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Old Turkic Stone Enclosures at Kyzyl-Shin, Southeastern Altai

This study outlines the results of excavations of five Old Turkic stone enclosures (No. 1, 6, 9, 12, and 18) at the memorial complex Kyzyl-Shin, in the Kosh-Agachsky District of the Altai Republic. Owing to soil conditions and to the presence of air in some offering chambers, unique artifacts were discovered—a wooden box, wooden dishes, armor plates, etc. These finds extend our knowledge of Old Turkic offerings and Turkic ritualism in general. They have enabled us to reconstruct the stages of the construction of enclosures and their separate elements. The presence of nonfunctional (votive) artifacts highlights a key feature of the Old Turkic memorial ritualism, supporting the idea that enclosures were ritual models of dwellings—abodes of the deceased persons' spirits/souls. Well-preserved larch tree trunks, dug into the ground in their centers, offered the possibility for cross-checking the results of radiocarbon and dendrochronological analyses, suggesting that the enclosures date to the late 6th and 7th century AD. Although the Kyzyl-Shin enclosures belong to the Yakonur type, they are contemporaneous with adjacent enclosures of the Kudyrge type, suggesting that the typology of archaeological structures does not always mirror their chronological and evolutionary relationship. Differences in the construction and arrangement of enclosures could be determined by other factors such as family or social structure.

Keywords: *Southeastern Altai, Old Turks, memorial enclosures, altar, larch tree trunks, votive artifacts, dendrochronological analysis, radiocarbon dating.*

Introduction

Old Turkic memorial enclosures, which were often accompanied by statues, belong to one of the most numerous archaeological monuments of the Early Middle Ages in the vast mountain-steppe region, stretching from Eastern Mongolia to the Urals. They are marked by an especially large number and diversity on the territory of Mongolia, Altai, Tuva, Kazakhstan, Tian Shan, and Eastern Turkestan. The history of research into Old Turkic memorial structures and statuary monuments of the Altai has continued for over one and a half centuries. We can only speak about the approximate number of such investigated objects in this region (about 300), since many of them remain unpublished.

Despite the significant number of studied Old Turkic enclosures of the Altai, many problems still remain unsolved: their significant variability, dating and chronology, interpretation of structural elements, and possible reconstruction of these memorial structures. That is why further archaeological research into various types of memorial structures (single, adjacent enclosures, etc.), study of their materials using scientific methods, and their publication are needed.

The present author has published almost complete information on the memorial Old Turkic enclosure 5 at the Kyzyl-Shin site, Altai, which contained artifacts made of organic materials, showing a unique state of preservation (Kubarev G.V., 2012). Short reports about a part of the researched monuments, including those discussed in this

article, have been also published earlier (Kubarev G.V., 2007). However, the dendrochronological and radiocarbon dating of larch tree trunks from the enclosure of Kyzyl-Shin, which made it possible to establish the time when these structures were built, compels us to turn to their consideration again and provide full information about them.



Fig. 1. Location of the Kyzyl-Shin site.

Description of the sites

The memorial complex of Kyzyl-Shin ('red earth') is located on the left bank of the Chagan-Uzun River, 2.5 km upstream from the village of the same name, in the Kosh-Agachsky District, the Altai Republic (Fig. 1). This site already became the object of archaeological surveys in the late 1970s (Elin, Zinyakov, 1977). V.D. Kubarev discovered and described a stylized statue at one of the enclosures (No. 10) of this complex (Kubarev V.D., 1984: 133, pl. XXI, 126), and took a sample of a larch tree trunk from this object.

In 2005, the Chuy Team of the Institute of Archaeology and Ethnography of the SB RAS mapped this memorial complex at the Kyzyl-Shin site, and excavated one Old Turkic enclosure (No. 1). The complex does not form clear "chains" of burial mounds, but includes 35 single objects located over a fairly extensive territory. In 2006, the Chuy and Dendrochronological Teams of the Institute of Archaeology and Ethnography of the SB RAS explored five more Old Turkic structures at this site (No. 5, 6, 9, 12, and 18).

Enclosure 1 is located at the southern end of this memorial complex. It is a weakly sodded structure of square shape, measuring 360×360 cm, 35 cm high, which was made of slabs dug sideways into the ground and filled with small broken stones and boulders. The sides of the structure are oriented in the cardinal directions with slight deviation (the meridional axis runs along the line NNW–SSE). The enclosure had no accompanying statuary.



Fig. 2. View of enclosure 1 with the cleared filling from the east.

A row of eight balbals is located to the east of the structure, with a slight deviation to the north, at a distance of 29 m. The eastern and southern walls of the enclosure were disturbed: some slabs were displaced or absent; stones have fallen out or were thrown out from the filling.

A larch tree trunk, which was dug into the ground, measuring 30 cm in diameter and rising above the level of the modern surface by 23 cm, was found in the center of the enclosure. Traces of axe-adze processing were discernible in its upper part. The height of the larch tree trunk above the level of the ancient surface was 50 cm (Fig. 2), and the total height was 110 cm. Undoubtedly, it was originally much higher (an entire tree with the stump cut off). The trunk was set in a pit measuring 50 cm in diameter and 60 cm in depth, and was wedged on the eastern side with a slab measuring $80 \times 45 \times 7$ cm.

An altar was discovered 20 cm to the west of the pit with the larch tree trunk (Fig. 2). The altar constituted a pit measuring 30×50 cm, reaching a depth of 15 cm from the ancient surface, and covered with stones. Its walls were lined with wooden plates 40×12 cm in size. Two wooden objects, originally representing miniature vessels (Fig. 3, 1, 3), the bronze tip of a belt in the form of soldered balls (Fig. 3, 5), an armor plate (Fig. 3, 2), and a ram vertebra (Fig. 3, 4) were found there.

Enclosure 6 was a small heavily sodded structure of square shape, measuring 280×280 cm, and oriented almost strictly in the cardinal directions (Fig. 4). Initially, a row of balbals started from the enclosure, from which only one stone at a distance of 4 m has been preserved.

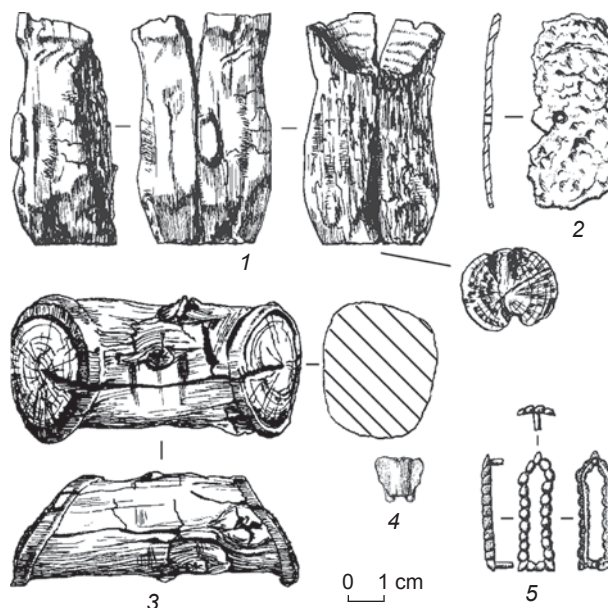


Fig. 3. Objects found in the altar of enclosure 1.
1 – votive wooden vessel; 2 – iron armor plate; 3 – votive wooden barrel;
4 – ram vertebra; 5 – bronze tip of a belt.

A boulder 31 cm high was vertically dug into the ground, 13 cm to the east of a larch tree trunk rising from the center of the structure to the height of 48 cm from the present day surface (Fig. 4, 5). Another boulder ($30 \times 28 \times 17$ cm) replacing a statue was set on the eastern side of the enclosure (see Fig. 4). A box of thin slate tiles, which

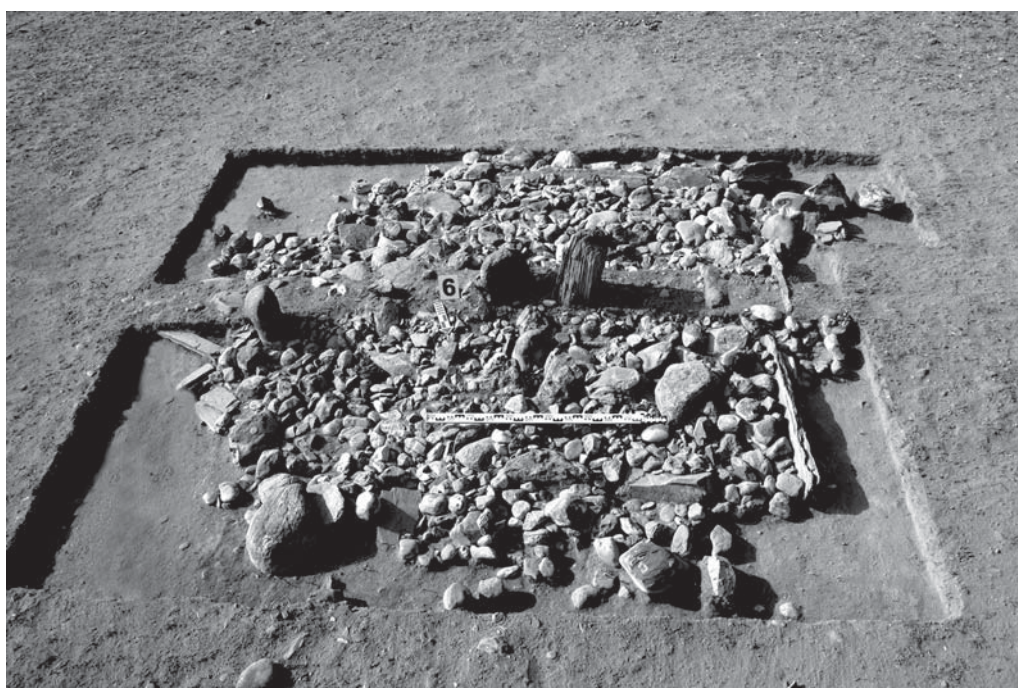


Fig. 4. View of the cleared enclosure 6 from the north.



Fig. 5. Larch tree trunk and altar in the center of enclosure 6.

were dug vertically into the ground (see Fig. 5), was found to the west of the larch tree trunk. The sizes of the box were $47 \times 25 \times 21$ cm; it was filled with small pebbles.

The larch tree trunk was dug into the ground at a depth of 40 cm from the level of the ancient surface and slightly backfilled. The diameter of the pit was 55–60 cm. The total length of the preserved log was 110 cm; the diameter

was 27–33 cm. The larch tree trunk was chopped off at the top and slightly charred in the lower part.

Enclosure 9 is located in the same row as three other enclosures. Two of them (No. 10 and 11) suffered illegal excavations in our days (?). A stylized statue was probably originally set up near structure No. 10 (Kubarev V.D., 1984: 133, pl. XXI, 126). The chain of enclosures is oriented along the NNE–SSW line. Small enclosures joined the edges of the two central destroyed objects (No. 9 and 12).

Enclosure 9 was a heavily sodded structure measuring 240×240 cm, 25–30 cm in height, oriented almost strictly in the cardinal directions. Two slabs measuring $77 \times 34 \times 7$ cm (southern) and $71 \times 36 \times 7$ cm (northern) were set in the center of the enclosure at an angle to each other (Fig. 6). The remains of bases from two steles have survived behind the southern wall of the enclosure. Their upper parts have been broken off. The overall size of the eastern stele was $43 \times 17 \times 3$ cm. An artificial notch marking the neck was visible on its lateral side. The size of the western stele was $67 \times 24 \times 6$ cm. A pole with a diameter of 9 cm and length of 223 cm, lying on the ancient surface, was found at the outer surface of the eastern wall of the enclosure (Fig. 6). The filling of the enclosure consisted of small stones and pebbles. The ancient surface along the perimeter of the structure was lined with flat slate slabs under the filling.

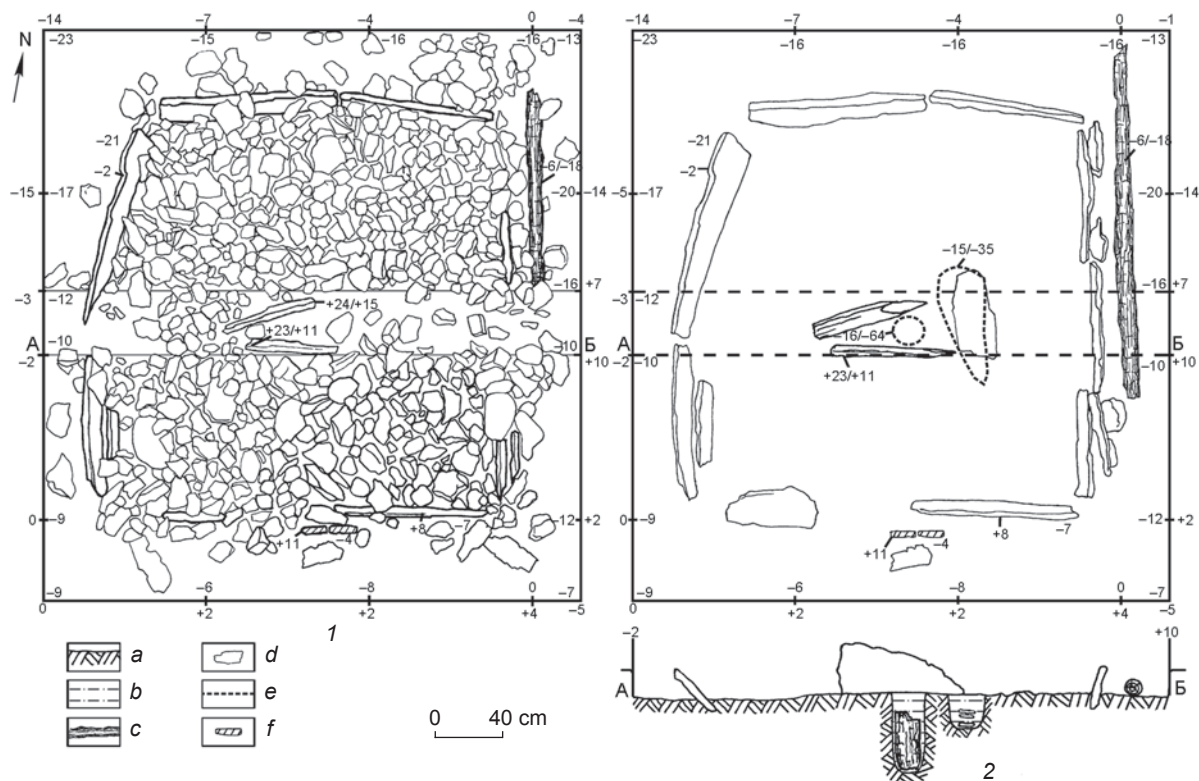


Fig. 6. Plan and cross-section of enclosure 9 before (1) and after (2) clearing the filling.

a – buried soil; b – loamy sandy clay; c – pole; d – slab covering the altar; e – boundaries of the pits; f – slab vertically dug into the ground.

Another slab (56 × 37 cm), covering the sacrificial pit, lay in the immediate vicinity of the two slabs set in the center of the enclosure on the east side (Fig. 6). A partially crushed wooden dish measuring 37 × 16 cm (Fig. 7, 3), which used to have four legs, was found under the cover at a depth of 12 cm. A board 50 × 10 cm—the lid of a tray-dish (Fig. 7, 5)—was found under the wooden dish, at a depth of 15 cm. The tray itself lay at a depth of 20 cm. Two large fragments have survived from the tray (Fig. 7, 4). The original size of the tray was 51 × 14 cm. A pottery fragment (?) (Fig. 7, 2) and several tail (?) ram vertebrae were also found there. The size of the sacrificial pit was 77 × 27 × 30 cm.

Another pit was found 18 cm to the west of the altar, between the slabs in the center of the enclosure. A broken armor plate (Fig. 7, 1) lying on a vertically set larch pole with a diameter of 16 cm and height of about 41 cm, was discovered in the pit at a depth of 15 cm. The depth of the pit reached 48 cm from the level of the ancient surface; its diameter was 25–28 cm.

Enclosure 12, measuring 220 × 220 cm and 20 cm high, was a small, heavily sodded structure made of slabs dug sideways into the ground, and was oriented with its angles in the cardinal directions (Fig. 8). The enclosure was filled with large and small boulders. The southeastern and northeastern walls were partially destroyed. Part of the stones from the filling of the

enclosure were thrown out beyond its boundaries already in ancient times. The surviving walls of the structure were composed of double slabs.

Two slate tiles from the “box”, which were vertically dug into the ground, and a spot 40 cm in diameter with charcoals and calcination were located in the center of the structure. A larch tree trunk with a charred upper part was found in the same place in the pit. The diameter of the trunk was 16 cm; the length was 30 cm. The depth of the pit to the bottom was 47 cm; the diameter was 28 cm.

Stone alignment 18 was a small sodded structure of rounded shape with a diameter of 320–330 cm and height of 20 cm. It was composed of large stones laid in one or two layers (Fig. 9). Originally, the stonework had a hemispherical shape. A part of the stones was moved outside the structure already in ancient times. A larch tree trunk with a diameter of 27 cm, rising above the level of the modern surface by 30 cm, was vertically dug into the ground in the center of the structure. It was deepened at 58 cm and was thoroughly wedged with vertically set tiles and flat boulders. The height of the larch trunk above the level of the ancient surface was 54 cm; its total length was 107 cm.

Stone grinders of a hand mill (Fig. 10) were found in the northwestern sector of the mound at a depth of 10 cm; the upper grinder was split. An ash spot

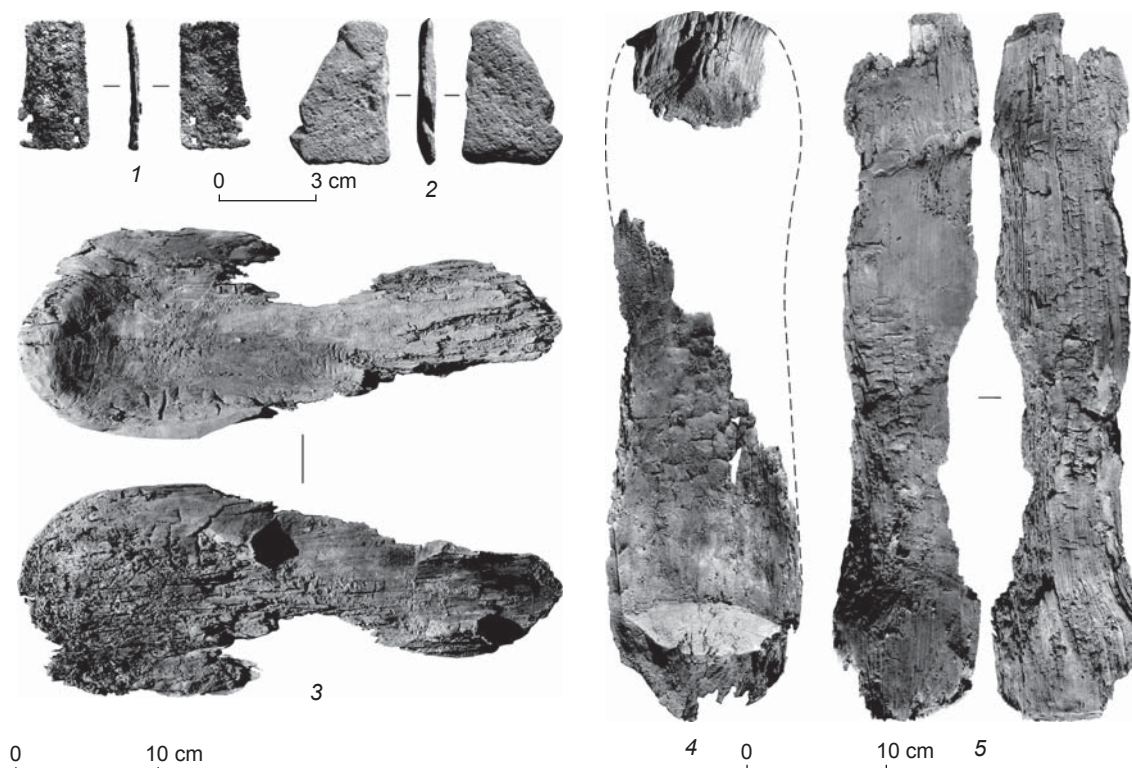


Fig. 7. Objects from the altar of enclosure 9.

1 – iron armor plate; 2 – pottery fragment (?); 3 – wooden dish; 4 – wooden tray; 5 – cover of the tray.

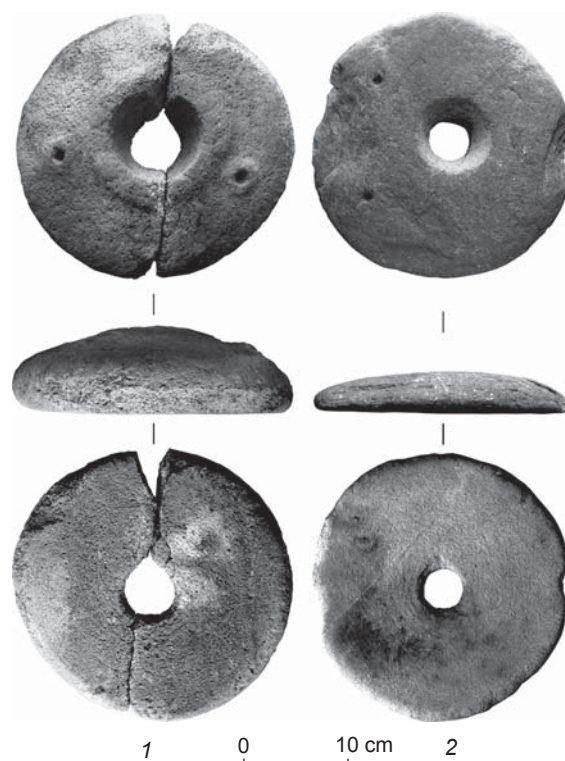
Fig. 10. Stone grinders of a hand mill from structure 18.

(10–15 cm in diameter) was discovered in the southwestern corner of the excavation at the level of the ancient surface. After dismantling the stonework, no traces of any pits or altars have been found.

Description of the inventory from the memorial structures, and its parallels

Wooden dishware and some other objects (see Fig. 3, 7; 11, 1, 2) found in enclosures 1, 5, and 9 at the Kyzyl-Shin site are unique for Old Turkic memorial monuments of the Altai and adjacent regions (Kubarev G.V., 2012: Fig. 3–5). We should point to a high degree of preservation and informative value of these materials. Even though it is not very rare to find the fragments of wooden dishware in Old Turkic burials and memorial enclosures (for a summary see: (Kubarev G.V., 2005: 67)), their intact examples have been found in single numbers.

Owing to good preservation of a small votive wooden vessel from enclosure 5 in Kyzyl-Shin (Kubarev G.V., 2012: Fig. 4), the partially preserved wooden object from enclosure 1 (see Fig. 3, 1) can be interpreted with certainty as a similar reduced and non-functional replica of a vessel. Both objects have the same sizes (a height of 6.0–6.5 cm, body diameter of 4 cm), profile shapes, and presence of a small handle. The fact that these vessels are votive is confirmed not only by their miniature size,



but also by the lack of volume inside. They replicate the shape and proportions of functional metal or possibly wooden prototypes. For example, gold and silver votive vessels (see Fig. 11, 3, 4) were found in the altar in front of an Old Turkic statue and enclosure in the Chingiz-Tau Mountains, near Lake Sarykol, East Kazakhstan (Unbekanntes Kasachstan..., 2013: Abb. 610, 611). In

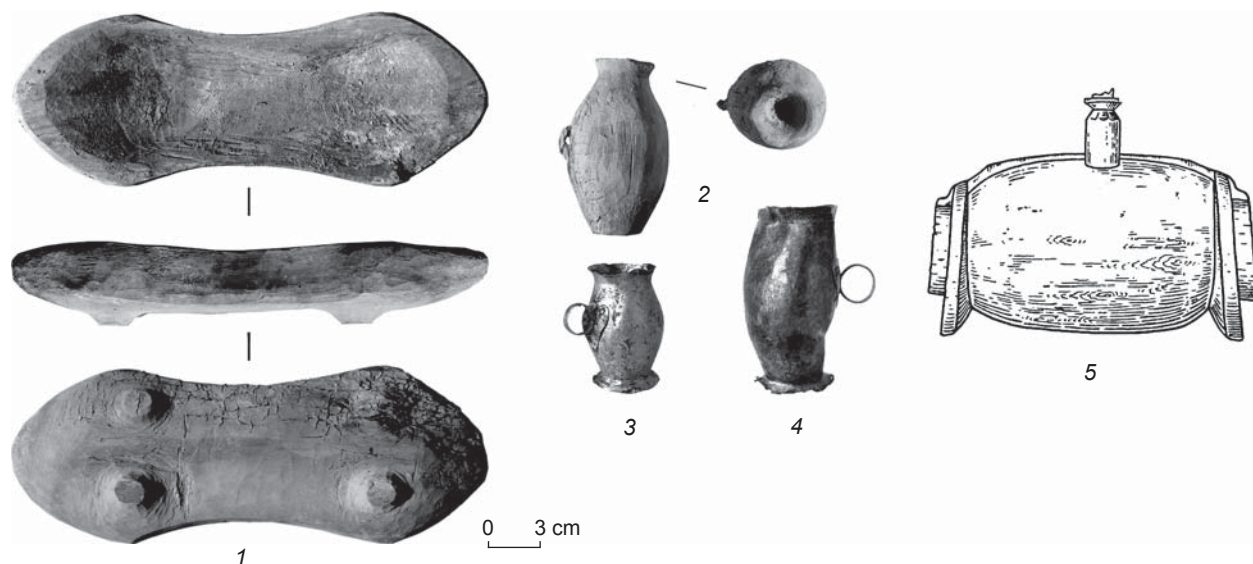


Fig. 11. Parallels to votive artifacts from the Old Turkic enclosures under consideration.

1 – votive (?) dish-tray from enclosure 5, Kyzyl-Shin, Altai (Kubarev G.V., 2012); 2 – votive vessel from enclosure 5, Kyzyl-Shin, Altai (Ibid.); 3, 4 – votive vessels from the enclosure in Sarykol, Kazakhstan (Unbekanntes Kasachstan..., 2013: 938); 5 – barrel from mound 9 at the Kokel burial ground, Tuva (Weinstein, Dyakonova, 1966: Pl. IX).

their shape (the pitcher) and miniature sizes (height of 5.5–7.5 cm), they are similar to the finds from Kyzyl-Shin. These small vessels, just as the complex near Lake Sarykol, should be dated to the 6th–7th centuries.

Another wooden object from enclosure 1 (see Fig. 3, 3), given its material, shape in the form of a cylinder with beveled sides and edges, and most importantly, its miniature size and lack of functional use, can be interpreted as a reduced copy of a barrel. Similar wooden barrels 15–20 cm long are known from the burial mounds of the Hunno-Sarmatian period in the Kokel burial ground in Tuva (Weinstein, Dyakonova, 1966: Pl. IX) (see Fig. 11, 5). Liquids could be stored and transported in similar barrels; and longitudinal thickenings imitated thick seam lines in leather skins (Ibid.: 256). Although such a type of dishware is still unknown from Old Turkic monuments of the Altai, the genetic connection of the Old Turkic monuments with the monuments of the Hunno-Sarmatian period, conservatism, and continuity in manufacturing many household objects on the territory of the Altai-Sayan in various historical periods suggest the existence of such dishware in the Old Turkic period. Moreover, as we shall see in the following discussion, the enclosures of Kyzyl-Shin date from the Early Turkic period (6th–7th centuries), which means that they were immediately preceded by the monuments of the Hunno-Sarmatian period.

Individual armor plates or a small fragment of armor were found in each of three Kyzyl-Shin enclosures (No. 1, 5, 9). Elements of protective armor belong to one of the most frequent finds in the inventory of Old Turkic memorial monuments. They have been found in the enclosures at Kudyrge, Kotyr-Tas, and other locations.

The grinders of the hand mill discovered in the mound of object 18 are a particularly interesting find. The lower grinder (see Fig. 10, 2) was made of fine grained gneiss, which is a dense rock (density of 6–6.5 on the Mohs scale). Its diameter is 24 cm; its thickness is 4 cm; the diameter of the hole is 4 cm. There are two grooves on the bottom for non-rotatable fixation (?). The upper grinder (see Fig. 10, 1) was made of granite containing a large amount of quartz, feldspar, and mica (muscovite). Its diameter is 27 cm; its thickness is 8 cm; the diameter of the hole is 7.5 cm in the upper part. There are two indentations for wooden handles in its upper part. The millstones might have been sacrificed because one of them came into disrepair—it was split back in ancient times.

The tradition of placing such tools into the mounds of barrows can be observed throughout the entire territory of Southern Siberia (Molodin, Borodovsky, 1994). Apparently, most of these finds belong to the Early Middle Ages. For instance, millstones were found in the mounds of Old Turkic barrows at the burial ground of Kurai VI

(mound 1; notably, it contained a female burial) in the Altai (Evtyukhova, Kiselev, 1941: 98, fig. 21) and at the burial ground of Bai-Dag (mound 90) in Tuva (Kyzlasov, 1979: 134, fig. 94, 2).

The custom of placing grain-grinding tools was observed at the archaeological monuments of the nomads virtually throughout the entire Eurasian steppe belt including Southern Siberia and Central Asia, starting from the Bronze and Early Iron Ages (Nagler, 2000: 107). However, if burial monuments of these historical periods typically contained milling stones, stone grinders of hand mills started to appear alongside with milling stones from the turn of the era (Ibid.). Notably, they were never placed into the graves, but were an important element of structures above the graves (Molodin, Borodovsky, 1994; Nagler, 2000: 109, fig. 2; etc.). Possibly, such finds may primarily mark the structures that belonged to or were dedicated to women.

It is believed that the use of the hand mill reflects a fairly high level of agricultural development (Kiselev, 1951: 514). The remains of ancient irrigation systems presumably going back to the Early Middle Ages, are known in Southern and Central Altai. The discovery of Tang farming tools makes it possible to conclude that plowing existed in the Altai in this period along with hoe farming.

Specific features of the memorial rite

Old Turkic memorial structures at Kyzyl-Shin have attracted the attention of scholars primarily due to the larch tree trunks rising from the center. Owing to the dry cold climate of the Chuy Depression and the adjacent valleys, for over a thousand years the larch tree trunks stood dug into the center of the enclosures and have been perfectly preserved. The investigated objects complement the body of memorial monuments left by the Old Turks of the Altai. They belong to the most widespread Yakonur type of enclosures (Kubarev V.D., 1984: 50), which is confirmed by their sizes (2.7–3.6 m) and the presence of pits with larch poles in the center. Another common feature is the presence of altars in the western part in many of the enclosures.

Despite the small series of investigated objects, their materials are quite informative and make it possible to draw some new conclusions concerning the features and procedures of creating such monuments. The larch tree trunks of small diameter in enclosures 9 and 12 were consciously chopped off during the building of the structures, since their decay has not been observed in the mound. The pits were covered with stones; calcination was observed in the first case above the larch tree trunk (enclosure 12), and an armor plate was found in the second case (enclosure 9). A curious pattern should be

noted: in the enclosures where the stumps of trunks were found in the pits, the trunks had a small diameter (about 15 cm); these trunks were dug into the narrow pit without stone backfilling. Thus, they were originally not intended for prolonged rising above the mound. The larch trunks, which have survived until the present day above the mounds of memorial structures, are much larger in diameter (about 30 cm); they were dug to considerable depth (up to 60 cm) and carefully wedged with stones or slabs. This confirms that initially there was a high trunk or a tree (?) in such enclosures.

V.D. Kubarev was one of the first scholars to draw attention to such a feature as digging wooden pillars or trees into the center and sometimes along the perimeter of Old Turkic enclosures (Kubarev V.D., 1979: 158; 1984: 70–71). He also studied a fairly representative series of similar objects on the territory of the Southern Altai (Kubarev V.D., 1984: 139–143). Sometimes, the trunks retained knots, bark, and the remains of roots. Enclosures with the remains of larch trees in the center were excavated in the Altai, Tuva, and Mongolia. The most reasonable conclusion seems to be the opinion of those scholars who argued that trees dug into the center of many Old Turkic enclosures had a cultic purpose and symbolized the world tree or shaman tree (Ibid.: 70–71; Voytov, 1996: 115–116).

Apparently, at a certain stage of conducting the ritual and constructing the enclosure, larch trunks would rise above the enclosure, and subsequently, prior to laying the stonework, they were deliberately truncated and buried. Otherwise, it is difficult to explain the practicality and purpose of the initial instillation of the stump deep into the pit. Possibly, a larch pole over 2 m long, which was found on the outer side of the eastern wall of enclosure 9 at the Kyzyl-Shin site, is nothing but a felled larch trunk whose base was found in the central pit of the same structure.

Conversely, larch trunks at some memorial structures were originally prepared to remain upright after the erection of the mound. It can be assumed that the construction of a memorial building was not a one-time action. At first, people would make an enclosure out of slabs dug vertically into the ground, install the pillar-tree in the center, and probably set up the altar. For some time, rituals of communication with the soul of the deceased and farewell to the soul were performed. The next stage was the cutting of the trunk and erecting stone mounds inside the enclosure. However, in some cases the trunk was deliberately left uncut, and it would rise above the mound. Further excavations of the memorial buildings of the Old Turks may possibly explain this fact.

Investigated object 18 at Kyzyl-Shin is not a classical Old Turkic memorial structure. It is rounded and does not have an enclosure made of slabs dug vertically into the ground. Nevertheless, the attribution of this structure to

the Old Turkic period is beyond any doubts. It was built at the same time as the “classical” enclosures considered here. They are also similar because of such a typical feature as the presence of a larch pole dug in the center. Memorial Old Turkic structures in the form of burial mounds have also been investigated at the Bike III burial ground in the Middle Katun region (Soenov et al., 2009: 80–81). The fact that pits with stone filling and wood decay were found under their mounds, as is the case with structure 18 at Kyzyl-Shin, is notable. The structures at Bike III are dated by the radiocarbon method to the 5th–7th centuries (Ibid.). Apparently, such objects along with square enclosures were typical precisely of the Early Turkic period and were genetically related to the memorial structures of the Hunno-Sarmatian period.

Dates of the memorial monuments

A combination of dendrochronological and radiocarbon methods was used for establishing the chronology of the memorial enclosures in Kyzyl-Shin. Since a separate publication has been prepared based on the results of this work, the present author will describe only the main results of dating. A 347-year generalized indexed tree-ring chronology (“KS”) was constructed on the basis of wood samples from the investigated archaeological monuments of the Kyzyl-Shin site. The following sequence has been established using this relative scale (the interval of years 0–346): enclosure 1 – 303, enclosure 6 – 319, enclosure 5 – 337, and enclosure 10 – 346. Cross-correlation analysis of the standardized 347-year “KS” tree-ring chronology with three long tree-ring chronologies (the 1900-year Jelo, 2367-year Mongun, and 3200-year Ak-ha chronologies) did not make it possible to obtain calendar dates for the construction of the objects under consideration. This necessitated the use of the radiocarbon method with the wiggle matching procedure on the selected wood samples. As a result, the following dates were obtained for the enclosures (years AD):

No. 1	579–656
No. 5	613–690
No. 6	595–672
No. 10	622–699
No. 18	620–682

This dating is generally confirmed (although with somewhat earlier dates) by the radiocarbon dates of the saw cuts from the log that was set in the center of enclosure 1 (see *Table*), and the date of its last rings calculated by the wiggle matching method, using the OxCal software, based on radiocarbon determinations and the total number of rings in the log (297)—516–578.

Thus, objects 5, 10, and 18 were built during the period from the second to the last quarter of the

Wiggle-matching radiocarbon dates obtained for the saw cuts from the sample from enclosure 1

Lab code	¹⁴ C, BP	Date		Rings
		Calibrated (95.4 %), years	Wiggle matching (95.4 %), years	
UGAMS-12159	1740 ± 20	241–380	321–382	97–102
UGAMS-12160	1560 ± 20	426–549	421–482	198–202

Note. Radiocarbon determinations by Dr. K.-U. Heussner (Deutsche Archäologische Institut).

7th century; enclosure 6 was built at the very end of the 6th–first three quarters of the 7th century, and the earliest memorial structure (enclosure 1) was built in the last quarter of the 6th–first half of the 7th century. However, it cannot be completely ruled out that the time of construction of enclosure 1 was the second–third quarter of the 6th century (516–578). In this case, based on the dendrochronological data, all other objects can be dated to an earlier period (with an interval of 50 years), which does not go beyond the error of the above radiocarbon dates.

Such a dating of the memorial structures in Kyzyl-Shin does not contradict the known time of existence of individual objects found in their altars. Thus, direct parallels to the tip of the belt made in the form of soldered balls from enclosure 1 are not known on the territory of Altai-Sayan, but the same decoration technique was used for manufacturing the belt set from the burial ground of Kudyrge (Gavrilova, 1965: Pl. XXIV, 12), whose materials are usually dated to the 6th–early 7th century.

Conclusions

The investigated Old Turkic enclosures at the Kyzyl-Shin site have proven to be extremely informative regarding the memorial rituals of the Old Turks. New data obtained make it possible to know more definitively the stages in the construction of these objects and of their individual elements. The presence of votive artifacts in the enclosures of Kyzyl-Shin highlights one of the most distinctive features in the memorial rituals of the Old Turks, which has already been observed in other memorial sites. It seems that the special production of votive non-functional objects for memorial rituals is most consistent with the interpretation of the Old Turkic enclosures as a ritual model of the dwelling—a kind of abode for the soul (spirit) of the deceased (Kubarev V.D., 1984: 66, 79).

An important result was establishing the time when the memorial enclosures were constructed (late 6th–7th century) by cross-dating, using radiocarbon and dendrochronological analysis. It can be argued that during this period there was one more variety of Old Turkic memorial monuments, represented by round stone mounds. Despite the fact that the enclosures studied at Kyzyl-Shin belong to the so-called Yakonur type

of memorial structures, they are synchronous with the adjacent enclosures of the Kudyrge type. This indicates that the typology of archaeological monuments does not always reflect their chronological and evolutionary connection. Differences in construction design and mutual location of the objects could have been triggered by other factors.

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