On the Chronology of the Noyon uul Barrows

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The Xiongnu were a herding people who in the last centuries BCE occupied huge expanses of Central Asia and created there a powerful ‘proto-state’ formation of a type that was further developed by later nomadic ‘empires.’ The archaeological monuments of the Xiongnu extend across a broad area of the steppe belt from the Enisei River to Manchuria and from Lake Baikal to the Ordos region of the Yellow River bend. One often finds in them reliably datable material (mirrors, coins, objects with inscriptions) which mean that such objects are among the basic sources for resolving the problems of the chronology of archaeological complexes of the whole of Central Asia and its neighboring regions.

Studies in recent years have provided not only new material but have enabled us to determine the system of the spatial organization of Xiongnu burials. Analysis of the distribution of burials across the area of their cemeteries has shown that in most cases the burials form complexes consisting of a central barrow and satellite burials distributed around it. Such complexes in turn form several groups, located some dozens of meters from one another. Furthermore, the larger barrows are located higher than the others; the largest barrow in each complex in most cases is in the northern section of the cemetery. One can suggest that such large barrows were created first and thus are the earliest in each group. They served as distinctive dominating features, around which the remaining part of the cemetery formed later. Alongside the large barrows are located small burials which, as studies of recent years have shown, are burials with human sacrifices (Miniaev 1985, 1989, 1998; Miniaev and Sakharovskaya 2002). Thus, each large barrow and the satellite burials located next to it can be viewed as a contemporaneous complex, whose burials took place over one or several days, that is, during a single funeral ceremony. An example is the distribution of burials at Tsaram, a modest-sized cemetery of the Xiongnu elite in Transbaikalia [Fig. 1].

One can observe analogous arrangements of burials in various Xiongnu cemeteries, such as at the largest currently known royal complex of the Xiongnu in the Gol-Mod mountains in western Mongolia in Arkhangai aimag (Miller et al. 2008). Here surrounding the central barrow

Fig. 1. Plan of the cemetery in the Tsaram Valley.
are some dozens of satellite burials which vary in size and importance.

The persistent repetition of the system of spatial organization of burials in various cemeteries shows that their layout is not accidental. It was, it seems, the norm of burial practice of the Xiongnu as a whole, indirectly reflecting real connections and relations both within separate collective groups and of the society as a whole. These specific features of the planning of the burials substantially broaden the possibility of analyzing the materials of the cemeteries, above all for the determination of their chronology.

The present article will show how this is possible for one of the best known Xiongnu monuments — the burials of the elite at Noyon uul mountain in northern Mongolia [Fig. 2]. The cemeteries at Noyon uul are located in three forested valleys: Gudzhirte ("Salt Marsh"), Tszurumte ("Piou Offering") and Sutszukte ("Prayerful") [Fig. 3, facing page]. The Mongolo-Tibetan Expedition headed by the famous explorer Petr Kuz‘mich Kozlov counted some 212 barrows in these cemeteries during its work there in 1923-1926. Seven of them were ‘excavated’ unscientifically under the supervision of Kozlov’s assistant Sergei A. Kondrat’ev; another one (№ 24/12) was opened by the well-known archaeologist Sergei A. Teploukhov. Most of those barrows (№№ 1, 6, 23, 24/12, and 25) were in the Sutszukte valley. Three additional ones (the Andreevskii, Kondrat’evskii and Bal lodovskii barrows), the first two named for members of the expedition, were located in the Tszurumte valley. In 1926-1927 digging continued, by Grigorii I. Borovka (Barrow № 49) and Andrei Simukov (Barrow № 5 and an unnumbered barrow). Simukov also had participated in the work of 1924-1925 (Simukov 2008). A number of later expeditions have carried out excavations at Noyon uul (Dorzhsuren 1962; Erdélyi et al. 1967), including, most recently, the expedition of the Institute of Archaeology of the Siberian Branch of the Russian Academy of Sciences (Polos’mak et al. 2008).

The main part of the nearly 2000 objects retrieved by the Kozlov expedition is today housed in the State Hermitage Museum in St. Petersburg, to which the material was transferred in 1934 from the Ethnographic Section of the Russian Museum. Finds from Barrow № 1 and a number of gold decorations were transferred to the National Museum of Mongolian History in 1928; related Xiongnu materials — mainly random finds from the early 20th century — are today in the museums in Irkutsk and Kiakhta.

The authors of the current article are in the process of completing a descriptive catalogue of the Hermitage collection, which is noteworthy for its more than 1100 examples of fabrics and various other organic materials, in addition to a wide range of metalwork, some pottery, and objects made of semi-precious stones. The collection includes as well human skeletal material and various plant and animal remains. (Earlier reports on the material are in: *Kratkie otechety* 1925; Trever 1932; Umehara 1960; Rudenko 1962; Elikhina 2007a, 2007b.)

The datable materials from the Noyon uul collection include:

- lacquered Chinese cups (three of which specify the year of their production) and fragments of a lacquered box;
- a fragment of a Chinese mirror;
- inscriptions in Chinese characters on fabrics;
samples of wood and charcoal, which have been dated by C-14 analysis, allowing the results to be juxtaposed with the archaeological materials.

Let us examine each of these materials in turn.

1. The lacquered cup with an inscribed legend in Chinese characters (State Hermitage Museum, Inv. № MR-2301), found in Barrow № 6 on the dirt floor of the northeastern corridor [Figs. A-1 – A-4, p. 31 below]. The cup is decorated with depictions of phoebies; on the bronze mount of the handle is an engraved depiction of a bird [Fig. A-5]. On the outer rim of the foot of the cup is an inscription of 17 characters [Figs. A-7 – A-8]. (For details regarding the inscriptions on the Noyon uul cups, see the accompanying article by Michèle Pirazzoli-t’Serstevens 2009.) The beginning of the inscription [upper section Fig. A-7], indicating the reign date, is engraved with a fine line and has been preserved in its original form, a fact which is the crucial one for dating the cup. The rest of the inscription has been more crudely engraved in a style differing markedly from that of the beginning [detail, Fig. A-8]. Microphotography of this part of the inscription shows that it was substantially altered and that in all probability the names of the craftsmen and supervisors of the work were corrected. This could explain the somewhat minor differences in the reading of the inscription by various scholars. First deciphered by Otto Kümmel and Umehara Sueji, the inscription indicates the year of manufacture — the fifth year of the Jianping Era, which normally is the equivalent of the first year of the next reign era, Yuanshu, corresponding to 2 BCE. Written in red lacquer in the center of the underside on the brown lacquered surface of the cup are the characters ‘Shanglin’ (上林) [Fig. A-6] designating the Imperial Palace park. According to Aleksandr N. Bernshtam, these characters and the year of manufacture of the cup allow one to suppose that it was given along with other objects to Shanyu Wuzhuliruoti during his visit to the court of Han Emperor Ai-di. Since Shanyu Wuzhuliruoti died in 13 CE, Bernshtam assumed that is the year to which Noyon uul Barrow № 6 dates (Bernshtam 1951, p. 38).
Such an interpretation of the burial in Barrow № 6 is in principle possible. However a number of considerations argue against accepting this hypothesis. Above all one should note that Wuzhuliruoti, as had other Xiongnu leaders before him, arrived at the Han court with a suite of 500 retainers. One cannot exclude the possibility that prestigious gifts from the Han court such as those which the shanyu received were also distributed among members of his entourage. Evidence of this is to be found in the presence of an analogous cup (see below) dated in the same fifth year of the Jianping Era, in another barrow located in the neighboring Tszurumte valley. This discovery, like the discoveries of lacquered cups in ordinary Xiongnu burials, shows that luxury objects received by the Xiongnu elite as gifts eventually came into the possession of other strata of the population. Thus there can be no certainty that the cup was buried with Shanyu Wuzhuliuruoti. In any event, this matter has little bearing on the determination of the chronology of the graves. The indication of 2 BCE suffices to determine the terminus post quem both of Barrow № 6 at Noyon uul (regardless of who was buried there) and of the unnumbered barrow in the Tszurumte valley.

2. The handle and sizeable fragments of a lacquered cup with an incised inscription in Chinese characters (Ulaanbaatar, National Museum of Mongolian History, Inv. № A-242) [Figs. A-9 – A-12, pp. 33-34 below]. Published references to this cup erroneously have attributed it to the finds from Barrow № 5 (Umehara 1960; Louis 2006-07) or Barrow № 6 (L’Asie 2000, p. 147, fig. 128; Mongolie 2003, p. 223). In fact, it was excavated by Simukov in 1927 from an unnumbered barrow at Tszurumte, but without any indication of where it was located in the barrow (Simukov 2008). On the extant part of the bottom of the cup is an incised *tamgha* [Fig. A-10] and a fragment of what appears to be a character; just above the slightly raised foot is an inscription consisting of 66 characters. The first four of them indicate the year of manufacture — the fifth year of the Jianping Era — which thus specifies a terminus post quem of 2 BCE for the unnumbered barrow at Tszurumte as it does also for Barrow № 6 at Sutszukte. So we would emphasize once again that the discovery of two cups with identical dates of the fifth year of the Jianping Era in different cemetery groups of Noyon uul renders improbable the attribution of Barrow № 6 as the tomb of Shanyu Wuzhuliuruoti and, hence, the dating of that barrow to 13 CE.

3. Four lacquered cups, 13 cm each in length, from Barrow № 23 (three of them now in the State Hermitage, Inv. №№ MR-2302, 2303 and 2304, and one in the National Museum of Mongolian History in Ulaanbaatar) [Fig. 4, facing page]. The exact location of these cups in the barrow was not specified (Sergei Rudenko [1962, p. 121] erroneously indicates they are finds made to the north of the coffin). They have no inscriptions and in contrast to the ones described above are distinguished as a whole by their lesser quality and simplified ornament, which is characteristic for the period of the Eastern Han (Louis 2006-07, p. 51). François Louis noted cups analogous to these from the tomb of Wang Shu in Korea, dated after 69 CE (ibid.). Therefore, it is quite probable that the terminus post quem for Barrow No. 23 is the last third of the first century CE.

4. Fragments from a lacquered toilet box with bronze mounts, found in Barrow № 24/12 [Figs. A-13, A-14; State Hermitage, Inv. № KP-14150]. As Michèle Pirazzoli-t’Serstevens has noted (2009), the technique of ornamentation and this type of box are typical for the end of the Western Han. One of the closest analogies may be dated between 16 BCE and 2 BCE. Thus the terminus post quem for Barrow № 24/12 is the end of the first century BCE.

5. A lacquered cup with an inscription from Barrow № 20, excavated by Natalia Polos’mak in 2006, but whose location in the barrow has not been specified in the information published to date (Polos’mak et al. 2008; ‘Za “kadrom”’ 2008, p. 83). In its measurements and ornament the cup is entirely analogous to those found by the expedition of Kozlov in Barrow № 6 and Simukov in the unnumbered barrow at Tszurumte. One might suppose that the cup, found apparently together with the Chinese mirror, was part of the inventory of one of the burial dolls, a supposition that is supported as well by the discovery of women’s teeth on the floor of the chamber of Barrow № 20 (Chikisheva et al. 2009). Similar burial dolls were found in Barrow № 7 at Tsaram (Miniaev and Sakharovskaja 2007a, 2007b). They consisted of a female skull, with extremities formed from lacquered wooden sticks; in their burial inventory were Chinese mirrors and
lacquered dishes. The date of the manufacture of the cup from Barrow № 20, as indicated in the inscription, was the fourth year of the Yuanyan Era, which corresponds to 9 BCE (Chistiakova 2009). This date thus establishes a terminus post quem for Barrow № 20.

6. A fragment of a Han mirror (State Hermitage, Inv. № MR-0810) [Fig. 5, next page] was found in Barrow № 25 in the eastern corner of the ‘coffin’; it measures 13 x 6.5 cm. Around the edge of the mirror is an ornamental band depicting birds (phoenixes?) and with stylized images of animals. Closer to the center of the mirror can be seen another ornamental band with a small nipple in the middle of an eight-petaled rosette, flanking which are stylized
zoomorphs (a bird and a feline or dragon). These two ornamental fields are separated by two narrow bands, the outer one with a saw-tooth pattern and the inner with a comb-tooth pattern. Inside the inner field (with the rosette and nipple) is another comb-tooth band. Finds of mirrors of a similar type in archaeological contexts enable one to date them to the period of the Eastern Han, i.e., no earlier than the first quarter of the first century CE (Zhongguo, p. 333).

7. Characters on a pair of silk pants (State Hermitage №№ MR-1979, 1980) [Figs. 6, 7]. The pants were found in Barrow № 6 and consist of two separate halves. The inscription [Fig. 8] consisting of rows of repeating eight characters (新神靈廣成壽萬年) has been variously translated by specialists. It is complete on the pants, but separate characters are also found on some analogous pieces of silk from that same barrow. One reading suggests that the cloth was manufactured in the reign of Wang Mang (9–24 CE), that is, the beginning of the first century CE (Umehara 1960, p. xvi; Lubo-Lesnichenko 1995), which is in agreement with the terminus post quem for this barrow established on the basis of the inscription on the lacquered cup.

The same kind of inscription with wishes for good fortune is on silk from the Kondrat’ev barrow. It is not excluded that the manufacture date of that silk also is the reign of Wang Mang, although the fragmentary nature of the cloth does not permit one to reconstruct the entire inscription.

Fig. 5. Fragment of a Han mirror, found in Barrow № 25 (Hermitage Inv. № MR-0810).

Fig. 6 (left). Silk pants from Barrow No. 6 (Hermitage Inv. №№ MR-1979, 1980).

Fig. 7 (top). Detail of fabric of the pants.

Fig. 8 (bottom). The Chinese characters on the pants.
8. Radiocarbon dates. In the laboratory of radiocarbon analysis of the Institute for the History of Material Culture of the Russian Academy of Sciences (headed by Ganna Zaitseva), five C-14 dates have been obtained for the barrows of Noyon uul. The results of this analysis are given in the following table.

<table>
<thead>
<tr>
<th>№ of sample</th>
<th>barrow</th>
<th>material</th>
<th>date (BP*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Le-7795</td>
<td>№ 6</td>
<td>section of a column, wood</td>
<td>1840 ± 30</td>
</tr>
<tr>
<td>Le-7934</td>
<td>№ 6</td>
<td>charcoal</td>
<td>1910 ± 50</td>
</tr>
<tr>
<td>Le-8132</td>
<td>№ 49</td>
<td>wood</td>
<td>1855 ± 30</td>
</tr>
<tr>
<td>Le-7935</td>
<td>№ 49</td>
<td>charcoal</td>
<td>1380 ± 30</td>
</tr>
<tr>
<td>Le-8191</td>
<td>№ 24/12</td>
<td>charcoal</td>
<td>1740 ± 40</td>
</tr>
</tbody>
</table>

* Before Present

As the table shows, the C-14 dates as a whole do not contradict the archaeological dating, with the exception of sample Le-7935 from Barrow № 49, which apparently derives from charcoal in a looter’s tunnel.

Let us look now at the spatial organization of the monument, where, as noted above, the burials are concentrated in several stream valleys.

The Sutszukte valley. The burials are concentrated here in three large groups—western, central and eastern [Fig. 9]. Of the burials examined above which contain dating material, Barrows №№ 20, 23, 24/12, 25 and 49 are located in the central group. The first four of those enumerated are found in the northern part of this group, that is, located higher than the remaining barrows and are among the largest in the group. The features of the spatial organization of Xiongnu cemeteries noted above allow one to suggest that these barrows were among the first to be constructed here, and their date thus establishes a terminus post quem for the remaining burials.

Hence, the dating of Barrows № 20 and № 24/12 (both no earlier than the end of the 1st century BCE), № 23 (second half of the 1st century CE), and № 25 (no earlier than the Eastern Han, i.e., no earlier than the beginning of the 1st century CE) enables one to suggest that the central Sutszukte group began to be formed no earlier than the end of the 1st century BCE, and the remaining barrows of this group should be dated to the same or an only somewhat later time. The C-14 date for Barrow № 49 (1855 ± 30), located in the southern part of the central group agrees with this hypothesis.

Fig. 9. The original site plan of the central and eastern groups of tombs at Sutszukte (with translated captioning and numbers for the tombs discussed here inserted in place of the handwritten ones).
In the site plan of the central and eastern groups at Sutszukte which was first published by Teploukhov (Teploukhov 1925, Fig. 3) and then reproduced in various publications (Umehara 1960, Fig. 4; Rudenko 1962, Fig. 3), Barrow № 6 is located in the central group. However, in the original site plan this barrow is located in the eastern group, as Kondrat’ev, the director of the work at Noyon uul also noted in his report. According to Kondrat’ev, Barrow № 6 is the largest in the Sutszukte valley. Like the other large barrows in the central group it is located in the northern part of its cemetery field and was constructed, apparently, as the first in this group. Thus, the inscription on the lacquered cup indicating the manufacture date of 2 BCE and the inscription on the silk (no earlier than the Wang Mang period, i.e., no earlier than the first quarter of the first century CE) determine the terminus post quem not only for that barrow but for the entire eastern group at Sutszukte. On the basis of this one can propose that Barrow № 1 (Mokryi), located in the southern part of the given group likewise cannot be dated earlier than the beginning of the Common Era and more probably dates to the first half of the first century CE.

The Tszurumte valley. The participants in Kozlov’s expedition located on the map of the site the central part of the cemetery and several of the nearby large barrows. Reliable dating material (the inscription on the lacquered cup) was obtained only for a separate unnumbered barrow, from which Simukov recovered part of the finds in 1927 (Simukov 2008, pp. 42-45). According his description, this was an isolated barrow located in the vicinity of other isolated barrows somewhat lower than the Tszurumte group (judging from the plan of the cemeteries, approximately 700 m. southeast of the Kondrat’ev barrow; see Fig. 3). It is not excluded that the barrow in question was part of yet another cemetery at Tszurumte. However, the absence of a map for that sector of the monument leaves the question open. One can only conclude that, as with Barrow № 6, for the given barrow the terminus post quem is 2 BCE.

Hence with considerable confidence one can suggest that, as at Sutszukte, the barrow groups at Tszurumte came into being no earlier than the end of the first century BCE. There are no reliable dating materials as yet from Gudzhirte valley, another of the cemeteries at Noyon uul. One can but suppose the establishment of this cemetery occurred at approximately the same time as was the case for the neighboring cemeteries.

On the basis of the archaeological material and radiocarbon dates the establishment of the cemeteries at Noyon uul mountain dates no earlier than the end of the first century BCE and more likely was in the first century CE. The archaeological material from other Xiongnu monuments in Transbaikalia and Mongolia likewise does not allow one to date these monuments any earlier than the first century BCE (for details, see Miniaev 2001; Miniaev and Sakharovskaia 2007b, pp. 54-55). Such a conclusion contradicts the traditional view based on the written sources that the beginning date for Xiongnu complexes is the end of the third century BCE. Obviously it is necessary to correct the generally accepted ideas about the chronology of the Xiongnu cultural complex, whose date has a significant bearing on the chronology of other early Iron Age monuments in Siberia and Central Asia.

[translated from Russian by Daniel C. Waugh]

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Note
1. Sometimes another fragment of a mirror has been described as a find from Noyon uul (Danilov et al. 1998, p. 118), although in fact it was found in Barrow № 25 at the Gol Mod cemetery (in the basin of the river Khuni-Gol; Dorzhasuren 1962, Fig. 7-7).
**Figs. A-1 – A-4.** Lacquered cup from Barrow № 6 (State Hermitage Museum, Inv. № MR-2301).
Fig. A-9. Lacquered cup from unnumbered barrow at Tszurumte (National Museum of Mongolian History, Inv. № A-242)

Fig. A-13. Reconstruction of the toilet box which was in Barrow № 24/12. After: Umehara 1960, p. 33, Fig. 18.

Fig. A-14. A fragment from the toilet box in Barrow No. 24/12 (Hermitage Inv. № KP-14150).