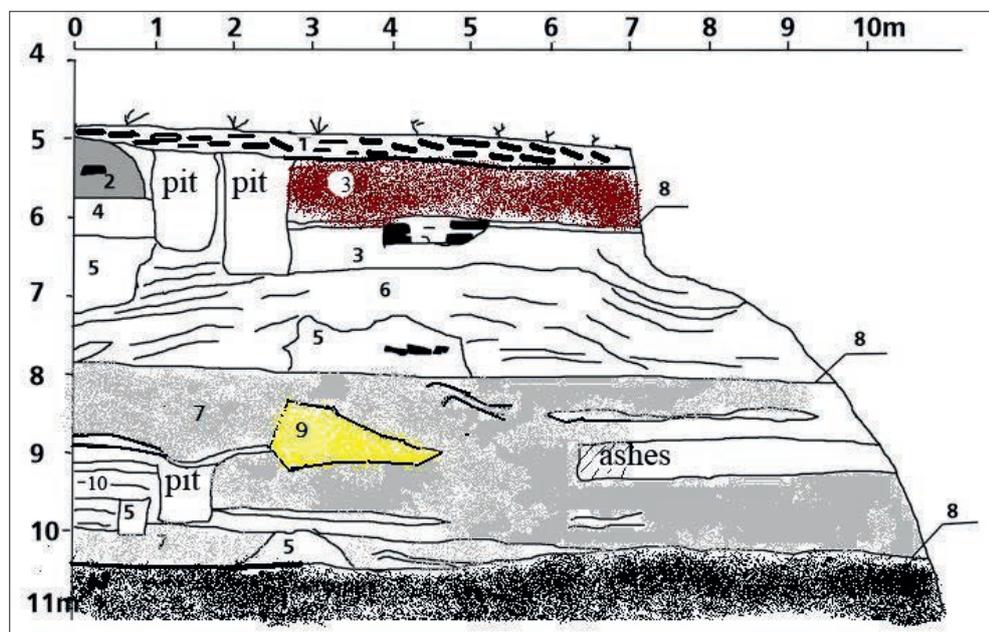
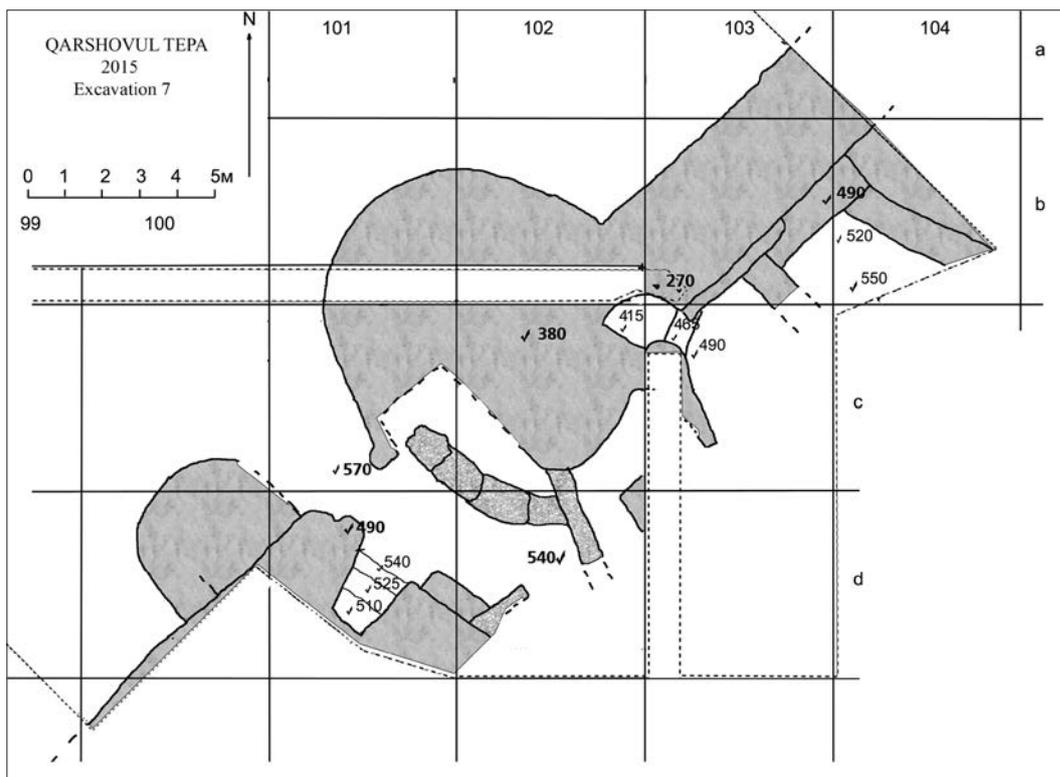


Fig. 2:2: Excavation 1, stratigraphic trench; 1: soddy layer; 2: pakhsa; 3: friable layer; 4: loess; 5: dense layer of destroyed wall; 6: ashes; 7: soil of medium density with ashes; 8: floor; 9: layer of medium density; 10: layer of ashes (elaborated by G. Ivanov).

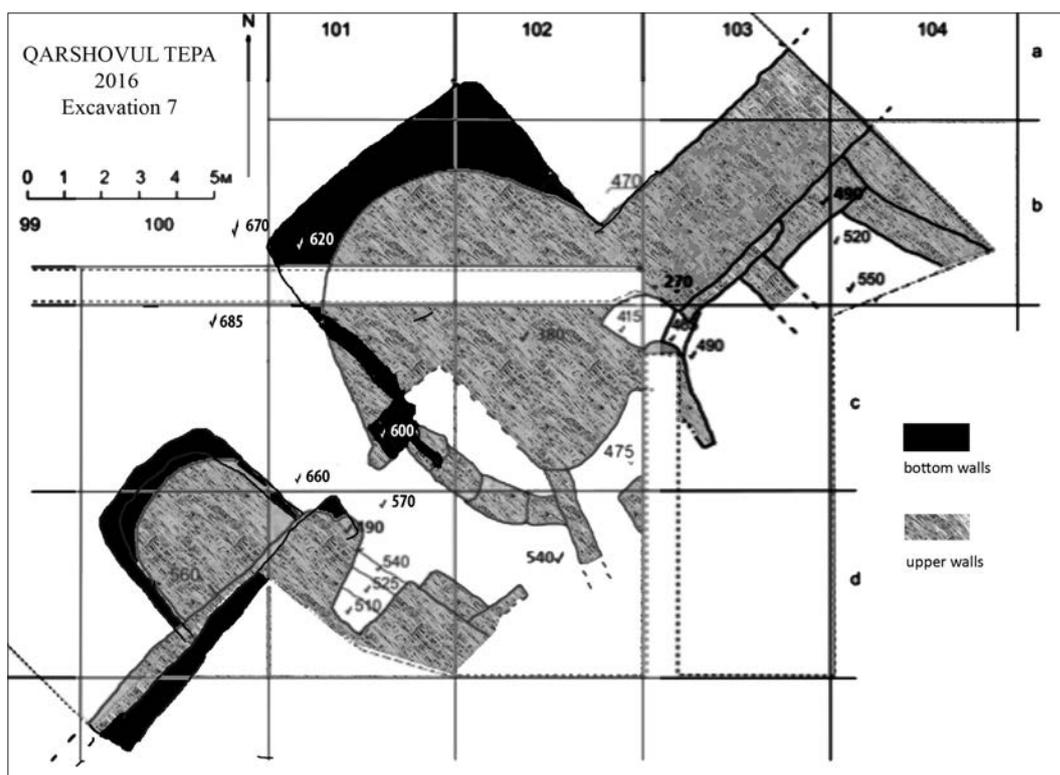
Formerly, the river flowed at the foot of the settlement and so the fortifications of the south-eastern side were built parallel to the riverbed. At some point, however, probably after the area had been abandoned, the course of the river changed from south-west to west, and, as a result, part of the river bank and the southern corner of the settlement were washed away by the river. Currently, the river-bed lies several hundred meters to the south-east.

## 2 History of investigations

The Qarshovul Tapa site (*qarshi ovul* means “opposite the located settlement” in the Uzbek language), also named Karshaul in the scientific literature, was mentioned by G.V. Grigor’ev in his 1935 report and located on the map he published. G.V. Grigor’ev studied the monuments on the right bank of the Chirchiq during his investigations in 1934, downstream between Tashkent and Chinaz (GRIGOR’EV 1935: 47). In 1968, the Bozsuv team of the Institute of History and Archaeology of the Academy of Sciences of



1



2

Fig. 3:1–2: Excavation 7, Northern gate; 1: The last stage of functioning; 2: The earlier stage of functioning (© G. Ivanov).



3

Fig. 3:3: Semi-circular tower of the northern gate (photo by the authors).

Uzbekistan (Ya.G. Gulâmov and G. Dadabaev) conducted some archaeological research (BURÂKOV/KASYMOV/ROSTOVTSSEV 1973: 57). Unfortunately, the results were not published. In 2008, a small investigation was conducted by the archaeological team of Ikuo Hirayama's International Caravanserai of Culture of the Academy of Arts of Uzbekistan, headed by K.A. Sheyko. Since 2010, regular excavations have been carried out by the above team, with financial support from the Society for the Exploration of Eurasia (Switzerland).

### 3 The main objectives of the excavations

The main work at the Qarshovul site has been conducted in the southern sector (Excavation 1), at the so-called Platform (Excavation 3), at the Northern Gates (Excavation 7), as well as at the Necropolis (Excavation 5), located 200 m to the north-east of the settlement's fortifications (Fig. 1:1, 2).

### 4 Stratigraphy of the southern section (Excavation 1)

Excavation 1 is located in the southern part of the site at the cliff. The investigation of this area was undertaken in 2008 (when a bronze cross was found there, see Fig. 9:5), 2011 and 2015. The main aim in 2015 was to establish the stratigraphy. A verti-

cal exploratory opening 6.5 m deep was dug down to the natural ground level (Fig. 2:1, 2). It revealed that this was an unbuilt area, used for utilitarian purposes. A large number of modelled ceramics, mostly kitchen pots and storage containers, were discovered. The ceramic material discovered in the lower layer allows a dating to the 4th–5th centuries CE, though there may be older layers in other parts of the site.

### 5 Gates and Fortifications Complex (Excavation 7)

As mentioned above, in plan the fortifications of Qarshovul Tapa form a pentagon aligned north-east to south-west. On the satellite image of the Qarshovul site dated 28 February 2016, published in the Google Earth System, the remains of the fortification walls can clearly be seen (Fig. 1:1). The longest wall (about 250 m) is the north-western, which goes almost straight from the northern corner of the fortress in the direction of the south-west until the southern edge of the cliff.

There is a gate in the north-western wall of the fortress situated about 50 m from the northern corner of the fortification. The local relief makes it clear that the gates were here, as there is a *pandus* (i.e. a gradual ascent without steps, an architectural and archaeological term from French *pente douce*, "gentle slope") rising at this point from the foot level of the site in a south-western direction. On the way up,





Fig. 5:1: Excavation 3. Highest part of the Platform (photo Dj. Ilyasov).



Fig. 5:2: Excavation 3. Rooms to the north from the Platform (photo by the authors).

chronology, can be settled by forthcoming excavations.

## 6 Platform and courtyard (Excavation 3)

Excavation 3 includes the most intriguing structure of Qarshovul Tepa – the so-called Platform and the premises that surround it (Fig. 4). The Platform is located in the south-western part of the site, which is delimited by a north-western wall. The Platform is situated parallel to the latter (Fig. 1:1). The excavations revealed that there were at least three construction horizons, subdivided into various construction periods. The constructional horizons are numbered from the top down. Herebelow follow the most important details.

### Construction Horizon I

This includes the Platform, the highest point of which is only 1.10 m lower than the highest point (i.e. zero point) of the entire site (Fig. 5:1). The Platform is rectangular, with corners orientated on the cardinal points. Its dimensions are: eastern side 16 m, western side 17.40 m, northern side 12 m, and southern side 11 m. In Construction Horizon I, the focus was on the main construction stage, as well as on at least two other functional periods.

Initially, a strong foundation made of clay was raised on the remains of the premises of the Construction Horizon II, its thickness 1.50 m on average. The smoothed top surface of this foundation was at a depth of -3.20 m from the zero point and the upper part of the Platform was erected over this flat surface. In the combined construction method, a layer of *pakhsa* 20, 25 or 35 cm thick alternated with a layer of mud brick laid over a layer of *pakhsa* without using any mortar (Fig. 5:1). This resulted in a flat surface that was used as the base for another layer of *pakhsa*. A binding clay solution was used only to grout the vertical seams between the bricks. The bricks used for construction are rectangular in shape, being 48–50 × 24–25 × 8–9 cm. This kind of masonry and this standard type of mud brick were typical in the architecture of Central Asia during the 6th–8th centuries, i.e. in the Early Medieval period (NIL'SEN 1966: 204–207, 212, 226–229, Figs. 78, 79; HMELNICKIJ 2000: 34–36, Figs. 20–22). The preserved height of the Platform in its combined part is 2.10 m, so the total height of the Platform is 3.60 m. Considering the possibility of a washout of soil, we can surmise that the original Platform was about 4 m high. A mud-brick bench (*sufa*) about 40 cm high (four layers of brick) and about 1.50 m wide was situated on the south-eastern side of the clay body of the Platform. A similar structure was probably also connected to the north-western

edge of the Platform. Structures had been added to the north-eastern and south-western sides of the Platform. Room 6, which joins the Platform on the south-west, is 4.95 × 3.50 m. The north-eastern wall of the room is actually the south-western edge of the Platform, composed of *pakhsa* blocks. Block sizes range from 60 × 60 cm to 90 × 90 cm. The height of the wall inside the room is 1.10 to 1.20 m. The length of the north-western wall is 4.95 m and reaches, at its highest undamaged state, 0.75 m. The south-western wall is less preserved than other walls. Its interior length is 4.60 m and its height is between 0.15 and 0.23 m. The south-eastern wall is also 4.60 m long and its current height 0.25 m. At its centre there is a doorway 1.25 m wide that connects the room with the big courtyard. The walls of the room, except the north-eastern one (i.e. the Platform) were laid out with mud bricks measuring 48–49 × 23–24 × 8–9 cm. There are *sufas* benches along the north-eastern and north-western walls, but not along the south-western wall. Only a small podium was identified in the southern corner. The construction of the *sufas* is as follows: the mud bricks are laid out in one row along the perimeter of the bench, and the space between the wall and the brick border is filled with soil and fragments of mud bricks. The *sufa* is 0.90–1.10 m wide. Walls and *sufas* are covered with a plaster consisting of clay mixed with straw. In the centre of the room, there was a square fireplace, and beside it (to the south-east) a copper coin bearing the image of a ruler was discovered. Another coin was discovered by the south-western wall; its state of preservation is poor, though a double portrait of a ruler and his wife can be discerned. The room was filled with wall debris lying on the burnt layer, which in turn lay on the last floor of the room. This period of occupation produced only a few not very expressive ceramic fragments.

A big complex of rooms surrounds the Platform on the north-east and north-west (Fig. 5:2). The walls of all these rooms are of mud brick. Rooms 7 and 8, which are only partly excavated, are located in the north-eastern corner of Excavation 3 and beyond. In Room 8, a ceramic fragment with an uncertain zoomorphic ornament was discovered. Pieces like this are called supports (for making *shish kebab*?) in Central Asian archaeology. Room 9 is located to the south-west of Rooms 7 and 8, its size 7.70 × 3.45 m. The south-western wall is only 6.35 m long, because it abuts the brick staircase that led to the upper floor or the roof, which has not been preserved. The height of the staircase is 0.90 m, the width 0.75 m. It has four steps, each 25 cm wide. Room 9 is connected to Room 8 by a passage. By the northern wall of Room 9, a fireplace was discovered at the lowest floor level. Room 10 (9.40 × 3.46 m) was added to the north-eastern face of the Platform, like Room 6. Its peculiarity is a non-

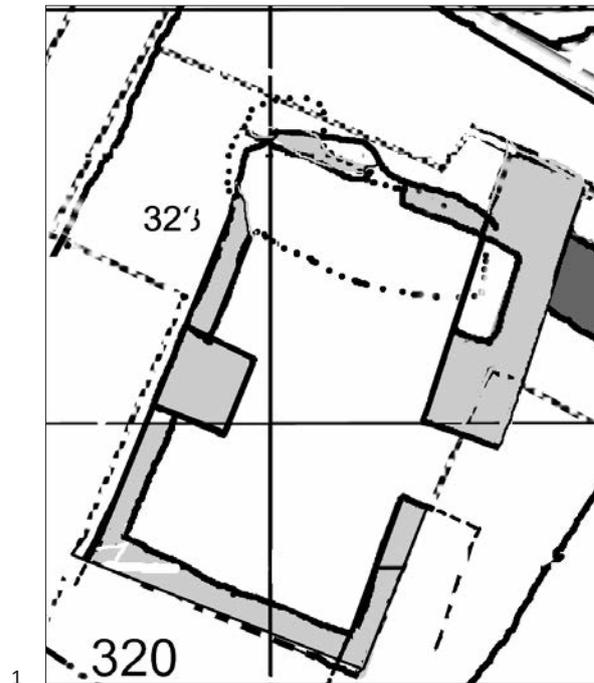


Fig. 6: Constructional Horizon II, Room No. 1; **1**: Plan (© G. Ivanov); **2**: View from north-west (photo by Dj. Ilyasov).

umental *sufa*, added to the Platform build of *pakhsa*; its length is 2.45 m, its width 1.83 m, and its height 0.60–0.65 m. The walls are made of mud bricks measuring 50 × 25 × 10–11 cm. Room 11 was probably an *iwan*, because it has no wall on the south-western side. The north-western wall is 4.60 m long, the north-eastern wall 5.40 m, and the south-eastern wall 3.50 m. Along the north-eastern wall, there is a *sufa* 1 m wide and 4.15 m long. This *sufa* does not reach the north-western wall. In the centre of *sufa*

there is a round fireplace 30–35 cm in diameter. Room 12 has been only partially excavated. Located to the north-west of Room 11, it is 3.50 m wide. The north-western wall has been traced for 4.70 m. There is a doorway 1.05 m wide in the southern corner. The south-western wall is 2.50 m long. Discovered in the room were fragments of a large ceramic jar (*khum*) with a *tamgha* (individual or clan property mark incised into the clay before firing). Room 13 is located to the north-west of Room 12

and is oriented south-west to north-east; it has been only partially excavated, because the northern part of the room is beyond the excavation site. The south-eastern wall has been traced for 6 m. The width of the room is 2.80 m. As in Room 11, there is no south-western wall here. There is a kind of communicating room which connects this room with Rooms 12 and 15. In Room 13, finds include fragments of big ceramic jars, and a modelled fire-resistant clay pot with two holders in the shape of roundish ledges. At the side of Room 13, we discovered, by the communicating room's wall, a thin-walled ceramic mug with polished surface and, under the handle, incised decoration in the shape of a cross inside a diamond. Room 14 is to the north-west from Room 13. Only its southern corner has been excavated so far, because the major part of the room is beyond the excavation area. Fragments of a *khum* with *tamgha* were found here. Room 15 has two passages into the communicating room and is located to the south-west. The north-western passage is 1 m wide, the second passage 1.30 m wide. The room is 5.20 × 3.50 m. Along the south-western and partially the north-western and south-eastern walls, there is a *sufa* between 0.90 and 1 m wide. The height of the *sufa* at the north-western wall is 37–39 cm; at other walls it is 23–25 cm. Closer to the western corner of the room there is a fireplace that rests on a brick base. Another fireplace, wall-mounted, was found on the wall that separates Room 15 from the communicating room. Traces of a powerful fire have been seen here: on the upper-floor level, there were found burnt wooden roof beams and the walls had been reddened by fire. In Room 15, fragments of *khums* were found, together with a modelled mug with relief decoration, polished red engobe and *tamgha* scratched under the handle before firing (Fig. 9:1, 2). Room 16, which is to the south-west of Room 15, is 10.45 × 7.50 m, which suggests it may in fact have been a courtyard. Here, at the level lower than the upper floor, we discovered circular-shaped ceramic jars with four loop handles, and relief polished decoration that made them look attractive (Fig. 9:3, 4). To the south-east of Room 16 there is a corridor 2.75–3.05 m wide that divides it from the Platform and has been named Room 17. So the area between Rooms 10, 11, 12, 15, 16 and 17 could have been used as an inner yard that included the *iwan* (that is, Room 11).

In the last period of the Platform's use, in its south-eastern part there was a spacious, complexly shaped yard with a floor area of about 600 sq m. A stairway made it possible to climb up to the *sufa* that surrounds the Platform from the earlier level of the courtyard. It was added to the outside of the walls of the second Construction Horizon phase which surrounded Room 2 or the inner yard (see below). The stairway consists of eight rows of mud bricks and has four steps, each of which is two bricks high;

its length is 1.80 m along the northern and southern sides and it is 1.60 m wide. In later periods, the cultural layers of the settlement grew in depth and the stairway was gradually covered with a layer of friable greyish soil 45–50 cm deep. Along the south-western wall of the yard, which was a continuation of the south-western wall of Room 6, and which was traced for 7 m, there was a *sufa* 1.10–1.15 m wide. Possibly a similar *sufa* was also built along the north-eastern wall of the yard. This has led to the suggestion that members of the community could have gathered in this spacious courtyard for certain ceremonies, sitting along the perimeter of the courtyard.

The part of the courtyard linked to the Platform was covered with a layer 25–30 cm deep that appears to be the result of a fire. In the south-eastern part of the courtyard, away from the Platform, traces of fire damage were also discovered, though here not as extensive as in the area close to the Platform. Traces of intensive fire revealed by the red colour of brick walls, burned wooden beams and so on, have also been noted in the premises that surround the Platform. The fire caused serious damage in all the premises that surround the Platform. Judging by evidence of repair works, after only a little time the rooms and the Platform were reused, but for a short period only. No traces of serious redevelopments have been discovered, and the site, as well as the whole settlement, was soon abandoned.

## Construction Horizon II

Before constructing the Platform, the upper parts of the walls of the building related to the second construction horizon were levelled. Under the central part of the Platform, Room 1 of the above-mentioned premises has been excavated. It is a rectangular room, its walls orientated mainly on the cardinal points, with a slight deviation towards the east (Fig. 6:1, 2). The layout of Room 1 on the level of the first (i.e. uppermost) floor (-5.22 m from the zero point) is typical of the throne or display (guest) rooms of Early Medieval palace and the castle architecture of Central Asia. Classic examples of the "throne room" are square in plan, though they can sometimes be rectangular. The best known examples are in northern Tokharistan, in Sogdiana and in Chach (NIL'SEN 1966: Figs. 24, 50, 65, 66; LUNINA 1984: 98–100, Fig. 28; HMELNICKIJ 2000: 57, Figs. 38, 54, 60; IL'ASOVA 2004: 207–213, Figs. 2, 3).

Room 1: the western wall is 5.40 m long, and the room's width along the southern *sufa* is 2.81 m. The room becomes slightly wider to the north: at 1 m to the north of the podium, its width is 2.90 m. Along the southern and western walls there are raised area (*sufa*) used for sitting. The height of this *sufa* is 50 cm in the south-eastern and 47 cm in the south-western corners, its width 44 cm. The height

of the *sufa* along the western wall was 50 cm, the width 39–42 cm. Here, 1.66 m from the southern *sufa*, a “place of honour” was made. It was organised as follows: the *sufa* has a niche 90 cm wide, the back wall of which is angled at about 30 degrees. The northern side of the niche is 15 cm deep, the southern side 20 cm deep. A brick podium covered with the fine clay plaster on the sides and on the upper surface is attached to the niche; its dimensions are: southern side 50 cm, eastern side 94 cm and northern side 63 cm. The height of the podium is 39–40 cm. A space of 72–81 x 90–94 cm (which is the area of podium plus niche) made it possible for one person to sit here in greater comfort than the other people present at an event. The *sufa* continues to the north of the niche, but as a more complex structure: for 54–55 cm it is 50 cm high and 37–38 cm wide; then it is 8–10 cm lower because here there is one row of bricks less than in the other part. This forms a kind of armrest 55 x 38 cm long and 10 cm deep. At a distance of 1.10–1.20 m to the north of the podium, the *sufa* was cut by a robbers’ pit which, coming down from the top of the Platform, partially destroyed the surface of the northern part of the western wall of Room 1. Because this pit completely demolished a significant part of the northern wall, together with the north-western and north-eastern corners of Room 1, there is no way to prove that the *sufa* continued along the northern wall, though this looks logical in terms of the planning schemes of this type. The “place of honour” is placed vis-à-vis the entrance to Room 1 on the eastern wall. Such a configuration is typical for the gala-halls, where the walls are lined with *sufas*, and opposite the main entrance there is a “kiosk”, i.e. a widened part of the *sufa*. The entrance is 87 cm wide, and its southern face is 2.28 m away from the south-eastern corner of the room; the northern face is 2.15 m away from the northern wall. The entrance was closed off with mud bricks (46 x ? x 9 cm, ? x 23 x 10 cm). Under the bricks, there is a layer of fine, dark-grey soil 10–20 cm thick. The height of the brick layer at the entrance is 70–75 cm from the level of Floor 1. Above this is a layer of levelling fill, and above that, at a height of 84–85 cm, *pakhsa* had been used, serving as a Platform foundation.

Room 1 had another niche, which is on the northern side of the eastern wall, close to the north-eastern corner. It is 1.12–1.14 m wide and 46–48 cm deep, and the bottom of the niche is 5–6 cm higher than the level of Floor 1. The walls of the niche have survived only as high as 45 cm. Like the niche in the western wall, this niche correlated with Floor 1. We can assume that the niches were used for storing certain objects, like statues, ceramic or wooden containers, ceramic vessels and so on. But considering that the podium is right in front of the first niche, as well as the fact that the back wall of this niche has a sloping back, we can surmise that it was used as

a “front seat” that was covered with mats, carpets and cushions. As for the niche in the north-eastern corner, it was most probably used for keeping the objects described above, so that they stood above the level of Floor 1 by several cm.

The above-mentioned robbers’ pit, which was dug after the settlement had been abandoned, destroyed one-third of Room 1. The robbers started digging the pit to the west of Room 1. In plan, the pit was round, about 3 m in diameter at the top, and in section shaped like a funnel. At the depth of 3 m from the preserved top of the Platform, the pit changes into an elongated oval, because the robbers intruded into the *pakhsa* foundation of the Platform in the east. The persistent treasure seekers managed to break through the extremely tough Platform, demolished a part of the northern wall of Room 1, and broke through Floor 1, as well as through several lower floor levels related to Construction Horizon II. In Room 1, the size of the pit is 3 x 1.30 m. At about the level of Floor 4, which is located at the depth of -6.40 m from the zero point, the pit gets smaller and occupies the north-western corner of Room 1. Apparently, this part of the pit was initially the robbers’ “mine”, which they widened towards the east. It is hard to say what the robbers were looking for; maybe they thought that there would be something very precious underneath so solid a platform. In any case, the depth of the pit is at least 7 m from the zero point.

In Room 1, excavation at the level of Floor 2 (-5.76 m) has been partially carried out (Fig. 6:2). It seems that the floor plan at this level is somewhat different to the plan at the level of Floor 1 (-5.22 m); for instance, the entrance to the room was, possibly, different, as well as the disposition of *sufas*. This will be examined in the next season of excavations, during the gradual, level-by-level clearing of Room 1 and the adjacent premises.

In the stratigraphic trench, which links with Room 1 in the east, the structure and phases of the Platform construction can be traced, as well as the remains of Room 2 (or a small courtyard?) of Construction Horizon II, the northern wall of which joins the eastern wall of Room 1. It is built of mud bricks which are 49 x ? x 8 cm, 52 x ? x 8 cm, and ? x 26 x 9 cm, about 1 m thick, and has been traced 4.50 m to the east. After that, the wall turns to the north. Access to Room 1 was through this room (or yard). Details of the plan and attribution will be clarified during coming seasons.

Stratigraphic surveys reveal the following: at the level of the eastern wall that was cut as preparation for the Platform construction in Room 1, the floor was made up of several thin layers of clay identical to the fine plaster covering the walls of Rooms 1 and 2. This clay covering is between 5 and 25 cm thick. Evidently this was not the real floor, but a multilayer coating, spread through the premises of Construc-

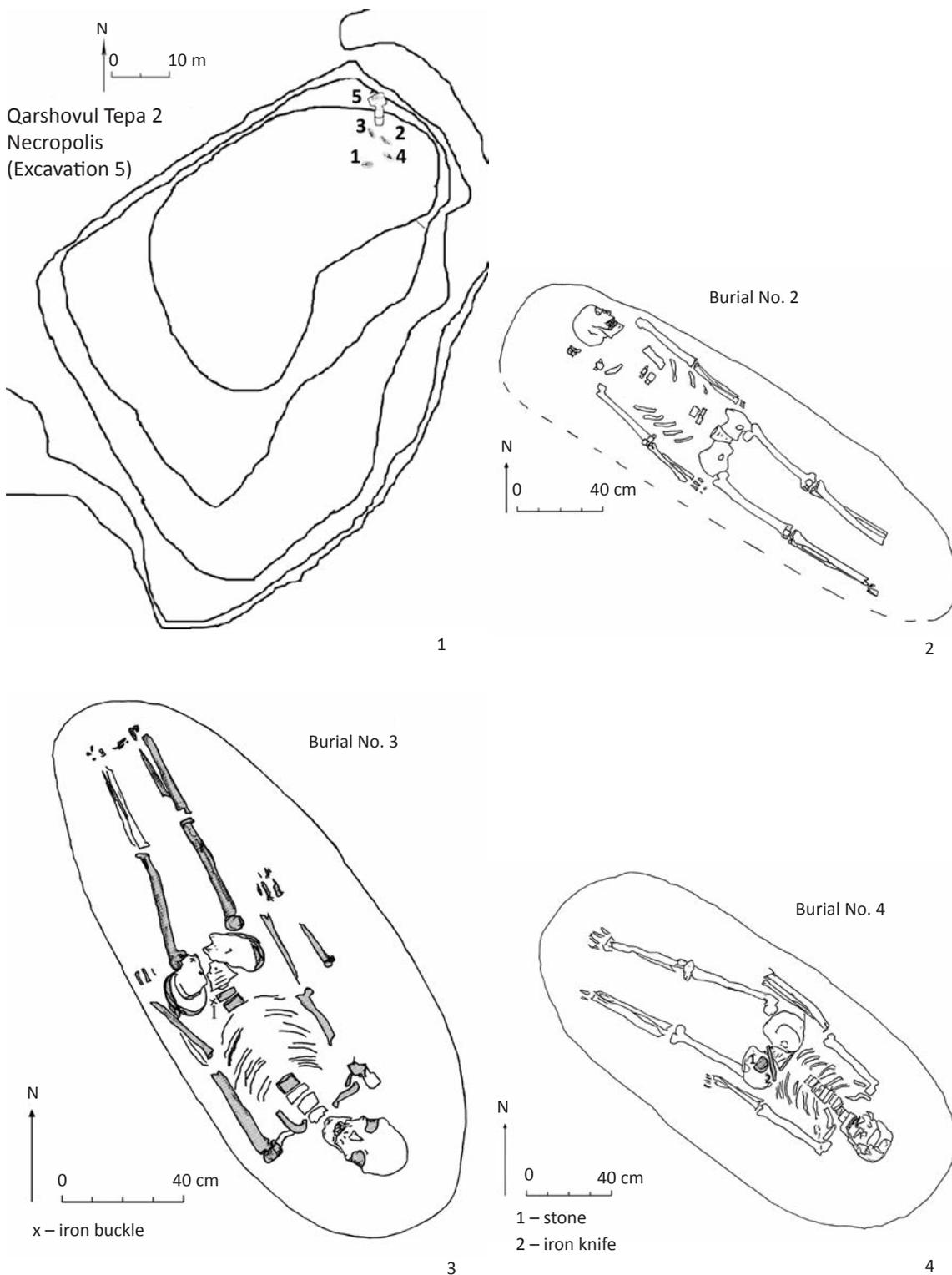


Fig. 7: Qarshovul 2 – Necropolis (Excavation 5); 1: Plan of necropolis; 2: Burial No. 2, plan; 3: Burial No. 3, plan; 4: Burial No. 4, plan (drawings by G. Ivanov).

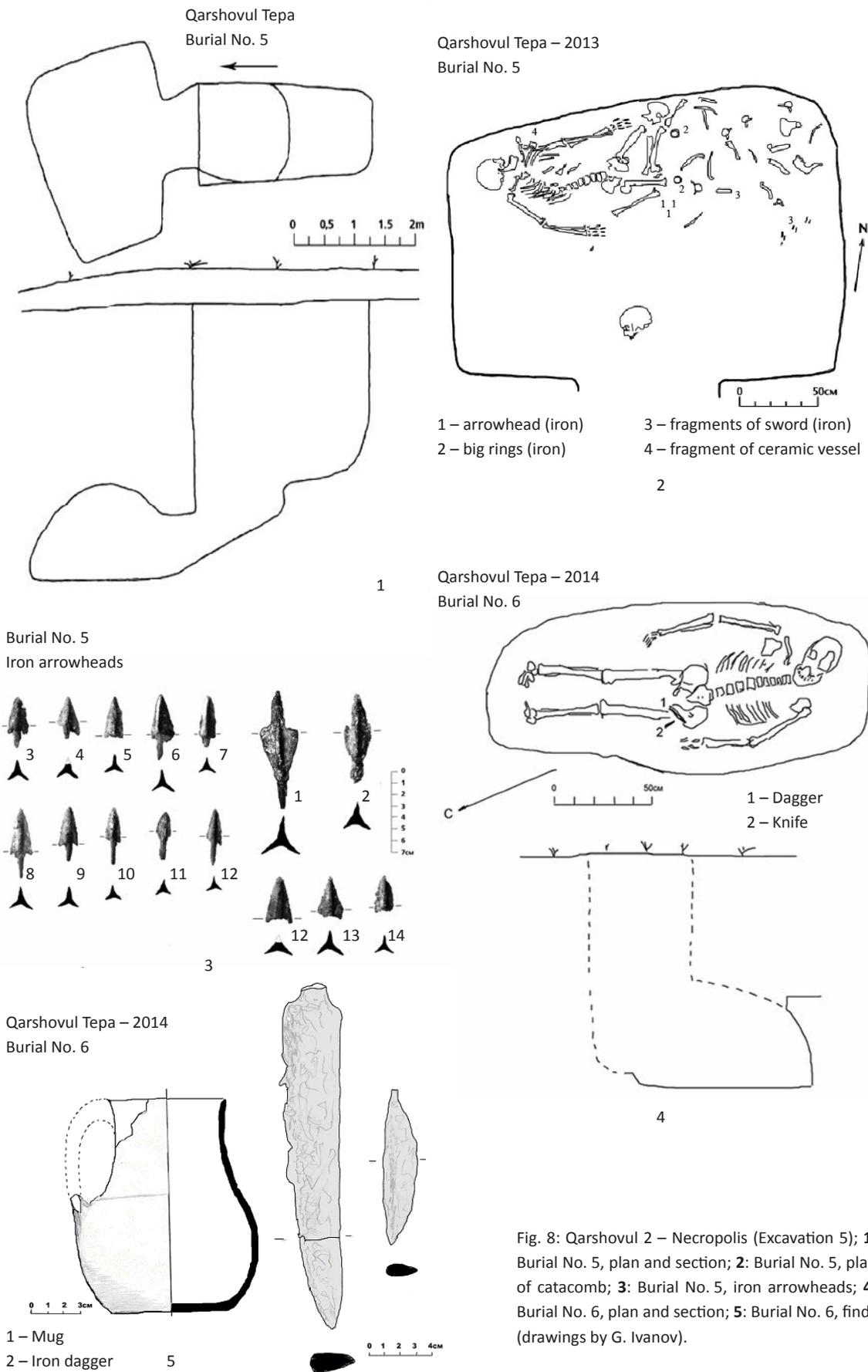


Fig. 8: Qarshovul 2 – Necropolis (Excavation 5); 1: Burial No. 5, plan and section; 2: Burial No. 5, plan of catacomb; 3: Burial No. 5, iron arrowheads; 4: Burial No. 6, plan and section; 5: Burial No. 6, finds (drawings by G. Ivanov).

tion Horizon II, that was applied over the friable layer of backfill in order to level the surface for the construction of the Platform. This level extends for 5 m to the south-east of the wall of Room 1 and is adjacent to a small brick wall (30 cm thick) that limits the courtyard (Room 2?) of Construction Horizon II to the east. At about 1 m from the wall of Room 1, the layer is horizontal, then it drops smoothly for 10–15 cm, then after 2.50 m it rises again. This lowering could have appeared because the fill and plaster sagged under the weight of the Platform that was initially built from this level. Underneath the layer of fill and plaster, about 40–50 cm lower down, Floor 1 was discovered, which coincides with Floor 1 in Room 1 (-5.20–5.22 m from the zero point). It continues horizontally from the eastern wall of Room 1. The above-mentioned wall, which is one-brick thick, stands at the same level. Floor 2 is lower (-5.39–5.49 m), its coating 5 cm thick. This floor has a fired surface, and supports another thin wall (40–45 cm thick) that limits a courtyard (or Room 2) to the east. This wall stands right under the first thin wall that was built 15 cm off. So the distance between this thin wall and the eastern wall of Room 1 is 4.85 m. These two thin walls are adjacent, with a stairway (related to Construction Horizon I) leading to the Platform (see above). On Floor 2, 85 cm to the west of the limiting thin wall and 3.45 m from the wall of Room 1, a square structure has been cleaned. It was possibly a base for the wooden (?) column that supported the roof or canopy. The coating of Floor 2 is 3–4 cm deep. Underneath Floor 2, there is a soft crumbling, dark-grey layer (6–8 cm deep) rich in ash. Farther to the east and south-east, this layer becomes the ground level of a spacious courtyard that is linked to the Platform. The lower ash layer continues to the east with a swell of 20–25 cm. Under the ash layer in Room 2 there is Floor 3. The coating here is 3–4 cm thick, underneath which are accumulation layers 25 cm deep, one of which is of greenish colour. Lower still is Floor 4, about 5 cm thick, and below that is a layer of lumpy soil about 10 cm thick. Underneath there is a layer of rubble about 25 cm thick. Below that, on the level of Floor 1, which belongs to Construction Horizon III, there is a dense layer of loam. Detailed investigation of this horizon is a matter for the future.

## 7 Necropolis Qarshovul 2 (Excavation 5)

The necropolis, which undoubtedly belongs to the Qarshovul Tapa site, is located 200 m to the north-east (Fig. 1:1). A natural hill standing on the banks of the ancient riverbed of the Chirchiq River was used for burials. Currently, it is partially preserved and has a triangular shape, for the original hill was cut from the north-west and south-west in the

20th century during land-reclamation (Fig. 7:1). Its dimensions are 60 × 40 m and it stands 4 m above the current ground surface.

The excavations of the necropolis were conducted between 2012 and 2015. Under the grassy surface, the top layer of the hill down 40 cm consists of a medium-density soil formed of dust and sand, held together by salt and grass roots. Lower, there is a thin layer of a heavily saline sand in which traces of graves could hardly be found. Most of the excavated burials could be identified as such only after the human remnants were discovered and cleaned. During the four field seasons, 11 burials were discovered. Ten of them can be attributed to the burials of the inhabitants of Qarshovul Tapa.

The design of the burial pits was difficult to establish in 6 cases out of 11. According to the disposition of the remains of the burial pits and skeletons, it can be concluded that they are so-called *podboy* burials, i.e. a rectangular entrance pit and vault in one of the long walls (Fig. 7:2–4; Fig. 8:4). The structure of the remaining five burials is clear: three of them are catacombs and two are *podboy* burials. The bodies were buried at the depth of 2 m maximum. During the excavations of Burial 2, it became clear that the vault was closed up with rectangular mud bricks sized 35 × 25 × 9 cm. In view of the fact that the butt-end of the bricks could have been partly cut during the excavation of the burials, the form of the brick is very close to that at Qarshovul Tapa (47–48 × 25 × 9–10 cm).

Three of the graves were of catacomb type and differed in size. In the largest of them (Burial 5), the lower skeleton was placed on the ground at a depth of 5 m below the current ground level.

Burial 6 was at a depth of 2.70 m, and Burial 11 at 1.70 m, below the current ground level. The burials are all differently orientated. This most probably illustrates the fact that the inhabitants of Qarshovul Tapa had no strict burial traditions.

The question of dating the necropolis is difficult. All in all, apart from the finds made in Burial 5, the finds were two ceramic vessels, two iron knives, a fragment of a dagger, and two round iron buckles. In more than a half of the excavated burials, no grave goods were discovered. But the objects found at the site cannot be used as dating material because similar objects were used over a very long period of time, from the middle of the 1st millennium BCE to the 8th century CE.

Burial 5, being a catacomb type, is different from the others both in construction and dating. The entrance pit is of a trapezoid shape and orientated north-south (Fig. 8:1, 2). It is 2.90 m long; its northern wall was almost perpendicular to the longitudinal walls, its width here being 1.50 m; in the southern part, the corners were rounded, and the width of the entrance pit is 1.25 m at the top and 1 m at the bottom. Under the southern wall, the pit is 2.25 m



1



2



3



4



5



6

Fig. 9: Finds **1, 2**: Ceramic mug, Excavation 3, Room No. 15; **3, 4**: Ceramic jars, Excavation 3, Room No. 16; **5**: Bronze cross, Excavation 1; **6**: Bronze ear-cleaner, Excavation 3 (photos Dj. Ilyasov).

below the ancient surface. 1.75 m to the north of the southern wall, there is a step, and the bottom of the pit now descends to 3 m. Farther to the north, the bottom of the pit gets lower still, reaching a depth of 3.75 m under the northern wall of the grave's entrance pit. There is an archway into the dromos, 75 cm high, and it is slightly narrower than the width of the entrance pit. A 50 cm dromos leads to the catacomb. The floor of the dromos is inclined and connected with the catacomb 4.25 m from the ancient surface. Inside the dromos, there was just loose soil. The catacomb of Burial 5 stretches east-west and is located almost perpendicularly to the entrance pit and dromos. Deviation from the north-east/south-west orientation is not more than 10 degrees. The catacomb is trapezoidal in plan (**Fig. 8:2**), its western wall 1.40 m long, the eastern 2.10 m. The length of the chamber is 2.60 m. The walls are vertical for only 20–25 cm; above this height they are overarched. The floor at the depth of 5 m from the current surface is levelled and formed of rammed earth. At its highest point, the catacomb's ceiling reached about 1.40 m. The ceiling in the north-western corner has caved in (or most probably the hole was pierced at the time of the next burial at the same spot). On the floor, there were remains of an organic substance which is brown in colour (felt rug?). There have been two burials in this catacomb, and both times they were along the northern wall. The skeleton from the initial burial rested on the ground (on a rug?). But just the leg-bones have survived, because soil covered the legs when the ceiling fell in. According to the position of the legs, the body lay stretched on its back, the head turned east. The remaining bones of the skeleton from the pelvis and above were scattered around the entire north-eastern part of the catacomb. The skull was positioned towards the dromos. The leg-bones were covered with a layer of loose soil 15–30 cm deep that had crumbled through the hole in the ceiling. The second skeleton lay over this soil. It, too, lay stretched on its back, but its head pointed west, the face turned towards the north. Later (but not long after, because its tibia and fibula were not separated) the leg-bones of the upper burial were shifted towards the northern wall of the catacomb. Judging by the position of all the bones, the catacomb had been robbed twice. Initially, at the time of the second burial, the grave-diggers fell into the catacomb they presumably did not know about before. And this happened again soon after the second burial.

### Finds from the necropolis

In Burial 5, south of the place where the hip-bones of both skeletons were, two iron rings, a fragment of a sword, and 15 three-bladed iron arrowheads were discovered (the arrowheads vary in size and condition). As practically no ceramic material was found,

the arrowheads were used as the basis for dating the graves. Small three-bladed arrowheads with the point bent over were in use at the turn of our era (LITVINSKIY 1965: 78, Fig. 6). Larger arrowheads are usually dated after the 4th century CE. Tiered arrowheads like those discovered (**Fig. 8:3**) appeared in southern Siberia and on the Mongol steppe in the 2nd to 1st centuries BCE (ZASECKAÂ 1983: 82). They are characteristic of the Hsiung-nu people, but by the end of the 1st century CE such arrowheads were known as far away as the North Pontic region (SIMONENKO/LOBAJ 1991: 14, 45, Fig. 7: 5, photo 9; SIMONENKO 2010: 99–100, Fig. 68). The type of construction and the depth of the catacomb are characteristic for the monuments of the Central Asian nomads at the cusp of two eras. Based on the above, it seems possible to date the first of the burials in the catacomb to the end of BCE/first centuries of CE. As for the second burial, investigated together with all the other burials at the necropolis of Qarshovul Tepa, it dates to the Early Medieval period.

Summing up the results of the excavations of 11 burials during the four field seasons, it is still too early to offer any final conclusion. Conspicuous are the facts that:

1. The main burial (No. 5) is very different from all the others in construction and dating.
2. Other burials do not show stable skeleton orientation and more than the half of them had no grave goods at all.
3. The overwhelming majority of the burials coincide in time with the occupation of the Qarshovul Tepa settlement.

So we can surmise that the early catacomb was left by the nomads before the fortified settlement appeared on the neighbouring hills. Later in this area, the cemetery for Qarshovul Tepa inhabitants was organised. Apparently, the burials excavated reflect a not very stable burial ritual and belonged to the descendants of the nomads of the so called Kaunchi archaeological culture of Tashkent oasis who later settled in the area. In other words, these were a part of the Kangju tribes, among whom the massive sedentarisation process began in the 3rd–4th centuries. As for the religious affiliation of the buried people, it is still too early to draw any conclusions.

## 8 Finds from the site

The archaeological investigation carried out by the Ikuro Hirayama International Caravanserai of Culture of the Academy of Arts of Uzbekistan revealed various aspects of the material and spiritual culture



Fig. 10: Excavation 3, stone object: **1**: Stone bead; **2, 3**: Stone pendants; **4**: Stone distributor, lapis lazuli; **5, 6**: Stone stamp with Sogdian inscription; **7**: Fragment of serpentinite vessel (mortar?); **8**: Stone guard; **9, 10**: Stone scabbard slide; **11**: Stone chape (?); **12, 13**: Details of engraved depictions of guards and scabbard slide, bone belt buckle, Orlat burial ground, Uzbekistan (photos by Dj. Ilyasov).

of the local population of the Early Medieval period, mainly the 7th–8th centuries.

As usual, the main finds were fragments of ceramic vessels. The vessels discovered included both modelled forms (the majority of the finds) and those made on the potter's wheel. They can be subdivided into kitchen utensils (pots, frying pans, tables or so called *dastarkhans*), storage and transportation wares (*khum*, *khumcha*, wide-neck jugs with the horizontal handles for storing liquids), and tableware (polished spherical jars with the relief decoration over the orange-red engobe, jugs, jugs with spouts, mugs, bowls). Both the kitchen utensils and storage vessels had lids. *Khums* and *khumchas* all had a characteristic brownish engobe. A separate group of finds consists of incense burners and oil lamps.

The discovered ceramic material is very close to Chach ceramics, as well as to ceramics of the south Kazakhstan territories along the Syr Darya River, and may be dated to the 6th–8th centuries (Fig. 9:1–4).

A characteristic feature of Qarshovul Tapa ceramics is the *tamgha* or *nishan*. *Tamghas* were personal or clan/tribal signs of ownership. They mainly appear of the storage and transportation wares (*khums* and water jugs) and on the tableware (mugs). A good collection of *tamghas* is being steadily gathered, and a special paper will be dedicated to it.

## Other finds

In 2008, a bronze cross was discovered on the site (ASHIROV/POTOROCHINA/SHEIKO 2010: 40–43), found under a layer of sods at a depth of 15 cm, in the south-east corner of Excavation 1 (Fig. 9:5). It generated interest in view of the long-lasting discussion concerning the location of the Christian settlement of Winkerd, which, according to the Arabic geographers of the 10th century, was located in al-Shash (BARTOLD 1964a: 279; 1964b: 315–316; SVERČKOV 1990: 101–102; concerning Christianity in Shash, see, BOGOMOLOV 1994: 71–78). Similar crosses have been found at the Krasnaja Rečka site in Kyrgyzstan, dated to the 7th–8th century (BAJPAKOV/TERNOVAJA/GORACHEVA 2007: 202–205, Fig. 308: 10–12, Fig. 312: 4).

At Excavation 3, various metal objects have been found. They include a bronze ear-cleaner, 60 mm long and 12 mm wide, with a spoon-like shape at one end and a figural finial at the other (Fig. 9:6). It was made with a casting technique. The finial at the end of the stick shows a female figure in a double-breasted high belted coat and boots. In her left hand, held low, she is holding a jug (?), while between her raised right hand and her cheek there is an indistinct object (a bouquet? a bunch of branches?). Above the head, there is a hole for hanging the item. Such objects, which have been discovered in Early Medieval sites in Sogd (Hisorak) and north-

ern Tokharistan, date back to the 7th–8th centuries. The example most like ours was found at Shirkent in southern Tadjikistan (SOLOV'EV 1997: 64, Fig. 16: 15; SOLOV'EV 2007: Fig. 50).

In Room 13, part of an iron spear was found, namely the pointed finial that was attached to the bottom end of a spear (*vtok* in Russian). In shape it is an elongated cone, its length 11.8 cm, the opening 3.5 cm in diameter.

Another very numerous group of finds after the ceramics are the objects made of various kinds of stone. Discovered in the fire layer in the courtyard linked with the Platform in the south-east, they were scattered over the courtyard. If we suppose that the Platform was used for some ceremonial or religious purposes, the fire layer may be evidence of the plundering and burning of the complex during one of the last periods of occupation at Qarshovul. In this case, the stone objects scattered around chaotically may be the remnants of the offerings that had originally been kept inside one of the premises that linked with the Platform. Seemingly, the robbers (soldiers of Qutayba ibn Muslim's army which, according to Ṭabarī, plundered and burned Shash in 713–714?) did not consider them valuable and so just threw them aside. Many stone artefacts, like beads, show the traces of burning.

Other stone objects include: a stamp with Sogdian inscription (Fig. 10:5, 6); the fragment of a mortar made of serpentinite (Fig. 10: 7); parts of a sword and scabbard (Fig. 10:8–11); a “distributor of laces/thongs” made of lapis lazuli (Fig. 10:4); rectangular and triangular pendants (Fig. 10:2, 3); and large beads (spherical, oval, cylindrical, and flat) (Fig. 10:1).

Let's look at some of these objects in a little more detail. The stamp, which is 4.7 cm, is made from a semi-translucent stone (chalcedony or jade?) that turned dark grey after being in a fire. It is square in transverse section (2.6 × 2.1 cm), becoming narrower at the top end, where a hole was drilled so that the stamp could be carried on a cord (Fig. 10: 6). On the flat bottom side of the stamp, which measures 2.5 × 2 cm, are carved two words: βγγ and prn<sup>1</sup> (Fig. 10:5). A theophoric name *Vayyfarn* (“Glory of god [s; of Mithra?]”) can be found at different sources, including Sogdian letters and coins (LURJE 2010: 140–141 No. 289). It should be mentioned that the inscription was not cut very elegantly, probably by someone who was not a professional, and carved not as a mirror reflection, as it should be done on a stamp, but reading right to the left, as in ordinary Sogdian writing. Nevertheless, this does not mean that this item could not have been used as a stamp.

1 The authors would like to express their gratitude to Nicholas Sims-Williams and Pavel Lurje for reading the inscription.

The fragment of a rim was part of a thick-walled vessel carved from a green stone with black spots, most probably serpentinite (**Fig. 10:7**). The cylindrical body is decorated on the outside with a relief carving depicting an elegant floral ornament. Judging by the thickness of the walls of the vessel (at its thickest 1.8 cm), it was a mortar with a diameter of about 12 cm. Overall, the fragment measures 6.2 × 3.1 cm. The discoveries of similar elegantly decorated objects are not known in Central Asia, though the Zoroastrian “Avesta” texts indicate indirectly that such pieces of art existed. One of the texts reads: “We worship the stone mortar, we worship a metal mortar” (GRENET 1987: 52). This attitude is connected with the worship of the sacred Zoroastrian drink “*haoma*”: mortar and pestle were used for the preparation of this drink and were therefore considered sacred. There was probably also a link with more ancient fertility and phallic cults, the mortar and pestle being associated with the male and female reproductive organs. Such associations were still relevant even during the Middle Ages (IL’ASOV 1993: 146). During the archaeological investigation of Persepolis, a stone mortar and pestle with an Aramaic inscription on them were discovered. They were kept in a treasury, not as functional items, but as objects of deep significance. A bronze mortar has also been found (KOCH 2000: 168, Fig. 111; ABDULLAEV 2009: 75–76, Figs. 36, 37). Information on a bronze mortar with a Parthian inscription on it was recently published (SIMS-WILLIAMS 2013: 106–110). The inscription reads: “I, Frahat, gave this mortar and pestle to the treasurer as a blessing for my own soul and for that of Warazak son of Waraz-framan.” In Early Medieval Sogd, which had a pronounced religious and cultural influence on Chach, the images of personages holding mortars in their hands are known. They appear on the relief decoration on ceramic ossuaries discovered in Biyanaiman and Ishtykhan. The figures with different objects in their hands, depicted standing under an arcade, are interpreted as Amesha Spenta (“Immortal Saints”), or as clergy acting their role; they were considered personifications of holy elements venerated by the Zoroastrians. A woman holding a mortar and pestle above her left shoulder is, probably, personifying Haurvatat (Persian Hordad) (“Integrity”), a patron of water (GRENET 1987: 50–52). Thus the thick-walled vessel, made of a rare kind of stone and decorated with a carved relief, could very well be a ceremonial mortar, donated to the treasury of a sanctuary or temple at Qarshovul. But this does not mean that it was necessarily a Zoroastrian temple.

Among the stone finds, there are also several objects that were used as elements of military equipment, namely parts of a long horseman’s sword set. The first of the items is a guard carved from a light-coloured, marble-like stone (**Fig. 10:8**). Its shape is reminiscent of that of typical Chinese

guards, whose characteristic features are a rhomboidal plan, a rectangular cut in the top part that faces the sword’s handle, and a triangular protrusion in its lower part facing the blade. Solid-cast bronze swords with a guard of this shape appeared in China during the Zhou dynasty (1046–256 BCE). During the Han dynasty (206 BCE–220 CE), the sword guards were removable and made from stone (mainly jade), bronze, or other materials.

The sword guards made of jade were often decorated with the carved reliefs; along with these, there were also cheaper made variants without any decoration. Chinese-made stone items reached the areas west of China by way of the trade routes, as well as spoils of war and official gifts. As they became popular outside China, locals began imitating them using the stones available in the area (like chalcedony). Often it wasn’t possible to copy accurately all the details of the original, partly because of the nature of the material used for imitation, or, probably, because of a misunderstanding of certain details on the classic Chinese prototypes. This observation concerns the replicas dated to the 3rd–4th centuries. And the guard from Qarshovul Tapa is one of these imitations.

The second sword item found is a fragment of a scabbard slide that was attached to the outer side of the sheath and used for carrying the sword on a sword belt. The scabbard slide was cut from a streaked, light-coloured stone (jade or chalcedony) later darkened by being in a fire (**Fig. 10:9, 10**). Of the scabbard slide, only the lower part with a longish protrusion, sloping on the outer side and with a thickened inner side at the end, has survived. Judging by the presence of two perforations, the scabbard slide was repaired at some point. The broken edge was ground either before the repair was done or, more probably, the repair wasn’t successful. A prototype for scabbard slides like this (as with the guard) were Chinese slides made of stone (mainly of jade), their classic shape being a flat rectangular plate with a hole bored through it for the belt; the short upper and long lower protrusion with “hooks” appeared during the Han dynasty. Unlike the guards, Chinese-made scabbard slides have been investigated in detail – W. Trousdale has published a remarkable monograph in which he analyses over 400 of them (TROUSDALE 1975). He concluded that production of Chinese classical scabbard slides (items made by the Chinese craftsmen who fully understood the purpose of each of the details) stopped after the 2nd century CE (TROUSDALE 1975: 68).

A set comprising a jade guard and scabbard slide that fits the classic concept, though they do not have richly carved decoration, was discovered in Samarkand Province, which, like Chach oasis, was part of the Kangju empire, founded by nomads. The set, discovered in a barrow (kurgan) at the Orlat burial ground, dated to the 1st–2nd centuries CE (IL’ASOV/

RUSANOV 1998; ILYASOV 2003). In the same sepulchre, bone belt plates have been discovered. One of them has an engraving depicting a battle between groups of horsemen and dismounted warriors. There are detailed depiction of the guards and scabbard slides of the kind named above (Fig. 10:12, 13). In the 3rd–4th centuries, and probably up until the 5th century in some regions (such as Central Asia and southern Russia), imitations of the guards and scabbard slides in which a sword would hang vertically were being made. In the 7th–8th centuries, as we know, the manner of wearing a sword was totally different – the sword would normally hang on two straps of different length that were attached to two fixtures on the same side of the scabbard (KAGEYAMA 2015: 199–212, Fig. 2ab). A sword would then hang nearly horizontally. This more progressive and comfortable way is shown in a great number of the Early Medieval images, such as on the 7th-century wall paintings in Afrasiab (Samarkand) (AL'BAUM 1975: Fig. 7). So the guard and the scabbard slide from Excavation 3 were definitely of a much earlier date than those of the second and first Construction Horizons of Qarshovul Tepa. Their presence in the 8th-century fire layer is evidence that the archaic sword with these details, or indeed just the details, could have been kept there as ancient rare objects. This idea fits the context of precious gifts kept in a treasure room of some sanctuary together with other donations. Examples of such treasuries in Central Asia are well known. We can cite the famous Oxus Temple at Takht-i Sangin in southern Tajikistan; it was built in the Graeco-Bactrian period, but continued functioning in the Kushan period, with gifts and donations dating from Achaemenid and Hellenistic times still being stored in it (LITVINSKIĬ/PIČIKĀN 2000: 341–352). Another example, closer in time to Qarshovul Tepa, is known from the excavations at Paikend in Bukhara province, Uzbekistan. Here, in the south-eastern corner of the citadel, in the so-called “Premises with the wall-paintings”, which were destroyed by fire, a real arsenal from much earlier times was discovered. Underneath the brick layer of the floor, over 30 daggers were found, dating back to between the late centuries BCE and the early centuries CE. The destructive fire is associated with the occupation and total devastation of the town by Qutayba ibn Muslim in 706–707 (SEMENOV (ED.) 2001: 8–13, Figs. 14–15).

There is a well-known example showing that the archaic details of the sword and scabbard were valued in later periods and could have been reused. To make the famous sword from the 5th century found in Altlußheim (Baden-Württemberg, Germany), a Chinese-style lapis lazuli guard was used to deco-

rate the tip of the scabbard (WERNER 1956: 39–40 Table 3: 1 b–c, Table 58: 4). The named guard could not be reused during the Great Migration era, as the sword of the period had a much wider blade. But the imported artefact made of a rare blue stone played the role of an exotic ancient amulet, having been used in the decoration of the scabbard.

An artefact made of lapis lazuli was also discovered at Qarshovul Tepa. This is a so-called “distributor for laces/thongs”, made in a shape of a truncated pyramid with a square flat basis, 28 × 28 mm and with rounded corners (Fig. 10: 4); its upper area, which is round, measures 23 × 23 mm. Two through-holes (10 mm in diameter) were drilled horizontally and crossed in the centre. The item is carved from a light-blue lapis lazuli with white spots; but because of the fire the stone has darkened and at a glance looks dark grey. Another stone item could have been used as a tip for the scabbard (Fig. 10: 11).

During the years of excavations at Qarshovul Tepa, around 60 bronze coins of 6 types have been discovered. The majority date to the 7th and 8th centuries. Also, several coins were found that do not date back to the settlement's occupation, they clearly were lost by later visitors. Among the finds, a silver coin of Amir Temur can be mentioned. Numismatic finds will be described in a separate paper.

Another particular find to be mentioned separately is this gravestone (*qayraq*) found in one of the burials, with a cross scratched on its surface. The carving is not deep or skillful, as if made quickly shortly before the funeral.

## 9 Conclusions

Summing up, we can say that the long-term excavations at the site of Qarshovul Tepa demonstrate that this monument is of great interest in terms of the investigation into urbanisation in the Middle Syr Darya basin in the so-called contact zone between the settled and nomadic population in the Tashkent oasis. This relatively small area has allowed us to answer many questions, beginning with the urban planning and architecture of the site, its material culture and everyday life, as well as its ideology, religion, and the burial rituals of pre-Islamic Shash (Čăč) in the early Middle Ages. Further excavations at the site will undoubtedly bring new and exciting discoveries.

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## Bibliography

- ABDULLAEV, K.  
2009: *Kul't haomy v drevnej Central'noj Azii*, Samarkand.
- AL'BAUM, L.I.  
1975: *Živopis' Afrasiaba*, Tashkent.
- AŠIROV, S./POTOROČINA, E./Šejko, K.  
2010: "Krest prorossij", *Vostok svyše* 19, 40–43.
- BARTOL'D, V.V.  
1964a: O hristianstve v Turkeстане v domongol'skij period (po povodu semirečenskih nadpisej), in: BARTOL'D, V.V., *Raboty po ot del'nym problemam istorii Srednej Azii* (= Sočineniâ 2/2), Moscow, 265–302.  
1964b: Eše o hristianstve v Srednej Azii, in: BARTOL'D, V.V., *Raboty po ot del'nym problemam istorii Srednej Azii* (= Sočineniâ 2/2), Moscow, 315–319.
- BOGOMOLOV, G.I.  
1994: O hristianstve v Čače, in: ŽUKOVA, L.I./PUGAČENKOVA, G.A./BURĀKOV, Ū.F. (ED.), *Iz istorii drevnih kul'tov Srednej Azii: hristianstvo*, Tashkent, 71–78.
- BURĀKOV, Ū.F./KASYMOV, M.R./ROSTOVCEV, O.M.  
1973: *Arheologičeskie pamâtniki Taškentskoj oblasti*, Tashkent.
- GRENÈ, F. (= GRENET, F.)  
1987: Interpretaciâ dekora ossuariev iz Biânajmana i Miankalâ, in: PUGAČENKOVA, G.A./ASKAROV, A.A. (ED.), *Gorodskâ kul'tura Baktrii-Toharistana i Sogda*, Tashkent, 42–53.
- GRIGOR'EV, G.V.  
1935: *Otčet ob arheologičeskoj razvedke v Ângiûl'skom rajone UzSSR v 1934 g.*, Tashkent.
- HMEL'NICKIJ, S.  
2000: *Meždu kušanami i arabami. Arhitektura Srednej Azii V–VIII vv.*, Berlin/Riga.
- IL'ASOV, D.Â.  
1993: Srednevekovye stupki s gorodiša Budrač, in: KAMENECKIJ, I.S./UZĀNOV S.A. (ED.), *Vestnik Šelkovogo puti 1*, Moscow, 135–155.
- ILYASOV, J.  
2003: Covered Tail and "Flying" Tassels, *Iranica Antiqua* 38, 259–325.
- ILYASOV, J.YA./RUSANOV, D.V.  
1998: A Study on the Bone Plates from Orlat, *Silk Road Art and Archaeology* 5, 107–159.
- IL'ASOVA, S.R.  
2004: Raskopki paradnogo kompleksa Aktepa Ūnusabadskogo, *Istoriâ material'noj kul'tury Uzbekistana* 34, Samarkand, 207–213.
- KAGEYAMA, E.  
2015: Change of Suspension Systems of Daggers and Swords in Eastern Eurasia: Its Relation to the Hephthalite Occupation of Central Asia, *Zinbun* 46, Kyoto, 199–212.
- KOCH, H.  
2000: *Es kûndet Dareios der Kônig: Vom Leben im persischen Großreich* (= Kulturgeschichte der antiken Welt 55), Mainz/Rhein.
- LITVINSKIJ, B.A.  
1965: Sredneaziatskie železnye nakonečniki strel, *Sovetskaâ arheologiâ* 2, 75–91.
- LITVINSKIJ, B.A./PIČIKĀN, I.R.  
2000: *Ėllinističeskij hram Oksa v Baktrii (Ūžnyj Tadžikistan). Tom 1. Raskopki. Arhitektura. Religioznaâ žizn'*, Moscow.
- LUNINA, S.B.  
1984: *Goroda Ūžnogo Sogda v VIII–XII vv.*, Tashkent.
- LURJE, P.B.  
2010: *Personal Names in Sogdian Texts* (= Österreichische Akademie der Wissenschaften. Philosophisch-historische Klasse. Sitzungsberichte 808 = Iranisches Personennamenbuch 2/8), Vienna.
- NIL'SEN, V.A.  
1966: *Stanovlenie feodal'noj arhitektury Srednej Azii (V–VIII vv.)*, Tashkent.
- PODUŠKIN, A.N.  
2005: Novye pamâtniki pis'mennoj kul'tury Ūžnogo Kazahstana, *Shygys* 2, 133–139.
- SEMENOV, G. (ED.)  
2001: *Raskopki v Pajkende v 2000 godu* (= Materialy Buharskoj arheologičeskoj ěkspedicii 2), St. Petersburg.
- SIMONENKO, A.V.  
2010: *Sarmatskie vsadniki Severnogo Pričernomor'a*, St. Petersburg.
- SIMONENKO, A.V./LOBAJ, B.I.  
1991: *Sarmaty Severo-Zapadnogo Prichernomor'a v I v. n.ĕ. (pogrebeniâ znati u s. Porogi)*, Kiev.
- SIMS-WILLIAMS, N.  
2009: The Sogdian Inscription of Kultobe: Text, Translation and Linguistic Commentary, in: JANOV-JANOVSKAĀ, N./RTVELADZE, Ė./DŽUMAEV, A. (ED.), *Trudy Central'nogo Muzeâ. Tom 2*, Almaty, 153–172.  
2013: An Early Parthian Inscription on a Bronze Mortar, in: TOHTAS'EVA S.T./LUR'E, P.B. (ED.), *Commentationes Iranicae. Sbornik statej k 90-letiu Vladimira Aronoviča Livšica*, St. Petersburg, 106–110.
- SIMS-WILLIAMS, N./GRENET, F.  
2006: The Sogdian Inscriptions from Kultobe, *Shygys* 1, 95–111.

- SIMS-WILLIAMS, N./GRENET, F./PODUSHKIN, A.  
2007: Les plus anciens monuments de la langue sogdienne: les inscriptions de Kultobe au Kazakhstan, *Comptes rendus des séances de l'Académie des inscriptions et belles-lettres* 151, 1005–1034.
- SOLOV'EV, V.S.  
1997: *Severnyj Toharistan v rannem srednevekov'e*, Elets.  
2007: *Iskusstvo rannesrednevekovogo Toharistana*, Elets.
- SVERČKOV, L.M.  
1990: O lokalizacii hristianskogo seleniâ Vinkerd, in: ALIMBAJ, N. (ED.), *Tezisy dokladov VI iskusstvedčeskoj konferencii molodyh učenyh*, Tashkent, 101–102.
- 2007: Syrdar'inskaâ step': puti i perepravu, in: IL'ASOV, D.Â./RTVELADZE, È.V. (ED.), *Transoksiana – Maverannahr*, Tashkent, 185–193.
- TROUSDALE, W.  
1975: *The Long Sword and Scabbard Slide in Asia* (= Smithsonian Contributions to Anthropology 17), Washington.
- WERNER, J.  
1956: *Beiträge zur Archäologie des Attila-Reiches* (= Abhandlungen der Bayerischen Akademie der Wissenschaften, Phil.-Hist. Klasse N.F. 38–39), 2 vols., Munich.
- ZASECKAÂ, I.P.  
1983: Klassifikaciâ nakonečnikov strel gunnskoj èpohi (konec IV–V v. n.è.), in: SKRIPKIN, A.S. (ED.), *Istoriâ i kul'tura sarmatov: mežvuzovskij naučnyj sbornik*, Saratov, 70–83.