

The Silk Road

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From the Editor's Desktop

Beyond the Sensational: The Reiss-Engelhorn-Museums' "Origins of the Silk Road"

Every blockbuster exhibition wants the public to believe that it is "sensational," since that may ensure large crowds and the revenues to recoup the huge costs involved in borrowing, transporting and mounting the artifacts. The Reiss-Engelhorn-Museums' current "Origins of the Silk Road: Sensational New Finds from Xinjiang, China" is no exception in this regard.¹ But in a world where Silk Road exhibitions pop up on the landscape like flowers after a thunderstorm in the desert, this one goes well beyond the sensational. With few exceptions, the material here, displayed first in Berlin before moving to Mannheim, is being shown for the first time outside of Asia. Readers of this journal will have about a month yet in which to visit Mannheim, before the exhibition closes June 1. It is worth the trip.

Thanks to the Public Broadcasting System, the *National*

Geographic and some recent books (e.g., Mallory and Mair 2000), the sensational part of the story—the largely "west asian" mummies unearthed in Xinjiang—is, in a sense, already well known. In Mannheim, the curators have been rather more cautious about sensational claims concerning western influences in China. Theirs is a nuanced presentation which meshes very nicely with the lead article in this issue of our journal by the distinguished German archaeologist, Hermann Parzinger. Dr. Christoph Lind's curatorial team in Mannheim selected but one of famous mummies (a well-wrapped infant from Zaghunluq, ca. 800 BCE, item no. 101²) and instead invites us to learn about cultures whose ethnic identities remain uncertain. The focus in the first instance is the ordinary artifacts of the everyday lives and deaths of inhabitants in the oases and mountains of Xinjiang. We come away with an appreciation for the complexity of

their cultures and interactions in Central Eurasia starting as far back as the late third millennium BCE, some two millennia before the period when conventional narratives of the silk roads begin. While there is "animal-style" gold work [Fig. 1; exhibit no. 166; Fig. 13, p. 6 below], bronze, silk

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Fig. 1. Gold neck ring or diadem, Jiaohe-Gou Xi, Tomb 1, Western Han Period (206 BCE-24 CE).



Fig. 2. A grave excavated at Zaghunluq.

and some noteworthy examples of Hellenistic artistic influences, the real interest is the material culture of clay, wood, grains and animal products such as bone and wool. As the curators recognize, a limitation of the selection is that most artifacts come from burials [Fig. 2], not from settlement sites, few of which have been located and studied. It is somewhat ironic that the chronological designations for so many of the artifacts are Chinese dynastic dates, even though so little of the indigenous culture displayed here had much of anything to do with China except by the accident of politics which finds the archaeological sites within the borders of today's People's Republic.

The decision was made to organize the exhibition by excavation site, rather than attempt to preserve a strict chronology throughout. Thus we

move on to other sites in the eastern Tarim Basin and Turfan region (notably Subexi and Yanghai). The spectacular "Yingpan Man" [Fig. 11, p. 4



Fig. 3. Archaeological sites in the eastern Tarim Basin and in the Turfan region.



Fig. 4. Sites in the Tien Shan Mountain region and especially the Ili River valley.

begin with the important "Bronze Age" cemeteries (which also happen to be amongst the earliest, dating between 2200 and 1100 BCE) at Qäwrighul and Xiaohe [Fig. 3], not far from Lop Nor. Then we below; no 162] (the burial of a Sogdian merchant?) is one of many interesting finds from an early first millennium CE site just to the west of Qäwrighul. There is a particularly rich selection of the remarkable 2000 to 2500-year-old textiles excavated at Sampula near Khotan and at Zaghunluq near Chärchän, both on the "Southern Silk Road." The exhibit concludes with Kiziltur (just south of the Tien Shan Mountains near Kuqa) and sites in the Ili River Valley [Fig. 4], where the artifacts range from striking first-millennium BCE bronzes [Fig. 5, facing page; no. 185] to the gold burial mask unearthed with other Turkic period artifacts at Boma [for an image, see p. 26 below].

The site at Xiaohe ("Little River"; nos. 3-36) may serve to illustrate both the promise of the ongoing archaeological work in Xinjiang and the challenges to proper scientific study of the material. Although discovered, it seems, by Ördek, who had led Sven Hedin to Kroraina (Lou-Lan) and who would much later in 1934 guide Hedin's archaeologist Folke Bergman to Xiaohe, this sizeable necropolis of some 2500 square meters was not systematically investigated until its re-discovery in 2000. At that time, a kind of



Fig. 5. Bronze figure. 71 - Tuanchang, Burial Site, 5th-3rd century BCE.

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find and its GIS coordinates became known (Mair 2006). Unfortunately the radioactivity in the area, due to nuclear testing, has made it impossible to obtain ¹⁴C dates.

Although now desert, Xiaohe must have been created in a period when the region was well watered. The boat-shaped coffins include both human remains and "substitute" figures made of organic materials. The burial of "substitute" figures or placing of anthropoid sculptures in or near the graves was not uncommon at other sites as well [Fig. 8; exhibit no. 57]. The wooden poles and "paddles" marking the graves at Xiaohe, as well as certain other objects, suggest a ritual concern over fertility and reproduction. As is the case though with so many other archaeological sites, we can only guess at the meaning of many objects — for example [Fig. 9, next page; no. 6], a small long-nosed wooden mask attached to the chest of a elderly woman whose attire included a striking felt cap and fur boots. Graves at Xiaohe contained delicately woven baskets or sieves, throwing darts bound with feathers, arrows, raw sheep's wool and woolen textiles.

Of particular interest are a 5th-century BCE five-stringed Konghou harp found at Yanghai (no. 69), the oldest such yet



Fig. 8. Mask made of clay and wood, Yanghai, Burial Site II, Tomb 2063, ca. 5th century BCE.

known, and a perfectly preserved compound bow, arrows and arm guard from Subexi (nos. 77, 78). Among the most important exhibits are some of those which make the least striking visual impression. For example, there is a rare 5th century BCE earthenware bellows valve from

Figs. 6, 7. Chinese excavations in Xinjiang.



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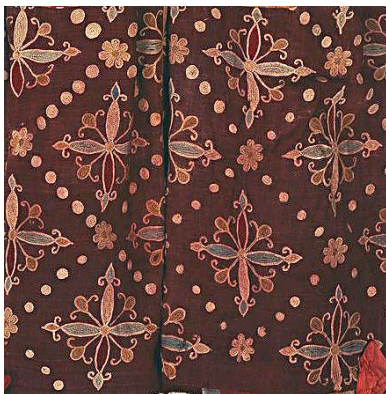
Fig. 9. Mask, willow wood, with strings, textile fibers and red paint, Xiaohe, Tomb C, Bronze Age (ca. 2200-1100 BCE).

Yanghai (no. 61), part of the equipment needed for smelting ore. A set of bowls (no. 79) from Subexi, dating from the 5th-3rd centuries BCE, contains food

Fig. 10. Details of textiles on "Yingpan Man."



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offerings, including meat cubes and millet; a pouch from Sampula (no. 129), dated to the Han Dynasty era, contains millet biscuits. Among the numerous examples of pottery are a rare early 2nd-millennium BCE vessel decorated with an image of a man and a woman (geometric designs are the more common), a unique 5th century BCE twin cup (no. 73), and a rare, for Sampula, wheel-turned earthenware jug (no.125). Spindles with carved weights may be common enough (nos. 95, 97), but rarely do they preserve traces of yarn. Thread spools (no. 127) (possibly originally attached to a loom?) are unusual.

The most vivid memory of the exhibition for me is the quality and variety of the textiles. Naturally, one's attention is drawn to Yingpan Man [Figs. 10, 11] and the now well known fragment of a large wall hanging with Hellenistic motifs from which trousers were sewn for a burial at Sampula [Fig. 12, facing page; no. 113].³ Undoubtedly the garments in those graves were sewn specifically for the burials, as were some other objects (socks, gloves). However, for the most part we are seeing what appear to have been every-day clothes, some soiled or worn from wear. There are trousers, skirts, kaftans, shirt fronts, and hats. The great majority are crafted from wool, some examples (e.g., the caps, nos. 86, 87)



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Fig. 11. Burial outfit of a deceased man, Yingpan, Tomb 15, Eastern Han to Jin Period (25-420 CE); wool and silk.

showing an exquisite ribbed mesh weave technique. Some of the weaves are plain; others brightly



Fig. 12. Trouser fragment, made, apparently, from a large wall hanging, Sampula, Tomb I, Han Period (206 BCE–220CE). The provenance of the textile is uncertain.

colored (e.g., no. 99, a dress with brown skirt but bright red and blue checker pattern top and red piping). Of particular interest are several skirts from Sampula with

began to arrive, I never felt that I was being hurried along by crowds as had been the case in the cramped and poorly laid out space in which the Musée Guimet

woven bands depicting bactrian camels, trees or fantastic creatures (nos. 102, 104, 106, and 117). There is at least one textile fragment (no. 152), probably imported, with an unusual taqueté weaving technique. With one possible exception (no. 96), all the silks date from the Han Dynasty period or later.

The spaciousness of the display area is one of the great virtues of the exhibition. These often quite ordinary clothes of ordinary people are not relegated to obscurity in a corner — many in fact take on a starring role as the central focus of a room or an alcove and thus demand the viewer's close attention. I was fortunate enough to begin viewing the exhibit before its formal opening hour, but even once the public

mounted its Afghan treasures exhibition last year in Paris.

Apart from the Silk Road exhibition in Mannheim, I would strongly recommend that those interested in archaeology visit the excellent Palatinate Museum in historic Heidelberg, only 15 minutes away on the train. There one can enjoy a rich collection of pre-historic and Roman period material. If your calendar excludes Mannheim before June, then at very least obtain the catalogue of the Silk Road exhibit (*Ursprünge* 2007), in which you can view the objects and read a number of interesting essays, including one on daily life in the early Xinjiang communities written by Dr. Ulf Jäger, a contributor to this journal. And in the meantime, enjoy on the pages below a substantial amount of new information about other discoveries which are expanding our knowledge about cultures of the silk roads, their pre-history, and their legacy down to the present.

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References

Mair 2006

Victor H. Mair, "The Rediscovery and Complete Excavation of Ördök's Necropolis," *The Journal of Indo-European Studies* 34/3-4 (Fall/Winter, 2006): 273-318.

Mallory and Mair 2000

J. P. Mallory and Victor H. Mair. *The Tarim Mummies: Ancient China and the Mystery of the Earliest Peoples from the West*. London: Thames and Hudson, 2000.

Ursprünge 2007

Ursprünge der Seidenstraße: Sensationelle Neufunde aus Xinjiang, China, Alfried Wieczorek and Christoph Lind, eds. Stuttgart: Konrad Theiss Verlag, 2007. ISBN 978-3-8062-2160-2.

Notes

1. The curatorial team for the exhibition was headed by Dr. Christoph Lind; apart from the Reiss-Engelhorn-Museen in Mannheim, the presenters included the Martin-Gropius-Bau Berlin and the Eurasia Department of the German Archaeological Institute. Funding was provided by several institutional and corporate sponsors. The exhibition objects are from the Cultural Heritage Bureau of the Xinjiang Uighur Autonomous Region, China.
2. With the exception of the two maps provided by the exhibit

organizers, my images here are limited to the few publicity photos made available by the Cultural Heritage Bureau of the Xinjiang Uighur Autonomous Region, China. The item numbers are those in the caption list kindly sent me by Dr. Christoph Lind; I assume they correspond to the published catalogue numbers, which I have not yet had the opportunity to check.

3. The Sampula textile was also part of the Metropolitan Museum's exhibition "China: Dawn of a Golden Age, 200-750 AD"; see http://www.metmuseum.org/special/china/s3_obj_1.R.asp.

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Fig. 13. Gold foil belt buckle ornament depicting a griffin attacking a tiger, Jiaohe-Gou Bei, Tomb 1-mb, Han period (206 BCE- 220 CE).

The 'Silk Roads' Concept Reconsidered: About Transfers, Transportation and Transcontinental Interactions in Prehistory

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Today's widely used designation, the "Silk Road," goes back to the German scholar Ferdinand von Richthofen, who travelled extensively in China during the second half of the 19th century. He formulated the term "the silk roads" (Höllmann 2004, 37; Waugh 2007). In doing so, he chose the plural form, being quite cognisant that not just one single track was involved, but a widely branching and ancient transcontinental network of transportation and communication. Yet, now, at the beginning of the 21st century the plural form is nearly forgotten; instead, the singular form, the Silk Road, is commonly used to designate what Richthofen meant. In fact, the plural is more correct and reflects more precisely what this transcontinental travel and communication network really was. This system of travel and trade routes is indeed ancient and developed over millennia. Archaeological evidence, which is our focus here, has greatly extended our knowledge of the cultural exchange across Eurasia from prehistoric times and demonstrates the antiquity of this network.

The geographical setting of the silk roads: barriers and routes

The natural environment of the regions through which the silk roads proceeded is exceedingly varied. High, precipitous mountains covered with snow and seemingly endless deserts were obstacles along the silk roads. These natural barriers often

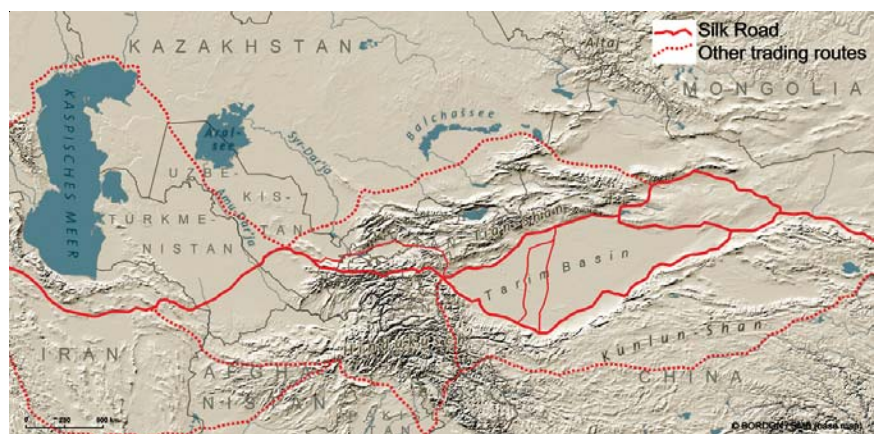
dictated the route to be taken. Therefore a knowledge of the geographical framework is essential for understanding the distribution of cultures and their contacts since earliest times.

The eastern terminus of the classical, major route of the silk roads was the old imperial city Chang'an (Xi'an) in northern China (Höllmann 2004; Debaine-Francfort and Idriss 2000; Baumer 2002). The track ran westward and crossed the Huangho (Yellow River) in the province of Gansu, whence it then led further to the northwest [Fig. 1]. At the southwestern reaches of the Gobi desert the main road forked into a southern and a northern route. The southern route ran parallel to the Kunlun mountain range along the southern fringe of the Taklamakan in the region now known as Xinjiang. The northern track first crossed the Gobi desert, then circumvented the northern rim of the Taklamakan, following the Tian Shan mountains. A

branch left the northern route at Turfan and continued in a northwesterly direction towards southeastern Kazakhstan (Semi-rechye).

Northern and southern routes converged in Kashgar in western Xinjiang, whence the main connection to the west crossed the western fringes of the Tian Shan as well as the Pamir range to attain the Ferghana basin. Despite low precipitation, the fruitfulness of the Ferghana basin is ensured by rivers that are fed by the melted snow and ice from the surrounding mountains. The most important east-west route left the Ferghana basin, passing through the Tashkent oasis to Sogdia, where it traversed the Zeravshan valley, bridged the Amu Darya river, and, after crossing the Karakum desert, progressed across the northern Iranian highlands ultimately to reach Mesopotamia and the Mediterranean Sea. There was undoubtedly also a route that circumvented the Caspian Sea to the north and then advanced across the Eurasian steppe.

The development of this complex and widely branching



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Fig. 1. The "Silk Roads" and other trading routes crossing Central Asia.

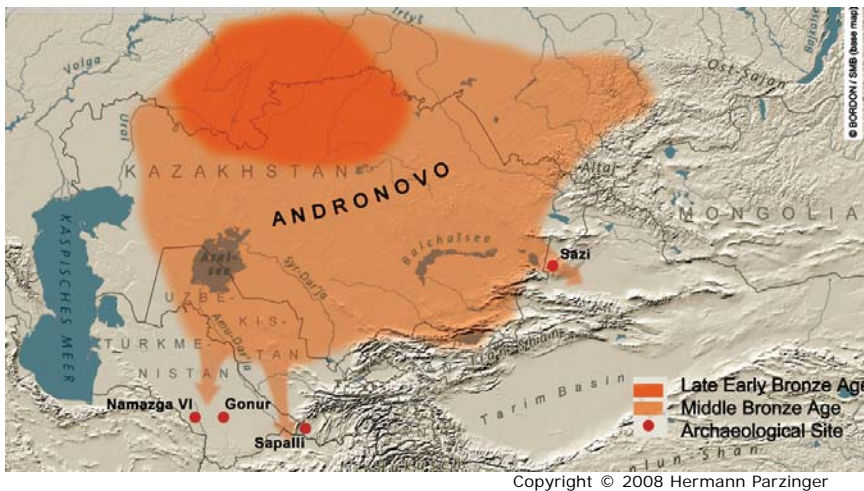


Fig. 2. Map of the Andronovo culture and its diffusion south- and eastwards during the Late Early and Middle Bronze Age (first half of the 2nd millennium BCE).

transportation network – that is, the emergence of the silk roads – cannot be dated with certainty. Historical sources scarcely aid in reconstructing this wearisome process. For example, in China Zhang Qian is considered the “progenitor” of the silk roads. He was an imperial envoy who journeyed twice to the west in the late 2nd century BCE. During his travels he was in Ferghana and reached the upper Amu Darya (Höllmann 2004). The information which Zhang Qian gathered about these distant trans-Pamir regions drew close attention at the Chinese imperial court. Yet it is rather improbable that Zhang Qian was really the first Chinese who ever reached these areas; more likely, his report is the first that has been preserved.

The travel and communication networks across Central Asia which were described later as the “silk roads” were neither an achievement of the ancient world nor even the medieval world. Their beginnings lie long before the millennium in which Buddhism emerged. The fact that comparatively little is known today about these early times is primarily due to an insufficient amount of research, which however has been expanding year by year. The more knowledge gained about the early cultures of Central Asia, the older the

communication network that linked them appears, a network that in its beginnings as well as much later enabled migrations of population groups as well as the transfer of goods and knowledge.

Between north and south: the role of Andronovo herdsmen and metallurgists

Looking back into the depths of prehistory – and that we must do, if we wish to study the emergence of the silk roads – we depend exclusively upon archaeological sources. Long-distance relations in the area of the later silk roads had always been present, perceptible to varying degrees of clarity in archaeological contexts. The migration of certain groups of peoples along natural trails, later utilized for the silk roads, can be delineated with increasing confidence in the first half of the 2nd millennium BCE. During this period diverse regional groups of the Andronovo culture had spread into distant parts of Eurasia. From their origins in present-day western Siberia and northern Kazakhstan, they expanded their territory to the east as far as the Yenisei River [Fig. 2].

The Andronovo culture is a widely spread cultural complex, representing the Middle Bronze Age in a great part of the eastern Eurasian steppe belt (Chernykh

1992; Parzinger 2006). As many other prehistoric cultures, it is mainly defined by its material remains, especially a rather specific pottery with different S-shaped vessels and incised geometric ornaments [Fig. 3, facing page]. Bronze metallurgy and stock breeding are typical features of this culture, although their roots date back to the 3rd millennium BCE. Tin bronzes had been invented even before the Middle Bronze Age, but the Andronovo culture is connected with the first large scale production of jewellery, weapons and instruments made of tin bronze (Chernykh 1992; Parzinger 2006) [Fig. 3]. Sheep, goats, cattle and horses were widespread, and stock breeding was the economic basis of the Andronovo population. Not only the horse, but also the camel was of crucial importance for the mobility of this culture, and the camel even enabled the Andronovo population to cross large and extremely dry areas. From the steppe and forest-steppe regions between the Ural and the Yenisei rivers we know a lot about settlements of this period, some of them rather large. Clearly, sedentary life was quite developed, but the question of the degree to which agriculture was known is still open. Part of the Andronovo population was not concentrated in villages but lived as mobile herdsmen.

During the first half of the 2nd millennium BCE mobile groups of this Andronovo culture wandered to the south. They survived the dry steppes and deserts of Middle Asia, some groups ultimately reaching the area of the Namazga VI culture in southern Turkmenistan and others the territory of the Sapalli culture in Bactria. Both the Namazga VI and the Sapalli cultures are fundamentally different from Andronovo. In southern Turkmenistan (Namazga VI) as well as in southwestern Uzbekistan (Sapalli) quite a large number of tell settlements have been investigated. Both cultures

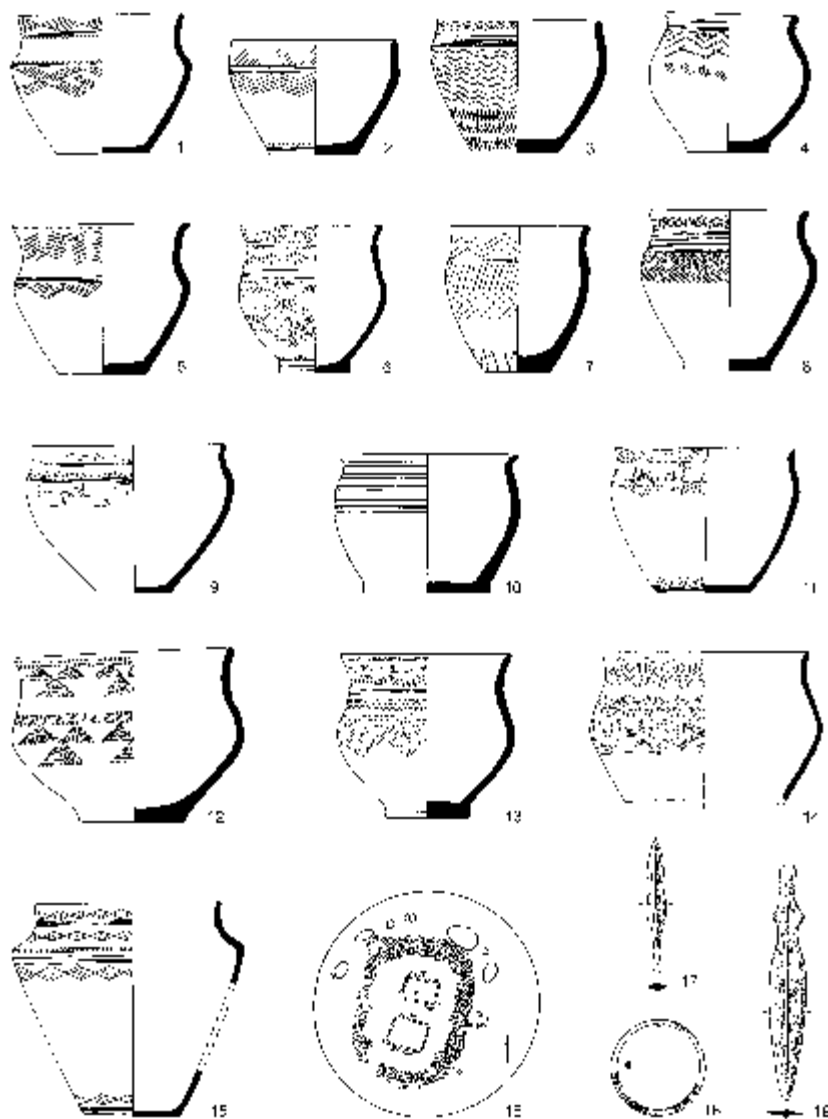


Fig. 3. Typical pottery and bronze objects of the Andronovo culture in Siberia and Kazakhstan. After Parzinger 2006.

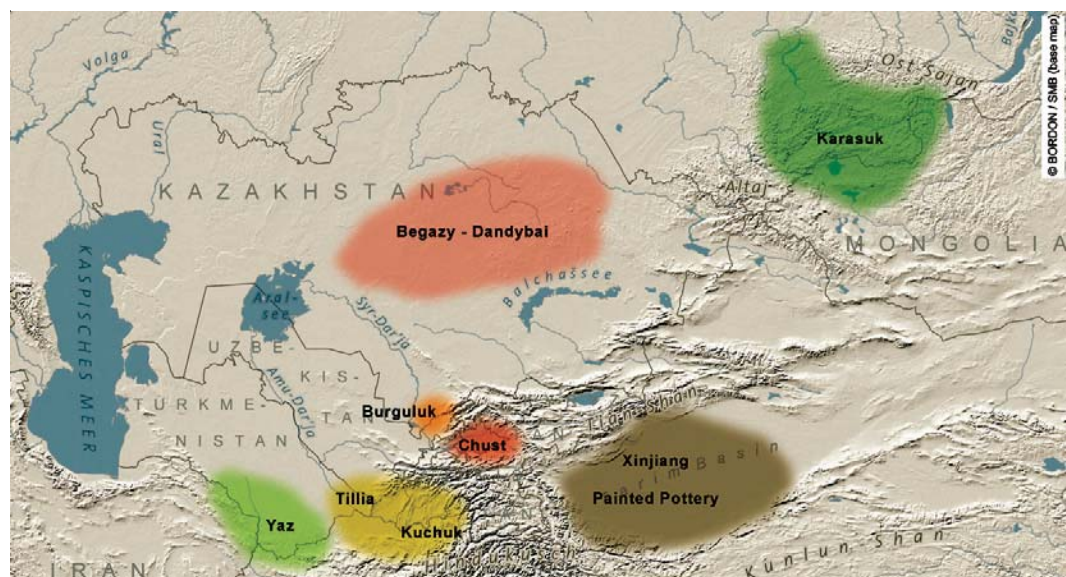
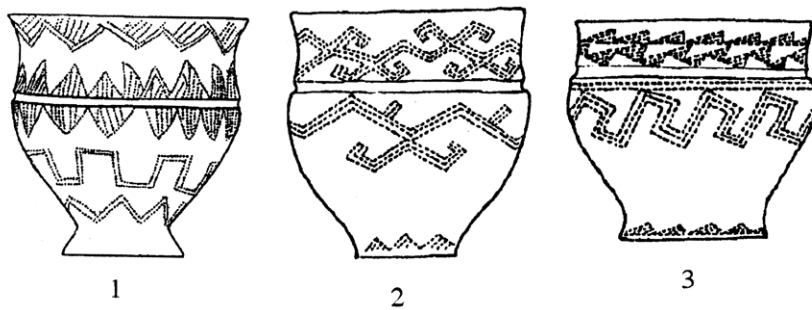
are characterized by complex societies, living in early urban centres with public buildings, sanctuaries, workshop areas, living quarters and even fortifications (Kohl 1984, 1992). Irrigation enabled their populations to develop agriculture with field crops and even garden products. The centers of these cultures concentrate in the oases of the large Central Asian river valleys, surrounded by dry steppe or desert. Although there was as yet no writing, Namazga VI and Sapalli cultures are part of the northeastern periphery of the Ancient Near East.

At the protourban center of Gonur in Margiana, one of the most important sites of Namazga VI culture in southeastern Turkmenistan, a temporary camp of mobile Andronovo herdsman existed in the immediate vicinity of this large, coeval tell settlement (Hiebert 1994). This shows that individual Andronovo groups lived near these central communities of the south, yet without causing any change in these more advanced cultures. Areas in the north of Middle Asia, by contrast, were broadly settled by Andronovo groups. At that time Khwarezm on the lower Amu Darya river, the

Zeravshan valley in Sogdia, the Ferghana basin, the Tashkent oasis and Semirechye in southeastern Kazakhstan were integrated into the sphere of the Andronovo cultural community, and thenceforth they followed the development in the steppe farther north rather than that in areas of oases to the south.

The reasons for the southern expansion of the Andronovo culture, with some of its groups moving even farther south to the borders of Iran and Afghanistan, are unknown. Nonetheless, it is remarkable that the appearance of the Andronovo culture in Middle Asia was always associated with metallurgical activities (Chernykh 1992; Parzinger 2006). Numerous artifacts and other evidence point towards mining as well as the processing of ores. Prehistoric mines and settlements in which ores were extracted and processed, ascribable to the Andronovo culture, are known in areas in the modern states of Kazakhstan, Uzbekistan and Tajikistan.

Moreover, not only copper ores were mined, but also tin – that indispensable component for the production of bronze. Whereas copper ores were available farther north in the region of the Ural mountains and elsewhere, the much coveted tin was found only in Middle Asia. The exploitation of tin in the Zeravshan valley and in eastern Kazakhstan by the Andronovo culture has been confirmed (Parzinger and Boroffka 2003). Although objects made of tin bronze are already known prior to this time, they were first produced on a large scale by craftsmen of the Andronovo culture and thence became widespread in all of western Siberia and Middle Asia. The peoples of the Andronovo culture were not only herdsman, but they were also highly experienced miners and adept metalworkers. Possibly it was the abundance of ores in those particular mountain ranges in Middle Asia that



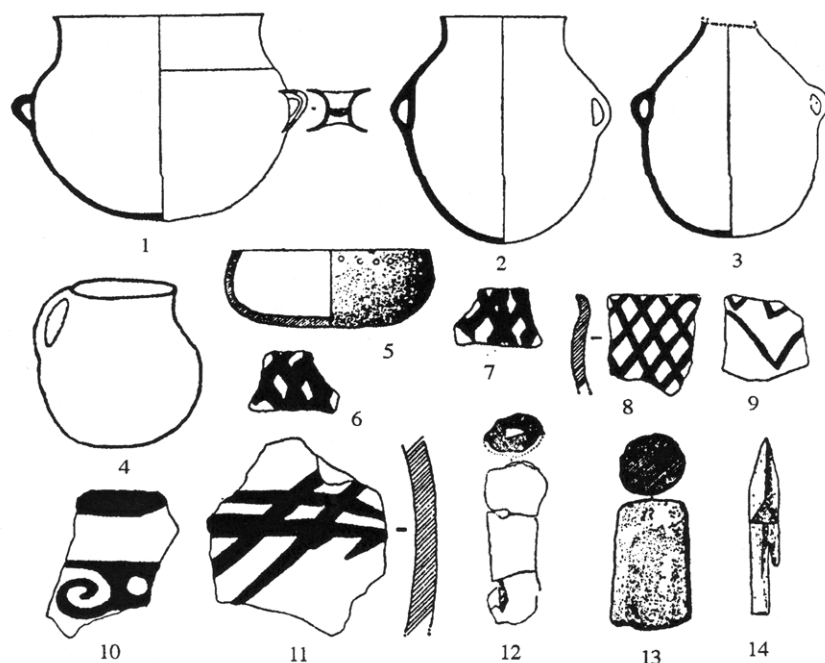


Fig. 6. Handmade painted pottery from Xinjiang. After Mei 2000.

painted pottery, widespread between the Caspian Sea and China [Fig. 6]. Hence it has become of considerable interest to study the patterns of distribution and directions of dissemination, especially since the cultures in question occupied areas through which the silk roads later passed. Debates about the evidence intensified when in recent years improved research in Xinjiang discovered cultures connected with this handmade, painted pottery. The question is not simply where was the new pottery produced first and how it spread. What is far more crucial is the question as to whether the spread of this pottery can be connected with other cultural developments and population groups.

Research has recently linked cultures with handmade, painted wares found in western Central Asia with an "Iron Age Oxus culture," which includes the groups Jaz in southern Turkmenistan, Tillia in northern Afghanistan and Kuchuk in southeastern Uzbekistan [Fig. 7] (Francfort 2001; Shaidullaev 2002; Parzinger 2006). Since previously these

areas had used exclusively monochrome wheelmade wares,

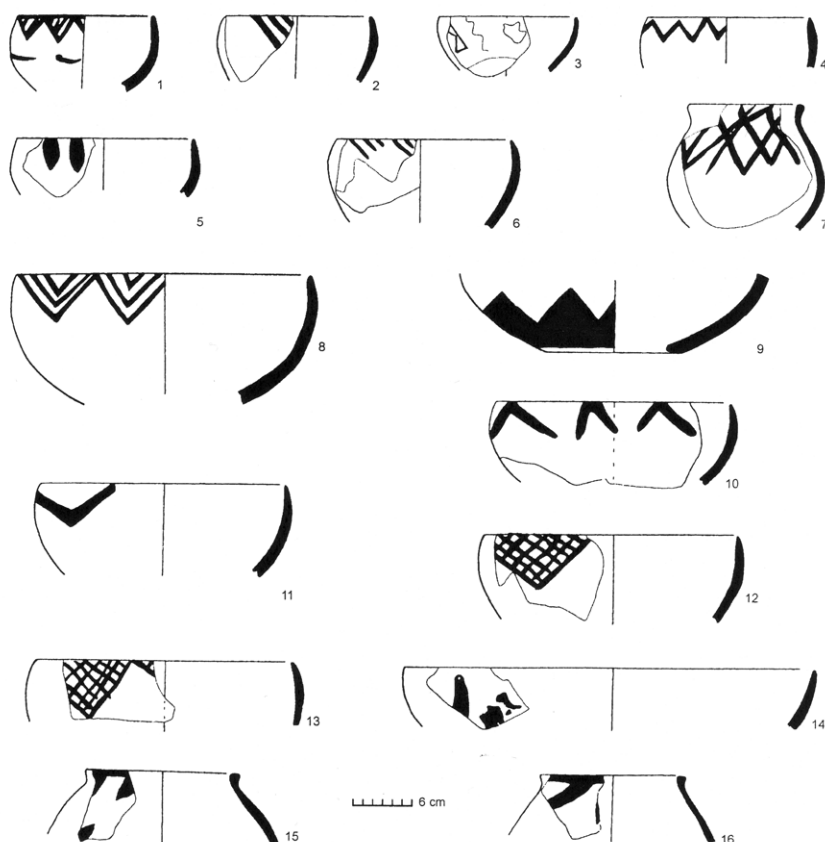


Fig. 7. Handmade painted pottery from Kuchuk in Uzbekistan. After Shaidullaev 2002.

the immigration of foreign peoples was presumed to be the cause of this break in ceramic development. Yet their origin cannot be determined with certainty. Further, because cultures with similar material possessions were present in the Tashkent oasis (Burgulyuk) and in the Ferghana basin (Chust) [Fig. 5], with comparable material reported from Xinjiang as well, one is inclined to presume that these groups advanced from east to west through the Ferghana valley. In other words, the movement was in the opposite direction to that of the spread of metalworking a few centuries before.

Comparison of the structures of these cultures demonstrates that the urban-like oasis settlements with mudbrick architecture and irrigated agriculture are the primary characteristics of the Iron Age Oxus culture, which is based

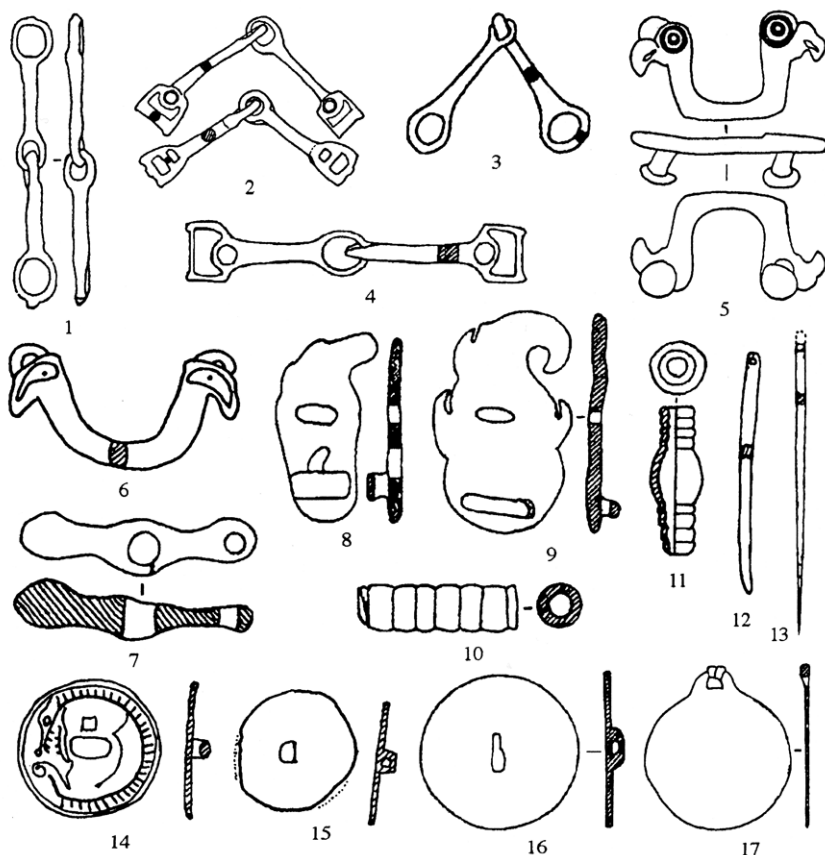


Fig. 8. Objects of "Scythian" character from Xinjiang. After Mei 2000.

upon an uninterrupted tradition from the Bronze Age. By contrast, only elements of this cultural system are found in cultures farther east. This does not refute the presumed immigration of new groups to Bactria and further westwards to southern Turkmenistan (Margiana), who might have brought handmade, painted vessels. However, the achievements of the Iron Age Oxus culture in the first instance emerged from indigenous older traditions and not primarily as a result of influences coming by way of Xinjiang and Ferghana.

Be that as it may, it is noteworthy that the change which the Iron Age Oxus culture and the other groups with handmade, painted pottery illustrate was complete at about the same time – after the middle of the 2nd millennium BCE – in almost all of Central Asia. This result certainly would not have been possible if a comprehensive and widely

branching network of long-distance travel and communication routes had not already been present. It is surely no coincidence that this network already foreshadows the underlying features of the later silk roads.

The first mounted nomads: a new dimension in mobility

The first millennium BCE saw the emergence in the Eurasian steppe of mounted nomadism and a concomitant greater mobility (Parzinger 2004; Lebedynsky 2006). In large areas of Central Asia – e.g. in Turkmenistan, Bactria, Sogdia, Khwarezm, Ferghana and

other regions – the coexistence and symbiotic relationship of peoples living in urban centers and farming irrigated fields together with nomadic stock-raisers in the environs of the oases are well-attested. Mounted nomads appeared in other parts of Central Asia as well (Parzinger 2006). There are convincing parallels between bronze objects found in many areas of Xinjiang [Fig. 8] and those in southern Siberia and even in the Ordos region – in particular, specific types of knives, daggers, arrowheads, horse-gear, mirrors and decorative fittings. The last often display the so called animal-style ornament (Tierstil), that is so typical of the nomad horsemen of the older Iron Age (Mei 2000; Parzinger 2006). Such evidence also appears along a branch of the later silk roads that leads from the western Taklamakan over the Karakorum range to the upper course of the Indus River and ultimately to the broad Indus plain in the south.

In recent years increasing numbers of finds from cemeteries of nomadic riders of the 1st millennium BCE in the Karakorum area show a clear connection to material from Xinjiang as well as southern Siberia. The famous golden necklace from Pattan in northern Pakistan, decorated all over with the typical animal style images (Rahman 1990), seems to be a close parallel to the golden necklace which we found in 2001 in the Scythian elite burial at Arzhan in Tuva [Fig. 9], not too

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Fig. 9. The golden necklace from Arzhan 2 in Tuva, a masterpiece of Siberian animal style.

far from the present Russian-Mongolian border (Chugunov, Parzinger and Nagler 2003; 2006). Many other similar examples can be adduced, all of which confirm that during the 1st millennium BCE the mobility of people and the network of cultural interactions gained a new dimension.

Likewise, during this period and in the following centuries, but above all in the Christian era, the Upper Indus area was traversed in both directions by countless merchants and pilgrims. This is evident from large numbers of rock inscriptions written in Sogdian, Brahmi, Kharosthi, Persian, Hebrew, Tibetan, Chinese and other languages and scripts, as well as petroglyphs and stupas from the Buddhist period (Höllmann 2004). Bronze objects typical of nomad horsemen, which belong to the greater sphere of material culture of the older Iron Age attributed to the Scythians, are indicative of the many influences from the Eurasian steppe. These spread rapidly within Central Asia precisely via the long-distance network for travel and communication, itself rooted in Bronze Age and even older traditions.

In addition to the aforementioned bronzes a further source of material from Xinjiang must be emphasized, which illuminates the culture of that time in a special manner. In the cemeteries there the deceased were buried in tree coffins, in containers made of reed or simply in shallow pits. The favourable conditions in the dry desert sand of the Taklamakan resulted in the excellent preservation of the dead as well as their whole attire and funerary gifts of organic material (Debaine-Francfort & Idriss 2000). As these desiccated mummies exhibit unmistakable European features, the theory has frequently been asserted that these were Proto-Tocharians, ancestors of the later Indo-Germanic Tocharians, whom some believe could be localised in



Fig. 10. The mummy of a mounted warrior, preserved in the permafrost of the Mongolian Altai at Olon-Kurin-Gol 10.

Xinjiang in the 6th–8th century CE. However, the problem of the Tocharians is thus far surrounded by too many speculations and too little clear evidence. The fact remains that in almost the whole of the Eurasian steppe belt the majority of the older Iron Age mounted nomads was a European population, supplemented by merely a few Mongolian individuals, who only later, above all in the Christian era, came to be a dominant element in the population of Central Asia. Thus, the discovery of European mummies in Xinjiang is by no means surprising.

Yet, even more decisive than the anthropological characterization of the mummies is the fact that due to the excellent preservation of the clothing and accessories, it is possible to make a detailed reconstruction of their attire. And here there are surprisingly close similarities to finds of the Scythian period recovered from the frozen kurgans of the Pazyryk culture in the Altai Mountains (Polos'mak 2001). The coincidence relates to the type of clothing as well as to its ornamentation, color and technique of production. Thus,

aside from fur, felt, wool and other materials, silk played a prominent role. The nearly complete wardrobe of trousers, skirts, blouses, jackets and coats includes as well socks and boots, and hood-, hat- or helm-like head apparel (Polos'mak & Barkova 2005; Polos'mak et al. 2006). The last includes peculiar pillar-like hats found in graves of females. Recent discoveries in the Mongolian Altai from a permafrost grave at Olon-Kurin-Gol [Fig. 10], excavated by a joint German-Russian-Mongolian expedition (Heinken 2007), confirmed these close relations between north and south and showed that the Pazyryk culture extended much farther to the southeast than was previously known [Fig. 11, next page].

It is astounding that these examples of costume, which usually are never preserved, manifest many more and closer similarities between Xinjiang and southern Siberia than do other categories of finds. Hence, we are confronted with a conspicuous uniformity in clothing that extends over a large area. Occasionally these findings correlate with a general Indo-Iranian substratum



Fig. 11. Typical wooden carvings of the Pazyryk culture, found at Olon-Kurin-Gol 10 in the Mongolian Altai.

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in the region. But textiles and furs were always important commodities of trade in Central Asia. Written sources verify this in later periods in a compelling manner, and the situation was probably no different during the pre-Christian era. Fabrics were often traded in the form of complete garments too. Thus, the question arises as to whether the similarities in costume found between Xinjiang and southern Siberia are to be connected with members of one and the same group of languages or people, or may not rather reflect an increasingly intensive exchange of goods and information along the silk roads, where the mobility of people reached a new dimension.

Conclusions

The evidence of archaeology alone is sufficient to demonstrate the existence of a widely branching network of travel and communication in Eurasia starting as early as the 2nd millennium BCE. This can be seen in the penetration of Andronovo groups into Dzungaria and the ensuing spread of bronze metallurgy into northwestern and northern China, a transfer of technical knowledge from the northwest to the southeast. A few centuries later handmade, painted pottery appears relatively suddenly and almost at the same time throughout the vast area extending from southern

Turkmenistan to northwestern China. This new ware reflects a cultural change, which could hardly have been achieved so rapidly and uniformly without a well-functioning and broadly branching network of communication. A web of intersecting relations between north and south and in particular with a northeast-southwest orientation can be recognised through the finds left by mounted nomads of the 1st millennium BCE. The astonishing similarities in attire, observable in general and even in details and found in distantly separated areas do not necessarily point to ethnic relationships, but rather to an intensive exchange of furs, textiles and even garments. And it was at this time that silk first played an important role.

The examples presented here illustrate three main points. Firstly, the roots of this network of long-distance travel and communication routes that spanned all of Central Asia reach back into the pre-Buddhist past. The network developed continuously throughout the millennia before attaining the form in which it is known in Antiquity and the Middle Ages as the "silk roads." Secondly, whereas in later historical periods gun powder, book printing, the manufacture of porcelain and many other things were transported via the silk roads mainly from the East to the West, the spread of knowledge and products during Prehistory seems to have been much more complex, using the same routes, but in different and continuously changing directions. And thirdly, it becomes evident that this network does not concern just one road or even a few main tracks, but – as in the sense of the original definition by Ferdinand von Richthofen – an expansive

network with many branches and countless trails, all of which contributed in the same manner to the spread of groups of peoples and the transmission of knowledge, techniques, wares, religious ideas and forms of artistic expression. Again and again changes took place among the cultures involved in this web, whereby the manner, direction and intensity of change were dependent upon the most diverse factors, which cannot always be reconstructed today.

During recent centuries the significance of this travel and communication network has diminished greatly. In the late 19th century Russian and British territorial interests collided in the area. For a lengthy part of the 20th century the millennia-old routes were cut off through the confrontation between the eastern and western political blocs and to no lesser a degree by the Iron Curtain between the former Soviet Union and China. Only in recent years has a serious opportunity to revivify the silk roads emerged: as a fascinating subject of further research, and, in its original, millennia-long function, as a medium for the exchange of goods and ideas and the peaceful encounter between people of different nationality, skin colour and religion.

Note: This essay is based on a keynote address delivered on 7 October 2005 to the Ferdinand von Richthofen Symposium 2005 at Humboldt-Universität zu Berlin.

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Hermann Parzinger studied Prehistory in Munich, Saarbrücken and Ljubljana (Slovenia). As Director at the German Archaeological Institute he founded its Eurasian Department and directed research projects in Turkey, Iran, Kazakhstan, Uzbekistan, Tajikistan, Siberia and Mongolia. Since 1996 he has taught Prehistory at the Free University in Berlin, and in 1998

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References

- Baumer 2002
Christoph Baumer. *Die südliche Seidenstraße. Inseln im Sandmeer. Versunkene Kulturen der Wüste Taklamakan*. Zaberns Bildbände der Archäologie. Sonderbände der Antiken Welt. Mainz: Philipp von Zabern, 2002.
- Chernykh 1992
Evgenii Nikolaevich Chernykh. *Ancient Metallurgy in the USSR. The Early Metal Age*. Tr. Sarah Wright. New York: Cambridge University Press, 1992.
- Chugunov, Parzinger and Nagler 2003
Konstantin V. Chugunov, Hermann Parzinger and Anatoli Nagler. "Der skythische Fürstengrabhügel von Arzhan 2 in Tuva." *Eurasia Antiqua* 9 (2003): 113-162.
- Chugunov, Parzinger and Nagler 2006
Konstantin V. Chugunov, Hermann Parzinger and Anatoli Nagler. *Der Goldschatz von Arzhan. Ein Fürstengrab der Skythenzeit in der südsibirischen Steppe*. München: Schirmer/Mosel, 2006.
- Debaine-Francfort 1995
Corinne Debaine-Francfort. *Du Néolithique à l'âge du Bronze en Chine du Nord-Ouest: la culture de Qijia et ses connexions*. Mémoires de la Mission Archéologique Française en Asie Centrale 6. Paris: Editions Recherche sur les civilisations, 1995.
- Debaine-Francfort and Idriss 2000
Corinne Debaine-Francfort and Abduressul Idriss. *Kériya, mémoires d'un fleuve. Archéologie et civilisation des oasis du Taklamakan*. Paris, 2000.
- Francfort 2001
Henri-Paul Francfort. "The Cultures with Painted Ceramics of South Central Asia and Their Relations with the Northeastern Steppe Zone (Late 2nd – Early 1st Millenium BC)." In: Ricardo Eichmann and Hermann Parzinger, eds. *Migration und Kulturtransfer. Der Wandel vorder- und zentralasiatischer Kulturverhältnisse im Umbruch vom 2. zum 1. vorchristlichen Jahrtausend*. Kolloquien zur Vor- und Frühgeschichte 6. Bonn: Habelt, 2001, pp. 231-236.
- Hiebert 1994
Fredrik T. Hiebert. *Origins of the Bronze Age Oasis Civilization in Central Asia*. Cambridge, Mass.: Peabody Museum of Archaeology and Ethnology, Harvard University, 1994.
- Heinken 2007
Siebo Heinken. "Der Krieger vom Altai. Was eine Mumie aus der Skythenzeit über die Geschichte eines antiken Steppenvolks erzählt." *National Geographic* (Deutschland) 2007, no. 6 (Juni): 116-129.
- Höllmann 2004
Thomas O. Höllmann. *Die Seidenstraße*. München: C. H. Beck, 2004.
- Kohl 1984
Philip L. Kohl. *Central Asia. Palaeolithic Beginnings to the Iron Age*. Paris: Editions Recherche sur les Civilisations, 1984.
- Kohl 1992
Philip Kohl. "Central Asia (Western Turkestan): Neolithic to Early Iron Age." In: Robert W. Ehrich, ed. *Chronologies in Old World Archaeology*. Chicago; London: University of Chicago Press, 1992, pp. 179-195.
- Lebedynsky 2006
Iaroslav Lebedynsky. *Les Saces. Les "Scythes" d'Asie, VIII^e siècle av. J.-C. – IV^e siècle apr. J.-C.* Paris: Editions Errance, 2006.
- Mei 2000
Jianjun Mei. *Copper and Bronze Metallurgy in Late Prehistoric Xinjiang: Its Cultural Context and Relationship with Neighbouring Regions*. BAR International Series 865. Oxford: Archaeopress, 2000.
- Parzinger 2004
Hermann Parzinger. *Die Skythen*. München: C. H. Beck, 2004.
- Parzinger 2006
Hermann Parzinger. *Die frühen Völker Eurasiens. Vom Neolithikum bis zum Mittelalter*. München: C. H. Beck, 2006.
- Parzinger and Boroffka 2003
Hermann Parzinger and Nikolaus G.O. Boroffka. *Das Zinn der Bronzezeit in Mittelasien I. Die siedlungsarchäologischen Forschungen im Umland der Zinnlagerstätten*. Archäologie in Iran und Turan 5. Mainz: Philipp von Zabern, 2003.
- Polos'mak 2001
Nataliia V. Polos'mak. *Vsadniki Ukoka* (The Horsemen of the Ukok). Novosibirsk: Infolio-press, 2001.
- Polos'mak and Barkova 2005
Nataliia V. Polos'mak and L. L. Barkova. *Kostium i tekstil' pazyryktsev Altaia (IV-III vv. do n. e.)* (Costume and Textiles of the Altai Pazyryks [4th-3rd centuries BCE]). Novosibirsk: Infolio-press, 2005.
- Polos'mak et al. 2006
Nataliia V. Polos'mak et al., *Tekstil' iz 'zamerzshikh' mogil Gornogo Altaia IV-III vv. do n. e. (opyt mezhdistsiplinarnogo issledovaniia)* (Textiles from the "frozen" tombs of the Mountain Altai 4th-3rd centuries BCE [an experiment in interdisciplinary research]). Novosibirsk: Izd-vo Sibirskogo otdeleniia RAN, 2006.
- Rahman 1990
S. Rahman. "Unique Find of Gold Ornaments from Pattan/Kohistan." *Journal of Central Asia* 12 (1990): 5-35.
- Shaidullaev 2002
Sh. Shaidullaev. "Die früheisenzeitlichen Siedlungslandschaften in Nordbaktrien." *Archäologie in Iran und Turan* 34 (2002): 243-340.
- Waugh 2007
Daniel C. Waugh. "Richthofen's 'Silk Roads': Toward the Archaeology of a Concept." *The Silk Road* 5/1 (2007): 1-10. On-line at: <http://www.silkroadfoundation.org/newsletter/vol5num1/srjournal_v5n1.pdf>.

The Dream and the Glory: Integral Salvage of the Nanhai No. 1 Shipwreck and Its Significance

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The morning of 22 December 2007 saw the integral raising from the seabed of the steel caisson containing the Nanhai No. 1 shipwreck [Fig. 1]. One week after that exciting moment, on 28 December, the huge caisson was brought into the newly established Marine Silk Road Museum on Hailing Island, Guangdong Province [Fig. 2]. The completion of the Integral Salvage Project of Nanhai No. 1 was the dream of Chinese underwater archaeologists come true!

Nanhai No. 1 (South China Sea No. 1) was a merchant ship of the Song Dynasty (Northern Song, 960-1127; Southern Song, 1127-1279 CE) which sank in the South Sea of China 800 years ago. It was discovered by accident when the Guangzhou Salvage Bureau and a British salvage company co-operated in searching for a shipwreck of the East India Company in August 1987. More than 200 objects, such as Song and Yuan porcelains, a gold belt [Fig. 3] and silver sycee (an ingot used for currency) [Fig. 4, facing page] came out of the sunken ship. Further analysis led to the conclusion that the ship was a merchant boat of the Song-Yuan period sailing on the marine Silk Road.

A series of underwater archaeological investigations began. In November 1989, the Underwater Archaeological Survey Team of the South China Sea's Shipwrecks, including specialists from the National Museum of Chinese History and the Japanese Institute of Underwater Archaeology, conducted the first study of the shipwreck. Some shards of porcelain were collected and the

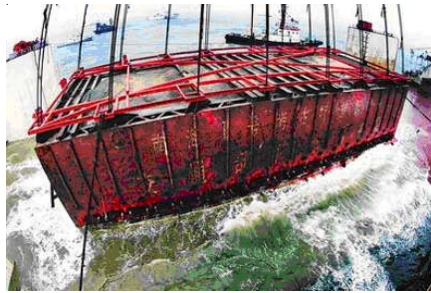


Fig. 1. The caisson containing Nanhai No.1 being lifted out of the sea.



Fig. 2. The caisson being transported to the Marine Silk Road Museum.

position of the wreck roughly mapped. In April 2001, a collaborative investigation (involving the Underwater Archaeology Research Center of China and the Guangdong Institute of Archaeology and Relics) drew an exact map of the site. Subsequent study included the geophysical exploration, underwater investigation and the excavation of small-scale test pits in October 2001, March 2002, August, 2002, January 2003, and May 2004. Aside from the sunken wreck's hull, the freeboard and the cabin, the

researchers also found a number of fine artifacts: more than 4,000 pieces of unbroken ceramics, some lacquerware, stone implements, ironware, bronze, sycees, a large quantity of copper coins and so on.

The underwater archaeological investigations showed that Nanhai No.1, a very large ship with a sharp

Fig. 3. The porcelain bowl and pot; the gilded belt.



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Fig. 4. The sycees.

prow, was made of red cedar. It was 30.4 m long, 9.8 m wide and 8 m high (excluding the height of the mast), with a displacement of

The bundles of ceramics in the ship were mainly from the famous kilns of the Southern Song Dynasty: the Longquan Kiln of

600 tons and a cargo capacity of 800 tons. It dates most probably to the Song Dynasty. The hull of the sunken ship was oriented to the southwest, indicating the probable direction it was sailing.

Zhejiang, the Dehua Kiln and the Cizao Kiln of Fujian, and the Jingdezhen Kiln of Jiangxi. Specialists have identified some noted products like the misty blue wares of Jingdezhen [Figs. 7, 8], the whitewares of Dehua [Figs. 5, 6], the green-glazed wares of Cizao and the celadon wares of the



Fig. 5. A whiteware pot of the Fujian Type.

Fig. 6. A whiteware pot with a handle.

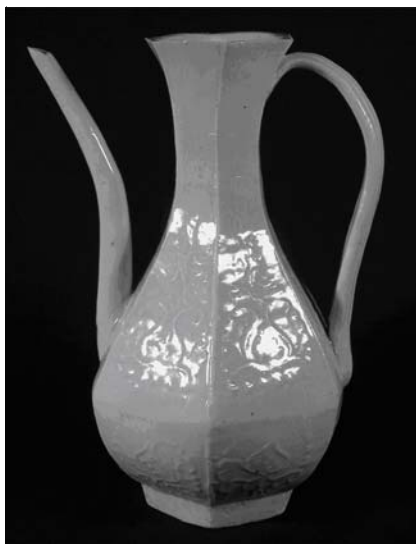


Fig. 7 (bottom). A qingbai-glaze bowl of the Jingdezhen Type.

Fig. 8 (top). A qingbai-glaze bowl of the Jingdezhen Type.



Longquan Kiln [Figs. 9, 10]. The copper coins discovered in the ship — for example, *Zhi Ping Yuan Bao* 治平元寶, *Yuan You Tong Bao* 元祐通寶 and *Huang Song Tong Bao* 皇宋通寶 — mostly belonged to the Northern Song Dynasty [Fig. 11]. Surprisingly, *Kai Yuan Tong Bao* 開元通寶 of the Tang Dynasty (618-907) appeared in the ship. The *Jian Yan Tong Bao* 建炎通寶 (1127-1130) and *Shao Xing Tong Bao* 紹興通寶 (1131-1162) of the Southern Song Dynasty belonged to the latest coins in the findings and thus provide a *terminus a quo* for the date of the ship. Furthermore, several very delicate artifacts came out, including a gold belt with a garland pattern



Fig. 9. A petaled dish of the Longquan Type.

knitted using eight golden threads, a large gold bracelet with a dragon pattern, a black lacquer box with red billowing cloud inlay, a sunflower-shaped bronze mirror,



Fig. 10. The celadon alms bowl of the Longquan Type.



Fig. 11. Copper coins of the Song Dynasty.

and a large flared celadon bowl [Fig. 10]. In addition, a few exotic-looking objects are eye-catching, such as the gold belt and a cobra's skeleton, indicating the breadth of cultural and economic interaction along the maritime silk road. The present estimate, still very rough, suggests that there were 60,000 to 80,000 objects in the cargo. The preservation of the cargo notwithstanding, no human remains have been discovered so far in the ship.

Taking into account all the data, including the wreck's position and orientation of the hull, as well as the type, quantity and details of the cargo, it was concluded that Nanhai No. 1 was a large Chinese wooden ship of the Southern Song Dynasty used for overseas trade. It sank for reasons unknown when sailing out of port to the open sea.

The hull of the Nanhai No.1 is still

very well preserved. Since the cargos on the ship were kept primarily in the hold near the hull, the porcelain and other relics are largely intact and thus constitute a national treasure. However, the hydrographic circumstances of the ship's location are very complex. In order to preserve completely the all the data from the ship, the Guangdong Province Cultural Department organized in 2002 a program named Integral Salvage and Protection Plan of the Nanhai No.1. The experts from the Guangdong Province Cultural Department, the Underwater Archaeology Center of the National Museum and the Guangzhou Salvage Bureau discussed and revised the program six times between 2002 to 2006 and presented the final plan to the State Administration of Cultural Heritage. In April 2007, the Integral Salvage Project of Nanhai No.1 officially started. In the process of salvage work, the Guangzhou Salvage Bureau applied some pioneering technologies, such as the semi-submersible barge and girder perforation under the seabed, thus guaranteeing a successful outcome.

The technique of "integral salvage" involves securing the sunken ship, the cargo and surrounding silt in a special steel caisson without disturbing their original context. The process lifts the scattered and brittle relics at one time and integrally so that they can be moved to their carefully prepared "crystal palace" — the Marine Silk Road Museum. Once there, the underwater archaeological excavation can proceed scientifically in the new environment. This approach is different from traditional operations such as coffering salvage or item-by-item salvage.¹ The salvage of Nanhai No.1 applied the integrated methods of search, excavation and protection for what is probably the first time in the history of underwater archaeology. Although relics

brought up from the ocean may be mysterious and impressive, their interest often enhanced by media coverage, some archaeologists still look down on underwater archaeology, because its methods have obvious flaws compared to those of land archaeology. Underwater archaeology usually undertakes salvage item by item, and thus lacks an accurate description and records regarding the original context of the submarine objects. When judged by the standard of land archaeology, this method may seem blind, capricious and fortuitous. The integral salvage method applied for the Nanhai No.1, however, turns the underwater operation into one similar to the excavation work on land, and obtains the same kind of accurate recording of data which is possible for underground excavation. The sinking of test cores and methods of underwater excavation which were widely used in the past are equivalent to the selective sinking of test pits in very limited land excavation. In contrast, the Nanhai No.1 Integral Salvage Project has recovered the relics in their entirety, just as in the comprehensive excavation of a site on land.

The year 1987 was fruitful for Chinese underwater archaeologists, for it witnessed the founding of the National Underwater Archaeology Center in the Chinese Historical Museum as well as the discovery of Nanhai No. 1. The process of excavating Nanhai No.1 — from the initial discovery, investigation and sinking of test pits to the integral salvage — is a record of the growth of Chinese underwater archaeology during the subsequent twenty years. The success of the Nanhai No.1 Integral Salvage Project thus has become a landmark for Chinese archaeology.

The raising of the caisson and the transfer of the ship to the “crystal palace” are yet early stages in the work — no more than

one-third of the entire project. Careful excavation and preservation are still to come and are even more important for long term success. Many difficult and pressing questions must be answered: What changes will take place after sunken wreck has left the original environment? Will the fragile ship framework fall apart after the box containing the vessel is opened? How do we dehydrate and desalt the wooden hull and simultaneously minimize oxidation? How do we deal with the probable fissures present in the porcelains which may be caused by saline crystallization on the glazed surface? Also, how do we deal with the tension between the requirements of careful and extended excavation, on the one hand, and on the other the urgent demands of the local government to develop tourism?

Only when we are able to solve these problems can the archaeologists obtain the full range of information which the Nanhai No.1 contains and provide satisfactory explanations of its mysteries, both to address the academic concerns of scholars and the general curiosity of the public. Perhaps we will then be able to answer such questions as: Where was the Southern Song merchant ship built? From whence did the ship sail and where was it headed? Was the ship owner a Chinese or a foreign merchant? How many cargos were loaded on the ship and what kind? How were the cabins and cargos arranged? Why did the ship sink? Was the crew able to escape? Were there any navigating instruments on board? What was the actual route of the marine Silk Road? What was the role of the Southern Song Dynasty in the marine Silk Road?...

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Professor **Xu Yongjie** 许永杰 received his degrees from Jilin University. Between 1998 and 2004, he was Deputy Director of the Heilongjiang Provincial Institute of Cultural Relics and Archaeology. Since 1994 he has taught Chinese Archaeology in the Department of Anthropology of Sun Yat-sen University in Guangzhou. He is also Visiting Professor at the Research Center for Frontier Archaeology in Jilin University and the Visiting Researcher at the Research Center of Ancient Civilization in the Chinese Academy of Social Sciences. Among the important excavations which he has directed are those at the Dadiwan 大地湾 Site and Donghuishan 东灰山 Graveyard in Gansu, the Xinzhou Youyao 游邀 Site in Shanxi, the Fenglin 凤林 City Site in Heilongjiang and the Jiuxianping 旧县坪 Site in Chongqing. His numerous publications include some 70 articles and the following books: *The Archaeology of Minle Donghuishan* (1998); *The Archaeology of Shanxi Xinzhou Youyao* (2004); *Qixinghe — The Survey Report of the Shanjiang Plain Ancient Site (The Settlement Archaeology of the Han-Wei Sites in the Qixinghe Valley)* (2004); *The Genealogy of the Later Period Yangshao Culture in China's Loess Plateau* (2007). He can be contacted at <yongjie1957@yahoo.com.cn>.

Note

1. Coffering salvage entails encircling the sunken wreck and pumping out the sea water, thus changing underwater archaeology to land archaeology. In item-by-item salvage, the archaeologists dove directly to the ship, excavated the relics piece-by-piece, then disassembled the ship's hull, in order to bring it ashore and re-assemble it.

The Byzantine Element in the Turkic Gold Cup with the Tiger Handle Excavated at Boma, Xinjiang

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In 1997, a hoard with assorted exquisite gold and silver vessels was found by the local farmers in Boma, Yili (Ili) county, Xinjiang [Fig. 1]. The new finds were soon sent to the Yili County Museum. An Yingxin, the director of the

museum, first reported the treasure and published a preliminary study in *Wenwu* (An 1999). After comparing the new finds with other artifacts unearthed in its vicinity, he dated these precious metal works to the sixth or seventh century CE, that is, the late Northern Dynasty to early Tang period. Concerning the owner of the treasure he wrote:

"During the sixth century, the Tekesi River basin was the political center of the Western Turks. The court of the qaghan was situated there. The discovery of these high-quality gold and silver objects will no doubt be helpful for locating the court of the qaghan and answering other related questions."

A gold cup with a tiger handle is especially eye-catching among these treasures that most likely belonged to a Turkic chieftain or even the qaghan himself. It is 16 cm high, 10.5 cm in body diameter and weighs 725 g. The rhombus (lozenge) pattern is mold-pressed on the whole body of the cup, and oval red agate is inlaid in each rhombus. A tiger sculpture is riveted to the upper body of the work as a handle. The tiger has a wide, round head, two erect ears, and a long and narrow body. The stripes that identify the tiger are etched over the whole body of the animal [Figs. 2, 3].

The Turks were fond of drinking wine. Two of the ten titles of their leading officials were derived from the words for wine and a drinking vessel (Cai 1998, pp. 190–91). The gold cup from Boma resembles the drinking vessels carved on certain of the Turkic period stone images (balbals) found Tuva, southern Siberia (Sun 1996, p. 262, Fig. 31). It is very likely that such cups were used for wine.

The combination of drinking cup and tiger handle reminds us of the close relationship between the tiger (also the leopard) and



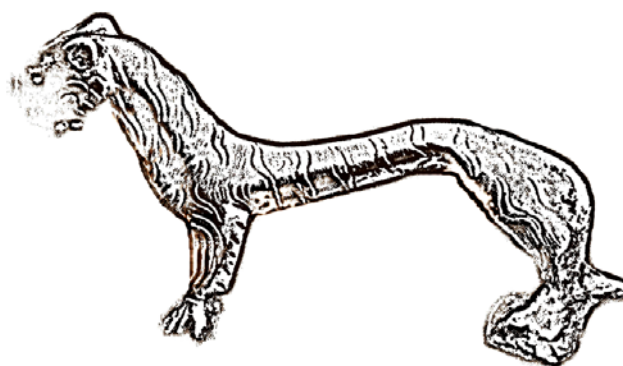
Fig. 1. The location of Boma.



Fig. 2 (left). The Boma Cup.

Fig. 3 (below). The handle of the Boma cup. All drawings copyright © 2008 Lin Ying.

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Dionysus. In Greek myth, Dionysus, the son of Zeus and Semele, once wandered around Egypt and India, accompanied by his teacher Silenus and a group of satyrs and maenads (Cary et al. 1979, pp. 478–82). After that, he was worshipped by Greeks as the god of wine. The personal mount of Dionysus was a tiger or leopard. Therefore, the two animals constituted a key element in Greek and Roman depictions of Dionysus. Frequently, they were portrayed as lying prone on the wine vessel and drinking the wine eagerly. Sculptures of the animals are usually similar in body shape, but they can be distinguished by the pattern on the bodies. The tiger is striped, while the leopard is identified by roundels.

The theme of Dionysus and his tiger was also adopted by craftsman in the Parthian Empire (247 BCE – 226 CE). For example, there is a Parthian drinking vessel with a tiger handle [Fig. 4]. Gradually the tiger image came to be employed for a specific type of handle not even connected with wine or Dionysus, as can be seen in Sasanian and then Islamic

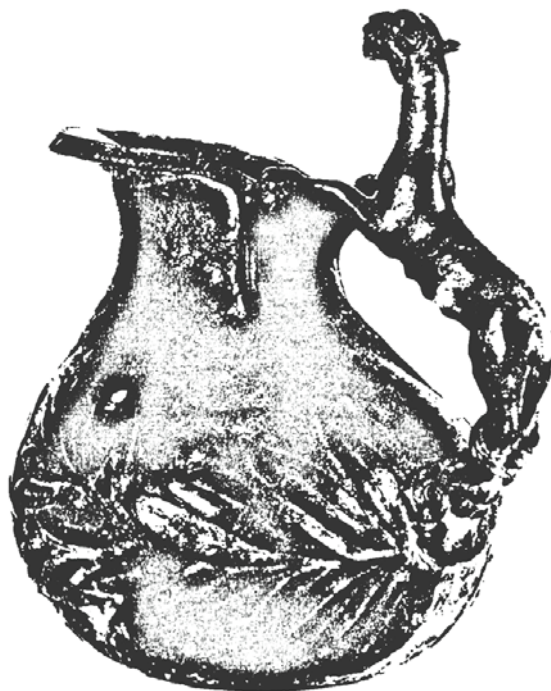


Fig. 4. Bronze jug with feline handle, Parthian, 2nd century BCE, Cincinnati Art Museum. After Ettinghausen 1972, Fig. 27.

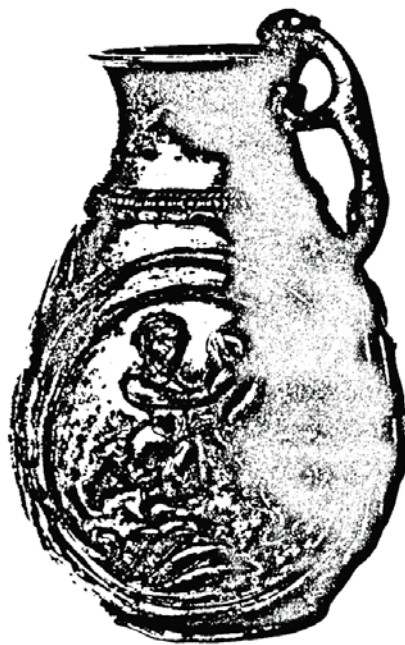


Fig. 5. Sasanian silver jug, partially gilt, with a tiger handle, Iran, 5th century CE. The Cleveland Museum of Art. After Ettinghausen 1972, Fig. 28.

tableware [Figs. 5, 6] (Ettinghausen 1972, pp. 2–8, Fig. 5).

There are some similarities between the tiger sculpture on the Boma cup and the tiger handle of the Sasanian vessel: for instance, the thin body, the pattern of stripe, and the rough treatment of the tiger's feet. Was

the Boma gold cup an import from Sasanian Iran? This seems unlikely. First, the rhomboid pattern is rare in Sasanian gold and silver works. On the other hand, it is closer that found on Byzantine silverware unearthed from an Avar tomb in Albania [Fig. 7, next page] (Daim et al. 1996, p. 435, no. 5.502). In addition, the red stone inlay is typical decoration for the jewelry and metal work in the steppe in pre-Islamic times. Most gold objects in the Boma hoard are inset with red stones. Therefore we believe that the Boma gold cup was produced by a local Turkic craftsman. The tiger handle similarly is not likely to be an imitation of Sasanian silver work. The tiger was riveted to the upper body of the vessel where it seems to be out of proportion with the size of the cup. In contrast, the Sasanian tiger handle is proportionate in size to the body of the vessel, and the head and front claws of the tiger are located on the rim of the vessel, as if the animal is eager to drink the wine. Thus we may conclude that the

Fig. 6. (left) Bronze ewer with feline handle, Iran, 8th century CE ; (right) Bronze juglike lamp inlaid with silver and copper, Seljuq period, late 12th century CE. The Metropolitan Museum of Art. After Ettinghausen 1972, Figs. 30, 31.





Fig. 7. Byzantine silver vessel, Varp, Albania. After Daim et al. 1996, no. 5.502.

tiger handle of the Boma cup most likely had been produced as a sculpture before it was attached to the cup rather than being made specifically as a handle to match the vessel.



Fig. 8. Gold bracelet, Egypt (?), 7th century CE. After Ross 1962-1972, Vol. 2, Pl. XXXVIII.

When we examine the development of sculptures depicting tigers or leopards in Byzantium from the fourth century to the sixth century, we find that the tiger handle of Boma has a closer relationship to the Byzantine works than to the Sasanian example. Small sculptures of tigers or leopards appeared as early as the era of the Roman Empire. By Late Antiquity, Christianity had replaced traditional worship and become the state religion. As pagan customs, the festival and ceremonies for Dionysus were finally eliminated. It is possibly against this background that the sculptures of tigers

and leopards lost their connection with wine and Dionysus began to appear more widely on other objects [Figs. 8, 9].

In the meantime, gold and silver drinking vessels with tiger or leopard handles continued to be made in the territory of the Byzantine Empire. Nevertheless, contemporaries seemed to like to collect the handles as precious objects. Two small silver sculptures of a tiger and a leopard were discovered in the Traprain Hoard in Scotland between 1914 and 1919 [Fig. 10, facing page] (Curle 1923, pp. 1-5, 79-80). They are of the same size, but differ in the pattern of body decoration.



Fig. 9. Silver lamp, Egypt, 7th century CE. After Ross 1962-1972, Vol. 2, Pl. XXIX.

Those who have studied this hoard believe that they were originally a pair of handles for a ewer. In 1992, another small silver tiger was found in the Hoxne Hoard in England [Fig. 11, facing page] (Bland and Johns 1993, p. 24). The Hoxne tiger sculpture was more exquisitely sculpted than were the feline handles found at Traprain. The body of the tiger was engraved with stripes and inlaid with niello. In this case, as at Traprain, the sculpture depicted a female tiger; most likely, paired with a sculpture of a male tiger, the two would have been used as handles for a large silver vessel. The Hoxne Hoard, which was buried in the beginning of the fifth century, included over 200 gold and silver objects and 14,000 gold and silver Roman coins. The good condition of these treasures indicates that they were well preserved in their day and later placed in the hoard after careful planning. This is further testimony that people liked to collect these small tiger or leopard handles as

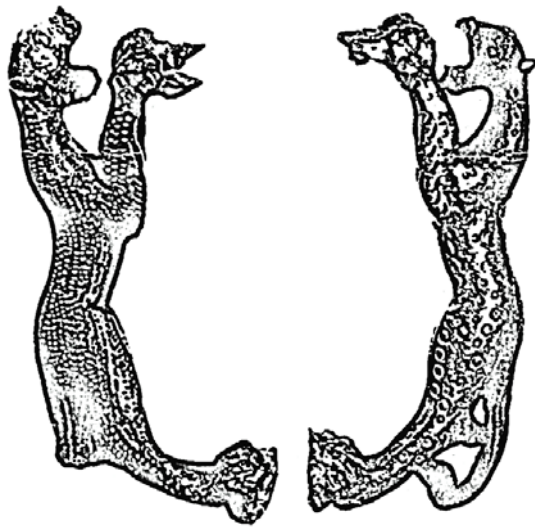


Fig. 10. Silver handles of leopards, 5th century CE, Traprain, Scotland. After Curle 1923, Pl. XXXI.



Fig. 11. (right) Silver sculpture of a tiger, 5th century CE, Hoxne Hoard, Britain.

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separate sculptures in daily life.

The sixth century saw the rise of the Western Turk Empire. Sizabul (Ishtemi – Shi-dian-mi 室点密 in Chinese sources), the first qaghan of the Western Turks, sent envoys to Constantinople and established diplomatic relations with the Byzantine Empire. From 568 to 576, at least five Byzantine envoys visited his court. When Valentinus, the last Byzantine envoy, set out from Constantinople for the territory of the Western Turks, he was accompanied by 106 Turks who had followed the previous Roman envoys back to Constantinople and now joined the delegation to return their homeland (Blockley 1986, pp. 171–79). In the same period, the Western Turks extended their military power to the eastern frontier of the Byzantine Empire, aiming to punish the Avars, their old enemies. When Valentinus arrived at the court of the qaghan, the Western Turk soldiers were undertaking an expedition west and invaded the Crimea (Ibid.). In this situation, the Byzantine silver objects were mostly likely carried into the Western Turk Empire as diplomatic gifts or spoils of war.

There is additional archaeological evidence for the present argument. The Seuso Treasure, which became known to the public in 1990, consists of 14 pieces of Roman silver tableware. The inscription on a silver plate indicates that they were once owned by Seuso, possibly a Roman general of Celtic origin who lived in Pannonia, the Roman province south of the frontier on the Danube. The plate, together with other vessels, was produced around the early fifth century (Painter 1990; Mango 1990; Mango and Bennett 1994, pp. 195, 205–6, 238–39; for the date, see also Nagy and Tóth 1990). A big silver drinking vessel (The Hippolytus Jug) of the Seuso Treasure [Fig.12a, b] has two handles in the shape of leopards, whose style and technique of sculpting resemble those of the



Fig. 12a, b. Silver amphora and its leopard handles, 4th-5th centuries CE (?), Seuso Treasure. After Mango and Bennett 1994, Figs. 5-1, 5-50.

feline handles in the Traprain and Hoxne Hoards. Prior to their being re-attached before the auction at Sotheby's, the handles of the Seuso vessel had been separated from its body. According to the studies by Marlia Mango and Kenneth Painter, at least two Roman silver vessels are similar to the Seuso amphora. One, from Concesti, Romania, is in the collection of the State Hermitage Museum in Russia (Matzulewitsch 1929, pp. 131–32; Kent and Painter 1977, p. 297). The shape of the Concesti amphora is the same as that of the Seuso one. However, the two handles, which had already been separated from the body of the vessel, are sculptures of centaurs instead of a tiger or leopard [Fig. 13]. The



Fig. 13. Late Roman silver ewer, Concesti, Romania. After Matzulewitsch 1929, *Tafel* 30.

other example is some fragments of a silver amphora unearthed at Tauteni-Bihor, Romania [Dumitrascu 1973, pp. 116–18]. What survives of the reliefs from the side of the vessel suggests that it is most likely of the same type. This type of amphora came from the eastern Mediterranean region, especially from the workshops in Constantinople.

We do not know the owner and source of Seuso Treasure. Nevertheless, the inscription on the silver plate illustrates that Pannonia was once a station in the long journey of the treasure. Pannonia, the Roman province on the Danube frontier, was first conquered by Attila, the leader of Huns, and then became a part of Ostrogothic Kingdom. The owners of the two amphorae found in Romania were most likely chieftains of the Huns or Alans, who played important roles in the middle and lower reaches of the Danube in the fifth century.

Priscus of Panium, the Roman envoy who went to the court of Attila in 449 CE, mentioned that the Romans gave the Huns many gifts for both men and women, including silver amphorae. Possibly, Roman silver ewers with tiger or leopard handles were sent into the steppe as diplomatic gifts. In this process, the Roman habit of collecting the tiger handle as an independent sculpture might have been adopted by the nomads. A gold necklace unearthed from Simleu Silvanici, Romania, provides additional evidence about the interest in objects embodying the tiger or leopard sculptures [Fig. 14a, b] (Florescu and Miclea 1979, pp. 92–95). The center pendant of the necklace is a large bead, enclosed by two crossed rings. Two gold leopards, their front paws on the knot connecting the chain and the pendant, face each other. Although the leopards are much smaller than the handles of Roman silver vessels, in their shape and creative concept they are similar. The hoard at Simleu Silvanici dates from the fifth century. Its owner was some barbarian chieftain connected with the Huns who had probably immigrated to the Danube valley. These barbarian tribes ruled the

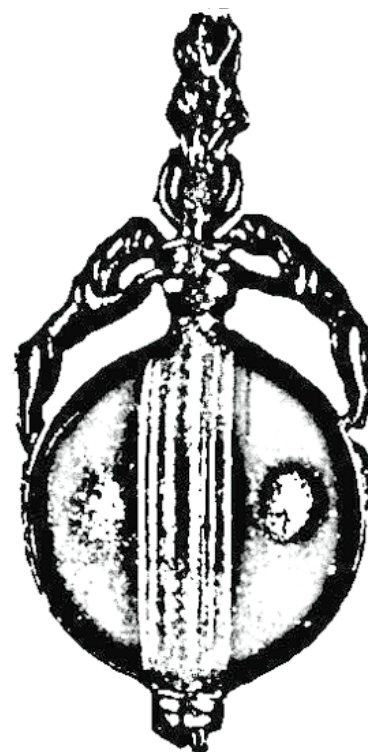


Fig. 14a, b. Gold necklace with leopard decoration, Simleu Silvanici, Romania. After Florescu and Miclea 1979, *Figs.* 80, 81.

local Dacians as the military vassals of Byzantine Empire.

The Xiongnu 匈奴 (the ancestors of the Huns) had a tradition of respecting the tiger and leopard as symbols of the heroic spirit. The gold and silver works excavated from the Xiongnu tombs in north China show that the image of the tiger was highly valued. Chinese sources assert that the Turks were descended from the Xiongnu. For

instance, the account of the Tujue 突厥 (Turks) in the *Beishi* 北史 (the standard history of the Northern Dynasty, composed by Li Yanshou 李延寿 in the seventh century) states: "The ancestor of the Turks lived in the west of Xihai (the West Sea) as an independent tribe. They were originally a minor tribe of Xiongnu." The Kül Tegin stele from the Orkhon Valley which was erected in 732 CE mentions a chieftain named *Bars bāg*, who married the sister of the qaghan and was granted the title Qaghan (Rui 2001, p. 251, n. 26). "Bars" was an old loan word from Iranian, referring to a leopard. In Turkic, its meaning also embraced the tiger and other large felines. That a member of the Turkic elite was named after a tiger or leopard indicates that the worship of these fierce animals continued in Turkic society. Possibly it was this cultural tradition which explains why the qaghans accepted the tiger or leopard handles from the Roman metal vessels and then had them attached to their own precious objects.

The Turks had developed the technique of producing high quality gold and silver work. A Turfan document from the Astana graveyard recorded that *Jinshi* 金师 (master of gold) Mo-pan-tuo 莫畔陀 was sent by the qaghan to the Gaochang Kingdom. According to the Turfan documents, the food provided for foreign guests in Gaochang was classified into three categories. The master of gold was supplied with the first-class food, indicating his high status in Turkic society. Clearly the craft of gold and silver manufacture was highly valued by the Turks. In 678 CE (the first year of the Shengli period in the reign of Wu Zetian 武则天), Mo-ch'o 默啜 (Qapaghan), Qaghan of the Turks, complained that the gold and silver wares sent by Empress Wu Zetian were "all counterfeit instead of qualified products" (cf. Yu 1996, pp. 206-7). The high connoisseurship of Turkic aristocrats for the gold and silver objects further illustrates that the Turkic craftsman were

able to imitate the tiger handles of Roman tableware.

In conclusion, the tiger handle of the Boma gold cup was very possibly made in imitation of the tiger sculptures of some Roman silverware. When the worship of Dionysus had gradually disappeared in Christian Byzantium, the tiger sculpture came to be connected again with wine in a new cultural context. The Turkic Empire connected the Byzantine, Iranian, Indian, and Chinese civilizations. The Turks not only transmitted the material and cultural achievements between East and West, but also combined in their own distinct culture the elements of different civilizations. Even if the influence of this new creation was not long-lived, it was through the Turks that foreign cultures penetrated into Eurasia more profoundly. The Boma gold cup reveals the unique achievement of the early Turks in the cultural exchange between East and West.

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References

An 1999

An Yingxin 安英新. "Xinjiang yili zhaosuxian gumuzang chutu jinyinqi deng zhengui wenwu" (新疆伊犁自治州古墓葬出土金银器等珍贵文物) (The gold and silver unearthed from Zhaosu county, Yili, Xinjiang). *Wenwu* 文物 9 (1999): 4-11.

Bland and Johns 1993

Roger Bland and Catherine Johns. *The Hoxne Treasure: An Illustrated Introduction*. London: British Museum, 1993.

Blockley 1985

R. C. Blockley, introd., ed. and tr. *The History of Menander the Guardsman*. Liverpool: Francis Cairns, 1985.

Cai 1998

Cai Hongsheng 蔡鸿生. *Tangdai jiuxinghu yu Tujue wenhua* 唐代九姓胡与突厥文化 (The Sogdians and Turkic Culture during the Tang Period). Beijing: Zhonghua shuju, 1998.

Cary 1949

Max Cary et al., eds. *The Oxford Classical Dictionary*. Oxford: Clarendon Press, 1949.

Curlie 1923

Alexander O. Curle. *The Treasure of Traprain, A Scottish Hoard of Roman Silver Plate*. Glasgow: Maclehose, Jackson and Co., 1923.

Daim et al. 1996

Falko Daim et al. *Hunnen + Awaren: Reitervölker aus dem Osten: Burgenländische Landesausstellung 1996, Schloss Halbturn, 26. April-31. Oktober 1996: Begleitbuch und Katalog*. Eisenstadt: Amt der Burgenländischen Landesregierung, Abteilung XXII/1 – Kultur und Wissenschaft, 1996.

Dumitrascu 1973

Sever Dumitrascu. *Tezaurul de la*

- Tauteni-Bihor* (The Treasure of Tauteni-Bihor). Oradea, 1973.
- Ettinghausen 1972
- Richard Ettinghausen. *From Byzantium to Sasanian Iran and the Islamic World: Three Modes of Artistic Influence*. The L. A. Mayor Memorial Studies in Islamic Art and Archaeology, v. 3. Leiden: Brill, 1972.
- Florescu and Miclea 1979
- Radu Florescu and Ion Miclea. *Tezaure transilvane: la Kunst-historisches Museum din Viena*. Bucharest: "Meridiane," 1979.
- Kent and Painter 1977
- John P. C. Kent and Kenneth S. Painter, eds. *The Wealth of the Roman World, Gold and Silver, AD 300-700*. London: British Museum, 1977.
- Mango 1990
- Marlia Mundell Mango. "Der Seuso-Schatzfund. Ein Ensemble westlichen und östlichen Kunstschaffens." *Antike Welt*, 21 (1990): 70-88.
- Mango and Bennett 1994
- Marlia Mundell Mango and Anna Bennett. *The Sevso Treasure. Part 1. Art historical description and inscriptions. Methods of manufacture and scientific analyses*. Journal of Roman Archaeology Supplementary Series, no. 12. Ann Arbor, 1994.
- Matzulewitsch 1929
- Leonid Matzulewitsch. *Byzantinische Antike: Studien auf Grund der Silbergefäße der Ermitage*. Berlin: W. de Gruyter, 1929.
- Nagy and Tóth 1990
- Mihály Nagy and Endrével Tóth. "The Seuso Cauldron: Is the Seuso Treasure from Hungary?" *Minerva: The International Review of Ancient Art and Archaeology* 1/10 (1990): 22-23.
- Painter 1990
- Kenneth Painter. "The Seuso Treasure." *Minerva: The International Review of Ancient Art and Archaeology* (London) 1/4 (1990): 4 ff.
- Ross 1962-1972
- Marvin C. Ross. *Catalogue of the Byzantine and Early Medieval Antiquities in the Dumbarton Oaks Collection*. 3 vols. Washington D.C.: Dumbarton Oaks Center for Byzantine Studies, 1962-1972.
- Rui 2001
- Rui Chuanming 芮传明. *Gu Tujue beiming yanjiu* 古突厥碑铭研究 (A study on the ancient Turkic inscriptions). Shanghai: Shanghai guji chubanshe, 2001.
- Sun 1996
- Sun Ji 孙机. *Zhongguo shenghuo* 中国圣火. Shenyang: Liaoning jiaoyu chubanshe, 1996.
- Yu 1996
- Yu Taishan 余太山, ed. *Xiyu wenhua shi* 西域文化史 (A general history of Xiyu). Beijing: Zhongguo youyi chuban gongsi, 1996.



The gold mask found at Boma along with the gold cup.

Xiongnu Elite Tomb Complexes in the Mongolian Altai

Results of the Mongol-American Hovd Archaeology Project, 2007

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The Altai mountains have served as an area of intensive traffic and interaction within Central Asia, and the critical passes through these mountains were certainly areas of contention over which varying tribes and polities throughout history and prehistory fought to gain control. Due to the unique nature of this section of Mongolia's western frontier, the Mongol-American Hovd Archaeology Project was established to explore the remains of early polities within this area and work toward an understanding of how they both controlled and exploited the region. While the vast majority of archaeological sites attributed to the Xiongnu empire (3rd century BCE – 2nd century CE) lie within

central Mongolia and the southern Baikal area, remains of cemeteries in the Altai evidence the expansion of this nomadic conquest state into the key peripheral region which gave them access to the oasis states and trade routes of the Silk Roads. Monumental tombs of the Xiongnu elite have been documented numerous times at several sites in the core area of Xiongnu sites throughout Mongolia and South Siberia (Rudenko 1969; Konovalov 1976; Navaan 1999; Mission 2003; Miller et al. 2006; Miniaev and Sakharovskaia 2006, 2007), but the existence of a similar royal cemetery at Tahiltin-hotgor signifies a strong imperial presence within the Altai. In summer of 2007, the Mongol-

American Hovd Archaeology Project began excavations at this site in order to explore imperial monuments at the periphery and further clarify the dynamic character of these elite cemeteries.

Tahiltin-hotgor cemetery is located in Manhan sum of Hovd aimag and was first discovered and documented through trial excavations of two small graves in 1961 (Volkov and Dorjsuren 1963). Further excavations were conducted in 1987-1990 (Navaan 1999) on two mounded ramped tombs, and in September of 2006 the cemetery was mapped in preparation for further excavations. The cemetery stretches

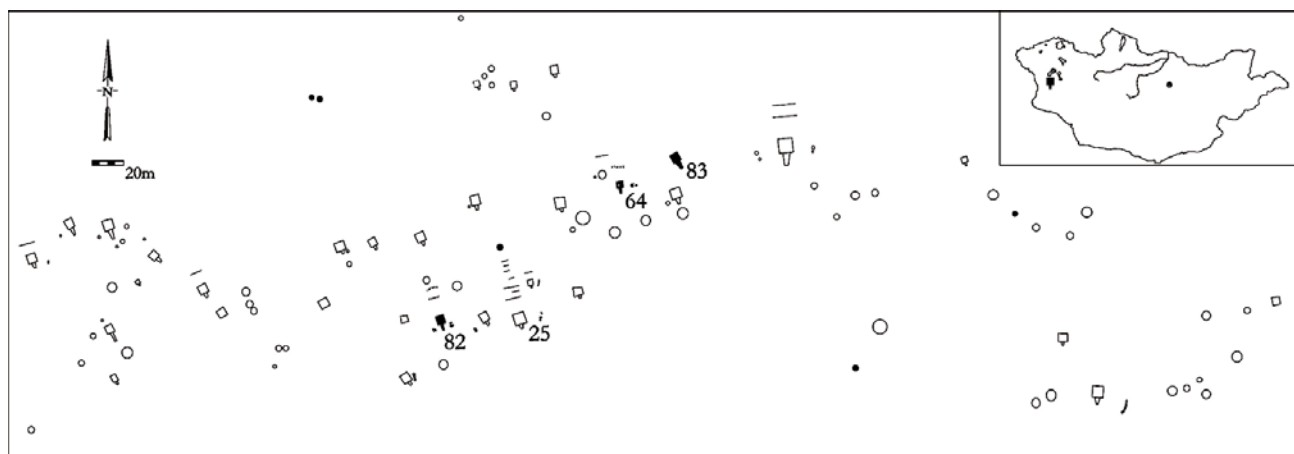


Fig. 1. Tahiltin-hotgor cemetery (excavated tombs noted). Inset map indicates location in western Mongolia. Unless otherwise noted, all images are copyright © 2008 Hovd Archaeology Project.

east to west between two small mountains and sits at the mouth of one of the major mountain passes through the Altai to the Djungar Basin of Xinjiang, northwest China [Fig. 1]. Three tomb complexes were investigated in 2007 with the aim of understanding not only the mounded tombs, which have received most of the attention of previous excavations, but also the accompanying features of the elite interments. We define a *tomb complex* as a collection of features associated with the interment of a single deceased that together are arranged as one group. In the case of the Xiongnu elite tomb complexes, three main features have been thus far documented, all of which are found at Tahiltin-hotgor.

The first feature, and the most prominent, is the *square ramped tomb mound*. This earthen mound is oriented approximately north-south and is held together by stone walls. A ramp or “funerary path” (Mission 2003) leading up to the top of the mound extends out from the southern wall. The tomb mounds often have stone lines that run north-south and east-west across the surface, the most recurring instance being a north-south line running through the center of the ramp and the mound. Beneath these tomb mounds and under numerous layers of stone, earth, and/or wood, lies a burial chamber with a decorated wooden coffin inside. As mentioned before, these monumental tombs have received great attention thus far, but recent studies have begun to draw attention to the features surrounding the main tomb and the details of the pit and mound above the chamber the chamber. Small graves adjacent to the

larger tombs have been excavated at several of the elite cemeteries in Mongolia and Buriatia, and recent studies have begun to address them directly as a particular phenomenon (Miniaev and Sakharovskaia 2002; Miller et al. 2006). These *satellite burials* average about three per tomb complex and are usually arranged in a north-south line to the east, west, or both sides of the main tomb. A few instances of significantly large lines of accompanying burials exist at Gol Mod 2 cemetery in Arhangai (Miller et al. 2006) and confirm the arch-shape of these arrangements of burials which flank the tomb mounds. The satellite burials bear surface demarcations of stone rings, and the deceased are interred in wooden coffins between one to two meters beneath. These resemble standard Xiongnu burials (Torbat 2004). The third feature of tomb complexes – *stone lines* – was discovered recently at Gol Mod 2 cemetery (Allard et al. 2002) and subsequently at Tahiltin-hotgor in 2006. Parallel east-west lines of

stone pairs are arranged north of some of the tomb mounds at both cemeteries. These lines were excavated for the first time in 2007 at Tahiltin-hotgor.

Square ramped tombs¹

The two square tombs excavated in 1987-1990 (Navaan 1999) are located in the middle of the cemetery, and each were assigned a number during the 2006 survey. A comparison of the drawings and measurements in the original report with the tomb remains visible now at the cemetery showed great inaccuracies, but the general descriptions appear more or less correct. The first tomb (THL-83) was completely excavated to expose the entire grave pit and the area beneath the ramp. At the bottom of the pit was a log chamber, inside of which had been placed a wood plank coffin with golden flower decoration [Fig. 2]. The grave furnishings and the remaining grave goods, including a large pot in the log chamber and pieces of a chariot atop the chamber, appear to indicate mortuary tradition similar to that

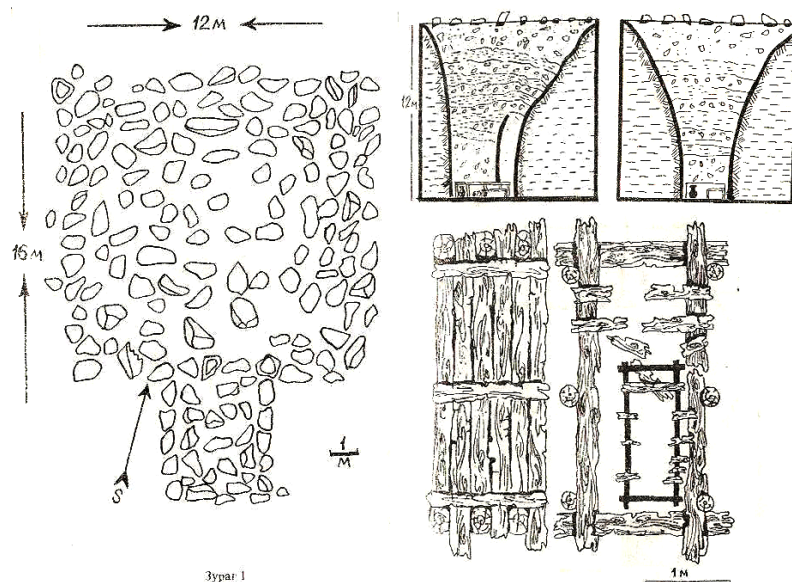


Fig. 2. Tomb 83. After Navaan 1999.

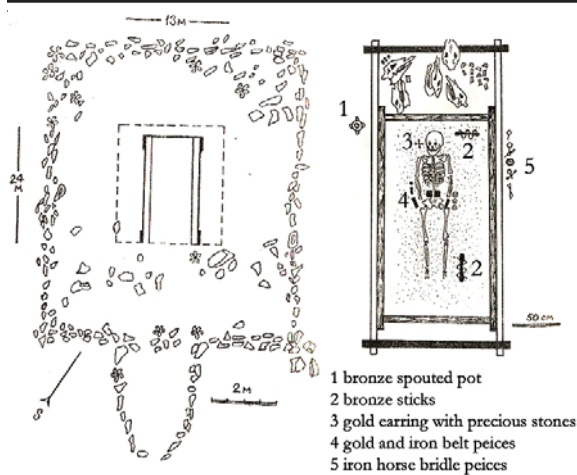


Fig. 3. Tomb 82. After Navaan 1999.

documented in royal Xiongnu tombs of central Mongolia. The second tomb excavated (THL-82) contained an unlooted double nested coffin with the complete remains of a woman, thus earning it the name "the Princess Tomb" [Fig. 3]. The excavations cored a single pit into the center of this tomb to access the chamber; so no excavations were done to reveal the entire structure of this grave. A bronze spouted pot and two bronze sticks² found in the

tomb are now on display at the National Museum in Mongolia, though the jewelry found by her head and on her waist do not reside in locatable collections.

Tomb 64

In order to document properly the structure of the square tombs at this

structure and the "door" closing off the ramp closely resembled those in elite tombs elsewhere. Near the ground level and in the center of the mound, at the exact place where the two lines cross, was found a dense deposit of burnt earth and charcoal. The stones at this intersection do not appear disturbed, and it is likely that this deposit relates to the original interment ceremony and not the occurrence of looting. Unlike most other tombs, the ramp only descends to the first step ledge of

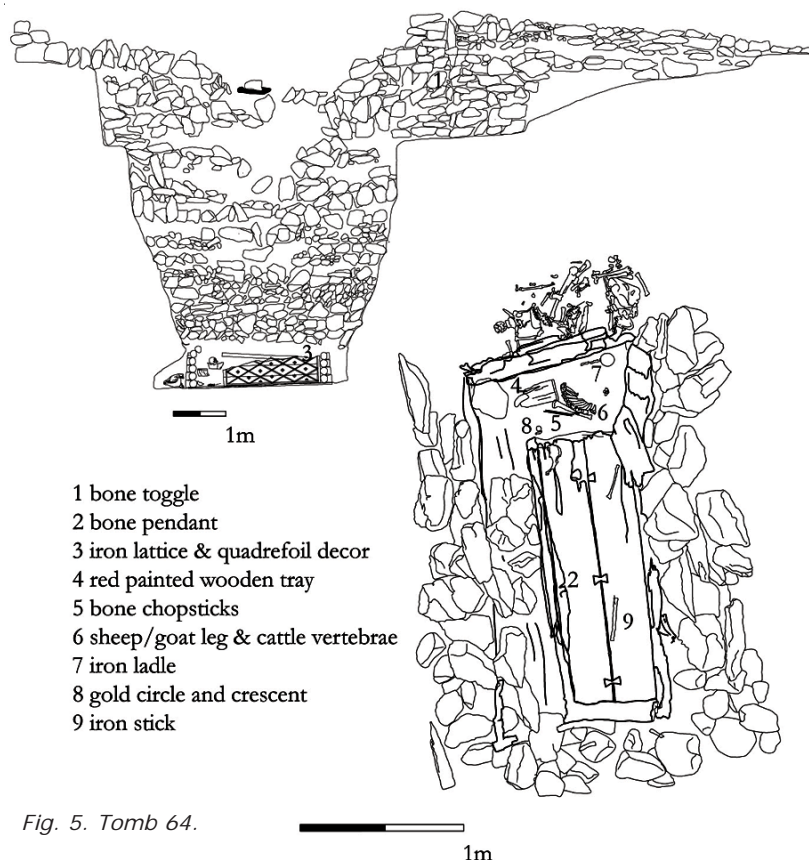


Fig. 5. Tomb 64.



Fig. 4. Tomb 64 complex

particular site and compare them to sites in central Mongolia, we chose one large tomb, THL-64, and its associated features [Figs. 4, 5]. The stone cross lines within the tomb

the pit, 1.6 m below the surface and 4.4 m above the bottom of the chamber. Therefore the ramp likely did not serve as a practical means for rolling the coffin into its final resting place, but rather took on more of a ritually symbolic function related to "funerary paths." The outer chamber at the

bottom was surrounded by stones and built from notched, interlocking logs. Inside the log structure lay a wood plank coffin nested in the southeast corner of the chamber, much like the inner coffin of Tomb 83 which had been nested in the southwest corner. A lattice and flower iron decoration covered the outside of the coffin, and scant remnants of silk confirm that the coffin would have been wrapped entirely before the iron



Fig. 6. Lattice and quadrefoil iron coffin decoration.

decoration was mounted [Fig. 6]. The wood of the coffin was fitted together with bow-tie shaped tenons across the planks and mortise holes with plugs inside the edges of the wood planks [Fig. 7].



Fig. 7. Coffin tenon construction.

A thin gold circle and thin gold crescent were found lying next to each other, and from the impressed marks and small rusted pin holes on both of these, they appear to have been previously mounted on a flat surface – very likely the surface of the coffin lid [Fig. 8] which was tossed aside during looting. This circle and crescent pair echo other such pairs found in numerous Xiongnu graves (Mission 2003; Torbat 2004) and are equated with Xiongnu rituals of the sun and moon. “And the *chanyu* [emperor] at dawn leaves camp and makes obeisance to the sun’s beginning, and at dusk makes obeisance to the moon” (Shiji 1959, 110: 2892).



Fig. 8. Gold sun and moon.

ladle, a painted red wooden tray, a pair of chopsticks, cattle vertebrae and a sheep/goat leg bone, and a large handmade grain storage pot [Fig. 9]. Several turquoise tear-shaped insets, five green stone insets carved in the



Fig. 9. Iron ladle and bone chopsticks.



Remains of food containment and serving were placed inside the log chamber just north of the coffin which held the deceased: an iron

shape of scallop shells, and a bone pendant which probably adorned the deceased were found tossed out of the coffin from looting [Fig. 10, facing page]. Lastly, to the north of the log chamber is a semicircular niche cut into the wall



Fig. 10. Turquoise inlay, scallop-shaped green stone, and bone pendant.

of the tomb pit where the skulls, cervical vertebrae and legs of one horse and three horned-sheep/goats were deposited. Two sheep ribs were found above the log chamber, one of which has a deep cut mark from the process of eating the meat on it.

While only the skull, half a pelvis and several other bones of the deceased were found from this looted tomb, this represents a greater yield than most royal Xiongnu tombs and thus allows us to gain more knowledge about the tomb occupant than usual. The deceased was a woman 35-40 years old and has evidence on the pelvis bone indicating she gave birth at least once. The low tooth wear for her age probably related to access to better processed food, and the gracile marks of muscle attachments show that she did not do much manual labor. Nevertheless, wear on the lower spine may indicate continued horseback riding, a pattern found in many of the individuals

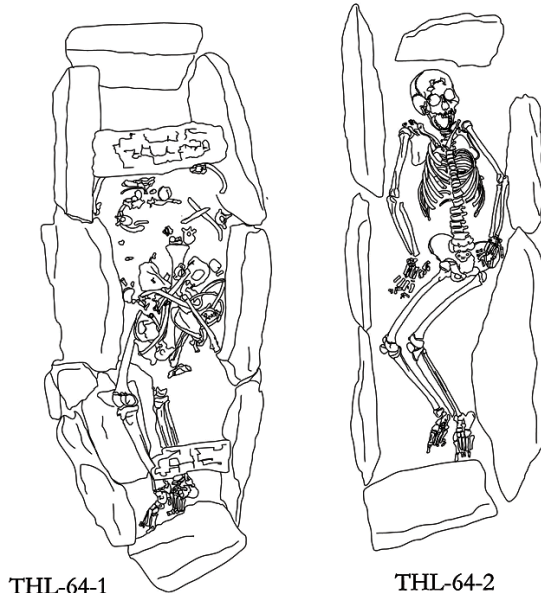


Fig. 11. Satellite graves THL-64-1 & -2.

bent. The lack of wooden coffins and bending at the knees sets these burials apart from the standard Xiongnu burial of fully stretched supine bodies inside a wooden coffin (Torbat 2004).

Satellites of Tomb 64

The two satellite burials excavated to the east of tomb 64 at

excavated here as well as other graves in Mongolia. Though this tomb was looted, enough remains that we may confidently say it is equitable in both structure and burial goods to the larger elite Xiongnu tombs in central Mongolia and southern Siberia.

Satellite burials

Dorjsuren describes each of the two small burials he excavated at Tahiltin-hotgor in 1961 as lying directly to the east of square tombs (Volkov and Dorjsuren 1963). From this we may deduce that they were probably satellite burials. Both graves were marked with some stones on the surface, maximum 3 m diameter scatter, and about 1.3 m below the surface lay stone cysts with human remains. No wooden coffins were found. In both graves the bodies lay stretched with the head oriented north. In one case the torso and head were greatly disturbed and only the legs articulated, but in the other the left arm lay stretched to the side, the right arm apparently bent at the elbow and lying across the chest, and the legs were slightly

Tahiltin-hotgor [Fig. 11] were very similar to those excavated by Dorjsuren, and thus quite different from the standard Xiongnu grave. Both individuals were interred in stone cysts, not wooden coffins, and both were laid with their legs slightly bent. The second noteworthy variance from standard Xiongnu graves is the surface demarcation. Instead of the typical thick stone circle overtop the burial pit, these, and all the other satellite graves excavated in 2007 were marked by a small stone cluster (which at times had been scattered) directly over and approximately the same size as the burial pit. Unlooted satellite burials, such as THL-64-2, have allowed us to view the original clustered position of the surface stone demarcations. Both of the individuals buried next to Tomb 64 were oriented just west of north, as was the main tomb of complex 64. The accompanying deceased were teenagers, and THL-64-2 was possibly a female. If this is true, then it would be the first confirmed discovery of a female in a satellite burial of elite Xiongnu tomb complexes. One of

the main reasons for choosing an entire tomb complex to excavate was to see the relationship between those in the satellite graves and the deceased in the main tomb. In this case, the teenagers are oriented to almost exactly the same degree as the central barrow, and the traits seen in the human remains show them to also be very closely related to other Xiongnu peoples in Mongolia, and thus closely affiliated to the woman in the main tomb who also appears closely affiliated to other remains within the group attributed to the Xiongnu (Lee 2007).

Satellites of Tomb 82

Next we chose the two accompanying graves on either side of tomb 82, previously excavated by Navaan (1999), so that we could finish the full investigation of this tomb complex [Fig. 12]. Again, both of the accompanying graves have the same orientation as the main tomb. Both burials were marked

on the surface with scattered stones, disturbed from their original position, and the deceased were interred about a meter below the surface in small pits with neither wood coffin nor stone cyst. The deceased in burial THL-82-1 was found lying stretched, his body oriented just west of north, with both arms at his side, but face down. This man had robust muscle attachments for his lower arms, hands, thighs, and right foot and is the most muscular individual at Takhiltin-hotgor, meaning he performed more labor than the other individuals. On either side of the body, probably in their original position, were found bone belt clasps with small holes [Fig. 13]. In burial THL-82-2, a small bone pin was found beneath the skull

which had been tossed aside, and thus may have been a hairpin. A sheep/goat astragalus was also found to the left of the waist. This man, like the first, also had robust muscle attachments on the lower arms, lower legs, and right foot. Both of the men buried in these satellite burials were Asian, and the second burial had enough of the skull to show that he was closely affiliated to other Xiongnu. The woman buried in the



Fig. 13. Bone belt pieces from THL-82-1.

main tomb (THL-82) excavated by Navaan in 1990 also shows a close biological affinity to the Xiongnu group. Again, the individuals in the satellite burials are closely affiliated to the main individual, and all of them related to the Xiongnu biological group (Lee 2007).

Satellites of Tomb 25

Lastly, we opened the three burials flanking the east side of tomb THL-25, even though the main tomb was not excavated, in order further to understand the nature of accompanying burials in this peripheral royal cemetery [Fig. 14, facing page]. None of these burials showed any significant evidence of disturbance of the surface demarcation, and all three had tight clusters of stones only slightly larger than the grave pit. The burials were arranged more or less in a north-south arc line, though the third grave (THL-25-3), when the exact positions of the burial pits and bodies were viewed, did not appear to be in line with the previous two graves. Burial THL-25-1 contained the body of a child about 8 years old

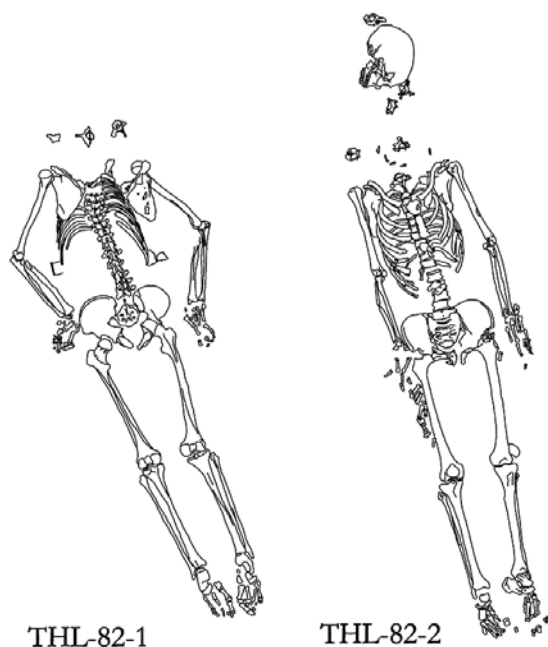


Fig. 12. Satellite graves THL-82-1 & -2.

oriented slightly east of north and laid supine and stretched, with only the legs slightly bent. The deceased in burial THL-25-2 was in a stretched supine position, and oriented almost exactly north. He was 30-35 years old, and had robust muscular attachments. The condition of his teeth is consistent with a nomadic diet high in meat, and low in carbohydrates. Additional detail about THL-25-2 is in the article below by Jessica Jones and Veronica Joseph. While

the surface stones of burial THL-25-3 appeared not to be disturbed, many of the deceased's bones, including the skull cap, were found amongst the stones in the pit. The rest of the bones were laid at the bottom of the pit, articulated in a stretched supine position. The man in this grave was 40-45 years old. A few iron platelets were found with small holes in the corners which may relate to their use as armor pieces. The child can be determined as Asian and related to the Xiongnu, while the two adult men, also Asian, appear more closely related to individuals in Manchuria or Siberia.

The recurrence of robust muscle attachments on the men interred in the satellite burials seems to indicate intense labor. These muscle markers may also relate to certain kinds of damage and arthritis that recurs in almost all the individuals. The patterns of trauma, especially the severe trauma seen in THL-64-1, come

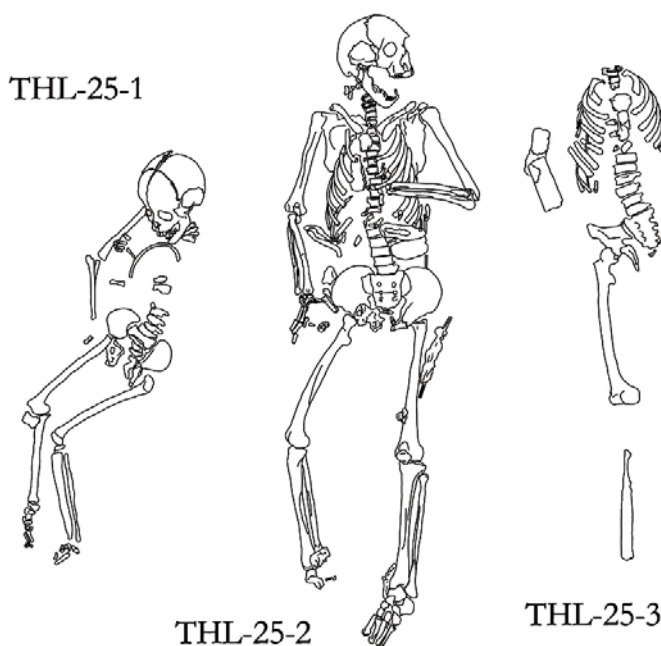


Fig. 14. Satellite graves THL-25-1, -2, -3.

from extreme impact and most likely relate to injuries incurred from falling off or being thrown from a horse. The arthritic pattern in these individuals also speaks to repeated horseback riding. The combined pattern of arthritis, musculature, and trauma seen in the individuals here is consistent with prolonged horseback riding.

Stone lines

One or two stone lines were found to the north of eight square tombs, the exception being seven parallel lines north of Tomb 25. The lines are at least fifteen meters away from the tomb mounds and only a few meters apart from each other. They are often oriented slightly off of an east-west axis so that they are parallel to the north wall of the tomb mound, which in most cases is oriented west of north. The line of stone pairs north of tomb 64 is aligned so that the axis of the stone line which cuts north-south through the center of the square mound and southern ramp then runs directly through the middle

of the northern line, directly between the center two pairs. The two stone lines to the north of tomb 82 were also excavated, and the ramp of tomb 82 was cleared so as to test the relationship between the stone lines and the axis of the central tomb. The central north-south axis of tomb 82, measured according to the center of the tomb ramp, also runs directly through the middle of the two parallel stone lines to the north. In both cases, the stone lines were clearly aligned in

sync with the greater mortuary complexes. The results of excavation between the stone pairs have begun to shed light on their function and use patterns.

The stone pairs in each line lie approximately two meters apart, though their original position seems to have been altered in some cases, probably due to stones falling or being knocked over. Between some of the stone pairs, and at times beneath fallen stones, lie deposits of burnt, crushed animal bone. The bone fragments are high fired, resulting in completely black or white bones with a thin blue/black layer inside. There is also black ash and/or charcoal deposited with the burnt bones, but there is no evidence of burnt earth between the stones, or burning against the closely set stones. In some cases the burnt bones are found with no ash at all. This suggests that the activity of burning the animal bones was not done between the stones. The burning was probably done in a different place, after which the

offerings were put between the stones. The two easternmost stone pairs of the line in complex 64 contain such deposits, but none of the other four pairs do. In the tomb 82 complex, the first, southernmost line contains burnt animal bones between or beneath every pair of stones, while only two pairs of stones in the second line contain such deposits. As the stone pairs seem to “fill up” in order from nearest stone line outward, this may indicate a pattern of use over time rather than only at the time of interment of the deceased in the main grave.

This custom of burning animal bones in a place outside of the final deposition area and then setting the remains between stones, finds an exact parallel in Bronze Age *khirigsuur* complexes (Allard and Erdenebaatar 2005, pp. 3-5) and sheds light on the rituals of the Xiongnu which may connect with such earlier practices. In these Bronze Age complexes deposits of high-fired crushed animal bones were placed along with the ash from the fires inside small rings of single stones. These stone rings were aligned in concentric rows around an array of stone mounds containing horse heads, which were arranged in rows around a stone fence that enclosed a large central stone mound. Just like the separation between central mound, horse head mounds and stone circles of the *khirigsuurs*, there is separation in the Xiongnu elite tomb complexes between animals placed above the chamber, to the north of the coffin and inside the chamber, and the burnt animal remains in the exterior stone lines.

Brief discussion

The arrangement and components of tomb complexes at Tahiltin-

hotgor, as well as the contents of the main tombs, closely resemble elite Xiongnu cemeteries found elsewhere. The elite graves here are undoubtedly associated with the elite imperial culture of the Xiongnu polity and thus may be considered within the limits of the empire. Analysis of human remains in these graves seems to corroborate this association to the Xiongnu nomadic polity. The presence of Xiongnu peoples in these elite tomb complexes correlates easily to the spread of the Xiongnu state into this western frontier seen also in the material culture. The possible presence of people from Manchuria, seen in THL-25-2 and -3, suggests a great degree of mobility of different people within the empire and wide connections across the varied regions under Xiongnu control. Despite the consistencies in mortuary remains for the elite, evidence arises in the satellite burials of differentiation from standard Xiongnu customs. Interments in stone cysts such as THL-64-1 and THL-64-2 are seldom found in other Xiongnu cemeteries, and the flexed legs of these two graves and THL-25-1 deviate from the prevailing custom of fully stretched supine burials in Xiongnu graves (Torbart 2004). The most significant difference is the surface demarcations. The small tight cluster of stones over the grave pit differs greatly from the tradition of stone rings. It is not clear what these variations indicate, but it may relate to either local variations of the Altai or perhaps a social group not yet delineated within the greater corpus of Xiongnu remains.

Further excavations of Xiongnu graves outside this monumental elite cemetery will be conducted in the upcoming 2008 field season.

By investigating burial grounds in the open valleys and in the high mountain passes we aim further to contextualize the burial ground at Tahiltin-hotgor of the imperial Xiongnu elite in the peripheral region of the Altai mountains.

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References

Allard and Erdenebaatar 2005
Francis Allard and Diimaajav Erdenebaatar. "Khirigsuurs, ritual

and mobility in the Bronze Age of Mongolia." *Antiquity* 79 (2005): 1-18.

André and Yeruul-Erdene 2004
Guilhem André and Ch. Yeruul-Erdene. "Negen Hurel Shiidemnii Tyhai (Gol modni hunnu bulshni hereglegdehuuneer)." *Arheologijn Sudlal* (Ulaanbaatar) 22 (2004): 110-117.

Di Cosmo 2002
Nicola Di Cosmo. *Ancient China and Its Enemies: The Rise of Nomadic Power in East Asia*. Cambridge: Cambridge University Press, 2002.

Erdélyi et al. 2000
István Erdélyi et al. *Archaeological Expeditions in Mongolia*. Budapest: Mundus Hungarian University Pr., 2000.

Konovalov 1976
Prokopii B. Konovalov. *Khunnu v Zabaikal'e*. Ulan-Ude: Buriatskoe knizhnoe izd-vo., 1976.

Lee 2007
Christine Lee. "The Biological Affinities of Neolithic Through Modern Period Populations from China and Mongolia: The Cranial and Dental Non-metric Trait Evidence." Unpublished Ph.D. Dissertation, Arizona State University, 2007.

Miller et al. 2006
Bryan K. Miller, Francis Allard, Diimaajav Erdenebaatar, and Christine Lee. "A Xiongnu Tomb Complex: Excavations at Gol Mod 2 cemetery, Mongolia (2002-05)." *Mongolian Journal of Anthropology, Archaeology and Ethnology* (Ulaanbaatar) 2/2 (2006): 1-21.

Miniaev and Sakharovskaia 2002
Sergei Miniaev and Lidia Sakharovskaia. "Soprovoditel'nye

zakhoroneniia 'tsarskogo' kompleksa no.7 v mogil'nike Tsaram." *Arkheologicheskie vesti* 9 (2002): 86-118; in English as: "Sacrifice burials of the royal complex no. 7 at the Tsaraam cemetery" <<http://xiongnu.atSPACE.com/Sacrif.htm>>.

Miniaev and Sakharovskaia 2006
Sergei S. Miniaev and Lidia M. Sakharovskaia. "Investigation of a Xiongnu Royal Complex in the Tsaraam Valley." *The Silk Road* 4/1 (2006): 47-51.

Miniaev and Sakharovskaia 2007
Sergei S. Miniaev and Lidia M. Sakharovskaia. "Investigation of a Xiongnu Royal Complex in the Tsaraam Valley. Part 2. The Inventory of Barrow No. 7 and the Chronology of the Site." *The Silk Road* 5/1 (2007): 44-56.

Mission 2003
Mission archéologique française en Mongolie. *Mongolie: le premier empire des steppes*. Arles: Actes sud, 2003.

Navaan 1999
D. Navaan. *Hunnugiin uv soyol: arheologijn sudalgaany material*. Ulaanbaatar, 1999.

Rudenko 1969
Sergei I. Rudenko. *Die Kultur der Hsiung-nu und die Hugelgräber von Noin Ula*. Bonn: Habelt, 1969.

Shiji 1959
Sima Qian. *Shiji*. Beijing, 1959.

Torbat 2004
Ts. Torbat. *Hunnugiin jiriin irgediin bulsh*. Ulaanbaatar, 2004.

Volkov and Dorjsuren 1963
V.V. Volkov and Ts. Dorjsuren. "Hovd aimagiin Manhan sumin nutagt ertiin sudlalin maltaga haiguul hiisen tuhai." *Arheologijn Sudlal* 2 (1963): 51-68.

Ch. Yeruul-Erdene. "Gol Modni Hunnu bulshni sudalgaani zarim ur dun." *Arheologiin Sudlal* (Ulaanbaatar) 22 (2004): 76-109.

Notes

1. A detailed description of a square tomb and its components is given in Miniaev and Sakharovskaia 2006, 2007.

2. A comparison of these bronze sticks with others found in Xiongnu royal tombs exhibits intriguing similarities, though their exact function is still under debate (André and Yeruul-Erdene 2004).



Carved stone erected after our excavations marking the completion of the reconstructed Tomb 64.

Excavation of a Xiongnu Satellite Burial

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During the 2007 field season, the Hovd Archaeology Project excavated several burials at the Tahiltin-hotgor cemetery in Hovd aimag, Mongolia, at the foot of the Altai Mountains. A full report of the Tahiltin-hotgor excavation is included in this issue of *The Silk Road* (Miller et al. 2008).¹

An earlier survey of the site in September 2006 indicated that there are 132 graves which make up the many complexes in this cemetery (Miller 2006). The number of satellite burials ranges from one to five per burial complex at Tahiltin-hotgor. The purpose of this report is to describe the excavation of one of these satellite burials and the artifacts found within it. Burial THL-25-2 is one of the three satellite burials associated with the unexcavated tomb complex THL-25 [Fig. 1]. The three satellite burials, of which THL-25-2 was the middle one, were oriented in a generally north-south line to the east of the large, square-ramped tomb mound. We have chosen to report on burial THL-25-2 because the skeletal remains were com-

pletely undisturbed and well preserved and thus the artifacts could be viewed in their original context.

Grave excavation

After the vegetation, consisting of scrubby desert bushes, surrounding the cluster of stones was removed, the loose sandy sediment surrounding the stones was cleared to define the extent of the feature. When the surface was completely visible, a rectangular grid was created around the stone cluster using string and iron pegs. This grid was tied to a reference datum point at the large square tomb (THL-25) in order to allow us to record the location of the burial features in

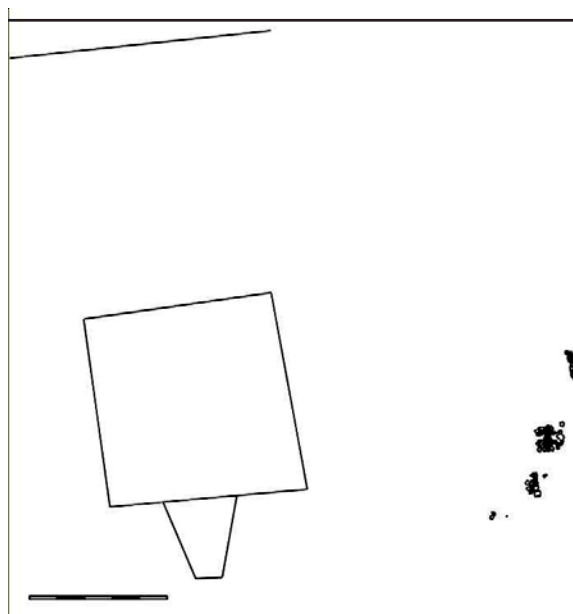


Fig. 1. Drawing of THL-25 grave complex. All images are copyright © 2008 Hovd Archaeology Project.



Fig. 3. The THL-25-2 grave excavated to the level of the skeleton, with the two large sub-surface stones still in place.

three-dimensional space with regard to the square tomb and the other two satellite burials in the complex. A sub-datum was created for THL-25-2 (known as sub-datum II) as a reference point for taking all measurements relating to this burial. Accuracy in recording the features is very important during excavation so that the context of the artifacts is understood and drawings of the burial can be recreated once fieldwork is completed. We took measurements and photographs at every level of the excavation.

Within our excavation unit, the sediment around the stones was removed down to their bases, which represented the ground surface at the time the feature was constructed. The artist of the team then drew the excavation unit using a meter-grid. In order to draw the cross-section of the burial shaft, a level north-south reference line running roughly through the middle of the stone

mound was made with a string, and coordinates were taken with reference to sub-datum II from various parts of the stones. Once this level was recorded and photographed, we removed the stones and began excavating below the surface through the hard-packed earth. We were very careful at this stage so as not to damage any of the grave contents. The buckets of soil that we removed were dumped outside the excavation unit so as not to clutter the working area, but not too far away because it was used to refill the hole when the excavation was concluded.

At a depth of approximately half a meter (33-56 cm), we uncovered a second layer of stones oriented in the same north-south direction. The coordinates of this layer were recorded and the features photographed. The smaller stones were removed and we continued excavating with trowels toward the bases of the two large stones [Fig. 2]. As soon as we reached the bases of the stones, we created a pedestal roughly the size of the entire grave shaft so that we had enough room within the excavation unit to continue working down toward the skeleton. The soil matrix within the grave shaft was looser than the surrounding, undisturbed ground. We were able to identify the extent of the grave by the change in soil consistency and the presence of very hard, white veins of clay in the undisturbed areas.

Human remains

There was no indication that the individual had been buried in a wooden coffin or stone cyst. Similarly, no wooden coffins or stone cysts were found in the other two satellite burials associated with the THL-25 tomb

complex. As we excavated beneath the stones, we could see bits of bones sticking out, which indicated that the skeletal remains were directly underneath this layer of stones. After we had carefully trowelled and brushed away the soil, we came across three small loose human bones. From then on, every trowel movement and brush stroke was painstakingly executed in order to make sure human remains and artifacts were exposed in their original position. The sediment around the three bones was carefully brushed away and their positions documented in situ and photographed. Before any of the bones or artifacts was removed, each item was assigned a number and then a clear plastic zip-lock bag was labeled with the assigned number. In this case, the first three bones were given the numbers THL-25-2.1, THL-25-2.2 and THL-25-2.3 ("THL-25" is the number assigned to the main tomb; "-2" is the number of the satellite burial, and ".1" is the number of the item coming out of the burial). A log book was kept as the items were taken out, numbered, and bagged. The record in the log book had to be meticulous because the information had to be entered into a computer database back in our field lab. It was important to assign one person to record-keeping so that confusion or discrepancies could be clarified later. After the three small bones were removed and recorded, we continued working down toward the rest of the skeleton and artifacts. These bones appeared to have been disturbed by rodent activity, as indicated by small rodent skeletal remains found at this depth. As we finally exposed the rest of the skeleton and artifacts, it became clear that this

grave had not been looted. We noted that the skeleton was well preserved and nearly intact. Preliminary analysis indicated that the remains belonged to a male.

In order to be able to make drawings of the exposed skeleton as well as the cross-section of the grave, coordinates were taken from various parts of the skeleton along the same north-south string line we created earlier. Day glow plastic cocktail sticks were laid in the burial pit at strategic points of the skeleton along this north-south line, keeping the northern point consistent for all later measurements; their coordinates were recorded; and photos were taken directly above the excavated area. Later in the laboratory, these photos were used in conjunction with the Illustrator® program to make accurate scale drawings of the skeleton and cross-sections of the burial pit. The consistent northern point of all such photograph-based drawings was used to overlay the consecutive images in Illustrator® so that their stratigraphic relationship could be properly understood.

After the exposed remains were documented and photographed in situ as above, artifacts that were above the skeleton were taken out, given a number and bagged so that the full extent of the burial position and condition of the skeleton could be noted. The individual in this tomb was buried

in a supine position with legs extended [Fig. 3]. His body was oriented to the north and his left arm was bent across his chest. The skull was oriented facing east and had been slightly deformed by the weight of a large stone placed on top of it. The skeleton was



Fig. 3. In-situ skeletal remains.

buried about a meter below the ancient surface. All of these observations were again recorded and additional photographs made before the remains were removed, superficially cleaned with brushes,

labeled and bagged, and taken to the ger (yurt) that housed the laboratory equipment. In the laboratory, the bones went through another cleaning process before being securely packed for transportation to Ulaanbaatar. No perimortem trauma to the skeleton was observed, which most likely rules out a violent death. Further analysis by Christine Lee revealed that the interred individual was an adult male between 30-35 years of age and 159-167 cm tall. (Miller et al. forthcoming).

Artifacts

This burial contained more artifacts than any of the other satellite graves we excavated. After all the skeletal remains had been removed from the grave, the same process of taking coordinates of the artifacts was repeated and another photo with the day-glow plastic cocktail sticks was taken. Correct photo-documentation of all the artifacts in situ is essential for post-excavation research.

Due to the climatic conditions in this area no organic material such as textiles, wood, or leather were preserved at this shallow depth. However there was some evidence of organic residues around the skeleton. We recovered several artifacts made of bone and metal. The bone artifacts were relatively well-preserved but all the iron artifacts were badly corroded. The bone artifacts included a plate perforated at both ends [Fig. 4, facing page], approximately 16 cm

long, found near the left side of the individual, within the bend of the left arm. The bone plate is slightly curved with a small hole on one end and a "T"-shaped piece of metal inserted through the other hole at the opposite end. This plate may have been part of a bow, of which the rest was not preserved, or the handle of an instrument. Similar bone and deer-horn artifacts have been found at the site of Burhan-tolgoi in Egiin gol Valley, Bulgan aimag (Torbat et al. 2003). Near the left side of the pelvis, we also found a small, slightly flat object made of bone that was rounded on both ends and perforated through the middle [Fig. 5]. On one side, an "X" was incised into the surface, and the opposite side was untouched. This may have been a toggle used for fastening clothing.

Around the same area, a small bone shaft that we had partly exposed earlier was found to be

embedded in a chunk of highly corroded metal, just below the left pelvis near the femur. Our conservator, Judy Logan, devised a method to dislodge the bone artifact from the corroded metal with minimal damage to the artifacts. After studying the situation, it was decided that a block-lift method would be the best option to achieve this. The artifact cluster was cleaned, then two layers of cheesecloth were carefully placed on top of it. The cheesecloth was wetted so that it would conform to the surface of the object. Paraffin wax pellets were softened in a hot-water bath and the semi-melted wax was slathered onto the cheesecloth on all sides, like icing a cake [Fig. 6]. The



Fig. 6. Applying the wax over the cheesecloth in preparation for the block-lift.

cheesecloth acted as a barrier between the artifact and the rigid wax support and prevented the melted wax from sticking to the artifact. After the wax had set, an archaeological spatula was sliced under the dirt supporting the wax-encased artifact to separate it from the ground. It was then flipped onto a piece of cardboard so that the artifact was lying on its wax-case. It was conveyed back to the laboratory for further treatment.

On each side of the pelvis we also found a pair of sheep or goat astragali (ankle bones). They were smoothed in some areas, but otherwise undecorated. Near the right side of the pelvis, sitting on top of a chunk of corroded metal was a larger astragalus, which could be from a bovine or horse. Animal ankle bones were found in some of the other burials excavated at Tahiltin-hotgor as well as in many other Xiongnu sites throughout Mongolia and southern Siberia (see Davydova 1995, 1996; Dorjsuren 1961; Miller et al. 2006). In modern Mongolia, ankle bones are still used as gaming pieces. The burial contained many other fragments of corroded iron, but most of them were too damaged to be identified

Fig. 4. (below) Bone plate, before cleaning, with inset (in different scale) showing end view with iron insert.

Fig. 5. (right) Bone toggle.



in the field. However, several of the corroded iron artifacts were intact enough so that they could possibly be identified in the future using x-ray and other techniques.

Located on the inside of each ankle of the deceased was a piece of iron, which may have been part of a footwear buckle. Several other fragments found around and under the pelvis may have been part of a metal belt or fasteners for clothing. A corroded metal ring was found near the right hand. This could be a ring used by archers to protect the fingers when drawing the bowstring.

Back in the laboratory, dirt from the underside of the block-lifted artifact cluster was carefully cleaned in order to expose the bone-shaft, while leaving the fragile corroded metal in the cheesecloth-wax case. Fragments of wood were detected at one end of the corroded metal, which suggests that it could have been be a knife or other metal instrument with a wooden handle. Only further cleaning and other tests can reveal its form and confirm what the object is. Meanwhile, the bone artifact revealed itself as a pipe-shaped object – a long, faceted piece of bone with a small scoop carved into one end [Fig. 7, facing page]. The shaft of the artifact was not hollow which rules out the possibility of its being an implement used for smoking. There were no visible burn marks or residue inside the bowl of the object. A similar artifact was found at the Burhan-tolgoi cemetery in Egiin gol valley, north Mongolia (Torbat et al. 2003), and two similar objects have also been found in Sudzinsk in Il'movaia pad' (Rudenko 1969).

Discussion

The purpose of these satellite burials is still being debated. THL-25 is a typical Xiongnu elite burial with three satellite burials. The artifacts buried in this satellite grave are consistent with Xiongnu satellite burials of this size in other cemeteries, even though the burial structure of the satellite graves at Tahilt is different (Miller et al. 2006; Miller et al. forthcoming).

The presence of traditional clothing accessories such as a metal belt around the waist, footwear with buckles, and astragali is common in Xiongnu burials. The most unusual object in this grave is the bone pipe-shaped object. It is interesting to note that such objects have been found in the core Xiongnu areas as well as in the westernmost part of the Xiongnu Empire. This may point to some degree of cultural homogeneity among the different tribes which constituted the nomadic empire. The types of materials used to produce these artifacts (bone, metal, etc.) are also similar to Xiongnu material culture from other burials.

When we reviewed the human remains and artifacts together, we wished to hypothesize this was a warrior not significantly past the prime of his life. However, the evidence about possible weaponry was at best slender. He was probably dressed in organic materials (most probably wool or felt) as indicated by organic residues all around his remains. His garment was fastened with a bone toggle and in Xiongnu fashion he wore a belt made of linked metal plaques. He probably wore felt or leather boots decorated with metal buckles and

carried his accessories, such as a knife, the pipe-shaped object, and astragali in a pouch of some sort on his left side just below his pelvis. The bone-plate might have been part of his bow, and he appears to have had an iron-bladed knife. It is not certain whether a corroded metal fragment found near the left femur is an arrowhead. Connections between the material and human remains found in the grave and the past lifestyle and practices of the ancient Xiongnu can be drawn through the context that intact burials and archaeological excavation provide. In this and the other satellite burials at Tahilt, unlike at Gol Mod 2, we did not find numerous iron arrowheads.

It is interesting to note that no coffin or stone cyst was found among the three satellite burials in the THL-25 complex. The reasons could be due to variations in local tradition, given that the Tahiltin-hotgor cemetery is in the westernmost part of Mongolia, or environmental constraints such as the shortage of wood, or the status of the deceased. The exact dating of this satellite burial, THL-25-2, awaits further clarification but we can say confidently that it shares similar burial traditions of other Xiongnu graves.

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References

- Davydova 1995
A. V. Davydova. *Ivolginskii arkheologicheskii kompleks. T. 1. Ivolginskoe gorodishche* (The Ivolga Archaeological Complex. Vol. 1: The Ivolga Fortress). Arkheologicheskie pamiatniki siunnu, Vyp. 1. St. Petersburg: Peterburgskoe vostokovedenie, 1995.
- Davydova 1996
A. V. Davydova. *Ivolginskii arkheologicheskii kompleks. T. 2. Ivolginskii mogil'nik* (The Ivolga Archaeological Complex. Vol. 2. The Ivolga Cemetery). Arkheologicheskie pamiatniki siunnu, Vyp. 2. St. Petersburg: Aziatika, 1996.
- Miller 2006
Bryan Miller. "Khovd Archaeology: Archival Research and Field Survey Expedition," accessed at: <<http://www.mongoliacenter.org/fellowship/reports/Bryan.Miller.pdf>>.
- Miller et al. 2008
Bryan K. Miller, Jamsranjav Bayarsaikhan, Tseveendorj Egiimaa, and Christine Lee. "Xiongnu Elite Tomb Complexes in the Mongolian Altai: Results of the Mongol-American Hovd Archaeology Project, 2007". *The Silk Road* 5/2 (2008) (see above).
- Miller et al. 2006
Bryan K. Miller, Francis Allard, Dimaajav Erdenebaatar and Christine Lee. "A Xiongnu Tomb Complex: Excavations at Gol Mod 2 Cemetery (2002-05)." *Mongolian Journal of Anthropology, Archaeology and Ethnology* 2/2 (2006): 1-21.
- Miller et al. forthcoming
Bryan K. Miller, Jamranjav Bayarsaihan, Tseveendorj Egimaa, Prokopy B. Kononov, Judy Logan and Christine Lee. "Elite Xiongnu Burials at the Periphery: tomb Complexes at Tahiltin-hotgor, Mongolian Altai" (forthcoming).
- Navaan 1999
D. Navaan. *Khunnugiin uv soyol: arkheologiin sudalgaany material*. Ulaanbaatar, 1999.
- Rudenko 1969
Sergei I. Rudenko. *Die Kultur der Hsiung-nu und die Hugelgräber von Noin Ula*, tr. Helmut Pollems. Bonn: Habelt, 1969.
- Torbat et al. 2003
Ts. Torbat, Ch. Amartuvshin, and U. Erdenbad. *Egiin Golyn sav nutag dah arheologiin dursгалууд*. Ulaanbaatar: Mongolian State Pedagogical University, 2003.

Note

1. Additional information about Tahiltin-hotgor cemetery can be found on-line at the Silkroad Foundation website: <www.silkroadfoundation.org/excavation/takhiltcemetery.html>.



Fig. 7. Bone "pipe-bowl."

The Tahilt Region:

A Preliminary Archaeological Survey of the Tahilt Surroundings to Contextualize the Tahilt Cemeteries

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The survey component of the 2007 Silkroad Foundation Tahilt expedition provided information which not only complements data collected by the Xiongnu period excavations conducted by the Mongol-American Hovd Archaeology Project but may also stand alone as a data related to broader regional considerations. A large scale survey can provide both a chronological and spatial context for particular sites, and the type of survey described here is intended to be the first stage in a methodology that would include more survey and more targeted excavation, a methodology that has been successful in other areas of Central Asia (Honeychurch, Wright and Amartuvshin 2007; Frachetti 2004). The survey of 2007 was designed to answer some preliminary questions and assess the suitability of the region for higher intensity survey in the future. Some of the questions are as follows:

- What types and kinds of sites exist in the Tahilt region?
- What types of environmental or landscape features are associated with archaeological features?
- What are the pre- and post-Xiongnu sites and how do they compare to the Xiongnu component in the archaeological landscape?
- What should future surveys of this area look like and what are the potential challenges?

Methodology

The survey was conducted over a 40 square kilometer area generally to the southwest of the Tahilt Xiongnu cemetery. It consisted of a systematic

pedestrian survey with transects spaced at about 500 meters, terrain permitting. This region allowed the survey to encompass a number of environmental and landscape features such as rivers, high rocks, open spaces, and valleys. The rationale for survey by making large transects across the region involved a number of factors, the first being how best to understand the Tahilt region quickly while at the same time having the resolution to detect small sites or single artifacts. The methodology could be described as *high resolution* but *low density*. By low density I mean that the surveyed area represents what I estimate to be a ten percent coverage or sample of the 40 sq km region (Honeychurch, Wright and Amartuvshin 2007). A small area was targeted for 100% survey coverage so as to prove that the target area was a very low density area and not low density due to the survey methodology [Fig 1, C]. Future surveys would be done at 100% coverage, as I will discuss below. GPS coordinates, site type and surrounding environmental data have been taken to establish the context of a site. Site typology is similar to that of other regional surveys conducted in northern and south

central Mongolia, in order to facilitate comparison with their results (Wright 2006). Sites were also categorized by the number of features. *Features* are single archaeological elements which make up an archaeological site. Recording the number of surface features, those elements that are visible from the survey, can be a useful ranking tool in discriminating between larger and smaller sites.

What are the types and kinds of sites that exist in the Tahilt region?

Both artifact-based and monument-based sites indicate that the chronology of the Tahilt

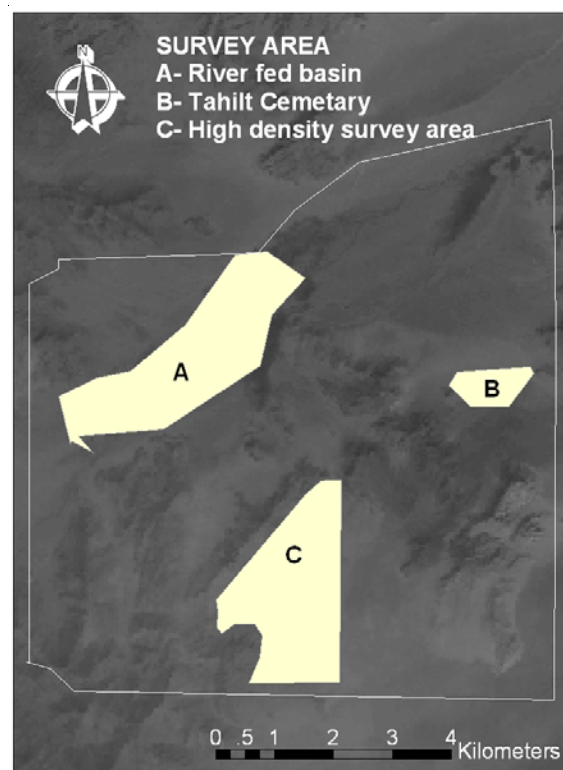


Fig 1. Overview of the survey region with smaller areas indicated. All images copyright © 2008 Hovd Archaeology Project.

region appears to be continuous from the Paleolithic, roughly 100,000 B.P. based on stone tool typology, to the Turk period (ca. 7th century CE). Evidence for specific later historic periods such as Khitan or Mongol at this time has not been detected. For this paper I designate as *monumental sites* those with architectural features. I include burials and/or tombs but do not limit the designation to these types: i.e., all burials are monuments, but not all monuments are burials. Since none of them have been excavated, there is no evidence of the use of the monuments. This section will address the initial question of the survey concerning the types and kinds of sites in the Tahilt region and give a very brief description of them.

The Paleolithic and Mesolithic component in the Tahilt region is characterized by large stone chopper and axe tool types [Fig 2] generally in the area surrounding the large spring and river fed basin [Fig 1, A], now nearly dry. The well known Tsenker cave Paleolithic site is upstream of this basin. So the location of early stone tools in this area seems to relate to the river valley.

Fig 2. Paleolithic chipped hand tools.



Fig 3. Mesolithic and Neolithic flakes blades and bladelets.

The Neolithic component is characterized by smaller blade tools and more complex tool kits (Larichev, Pforr and Chard 1962) and in the case of Tahilt would include scrapers and retouched bladelets [Fig 3]. These were generally found in close proximity to Bronze Age monuments and pottery [Fig 4], a fact which suggests that sites were used and reused over long periods of time for habitation and stone tool production.

Bronze Age sites are both artifact sites and monumental. The only pottery scatters found during the survey are from this period or are modern or historic sherds which were not collected. Since nomadic sites lack non-mortuary

architectural and other extensive material remains, the pottery generally would indicate a habitation site which it is useful to distinguish from a monumental site. There are both habitation and monumental sites for the Bronze Age, but this pattern does not appear for later periods. The monumental Bronze Age site types found in the Tahilt region are khirigsuurs, monuments, slab



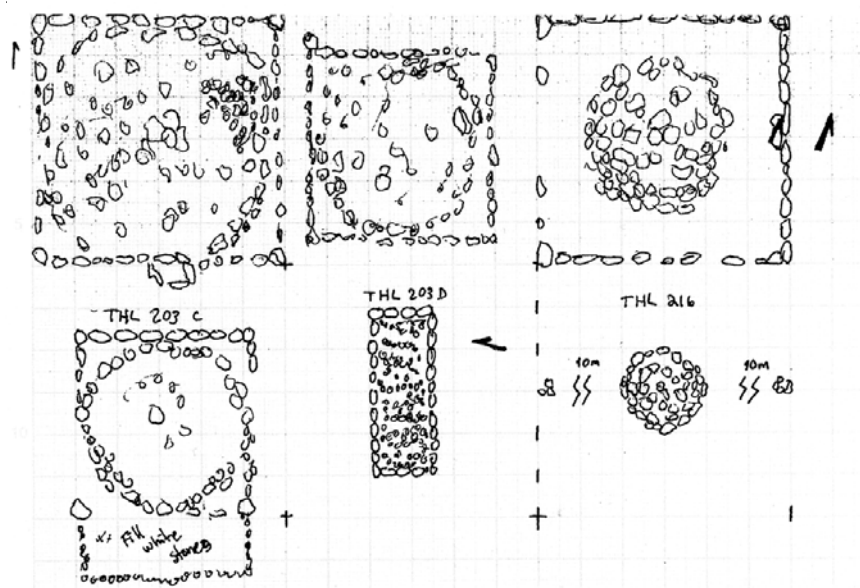
Figs. 3, 4. Flakes and blades with associated pottery.

burials and other features associated with those two, such as satellite features that are characteristic of khirigsuurs. A *khirigsuur* is a circular pile of stones which may or may not include an interment. The khirigsuurs at Tahilt have not been excavated; so there is no measure of those with interments and those without. However, the types and kinds of features recall khirigsuurs found in Central Mongolia, and the percentage with interments is expected to be generally very small, if it exists at all (Wright 2006). The other characteristics of khirigsuurs are most often circular or square surrounds and small



Fig 5. (above) Example of a Khirigsuur with a square surround.

Fig 6. (below) Selection of Khirigsuur types and features from the Tahilt region.



satellite features and/or rectangular pavements of stone [Figs. 5, 6].

Another site type generally characterized as Bronze Age is rock art. This would include any depiction made by humans painted or pecked into the stone (Jacobson-Tepfer 2006). At Tahilt there are seven rock art sites ranging from a single panel of a single animal to multiple panels with a variety of depictions of sheep or deer, which is within

normal expectations of rock art for this area [Fig 7].

The evidence for the Xiongnu and the Iron Age comes most obviously from the Tahilt cemetery (Miller et al 2008) [Fig 1 B], but in addition there are three smaller cemetery sites in the area, containing between six and twenty-seven features/burials. Furthermore there are a number of single Xiongnu burials outside of the four main cemeteries and a number of stone ring features that



Fig 7. Typical panel of rock art depicting sheep, goats and/or deer.

could be characterized as Xiongnu but may represent another chronological period. The future excavation of these smaller cemeteries and single burials will provide more information about their relationship to the major cemetery. Outside of the major cemetery complex no other square-ramped tombs have been detected. The

burials in the other cemeteries are all circular in form [Fig 8 Map; Fig 9, both, facing page].

The smallest component to the chronology of the Tahilt region comes from the Turk period with two sites including standing stones and stone lines extending from them, as is typical of *balbal* lines found in other areas of Mongolia. The construction of the standing monument includes base support stones generally square-shaped [Fig 10, facing page] and thus not

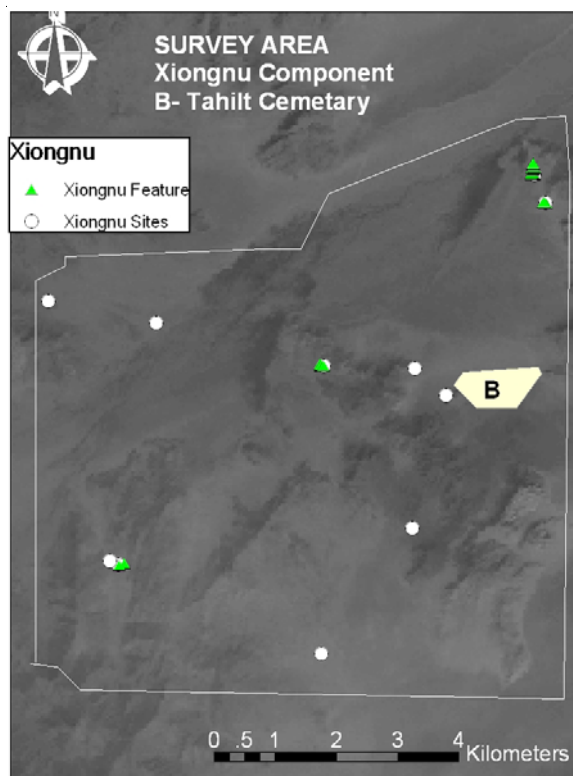


Fig 8. Locations of three or four secondary Xiongnu cemeteries.

to be confused with the deer stone or Bronze Age standing stone features.

The post-Turk period in Mongolia would encompass

continuous use of the landscape for 100,000 years up to the Turk period; however, the use and understanding of this landscape within the survey area differs with the culture.

Fig 10. Standing stones assumed to be from the Turk period.

medieval and historic periods such as Uighur, Khitan, and Mongol. No evidence of these sites or characteristic pottery from these periods (Wright forthcoming) was detected during the survey. It is possible that the sample size is limiting the finds. However, the location of Tahilt is far from the core of any of the historic empires. In addition, periods such as the Mongol might not appear, given that they are relatively short in comparison to the major periods represented at Tahilt. What the preliminary survey shows is a



What types of environmental or landscape features are associated with archaeological features?

The connections between specific landscape features are, at this point anecdotal. However representing them graphically in a GIS is the first step to understanding what environmental features are important to locations of archaeological elements within the landscape. In the future the types of landscape features will be systematically categorized to clarify the relationships between the archaeological record and its environment. In addition this will help better to target surveys for the future.

The first of the major environmental features of the Tahilt region are the Hoyt Tsenker and Dond Tsenker rivers. These two rivers come together at the modern town of Manhan. Also at this river junction is a large site with over 40 khirigsuur monuments ranging in size from ten to thirty-five meters. So far this is the largest site in the area with some of the largest monuments. The other main feature is the high rocks that run between the two rivers. While the high rocks do not affect the overall site locations, the sites are fairly uniform over the entire survey area. The larger



Fig 9. Xiongnu burial ring from a secondary cemetery.

sites, both Bronze Age and Xiongnu, appear at the base of the high rocks and in the dry and river valleys [Fig 11]. The large basin mentioned earlier is to the west of the Tahilt cemetery; some of the major Khirigsuur sites overlook this basin. To the south of the Tahilt cemetery is a large open valley. This area contained evidence for modern use but was almost unused in the past. A section of this area was selected for 100% total coverage survey, and only four sites were detected within that area. Understanding the relationship between major landscape features and the surrounding archaeology strengthens our understanding of each component of the chronology.

What are the pre- and post-Xiongnu sites and how do they compare to the Xiongnu component in the archaeological landscape?

The pre-Xiongnu component to the Tahilt region is the most visible

of all the periods, with 40% of all the sites dating to the Bronze Age, not including the rock art and associated Neolithic sites. The relationship between these two periods can begin to be understood even at the preliminary stages of survey. The key difference between the Bronze Age sites and the the Xiongnu sites is that there are no artifact or visible Xiongnu habitation sites, whereas in the Bronze Age we have both, sometimes in close proximity to the monumental sites. We can understand this to mean that during the Bronze Age the landscape was understood as both a ritual and habitation area, but the Xiongnu were delineating a separation between a ritual and habitation space, thus creating a less homogeneous picture than the Bronze Age perspective on space. This may be unique to the periphery or be resulting from the limitations of the survey methodology. The evidence for the ritual use of the landscape in the Bronze Age is very visible and would have

been visible to the Xiongnu. The evidence that the landscape was previously used for habitation is and was less apparent. It is possible that this is part of the criteria the Xiongnu would have used in choosing a location for the Tahilt cemetery. However comparison of other major cemetery sites and the Bronze Age component would need to be explored before we can be certain. At Tahilt we can see the Bronze Age mark on the land, and later the Xiongnu use a section of this landscape not currently occupied with monuments for their own monuments

and ritual. These distinctions also bring out the behavioral differences between the two groups during these time periods. The khirigsuurs represent monument and ritual without burial. The Tahilt cemetery and Xiongnu burials represent a ritual and mortuary site and behaviors (Miller et al. 2008). This can also be seen for later periods, where we have evidence for two Turk standing stones but no pottery. It is understood that two sites do not represent a significant sample, but future survey will easily either confirm or deny this pattern.

Future surveys

The Tahilt region is interesting archaeologically and ideal for future regional survey. However, there are some challenges of which we became aware during the preliminary stages. Full coverage survey (that is, covering 100% of the landscape) would be ideal for the Tahilt region for overcoming some of these challenges. One of the challenges of survey in the Tahilt region was the absence of artifact sites, which makes it difficult to determine with any certainty the habitation and settlement patterns for the Xiongnu and Turks. A full coverage survey would detect more sites and increase the sample size, or, if the habitation area is in fact not in the Tahilt region, full coverage survey would detect this. The same could be said for understanding the Bronze Age complexity of the region. At this point the survey indicates where sites seem to be located but is not representative of the emerging spatial and cultural complexity studied during this period (Allard and Erdenebaatar 2005; Wright 2006, 2007). Expanding the survey to include more environmental zones would also increase the likelihood of detecting nomadic habitation sites for the Bronze Age, Xiongnu and later periods.

The other aspect that would need to be considered for future

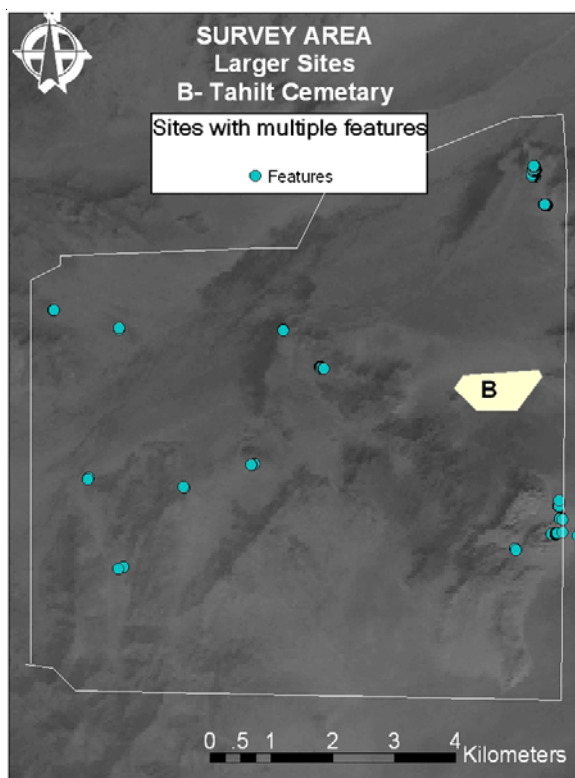


Fig 11. Location of larger sites or those with a higher feature count.

surveys would be to locate source materials for lithics and pottery. Since the site locations seem to be related to certain landscape features, future surveys would also want to consider the other elements that might affect this decision-making process. In addition, source material studies have been useful in other parts of Mongolia to prove whether pottery is locally produced or brought from other regions (Honeychurch, Wright and Amartuvshin 2007). In the case of Tahilt, since the habitation record for the Xiongnu and Turks is limited and/or non-existent, pottery sourcing could help in understanding the locations of habitation. Simultaneously surveying the palaeo-environment would clarify the environmental landscape and provide other layers of data to consider.

The Tahilt region has the potential to answer a number of interesting research questions. One single survey or excavation is not enough to characterize an entire region, but, with continued interest in the area, a clearer picture will emerge regarding the landscape in which the Xiongnu and other cultures of Central Asia lived. The study and survey of this region will no doubt continue.

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References

Allard and Erdenebaatar 2005

Francis Allard and Diimaajav Erdenebaatar. "Khirigsuurs, Ritual and Mobility in the Bronze Age of Mongolia." *Antiquity* 79 (2005): 1-18.

Fitzhugh 2006

William Fitzhugh, ed. *American-Mongolian Deer Stone Project: Field Report 2006*. Washington DC: Arctic Studies Center, 2006. Available on-line at: <<http://www.mnh.si.edu/arctic/html/pdf/2006%20Mongolia%20Field%20Report%20small.pdf>>

Frachetti 2004

Michael D. Frachetti. "Archaeological Explorations of Bronze Age Pastoral Societies in the Mountains of Eastern Eurasia." *The Silk Road* 2/1 (2004): 3-8.

Hall et al. 1999

Mark E. Hall et al. "Chemical Analyses of Prehistoric Mongolian Pottery." *Arctic Anthropology* 36 (1999): 133-150.

Honeychurch, Wright and Amartuvshin 2007

William Honeychurch, Joshua Wright and Chunang Amartuvshin. "A Nested Approach to Survey in the Egiin Gol Valley, Mongolia." *Journal of Field Archaeology* 32 (2007): 339-352.

Jacobson-Tepfer 2002

Esther Jacobson-Tepfer. "Petroglyphs and the Qualification of Bronze Age Mortuary Archaeology." *Archaeology, Ethnology,*

and Anthropology of Eurasia 3 (11) (2002): 32-47.

Jacobson-Tepfer 2006

Esther Jacobson-Tepfer. "The Rock Art of Mongolia." *The Silk Road* 4/1 (2006): 5-13.

Larichev, Pforr and Chard 1962

V. E. Larichev, Barbara L. Pforr and Chester S. Chard. "The Microlithic Character of Neolithic Cultures in Central Asia, Trans-Baikal, and Manchuria." *American Antiquity* 27/3 (1962): 315-322.

Miller et al. 2008

Bryan K. Miller, Jamsranjav Bayarsaikhan, Tseveendorj Egiimaa, and Christine Lee. "Xiongnu Elite Tomb Complexes in the Mongolian Altai: Results of the Mongol-American Hovd Archaeology Project, 2007." *The Silk Road* 5/2 (2008) (see above).

Wright 2006

Joshua Wright. "The Adoption of Pastoralism in Northeast Asia: Monumental Transformations in the Egingol Valley, Mongolia." Unpublished PhD dissertation, Harvard University, 2006.

Wright 2007

Joshua Wright. "Organizational principles of Khirigsuur Monuments in the Lower Egiin Gol Valley, Mongolia." *Journal of Anthropological Archaeology* 26/3 (2007): 350-365.

Wright forthcoming

Joshua Wright. "A Guide to the Ceramics of North and Central Mongolia and the Gobi Desert" (forthcoming).

Food as Culture: The Kazakh Experience

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The Kazakhs have an amusing anecdote often told at the table:

Once a Kazakh came to town to buy food for an upcoming *toi* (feast) celebrating the expected birth of a child. He met there his Uzbek friend. The Uzbek was delighted at the chance to display his hospitality and invited the Kazakh home as a guest. It was impossible to refuse, and the Kazakh, even though he was in a hurry to return home, agreed. The Uzbek brought him home and began to entertain him generously. There was flat bread, grapes, honey, dried fruits, unusual sweets and a great deal of green tea. ("Thank God, it's hot," the Kazakh thought, "but it's so...pale, it hasn't steeped very long.") At the end of the day they brought in a plate of greasy pilaf. ("Why on earth is it made with raisins and nuts — maybe they don't have enough food?" the Kazakh said to himself.) After the meal the Kazakh, to the surprise of his Uzbek hosts, stayed for the night. The wish of the guest is law. In the morning, they had tea, and again at the midday meal; in the evening they served soup. ("Fairly tasty, but too full of potatoes.") And again the Kazakh stayed for the night, although for some reason he began to worry. The host was already unhappy that he had invited him home. Groaning, he went off to the market to buy something for the table and in his heart lamented that he simply couldn't get rid of the Kazakh. But a wise man said, "Did you feed him?" "Fed him." "With

what?" "Everything!" "Did you give him *beshbarmak*?" "What on earth is that?" "Go buy a sheep, boil it whole in water, dump it in front of him, and he'll leave." The Uzbek had no choice; so he did it. And he had no sooner served the meat, when the Kazakh began to hurry, washed his hands, thanked everyone, tasted the meat, drank the broth and immediately began to say his goodbyes. "I apologize, friend, but I'm in a rush — it's possible that my wife has already given birth. I simply didn't realize that your pasture is so far from the city. Well, so be it. Farewell."

When publishing this tale, one ought to give it a title — for example, "The Dumb Kazakh," or the "Dumb Uzbek," or even "Two worlds — Two Civilizations"....² A more academic title would be appropriate: "The Role of Stewed Meat in the Hospitality Ritual of the Kazakhs," "On the Question of the Semiotics of Food," etc., etc.

All of the well-known literature on the ethnography of nomads starts with the premise about their being deprived of any agricultural products, and, in connection with that, the impoverished nature of the nomadic diet. It is normal to state laconically that the basis of the nomad's diet is meat and milk — that is, those things which can be obtained directly from their animals. Meat and milk products are distinguished for their high protein content and indeed maintain the energy of individuals engaged in heavy physical labor. However, the diet of the nomad in fact never was limited to them. One need but recall the numerous

observations of travelers concerning the abundance of festive entertainment at weddings and memorial feasts of the nomads, and also the rich materials of folklore. The portrayal of elaborate feasts is infinitely varied and evocative, for example, in the Kazakh epic "Koblandy-batyr", the Kyrgyz epic "Manas", and in any other epic tales of the Central Asian nomads.

One of the basic reasons for such misunderstanding regarding the diet of the nomads is, if you wish, historical and ecological. Let me explain. The fact is that the food values of the traditional (steppe) and contemporary (farmed) products of animal husbandry hardly bear comparison. Above all this is connected with the nature of the vegetation cover of the pastures and the grazing pattern of the animals. Even today, the quality of the sheep in Kazakhstan and the USA, for example, cannot be compared. Here is an example.

In 2002 in Washington a Kazakh delegation of 18 people, invited to participate in an international celebration of the countries of the historic Silk Road (The Silk Road: Connecting Cultures, Creating Trust. The 36th Annual Smithsonian Folklife Festival On the National Mall, Washington, D.C.), despite the perfectly satisfactory food both in the hotel and at the festival grounds, decided to find a way to eat "normal" (that is, traditional) *beshbarmak*³ — the Kazakhs' favorite meat dish. Our hospitable American friends straight away found a farm located not far from the capital, took us there, allowed our experts to select the best sheep, slaughter it on the spot and themselves begin to prepare it. The entire procedure was videotaped. Everyone was bursting with enthusiasm and taking pains to ensure the best possible outcome, but in the end they were disappointed. The meat was different. The connoisseurs quickly discovered the chief reason: the

grass in that area was too watery, resulting in meat that was "watery," lacking in flavor, and "porous." In addition, the sheep, which for the most part were penned up, had not developed enough muscle mass. Our Kazakhs carefully considered all the factors. Thus it became clear that even today people can tell a lot from the taste of meat: the sex of the animal, whether it was free-range or penned up, whether it was a lamb or a mature sheep, and how exactly it had been cooked.

In traditional society, the sheep to be slaughtered was first shown to the guest, then laid on its left side, its legs tied in pairs, its throat cut without injuring the spine, and the blood drained. Then an incision was made in the skin and the carcass "undressed" — the skin was peeled off by hand, starting with the abdominal cavity, then the legs and finally the spine. The abdomen was cut up, the stomach and innards carefully removed and cleaned off to the side. The stomach was emptied of its contents, turned inside out, washed and then the lining scraped off, care being taken not to harm the walls. The intestines were washed, thrice stretched on the spout of a tea kettle with cold water and then turned inside out. The small intestine (*ashy ishek* — "sour tasting intestine") was crushed and boiled together with the meat, as were the kidneys (a treat for children). The animal's lungs were not highly valued as food, but were important in the healing practice of the shaman or *baqsu*. Held by the windpipe, they would be used to flagellate the ill person in order that the disease be transferred to the sheep's lungs. Then the lungs would either be given to the dogs or buried. There was one other way of using the lungs, in what we might call silent speech, a traditional way of expressing an unspoken reproach. In such a case, a piece of boiled lung would be served to a guest as though by oversight, acci-

dentally, "the mistake of someone who was helping," and thus express a sense of insult. (Here is a case of a play on words using absolute homonyms—lung, *okpe*, and insult, *okpe*). The guest was then expected to explain how his action in the past or unfortunate conduct had insulted the hosts and insofar as possible correct his mistake.

The slaughter of animals, carried out according to Kazakh custom (in contrast, for example, to the Mongolian), requires maximum removal of blood: the blood should be carefully collected and buried in a safe place. It is thought that blood, if it remains in the tissue, is the first thing to spoil. The division of the flesh requires a knowledge of animal anatomy, since all bones need to remain unharmed. In the case of a ritual meal, the bones would be carefully collected and buried, in order that the numbers of the herds be restored. Meat which remained on the bones is sliced and salted, whereby, according to Kazakh belief, the curing, the ripening of the meat supposedly continues. It would then be dried for at least one night, with the aim of removing any moisture, firming it up and concentrating its flesh. The head and extremities are seared on an open fire, the innards washed and used to make *kuyrdak* (boiled innards with onion), a dish that can be quickly prepared. The remaining meat is divided into 12 muscle groups, parts which correspond to the 12 parts of the human body or the 12-year calendrical cycle. Each part has its own social status and significance in the subsequent sitting. Each guest, depending on his place in the social order, is obliged to receive his share. To the son-in-law, for example, always goes the breast (*tyos*), and to the young bride the *kuiymshak* (the last vertebrae).

The head of the sheep, which has been cooked separately, occupies a special place in the meal and is given to the oldest or

most honored guest. Before serving it, the lower jaw is cut off and the host makes a cross-shaped cut on its forehead. The person who receives the head must share with all those present, accompanying his action with formulae of good wishes. Thus, they give out the ears and eyes to the young (so that they learn to listen and be observant), the tongue and palate to the poets (as a symbol of eloquence) and to the singers (as the emblem of a silvery, virtuosic, and ringing throat), and pieces of the singed skin (*kuika*) to the others. Brains are not given to the young, since it is considered that only the wise are worthy of that honor. A dish prepared from finely chopped brains mixed with meat and dough (*mipalau* — pilaf of brain) is given to toothless seniors, in the belief that this mixture is especially nutritious.

It is clear that the ritual has a magic function, in the course of which, by partaking together, a single social group is created and its structure made apparent.

A special place in wedding ritual is occupied by a dish around which is distributed boiled and thinly sliced tail fat and liver (*kuiyrbauyr*), where the alternation of the dense and dark with the tender and light symbolizes the paired opposites of male and female, and the liver, as the organ which generates blood, symbolizes kinship and birthing. If, at the time of the betrothal, both parties to the union receive this dish, then the betrothal is considered to be legally binding and a subsequent refusal by one of the sides to marry will create great unpleasantness.

During the wedding, when the movement of the young couple is accompanied by showering them with grain and sweets, at the entrance to the yurt or house of the groom the bride feeds the fire — that is, throws on fat or pours on it melted butter. While doing this she invoked the goddess

Umai, the protector of women in childbirth, whose name has the sound of the word *mai* (fat), and asks a blessing on her married life. In this way the bride joins the kin of her husband, since the burning of the butter also symbolizes the feeding of the ancestors of the given clan.

Having crossed the threshold, the bride meets her in-laws, who, holding hot, freshly-baked flat bread in the bosom, embrace the bride. In this ritual the bread symbolizes the placenta, and the whole procedure the making of the bride into a daughter.⁴ The Kazakhs say that a bride selected by god is created at birth from the remains of her future mother-in-law, who then discovers as a result a closer relationship with her.

A no less magical substance is the dish *zharys kazan* (literally, a "cauldron-contest"), in which meat is heaped up and put to boil at the moment when labor in childbirth begins. The readiness of the dish, the completion of its cooking, is supposed to influence the readiness of the fetus to be born and facilitate a natural and safe birth.

Apart from mutton, Kazakhs use beef, goat, camel and horse meat. The last of these is the most highly valued. Only specially fed and tethered mares are slaughtered, ones which have never been ridden or used in other work. The special regime of feeding such mares is called *zhylki bailau* (the tying of the mare), and the slaughter of the mare in early winter, *sogym*. *Sogym* becomes a holiday for the whole community, each member of which receives a portion. The first meal after the slaughter is one in which all members of the community gather at one table (*dastarkhan*).

In a somewhat analogous fashion to the white and dark meat of a Christmas turkey, horse meat has dozens of parts which differ in taste, texture and use. Thus: *kazy*, whole, salted and cured ribs in a casing of intestine; *shuzhyk*

— a sausage, in which large chunks of meat and fat are sprinkled with salt, pepper and wild (nowadays ordinary) garlic; *karta* — the tenderest part of the large intestine which has been turned inside out; *zhal* — the very juicy part under the mane; *zhaia* — the firm, cured and dried soft part of the haunch.

The techniques of preparation of horse meat include salting, marinating, and also drying and curing with juniper smoke. Depending on the time taken for each procedure and the combination of methods, innumerable taste combinations may be imparted to the end product, horse meat. This product of itself has endless variety, depending on the type of pasture, feed, the age of the animal, etc. etc. From this follows the combination of different kinds of meat into one dish, in a way analogous to how seven notes and three chords provide the basis for all European music of the last three centuries. Thus, Kazakhs perceive a symphony of aromas, tastes, colors and textures in the myriad embodiments of a single dish — *et*, which is known in the literature as *beshbarmak* (literally, "five fingers"). It is served in conjunction with dough which has been rolled out and boiled in broth and on which are placed pieces of stewed meat which has been cut into large chunks. Poured over this combination of dough and meat is an onion sauce, *tuzdyk*, whose quality determines the taste of the entire dish. Rings or half rings of juicy, crisp onion are covered with fat skimmed from the broth, salted, peppered and then simmered on a slow flame. Heaven help the person who overcooks the onion — it will all be spoiled! The onion should retain its crispness and having just begun to secrete onion juice, replaces it with concentrated broth and becomes transparent. Only once have I tasted French onion soup which could be compared with the Kazakh *tuzdyk* sauce.

Tuzdyk can even rescue unsuccessful meat. For example, if the meat had been stored too long in the freezer, it is possible to freshen it after the initial boiling by braising it in *tuzdyk*.

The quality and the texture of the dough also has an infinite number of variations and depends at very least on five basic factors: 1. on the type of flour (finely or coarsely ground, from milled or whole grain, from hard or soft wheat, home-made or commercial); 2. on the nature of the liquid (whether the dough is mixed with icewater, warm or hot water); 3. on the amount of salt (lightly salted or saline solution); 4. on the presence or absence of eggs in the dough; and, 5. on the amount of kneading (soft or firm dough).

In the preparation of the dough, its feel is extremely important. While working it, one pays particular attention to the quantity of liquid ingredients, adding flour as needed and achieving the requisite firmness and springiness by comparison with human skin — for example, they say about dough: it is light and soft like a child's cheek (or a baby's behind), or it is springy and firm like the breast of a nursing mother, etc. The mixing of the dough always alternates with letting it rest — until, as they say, the dough is "sated" and ready to be rolled out. It is rolled out with a long rolling pin of narrow diameter, to the point where the dough forms a circle of the thickness and transparency of a sheet of paper. Such dough when boiled will not fall apart nor will it stick to itself.

Such tender and white dough goes well with tender and light-colored mutton. Camel and horse meat, on the other hand, require a darker and thicker dough, pieces of which are cut up into smaller portions and boiled longer so that they absorb the broth.

Beshbarmak is served on several dishes — in earlier times flat wooden ones, and now enameled or ceramic ones — so

that one dish will serve three to four individuals of the same age group. Each dish has a name depending on which cuts of meat are on it. For example, *bas tabak* is the main dish, *zhambas tabak* has the cuts from the abdomen, *k'iuieu tabak* is the dish with the breast for the son-in-law, etc.

Beshbarmak is normally eaten with the right hand. Eating with the hand allows one not only to sense the temperature of the food (and thus be certain that the mouth never will be burned) but also assemble and combine according to taste the dough, a piece of meat and some onion into an appetizing portion. Moreover, while sitting on the floor, it is difficult to handle a fork with layers of dough and pieces of meat on it taken from the gravy without dripping on the table cloth, the rug and one's own clothing. In using a fork, it is necessary to hold out the left palm and inevitably scorch it with dripping gravy, which can then only be licked off or endlessly cleaned with napkins. Kazakhs are convinced that the right hand is especially suited to eating this dish. There is even a specific joke. They ask: "Why is the thumb shorter than the rest of the fingers and off to one side?" And they answer: "So that it will be easier to shape the food into a portion, lift it to the mouth and then place it in the mouth with a single movement of the thumb." (Kazakhs know that it is especially important to have a thumb when eating pilaf, since rice easily sticks together in a lump.)

The traditional concluding ritual of the meal is now becoming but a memory — *asatu*, when the elder feeds with his own hands and from his own dish all the young unmarried participants in the meal, thus bestowing on them a blessing and wish for long life and sharing his social status. Children, who compete for the right before the meal to pour water on the hands of guests for washing and then offer a towel,

await *asatu* as a reward and promise of good fortune in life.

At the end of the meal they serve hot broth (*sorpa*) which, according to the elders, contributes to easier digestion of the meat.

The meal, which begins with an invocation, concludes with the ritual *bata беру* (the bestowing of blessings) and *dastarkhan kaiyru* (closure, literally the "return" of the dastarkhan), after which people engage in relaxed conversation and music making.

Any leftover food is taken away and sorted, the onion removed, the dough and meat stored separately. The broth is poured off, the bones cleaned and everything left for the next day. Some people even prefer day-old beshbarmak, when it tastes so good to eat the cold meat with traces of aspic from the broth in its folds along with hot bread. Alternatively, one can cut the cooled and hardened dough into narrow strips, fill it with small pieces of meat, and heat it in a little broth to prepare a special dish, *naryn*, or fry the dough in butter and eat it separately. When diluted with water, the concentrated broth serves as the base for soups called *kespe*, containing freshly rolled out dough which is then wrapped into a roll and cut into narrow strips.

I have always been struck by this endless transformation and reworking of one dish into others. The basic principle is completely waste-free production. Literally everything went into the food. Even the congealed fat removed from the broth was melted and used for frying or in making dough for bread. This fat, like butter, may be stored for a long time in a dried sheep's stomach, from whose walls it is believed some beneficial substances are absorbed which impart medicinal qualities. Then the fat may be used to treat illnesses of the skin and joints.

Just remembering the quantity of cholesterol I consumed in the

past now makes me shudder. But nowhere and never have I seen such strong, healthy and hardy people as I did in my childhood. Anyway, that already is another lifetime...

I have heard tell of special dishes which were prepared only by men when hunting. Along with ordinary meat cooked on a spit over an open fire, my imagination is stirred by so-called *esip*. Elders insist that the size of the stomach of any being equals the volume of its soft tissues. Thus the stomach of captured game would be stuffed with its meat (with salt and wild edible herbs), sewn up, buried in sand and a fire lighted over it. The meat slowly braised literally for hours. The walls of the stomach turned into a solid container, inside of which the aromatic and soft meat stewed in its own gravy. Each time I heard these tales I regretted that I had not been born a boy and thus could not go hunting.

Among the mythological hunting tales connected with food is the story about the great hunts of the past when a giant wild bull was cooked on a spit. It supposedly happened in this way. The various kinds of game were dressed, the heads and extremities removed. Then they began to place one animal inside the other in a specific sequence. First they sewed a pigeon (*kogershin*) into a steppe grouse (*ular*), then the grouse was sewn into a goat (*eshki*) the goat into a wild sheep (*teke*), and the sheep into a bull (*buka*), which had not been skinned. And all this together was roasted slowly all night over the fire, having been hoisted on a truly gargantuan spit. Toward morning, the bull practically was burned to a crisp and came apart like a ceramic dish, its contents being cooked to perfection and ready to eat.

The confused details of this typically male dish — details whose symbolism already has been half forgotten — such as the

selection of animals, their number, the cutting apart of the joints of the animals and birds before the start of the preparation process, and in an even greater degree — the lighting of the fire and the all night vigil until dawn — connect in certain ways with an analogous ritual of preparation of *nauruz kozhe* (a new year's soup) by women in the night of the spring equinox (March 21-22, the Nauruz holiday). Women cook soup all night in a huge hemispherical kettle, rhythmically and without pause tracing the path of the sun in the way they stir it with a paddle (*pispek*) (from the verb *pis* — cook, to be cooked, to stick into, to stir up with a paddle). The paddle is a stick with a cross-piece at the bottom (analogous to the stirring stick used for agitating kumiss). In addition to the heaped up meat, generally they put into this soup five different grains — millet, oats, wheat, rice and corn. However, the selection of ingredients may vary depending on what is available (for example, beans may substitute for corn), and even the inclusion of water and meat in the number of countable ingredients may be optional. Only women of child-bearing age may participate in this ritual. At dawn, they give to the elders the separately cooked head of an ox (who cooks it, where, and how are not clear from the stories), and then all eat *nauruz kozhe*. There is an obvious correlation in the symbolism of these two somewhat parallel ritual dishes, the hunters' and that for nauruz. They both are prepared at night, in both there must be five ingredients. However, the one, for men, is distinguished by the fixed nature of its components, even as the second is marked by their fluidity. Whereas the first is entirely restricted to the closed male society of the hunt, the second involves exclusively women, although in the final reckoning it is in principle open to the whole community.

To tell about meat products may

create the impression that the Kazakhs eat only meat, literally from morning to late at night. Meat is indeed consumed by all members of a Kazakh family, the only exceptions being for pregnant women, who should not eat camel meat or certain parts of a sheep. But in general to characterize the Kazakhs as exclusively meat eaters would be a mistake. Fresh meat is prepared primarily on the occasion of receiving guests; in the daily diet, they rely on grain and milk products.

Unlike with meat, whose basic qualities to a considerable degree are predetermined by natural and seasonal conditions, products made from flour are the main stage on which the cook may demonstrate her talents. There is a wide spectrum of breads and other dishes made from flour, ranging from *kuimak* (a thin *blin*, rather like a French crêpe), cooked on a flat frypan and made of liquid batter mixed from whey and intended for immediate consumption, to flat breads baked on coals in two frypans, which hold between them the sourdough.

Even today the most popular food made with flour is balls of dough fried in boiling oil (to a degree similar to small donuts). The so-called *baursak* or *kyiksha* are not round but cut from rolled out sourdough. Leavening dough with commercial yeast is a rather late invention. Instead, people used as a leavening *ashytky*, the remains of the previously prepared bread. The art of making the initial *ashytky* was kept secret, although it is possible to develop a certain general understanding about the stepwise process of creating such a sourdough starter at home. The first stage is the liquid leavening (*ashytky kamy*) with salt in sour milk; the second stage is the fermentation of this leavening in a warm place; the third, the feeding of the leavening with sugar or honey; the fourth stage is an inelastic dough, mixed with flour until it is about half prepared (but still sticky); the fifth

stage is the addition of flour and the mixing of a soft, non-sticking dough. At that point part of the dough is set aside in a covered container (best of all one made of clay or ceramic) as a reserve, and fat is added to the remainder, after which the dough is formed into loaves. The leavening remains alive for 7-10 days. Generally it is about then that it is time to bake more bread for the family.

The attitude of Kazakh women to the ripening dough is indeed maternal: it is protected from drafts, from sharp drops in temperature, even from unnecessary agitation. It is common to cover the dough with a specially sewn blanket. It is even forbidden to praise the rising dough, so as not to jinx it, etc.

The cult of ancestors, which is strictly observed by Kazakhs, requires regular preparation of *shelpek* or *zheti nan* (seven breads), round, sourdough flat bread fried in fat. (The number of these breads should be a multiple of the magic number seven.) This is to be done on Thursdays, or when one has dreamed about deceased relatives, or in connection with a visit by guests who knew and loved the deceased. It is believed that the spirit of the ancestors (*aruakh*) is fed by the aroma or smoke from the frying of *shelpek*.

The best recipe for *shelpek* is to mix into soft dough one cup of over-ripe, even bubbling, sour cream, which had been left overnight in a warm place, along with a pinch of salt, a sprinkling of sugar and two pinches of soda. The dough made in that way is covered and left in a warm place for an entire day. Then in the evening one must carefully and tenderly knead it and divide it into seven portions, roll out the balls with a large rolling pin and let them rest, then fry them on both sides in a deep frypan filled half way with vegetable oil. It is important to have the fat at the right temperature, which can be

determined by tossing into the oil a bit of flour, which should sizzle but not burn. Fat that is too hot chars the bread and does not allow it time to breathe; insufficiently hot oil begins to absorb into the dough and makes the bread too greasy and heavy. The bread should be enjoyable and light—it is eaten hot, while declaring “*Kaby! bolsyn*” (“May it be accepted!”).

The process of the stepwise transformation of the end product can be seen especially clearly in dairy dishes.

The Kazakhs use milk from all types of animals in varying combinations. Nowadays the majority of milk products derive from cow's milk, since it is the most readily obtainable. Kazakhs observe a single rule for all types of milk: before beginning any preparation, the milk has to be scalded. Otherwise it is considered raw, unripe, and not brought to life by heat. Of course this reflects popular experience, since raw milk may contain harmful bacteria.

The cream is removed from the boiled milk and butter made from it in wooden churns.⁵ At one time the butter was preserved in the stomachs of sheep, in which it not only did not become rancid, but even breathed through the pores of the skin, absorbing healing enzymes from the tissue of the stomach. Over time such butter became as well a healing ointment, which helped in skin diseases and in healing wounds.

In working with milk, the primary task is the gradual elimination of superfluous liquid. Here again we have an obvious process of thickening, concentration, and condensation — the change in the consistency of the end product, achieved by means of fermentation. Sour cream is added to warm milk (the temperature level is easily checked — the hand should feel neither heat nor cold), mixed, and then wrapped in a specially sewn felt cover or woolen scarves and

blankets and left to ferment overnight. It is essential not to let it cool or to shake it. By morning there forms in the pan a product which compares with thick yogurt, which Kazakhs call *katyk*. Its consistency is such that when a spoonful is removed, whey quickly collects in its place. If the *katyk* is passed right away through cheesecloth, the remaining coagulate forms so-called *suzbe*, from which all the acidity has been removed with the whey. This delicacy is a special favorite of children and elders. In order to store *suzbe*, one must suspend it and allow the remaining liquid to drain, then mix it with flour and salt which have been roasted, form it into balls and dry it on the roof of a porch in the sun. The result is *tushy-kurt* — mild cheese, usually rather high in fat content and easily chewable. If *katyk* is stirred, so as to activate the process of fermentation by introducing air, and over the next 10-15 days new *katyk* is added, the result is a different product — so-called *airan*, which one can drink as it is or, if diluted by half with water, make into a drink called *shalap*. When *airan* has been drained, salted, rolled into small balls and dried in the sun, one gets *ashy kurt* — salty sour cheese, which then is broken into pieces and will keep as long as one wishes. *Kurt* which has been broken up may be added to broth, which, in addition to sourness, acquires healing qualities and thus is used to treat head colds. (Since it makes one sweat, the broth made from *kurt* eliminates coughing and fever.) *Airan* also is diluted with sheep's milk, which thickens in this mixture (two kinds of milk) and adds lightness as if of beaten eggwhites, the resulting dish known as *akta*.

Even the whey which remains after straining, rich in proteins and minerals, is not thrown away. When boiled down to dryness in a cauldron, it forms an orange-colored grainy mass, *irimshik*, which when mixed with melted

butter creates a new delicacy — *kospa*. (The more delicate *irimshik* is obtained from fermenting of steamed milk in a calve's stomach and by subsequently boiling it down, although this technique is already becoming a thing of the past.)

Yet one more dairy dish, which is especially appreciated in the hot summer, is a broth called *kozhe* — a drink fermented from *airan* and boiled grain. There several varieties of summer broths, which differ depending on the kind of grain: *tary kozhe* — millet; *bidai kozhe* — wheat; *zhugeri kozhe* — corn; *arpa kozhe* — oat. These cold soups even compete with what the Kazakhs consider to be the royal drinks — *kymys* (mare's milk) and *shubat* (camel milk). Well, maybe not quite...they are so highly rated only if kumiss and shubat should not be available.

Starting even as long ago as Herodotus, much has been written about fermented mare's milk being an inseparable part of nomadic culture. Here I would note though two characteristics of kumiss which are not generally known. First of all, it is a tried and true means of treating tuberculosis. Even today there are special kumiss treatment clinics, like sanatoria, in the Kazakh city of Borovoe (Burabai) in Kokchetau district and also in Bashkiria. A second quality of kumiss is that it is an aphrodisiac and remedy for impotence and nervous disorders. Such giants of Russian culture as Lev Tolstoi and Sergei Rachmaninov in their day underwent successful treatment with Bashkir kumiss.

There are certain misunderstandings generally connected with the neophyte's first attempt to join the clan of kumiss enthusiasts. Its taste is unusual and unexpected for the taste buds, which anticipate the somewhat sweet delicacy of something like milk. It would be a better approach to expect a taste which is reminiscent of beer,

whose varieties are indeed infinite. So it is with kumiss, which varies, for example, with the season — summer, autumn and winter — and with the length of fermentation — young, one-day (*sauma*), two day, i.e., already ripe and somewhat intoxicating (*tunemel*), and finally, aged — truly intoxicating (*ushkundik*). When first trying kumiss — this is advice for kumiss neophytes — one should start with small portions and not on an empty stomach, in order not to upset the digestion.

One of the secrets of good kumiss is careful stirring. In the days when kumiss had a special place in a traditional yurt, a high leather bag of kumiss with a paddle (*pispek*) in it usually stood to the right of the entrance on a wooden platform. Each person entering the yurt and passing by it was expected to stir the kumiss with this paddle. When kumiss was poured, it was done in a steady stream using a special ladle and raising it high to allow the stream of kumiss to fall freely, absorb oxygen and foam.

Shubat (fermented camel milk) is lighter, softer and has a higher fat content than kumiss. This drink is not so alcoholic and is very nutritious. *Shubat* is especially valuable for exhaustion and stomach or intestinal problems as well as for diabetes. When fermenting, camel milk does not become more concentrated or solidify, but retains a naturally thick, almost velvety uniformity. If one boils this milk, it begins to curdle and the resulting mass, which is sweet and light, becomes a special dish, *balkaimak* ("honey cream").

Natural kumiss and shubat are practically unobtainable outside the areas where they traditionally were produced, just as the majority of Kazakh dairy dishes cannot be prepared other than on the Kazakh steppe. The apparent explanation is the odd fact that the whole milk with which one begins

contains from its inception substances which allow it to remain unaltered — according to the Kazakh culinary understanding, it does not age quickly — despite the fact that in fresh milk quite naturally every day and hour there are living processes at work. I remember well how Kazakh elders greeted with skepticism the first refrigerators and freezers. Although they had such great economic benefits, at the same time, as was believed in the villages, they forced food products in a somewhat bewildered fashion to freeze in strange, uncomfortable and unnatural poses. It was as though they were seized suddenly and unexpectedly by freezing and forcibly detained...

In considering the current stage of the development of Kazakh food, I can appreciate more clearly how far the cuisine of the nomads has departed from its traditional sources. Possibly just as far as the nomads themselves have moved... Instead of *interaction* with food — interaction which is very like basic human stages of development such as recognition, attachment, touching, conception, birth, growth, transformation, disappearance and resurrection — there is the consumption of pre-prepared foods, prepared by strangers. That is, it is consumption of products which a person obtains without observing and even knowing the processes of their preparation. Modern cuisine has become impersonal and part of the inexorable stream of mass industry and culture. Food (*tamak, as*) for oneself, one's family and one's guests has been transformed into a product (*azyktulik, produktlary!*), identical for each and every person.

There are, however, housewives who try to preserve, if not traditional food in all its richness and original form, in practice impossible, then at least some components of it along with the procedures for their preparation at home. Among these still popular

homemade dishes are, for example, pilaf, *beshbarmak*, *shelpek* and *boursak*.

One of the dishes which has been part of the required repertoire of my family cuisine and which accompanies me from city to city, from country to country and from continent to continent is dairy *suzbe*, analogous to the American farmers' cheese "Friendship." The variant of the recipe adapted to American ingredients is remarkably simple. Pour into a heavy saucepan⁶ three one-liter cartons (three quarts) of Bulgarian cultured buttermilk, place it in the evening in a cold oven, turn on the heat set at 350 degrees (F), and cook for exactly one hour. Then remove and cool; let it rest and settle until morning. In the morning, holding the mass which has formed with the hand, carefully pour off the whey (which can be used for preparing bread or bliny or for cosmetic purposes) and serve — the *suzbe* is ready! Lovers of more solid *suzbe* can drain the mass using cheesecloth. At this stage of preparation, *suzbe* is an ideal breakfast. One can add to it, according to taste, sour cream or yogurt, jam or dried fruit (fresh raisins are especially good), an apple or a banana. If one strains it further, one obtains a new and quickly prepared dish. For this one needs half a pound of *suzbe*, one egg, one tablespoon of sugar and one tablespoon of flour. Mix it all together, and make seven balls from the mixture, dredge them in flour, gently pat them with the hand and fry in vegetable oil on both sides until a golden crust forms — thus one gets *syrniki* (*irimshik salyp pisirgen nan*) or cheese fritters. They are very good served with sour cream, preserves or honey. From the same *suzbe*, yet further squeezed and drained, one can even prepare homemade *kurt*. For this one needs to mix with the *suzbe*, which has been squeezed dry, two tablespoons of dry roasted flour, two tablespoons of melted butter, half a teaspoon of

salt. Shape the resulting mass into elongated "sausages" (as always, making seven of them), and let them dry in the sun while covered with cheesecloth. That's all there is to making *kurt*. (Incidentally, Kazakh children like *kurt* just as much as modern city kids like chewing gum.)

Probably the most productive time for traditional Kazakh cuisine, as I recall, was the period of the 1970s and beginning of the 1980s, when new dishes appeared, along with the relative abundance of ingredients and access to new technology such as gas stoves, ovens and refrigerators. In the process of enriching and varying the Kazakh table, of course a role was played by the interaction of Kazakhs with the foods of a good many other peoples of Central Asia. It was then that *manty* (Chinese dumplings) became a regular feature of Kazakh food, as did (Dungan noodles from stretched dough), Siberian *pelmeni*, Russo-Ukrainian *borshch* with beets, and also a variety of canned preserves (marinated and salted tomatoes, cucumbers, apples, cabbage, mushrooms), and piquant Korean marinades which still fill several aisles in the city market of Almaty. The abundance of rice grown in the Kazakh south, especially in Kyzylorda, has made pilaf, especially, almost daily fare for the Kazakh family.

Kazakh pilaf is very simple to prepare. It contains five basic ingredients: rendered fat, mutton, onion, carrots and well washed rice, over which is poured boiling water. Salt and pepper to taste. Preparation time is an hour and a half: 20 minutes to clean and slice the vegetables, 30 minutes to braise the meat (the meat is braised separately for 10 minutes, with the onion for another 10 minutes, and then another 10 minutes with the carrots). After adding the rice and water (to a level of one finger's width above the rice), cook for another 40 minutes. All in all, just 90

minutes. Pilaf is cooked tightly covered. All other details are left to creativity and experience.

Let me share a few little secrets: 1. Pilaf will be tastier if one adds apart from the meat itself a few lamb ribs (the bones intensify the flavor); 2. one should braise the meat before boiling off the excess moisture; 3. it is better to salt the meat the night before using it; 4. twenty minutes after adding the boiling water to the rice, use a flat spoon to shape the rice into the center of the pot like the dome of a yurt and with the handle create an opening in the center going right down to the bottom — rather like the smoke hole in a yurt — in order that the rice can breathe; 5. when the plates have been laid and the family called to the table, with the burner turned off, cover the pilaf with a clean towel and then once again the pot lid in order to allow the pilaf to rest. The towel absorbs excess moisture. In five to ten minutes remove the lid and the towel, carefully mix the lower layers of meat with the rice, and serve.

Yet one more opportunity for creativity is to add herbs (barberry, cumin, peas, nuts, raisins), but here we already are returning to the more refined pilaf of the Uzbek neighbor, who so generously received that apocryphal Kazakh of the anecdote with which we began our journey into the world of Kazakh cuisine...

It goes without saying, that in contemporary conditions, especially abroad — for example, in the U.S. — the demanding traditional cook will complain that the mutton is not the same, the rice is not the same, the water is chlorinated, etc. However, these excuses are not important for the true master of traditional pilaf; rather, what is important is the pot in which pilaf should be prepared. We are talking here of the *kazan*, the heavy metal cauldron with a hemispherical bottom. That

shape, as is the case with the Chinese wok, allows the flame of the campfire (or gas burner) to heat the cauldron equally, and the thickness of the wall retains the temperature well. The closest result can be obtained by the use of a Dutch oven. However, we admit that Kazakh students in their dormitories today prepare pilaf in pots and in deep frypans.

Kazakh pilaf varies, and only when all are taken into account can one form a kind of idealized image of what it should be. To a greater or lesser degree then any given version is a reasonable approximation. The same can be said about any kind of popular creation: for example, the ideal form of a song is composed of the totality of all its variants, and it is precisely this fact which makes one want to listen to it again and again...

The *kazan* is the ideal vessel for preparing yet another popular dish today, *dymlama*. In conclusion, let me share the recipe.

Dymlama is meat braised with root vegetables. Cut the meat (lamb or beef) into large chunks, quickly sear it in fat, add onion, salt, pepper (or other herbs) and then add layers of various root vegetables (lightly salted), sliced to the size of a hen's egg. This is best done in the following sequence, from the heavier and firmer to the lighter and softer: carrot, potato, rutabaga (or turnip), beets, eggplant (in its skin), green cabbage cut into wedges including the core, and then at the top tomatoes, split in half, and bunches of parsley and dill (which will be discarded when the dish is done). Do not add even a drop of water! Cover tightly with a lid and braise one and a half to two or even two and a half hours over low heat. Do not open the lid, and do not stir the contents. When the dish is done, the meat is completely tender and has absorbed all the juices, and each vegetable retains its shape, color and taste. There is not much

gravy, but it is exceptionally tasty. As far as quantities go, one should use approximately the same weight of each ingredient. The choice of vegetables may vary with the season. The best time is autumn when the vegetables have just been dug out.

Of course it is good to have recipes already at hand, and the more the better, since that way there is a choice. Yet I believe that if the marvellous recipes of the cuisine of our sedentarized Central Asian relatives should with time become part of world cuisine, that in no way would diminish the culinary creativity rooted in the centuries old life experience of the nomads. At very least I would hope that not only the perfect final product, but the very process of the interaction amongst food, people, and society at large will not be ignored by those who today take an interest in our experience. Then it will become clear that along with the effort to have an always perfect, easily repeated and reliably guaranteed dish which will be completely satisfying, there is another pleasure, that of unpredictability and experimentation. There is an impressionistic subtlety of detail and a minimal amount of reflection in the infinite variations of one and almost the same dish created without a recipe. Its essence is to create human warmth and even the soul. Thus the culinary arts become elevated to mythological stature

as the creation of the world. That is, we are talking here about food as the embodiment of the organizing principle of the world, like the above-mentioned kumiss paddle, which turkic cultures consider to be in the category of the world tree. It is no accident that the process of preparing kumiss is sometimes compared metaphorically with a shamanistic act.

Underlying traditional food culture is the entire traditional culture of a people. It is not only a culture of food, but food itself is culture.

About the author

Educated in Almaty, Moscow and St. Petersburg, **Alma Kunanbaeva** is a Visiting Professor at Stanford University's Department of Cultural and Social Anthropology, where she teaches courses on the culture of Central Asian nomads. She has written the principal entries on Kazakh traditional music for the *New Grove's Dictionary of Music and Musicians* and the *Garland Encyclopedia of World Music*, published a book, *The Soul of Kazakhstan*, and been involved in a broad range of educational programs, among them ones sponsored by the Aga Khan Trust for Culture. She is also President of Silk Road House in Berkeley, a pioneering non-profit cultural and educational center supported by the Silkroad Foundation.

Notes

1. This article was translated from Russian by Daniel C. Waugh.
2. Incidentally, I never once heard this story from Uzbeks, and when I told it I sensed their bewilderment and embarrassment.
3. The Kazakhs themselves call this dish *et* (meat), and *beshbarmak* (five fingers) is a later Russian borrowing, derived from the fact that a dish should have a name which distinguishes it from the ingredients.
4. In a similar fashion childless parents adopt orphans as their sons or daughters.
5. The second half of the 20th century saw the introduction of its innovations in the churning of butter at home. Hence the unique Kazakh popular method of churning butter in first-generation vertical washing machines with an agitator on the bottom. This has no effect on the quality of the butter, which, when collected, is well rinsed and then, as a rule, lightly salted.
6. I bought mine for 25 cents at a flea market in Berkeley. It is an aluminum pressure cooker without a lid and missing its handle.