Древние культуры Монголии, Южной Сибири и Северного Китая

Материалы XI Международной научной конференции
Ancient cultures of Mongolia, Southern Siberia and Northern China

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Материалы XI Международной научной конференции

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The Proceedings of the 11th International Scientific Conference “Ancient Cultures of Mongolia, South Siberia and Northern China” contain works of participants of the conference held on September 8–11, 2021 in Abakan (Russian Federation). This conference, which continues a series of scientific events started in 2010 in Ulan-Ude, was held on the basis of the South Siberian Branch of the Institute for the History of Material Culture of the Russian Academy of Sciences. The Conference Proceedings chronologically cover a large period of time from the Paleolithic to the Modern Times and are devoted to current problems of archaeological science, ethnology and preservation of historical and cultural heritage of the eastern part of Northern Eurasia.

В оформлении обложки использованы: пейзажная фотография — вид с востока—северо-востока на реку Абакан в районе впадения в нее реки Сос (фотография А.В. Поликова); художественное изделие из рога — Итколь II курган 14 могила 4 (раскопки А.В. Поликова).

In the design of the cover were used: landscape photography — view from the east-northeast of the Abakan River in the area of the confluence of the Sos River (photography by A.V. Polyakov); artistic product made of a horn — Itkol II barrow 14 grave 4 (excavations by A.V. Polyakov).
GREAT SALBYK BARROW – PIRAMID WITH MEGALITHS IN SIBERIA

Introduction

In different historical periods, megalithic structures were erected in many countries of the world. Until recently, archaeologists have not been considering the territories of Siberia as being an area of distribution of megalithic cultures, although the Sayan-Altai is now known an area with a variety of megalithic structures of different archaeological periods.

It is widely accepted that among settled civilizations of the past there were outstanding political figures, religious leaders, warriors, sages, craftspeople, architects and artisans who directly or indirectly influenced the course of world history. However, these figures were present in the nomadic cultures of Eurasia as well. An evidence of this is the presence of huge burial mounds of chiefs of nomadic groups, the unique layout of the settlements, ancient sanctuaries in the mountains and the valley steppes, petroglyphs and artistically designed objects.

The Great Salbyk barrow is the most famous megalithic monument in Siberia. The barrow is situated 65 km northward of the town of Abakan in Khakasia (Russia; coordinates of the site: geographical breadth (northern) – 53 53.4’, longitude (east) – 90 45.1’, height above sea level – 540 m). There are more than 50 big and middle-sized barrows, as well as many small ones. The archaeologist S.V. Kiselev excavated the Salbyk barrow in 1954–1956 (Киселев, 1956).

The expedition of the State Hermitage Museum investigated the Salbyk valley in 1992, 1994, 1996, 1998, 2008, 2010 and 2015 (Марсадолов, 2010). The expedition has recently drawn up a plan of the fence of stone slabs, taken samples for the tree-ring and radiocarbon analysis, conducted the astronomical and topographical analyses, and traced the connection of the barrow with the surrounding landscape.

The barrow height is more than 20 m and originally it was pyramid-shaped (Fig. 1). Under the mound there was a square “fence” (71×71 m) made of huge stone slabs placed vertically and horizontally and weighting several tonnes (the average size was about 5 m). Inside the fence, a square pit-grave had been dug, and there were seven human remains buried in timber on its bottom. It seems probable that the chief of an alliance of tribes and his favourites were buried in the grave. The construction of big barrows in Salbyk was probably based on the astronomical knowledge of that time. The installation of the fence slabs was connected to the main positions of the Sun and the Moon rise and set on astronomically significant days.

Construction of the barrow

The process of building the great barrow in Salbyk, which was very complex due to its construction and the burial ritual, was conducted in the following way. Probably less than a year was spent on the construction of the monument. Hundreds of people took part in the building of the burial monument temple.

In the mountain valley, a point for the barrow centre was chosen very carefully. The point had to satisfy certain requirements:

(1) It had to be on the highest place between mountains;
(2) It had to be surrounded by mountains lower to the west and east than to the north and south;
(3) It had to be situated according to astronomical observations.

It was mentioned that such a place had probably been found in an earlier period and kept its meaning in later epochs. Near the Great Salbyk barrow there is the Bronze Age ritual centre with stone sculptures of the Okunevo culture, and sites of the Early Tagar period.

The burial construction consisted of three parts: a corridor (dromos), an extension near the door, and a burial chamber. In the central part of the barrow, but closer to the western wall of the fence, a structure consisting of earth and logs was found. It looked like a reduced pyramid; its height was about 2 m and its upper platform was 8×8 m (Fig. 1). The pyramid was snow white at first sight because its slopes were covered with a thick layer of birch bark (sometimes 15 layers). In addition, the upper logs of larch were rolled up in birch bark. Thus, the wood of larch looked much like the wood of birch.

Under the pyramid there was a square pit – 5×5 m and its bottom was 1.8 m deep. Its walls were lined with vertical logs. In the bottom of the pit there was a wooden framework with 4 rows of larch logs cut like bars. The chamber was 4×4 m; its height was about 2 m. It was covered by six rows of massive logs with a thick layer of birch bark. The bottom of the framework, and the space between its walls, and the logs covering the pit’s walls were full of solid red, water-resistant clay.
S.V. Kiselev established that the bottom was covered with birch bark under the clay. Six layers of crossed logs formed a roof under the framework, but they could not withstand the great pressure of the earth and had fallen into the chamber.

In the chamber, the remnants of seven people – men and women – were found. An old warrior was buried in the centre; some of his bones were broken. A large clay vessel was found in fragments. Near the middle part of the western wall of the framework, on the bottom, a miniature bronze knife was also found.

The dromos began with an entrance near the middle stele of the western wall of the fence and went close to the western slope of the pyramid. There was a narrow hole into the chamber, which appeared filled with pieces of wood. The walls of the corridor (width 2–3 m) were covered with logs, and the upper parts of these were covered with a thin ceiling made of hewn planks. Both walls and the corridor’s ceiling were decorated with a layer of birch bark.

The fence was made of massive blocks of sandstone placed in a standing position; the largest of these weighs about 30–100 tones (Fig. 2). The fence’s blocks were put in narrow deep trenches, their width being less than 0.6 m. The depth of the trenches varied – from 0.8 to 2 m, depending on the height of the blocks, which were placed in such way that they were on about the same level above the ground, with heights of 1.8 to 2 m. The entrance from the barrow’s eastern side was rather complex. From the two middle steles, the long slabs were
perpendicular to the line of the wall, resting on two 5 m steles placed towards the east. From the eastern side, “the entrance” between the steles was covered with a roof of small slabs placed very carefully, with a small deviation inside the barrow.

During the clearing of the western wall, the remnants of the destroyed burials of two people were found in the SW and NE angles. While examining the fence, near the large angle of the south-eastern stele, a destroyed burial of a child was found. In the angle formed by a block of the southern fence and the angle of the SW stele, a burial of an adult man with tied, bent legs was discovered. These were probably sacrifices that were made in the most significant places of the barrow.
The transportation of blocks for the fence must have been very hard work. The barrow was erected in a steppe valley and the nearest deposits of Devonian sandstone are situated on the Kyzyl-Khayta mountain, 16 km south-westward from it. The remnants of ancient quarries were found there. The blocks were quarried from the rock, probably with the assistance of wooden wedges, and transported to the place of the barrow construction, perhaps on wooden rollers in winter. During the clearing of the barrow’s lower part, many larch logs often charred from forest fires were discovered.

The Great Salbyk barrow, by its monumental construction, belongs to the same group as the famous Stonehenge in England; however by the volume of consumed labour, it probably significantly exceeds Stonehenge. Megalithic stone slabs at Stonehenge had a weight up to 30 tons, and the biggest plate in Salbyk is about 100 tons. In Salbyk, some of great barrows have “chains” of vertically standing slabs as well as horizontally placed “slab-altars” near the mound. Outside the barrow were found vertical stones of intermediate size, aligned to astronomically significant directions. A sculptural representation of a lying tiger was also found. The detailed study of the stone slabs of the fence revealed the significance of a colour spectrum – from light to dark tones and conversely.

Radiocarbon, tree-rings and archaeological dating

The log from the Great Salbyk barrow preserved quite well. On radiocarbon (r/c) dating of the author samples were taken not only of the last annual rings (No. 3), but also from the middle part of the log (No. 2).

For Great Salbyk barrow, two main r/c intervals fallout – 764–622 BC (calibrated calendar age). Early r/c date – second half of the 8th – first half of the 7th centuries BC one of the probable time r/c intervals considered (Tab. 1).

The Great Salbyk barrow and Arzhan-2 tree-rings scales coincided in a 150-year-old stretch and the synchronization showed that the Great Salbyk barrow is 35 years older than the Arzhan-2 barrow. Radiocarbon definitions of closely related areas of wood from these mounds (Le-5145 and Le-6568) are also synchronous with each other – about 2460±40 BP.

Expedition of S.V. Kiselev discovered fragments of a large earthen vessel and a small bronze knife found at the bottom of the pit in the Great Salbyk barrow (Fig. 3-10).

Near the middle of the southern stone wall of the fence were found the remains of a birch bark bag, in which there were bronze awls with a dedicated head, bone punctures, bronze and bone needles, which lay near the fire. A large bent bronze knife with a rounded hole on the “trapezoidal” handle extending upward was found among the tiles of the overlay on the northern part of the eastern wall of the fence. Two bronze clips and a knife were found near the belt of the human body buried in the dromos.

Chronological “reference points” for dating and synchronization of materials of 8th–7th centuries BC can be repeatedly checked for dates by different methods for reference large barrows (Fig. 3):

- Arzhan-1 in Tuva – end of the 9th – first half of the 8th century BC.
- Chilikta-5 in Kazakhstan – fourth quarter of the 8th – first quarter of the 7th century BC.
- Great Salbyk barrow in Khakasia – first half of the 7th century BC.
- Arzhan-2 in Tuva – second half of the 7th century BC.

By close forms of bronze daggers, knives, bone crests, arrowheads, earthen vessels, jewelry and figurative images, taking into account the above “reference points”, it is possible to schedule absolute dates for the early Tagar’s monuments, which are given on Fig. 5 in their relative chronological order (s. Марсадолов, 2015, рис. 5).

Conclusions

Comprehensive date for the Great Salbyk barrow – first half of the 7th century BC (680–670 BC), does not contradict the archaeological, dendrochronological and radiocarbon analogies with many objects of Sayano-Altaï and other regions of Eurasia. The Great Salbyk barrow has multiple functions – funeral, socio-political, religious, astronomical, and architectural and others. The construction of the Great Salbyk barrow in the form of a pyramid of earth with a flat top resembles a pyramid of China. For more substantiated conclusions, further detailed research is needed.

Table 1. Radiocarbon dates for the Great Salbyk barrow

<table>
<thead>
<tr>
<th>No.</th>
<th>Lab. No ([IHMC RAS])</th>
<th>14C date [BP]</th>
<th>Calibrated calendar age intervals (years BC) [cal BC]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Le-1192</td>
<td>2410±</td>
<td>764–622</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>754–698 532–398</td>
</tr>
<tr>
<td>2</td>
<td>Le-4771 (from middle part of the log)</td>
<td>2490±</td>
<td>778–478</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>764–752 730–710 708–618 606–528</td>
</tr>
<tr>
<td>3</td>
<td>Le-5145 (last year rings)</td>
<td>2460±</td>
<td>764–622</td>
</tr>
</tbody>
</table>

ДРЕВНИЕ КУЛЬТУРЫ МОНГОЛИИ, ЮЖНОЙ СИБИРИ И СЕВЕРНОГО КИТАЯ
Fig. 3. Comparison of objects from archaeological monuments of 8th–7th centuries BC from different regions: Tuva [1, 12], Khakasia [2–6, 8–10], Kazakhstan [7] and Altai [11]. The measures are different (according to the materials of various authors, after Marsadolov, 2015 with references)


**Ключевые слова**: Хакасия, Большой Салбыкский курган, хронология, радиоуглерод, дендрохронология, элита, мегалитическое сооружение.