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The Xiongnu

Hyun Jin Kim

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Summary and Keywords

The Xiongnu were an Inner Asian people who formed an empire, a state entity encompassing a multiethnic, multicultural, and polyglot population. The ruling elite of this empire were, for the most part, pastoralists. However, the empire also possessed a substantial agrarian base. In the late 3rd and early 2nd centuries BCE, the Xiongnu created the first empire to unify much of Inner Asia. The Xiongnu Empire stretched from Manchuria in the east to the Aral Sea in the west, from the Baikal region in the north to the Ordos and Gansu regions of China in the south.

In the 2nd century BCE, the Xiongnu also subjected the Han Empire of China to tribute payments. However, late in that century, the Han broke the *heqin* policy of engagement with the Xiongnu and began a long struggle for supremacy with its northern foe. Political instability arising from protracted struggles over the imperial succession gradually undermined the Xiongnu Empire. In the middle of the first century CE, the state splintered into two halves: the Northern Xiongnu and the Southern Xiongnu. The Southern Xiongnu later conquered Northern China in the early 4th century CE, while the remnants of the Northern Xiongnu became the political and cultural forebears of the later Huns of western Eurasia.

Keywords: Inner Asia, Xiongnu, Huns, steppes, Han Empire, agro-pastoralism

The Xiongnu Empire (匈奴) was a long-lasting Inner Asian state (or proto-state) entity that flourished between the 3rd century BCE and the 2nd century CE. At its height, the Xiongnu Empire stretched from the forests of Manchuria in the east to the territory of the Kangju (southern Kazakhstan and northern Uzbekistan) in the west, from the Baikal region (southern Siberia) in the north to the Ordos and Gansu regions of northern China in the south. The Xiongnu have often been defined as a “nomadic” confederacy, and their state has also been viewed as essentially a complex chiefdom with the dimensions of an empire, but without the requisite administrative and organizational capacity. As will be

demonstrated, the Xiongnu were neither a “nomadic” society nor simply a primitive steppe chiefdom.

The Nature of the Xiongnu State

What is known about the Xiongnu and their history derives primarily from information preserved in a few select Chinese historical sources, including the *Yantielun*, a record left by a Western Han dynasty official named Huan Kuan on the 1st century BCE discourses/debates in the imperial court regarding the controversial state monopolies of salt and iron. These debates highlight the impact of the Xiongnu on the Han imperial economy. State monopolies were introduced by Emperor Wu prior to these debates primarily to finance his expensive wars against the Xiongnu). Another source is the *Shiji*, the historical records of the Grand Historian Sima Qian from the early 1st century BCE that contain a chapter devoted to the Xiongnu, the Xiongnu *liezhuan* (book 110 of the *Shiji*), which is by far the most important primary source on the Xiongnu. A third is the *Hanshu*, by the Eastern Han historian Ban Gu and other members of his family from the 1st century CE; it is essentially an expanded and supplemented record of the material on the Western Han found in the *Shiji* (volume 94 deals specifically with the Xiongnu). Finally, the *Hou Hanshu*, compiled by Fan Ye and others during the 5th century CE, records the history of the Eastern Han and contains valuable information about the later history of the Xiongnu).

These sources in general treat the Xiongnu not as the main subject matter but as a side note to the history of the Chinese empire. What must also be noted is the fact that “Xiongnu” (the imperial Xiongnu in particular) described in these sources does not primarily denote an ethnic or racial category, but rather a political community that comprised numerous ethno-linguistic groups.

The detailed but still limited information from these written sources has recently been augmented significantly by substantial progress made in the field of Xiongnu archaeology. With regard to the preimperial Xiongnu in Inner Mongolia (primarily the Ordos region), excavations at sites such as Maoqinggou in Liangcheng county,[1] Yulongtai, and Taohongbala[2] (which have been classified as containing Xiongnu remains) have yielded weapons, ornamental plaques, and equestrian items that show the existence among the early Xiongnu of a “nomadic” or, rather, equestrian militarized elite.[3] Farther north, four Xiongnu cemeteries (primarily from the imperial period)—Ivolga,[4] Dyrestui, Burkhan Tolgoi, and Daodunzi—have now been fully excavated, and thousands of other Xiongnu-period tombs have been recorded in Transbaikalia and Mongolia (the geographical center of the Xiongnu Empire). The combination of this archaeological data with the aforementioned information from written sources has veritably revolutionized our understanding of Xiongnu culture, the political organization of the Xiongnu imperial state, and its state economy.

What the archaeological evidence definitively shows is that the Xiongnu were not "nomads" who wandered about without a clear sense of belonging to a fixed territory but, rather, as Ursula Brosseder and Bryan Miller point out, a highly complex empire that "encompassed vast territories and varied regions."[5] The main power base of the dominant ruling elite of this empire (centered as it was on the steppe zone and Mongolia) was steppe pastoralists, who were closely affiliated with the ruling dynasty and the upper aristocracy. However, pastoralism was only one aspect of the Xiongnu imperial economy, which, the archaeology shows, was much more diverse.

Agriculture certainly played a significant role. The Ivolga complex near Ulan Ude in modern Buryatia, for instance, shows clear signs of agriculture and fortifications.[6] Deep within Xiongnu territory, even in areas where pastoralism rather than agriculture was the norm, there were walled enclosures that have yielded agricultural tools. Up to twenty fortified settlements have so far been documented, and in these settlements there were permanent buildings of various types.[7] Evidence of active trade with wider Eurasia is also found in grave goods. They include Chinese metal and lacquer vessels and textiles from the south, as well as items that originated in West Asia via the Greco-Bactrian areas in Central Asia.[8] What is becoming increasingly evident is that the Xiongnu were hardly a simple, homogeneous, tribal or even cultural group. Instead, all of the available evidence points to a multiethnic and multicultural society with a diversified agro-pastoralist economy.[9]

The Xiongnu were also likely to have been polyglot. The Xiongnu Empire encompassed virtually every ethnic and linguistic group in Inner Asia. These included the Mongolic-speaking Donghu people to the east and the Indo-European-speaking Yuezhi people to the west. There was also a large population of Turkic and Iranian language speakers within the Xiongnu Empire. The Chinese source *Jinshu* (95.2486), compiled in the 7th century CE, gives us an extremely rare transliteration of what purports to be a Xiongnu song sung during a battle between two Southern Xiongnu factions in the early 4th century CE. Linguistic analysis conducted on this transliteration has shown that the song was composed in a language most likely related to Yeniseian languages (which currently survive only in small pockets in central Siberia). Edwin Pulleyblank and Alexander Vovin, on the basis of this analysis, have argued that the Xiongnu, therefore, must have had a Yeniseian-speaking core elite[10] who dominated the various Tocharian-Iranian and Turco-Mongol subject nations. However, the song recorded in the *Jinshu* is sung by the Jie tribe of the wider Southern Xiongnu confederation, and whether or not the Jie tribe and the language they spoke are representative of the core ruling elite of the Xiongnu Empire remains highly uncertain. Other scholars have argued in favor of a Turkic,[11] Mongolic, or even Iranian ruling elite.

The European Huns, who originated from the Xiongnu Empire, are known to have spoken primarily a Turkic language, more specifically Oghuric Turkic.[12] However, this may be due to the heavy concentration of Turkic peoples in the areas that the Huns inhabited immediately before their major expansions into Europe and Central Asia. The Chinese historical source, the *Weilue* (=*Sanguozhi* 30.863-4), confirms that the Dingling (an

ancient Turkic people) were the main inhabitants of what is now the Kazakh steppes by the 3rd century CE. There is thus no scholarly consensus on the language that was spoken by the Xiongnu elite, and the whole debate may well be futile given the multifaceted identity of that elite and the multilingual empire they governed.

A more substantive debate is the dispute among scholars over whether the Xiongnu constituted a state or merely a complex tribal confederacy.[13] The assumption that "nomadism" is somehow an insurmountable barrier to organized statehood has no doubt influenced this debate. However, as mentioned previously, the Xiongnu were not "nomads." Significant elements of the Xiongnu population were indeed pastoralists, but pastoralism in ancient Inner Asia by no means implied a lack of fixed boundaries or limited organizational capacity. Exactly the opposite was the case, since the existence of well-defined territories and regular movements under an authoritative leader was essential for the survival of a pastoralist community in a very fragile ecological environment.[14] Therefore, the idea that nomadism or pastoralism necessarily leads to political anarchy must first be dismissed as unfounded.

Nikolay Kradin, who thinks that the Xiongnu did not constitute a state, argues that a state must possess the following features:

(1) access to managerial positions by a form of merit-based, extra-clan and non-kin-based selection
(2) regular taxation to pay wages to officials
(3) a special judicial power separate from political power
(4) a "class" of state functionaries engaged in running the state machinery, consisting of services for the administration of the whole political community.

It has been argued that this definition of the state is far too modernist and not nearly as relevant to, or appropriate in, defining pre-early-modern states like the Xiongnu. Kradin, however, argues that on the basis of these criteria, the Xiongnu achieved "statehood," at best, merely at an "embryonic" level, and therefore should be categorized not as a state but as a super-complex chiefdom, a stateless empire.[15]

On the other hand, Lawrence Krader, who argues that all steppe empires of Eurasia were actually state-level polities, provides a much looser definition of the state than does Kradin,[16] while Nicola Di Cosmo points out that the Xiongnu Empire, even by Kradin's own criteria, was much more similar to a well-organized state than to a haphazardly constructed chiefdom. Di Cosmo's observations are likely to be correct. As will be demonstrated, Xiongnu administration possessed distinct military and civilian apparatuses separate from kin-based hierarchies. Wages (in various forms) were paid to top military commanders and state functionaries from a political center headed by the Xiongnu *Chanyu* (emperor, also sometimes transliterated as *Shanyu*). The ceremonies and rituals conducted by the Xiongnu emperor were also meant to include the entire political community, not just his kin group. The complexity of the organization of the Xiongnu military, the grand imperial rituals, elaborate government structures, and politically

centralized functions of trade and diplomacy all collectively point to what Di Cosmo calls a political machinery and supratribal, imperial ideology.[17]

Therefore, the Xiongnu should be defined as comprising a state or, at the very least, an "early state" entity[18] and also, without any dispute, as an empire: "a political formation that extended far beyond its original territorial or ethnic confines and embraced, by direct conquest or by the imposition of its political authority, a variety of peoples and lands that may have had different types of relations with the imperial center, constituted by an imperial clan and by its charismatic leader."[19]

Political Organization of the Xiongnu

One of our principal sources on the Xiongnu, the *Shiji*, written by the Western Han dynasty historian Sima Qian, provides an elaborate picture of the Xiongnu political system. Sima Qian reports that a complex hierarchy existed among the Xiongnu, descending from an emperor (called Chanyu/Shanyu 單于, but likely to have been pronounced dàn-wà, representing the Xiongnu word *darɣwa* in Early Middle Chinese)[20] to lesser kings and sub-kings. For want of a better term the system has been called "quasi-feudal."[21] Sima Qian reports:

> Under the *Shan-yü*[22] are the Wise Kings of the Left and Right, the left and right Lu-li kings, left and right generals, left and right commandants, left and right household administrators, and left and right Ku-tu marquises. The Hsiung-nu word for "wise" is "t'u-ch'i," so that the heir of the *Shan-yü* is customarily called the "T'u-ch'i King of the Left." Among the other leaders, from the wise kings on down to the household administrators, the more important ones command ten thousand horsemen and the lesser ones several thousand, numbering twenty-four leaders in all, though all are known by the title "Ten Thousand Horsemen." The high ministerial offices are hereditary, being filled from generation to generation by the members of the Hu-yen and Lan families, and in more recent times by the Hsü-pu family. These three families constitute the aristocracy of the nation. The kings and other leaders of the left live in the eastern sector, the region from Shang-ku east to the land of the Hui-mo and the Ch'ao-hsien peoples. The kings and leaders of the right live in the west, the area from Shang province west to the territories of the Yüeh-chi and Ch'iang tribes. The *Shan-yü* has his court in the region of Tai and Yün-chung. Each group has its own area, within which it moves about from place to place looking for water and pasture. The Left and Right Wise Kings and the Lu-li kings are the most powerful, while the Ku-tu marquises assist the *Shan-yü* in the administration of the nation. Each of the twenty-four leaders in turn appoints his own "chiefs of a thousand," "chiefs of a hundred," and "chiefs of ten," as well as

> his subordinate kings, prime ministers, chief commandants, household administrators, *chü-ch'ü* officials and so forth. (*Shiji* 110: 9b–10b)[23]

This information in the *Shiji*, though brief, gives us some critical details about the Xiongnu political system. The Chanyu, who was the functioning head of the central government, possessed the supreme power in the state. However, the actual administration of the empire seems to have been managed by the Gu-du/Ku-tu marquises. These state officials supervised communications with regional governors and vassal lords on behalf of the reigning emperor.

Under the direction of the central government, there were four principal, regional governorships in the East and West. These were called the "horns," and they consisted of the Worthy King of the Left and the Luli King of the Left in the East and the Worthy King of the Right and the Luli King of the Right in the West. Each of these four governorships, like the central government, had its own government bureaucracy.[24] The "kings," who headed these governorships, were the highest-ranking nobles in the realm and were usually the sons or brothers of the reigning Xiongnu Chanyu. They all belonged to the Xulianti/Luanti imperial clan, which descended from the early Chanyus Touman and Modu. The other three aristocratic clans that were linked via family/marriage ties to the Chanyu were the Huyan, Lan, and Xubu. Together these clans constituted the ruling upper class of Xiongnu society.[25]

The later *Hou Hanshu* adds some more details to the information found in the *Shiji*. Below the four horn kings were six more kings: the Rizhu kings of the Left and Right (titles originally reserved for the sons and younger brothers of the Chanyu [*Hou Hanshu* 79.2944]), but later, for some reason, transferred to the aristocratic Huyan clan, which was related to the royal family by marriage; Wenyuti kings of the Left and Right; and the Zhanjiang Kings of the Left and Right. It has been argued that these six lesser kings were later added to the Xiongnu hierarchy after the Xiongnu had splintered into two separate entities, the Northern Xiongnu and Southern Xiongnu in the 1st century CE; that is, this was a political innovation introduced long after the time of the writing of the *Shiji* by Sima Qian.[26] However, it may also simply be that the Han Chinese, by the time of the Later Han, had acquired a more accurate understanding of the Xiongnu political system and improved on the original description of Xiongnu political organization left in the *Shiji* by Sima Qian.[27]

Below these ten top-ranking nobles (or perhaps including these ten) were the twenty-four imperial leaders/ministers (each with the title Ten Thousand Horsemen). These lords were the imperial governors of the strategically key and most important provinces of the Xiongnu Empire. Again, many of them consisted of the close relatives of the Chanyu or were members of the Xiongnu aristocracy who were related to the royal house by marriage.[28] These senior nobles were divided into eastern and western groups in a dual system,[29] and the designated heir to the throne was invested with the title Wise King of the Left, as the titular ruler of the eastern half of the empire.

At the bottom of this highly elaborate administrative hierarchy was a large group of subordinate, or vassal, tribal leaders. They are called in the *Shiji* subkings, prime ministers, chief commandants, household administrators, *chü-ch'ü* officials, and so on. These lower-ranked officials were controlled by the twenty-four imperial governors, but some of them at times enjoyed a considerable level of local autonomy.[30] These were usually former rulers of conquered peoples who had been allowed to remain as subkings/chiefs under the overlordship of Xiongnu overkings.

With regard to the government of the more distant western parts of their territory, the Xiongnu created the office of the "Commandant in charge of Slaves."[31] These "commandants" apparently had the power to tax minor city–states, such as Karashar and Kalmagan (in what is now Xinjiang province in western China) and to conscript corvée labor for the Xiongnu central government. A system of decimal ranks (thousands, hundreds, tens, etc.) was used in times of war in order to assemble and regulate large-scale armies conscripted from different parts of the empire under a single command structure.[32] A census was also taken to determine the empire's reserve of manpower and livestock.[33] In war, the Chanyu of the Xiongnu could reportedly mobilize an army of 140,000 men.[34]

It has been argued that at least some of these elaborate Xiongnu administrative practices were influenced by the practices of the neighboring Chinese. For instance, the complex Xiongnu hierarchy of kings and marquises (the highest ranks of which were reserved almost exclusively for members of the royal clan and the lesser ranks for leaders of other leading clans that intermarried with the royal clan)[35] is quite similar to the manner in which kingdoms and marquisates within the Han imperial system were distributed. Also noteworthy is the fact that in the Xiongnu Empire the left, that is, the East, had precedence over the right/West. Some have argued that this may reflect the influence of Chinese ideas that identified the left (East) with the *yang* (as in *yinyang*) forces of generation and growth. The use of colors as symbolism for territory—blue for east, white for west, black for north, and red for south—also seems to correspond to the symbolism of Chinese cosmology (*Wuxing*, five elements theory).[36] However, the possibility of Chinese influence on the Xiongnu is rejected by other scholars who argue that the resemblances or similarities between Xiongnu and Chinese administrative and cultural practices are the result of numerous shared sets of associations that probably go back to a more ancient cultural stratum.[37] What is not at all in dispute is the fact that the political organization of the Xiongnu provided an excellent model on which all subsequent aspiring states in Inner Asia built their state administrations.[38]

Political History of the Xiongnu

How did the Xiongnu Empire come into being? Thomas Barfield has famously argued that the first steppe empire to unite Inner Asia came into existence as a “nomadic” reaction to, and imitation of, the unification of their sedentary neighbors in China under the Qin dynasty. Thus, according to this theory, the empire of the Xiongnu was formed firstly as a means of resisting Qin encroachment, as a kind of “shadow” empire, and then maintained primarily via the efficient exploitation through military aggression of the abundant material wealth of the unified, sedentary empire of China (tribute received from the Han was distributed to nobles and vassals, thereby ensuring regime stability and magnifying the prestige of the ruling dynasty in the steppes).[39]

Barfield’s perhaps excessive focus on the influence of sedentary states on state formation in the steppes, as well as the presumption of wholesale dependence of steppe empires on China to survive, have been sharply criticized by Nicola Di Cosmo and Christopher Beckwith.[40] The counterargument that they present is increasingly gaining support because of the growing awareness in scholarship that the so-called nomadic empires of Inner Asia, as pointed out earlier, were by no means “nomadic,” but always possessed a sedentary, agrarian element. Although the frontier zone between China and the steppes, that is, the Ordos region, is still regarded by some scholars to have been the key to the formation process of the Xiongnu Empire,[41] scholarship now tends to view the phenomenon of this empire as largely the product of internal dynamics of the steppe zone.[42]

What is not in doubt among historians is the fact that the empire of the Xiongnu was born in the midst of crisis.[43] The Xiongnu were expelled from their homeland in the Ordos region by the first emperor of China, Qin Shi Huangdi, in the late 3rd century BCE. This military reverse led to the reconfiguration of the Xiongnu polity farther north in the steppe zone of Mongolia. There, under the dynamic leadership of Modu Chanyu (reigned 209–174 BCE, who seized the Xiongnu throne via a coup in which he assassinated his father the Chanyu Touman [*Shiji* 110.2888]), the Xiongnu rapidly defeated steppe-zone rivals, the Donghu and the Yuezhi, and became a fully fledged imperial state encompassing much of Inner Asia. The *Shiji* reports further that “Later [Modu] in the north subjugated the states of the Hunyu 渾庾, Quyi 屈射, Dingling 丁零, Likun 鬲昆, and Xinli 薪黎 (*Shiji* 110.2893)”.[44]

Modu then inflicted a humiliating defeat on the nascent Han Empire in 200 BCE at the battle of Ping Cheng, where he surrounded the main Han army commanded by the Chinese emperor Gaozu in person and forced him to buy his freedom by agreeing to terms that essentially reduced the Han to the status of tributary state in relation to the Xiongnu. And thus began the so-called *heqin* phase of Xiongnu–Han relations, whereby the Han bought peace from the Xiongnu via an annual tribute and the surrender of a Han princess as wife to the Xiongnu Chanyu.[45] When Gaozu died Modu, added insult to injury by sending an irreverent letter to the empress dowager of the Han, suggesting that she

become one of his wives. The empress, unable to challenge the Xiongnu militarily, sent a self-deprecating letter to Modu asking for the Chanyu's indulgence, explaining to him that she was unfit to be his wife because of old age and deteriorating physical condition. She then reminded the great Chanyu that her country had done nothing wrong and begged the Xiongnu emperor to spare it (*Hanshu*, 94A: 5a).

The empress dowager had good reasons to be afraid. Modu followed up his success against the Han with yet another decisive victory over the Yuezhi and the annexation to the Xiongnu Empire of the vast Tarim basin (modern Xinjiang). A total of twenty-six nations to the west of China, including the powerful Wusun nation in modern eastern Kazakhstan, were subjected to the Xiongnu. Under Laoshang, Modu's heir, the Xiongnu crushed the Yuezhi once again in 162 BCE and turned the skull of the defeated Yuezhi king into a drinking cup (*Shiji* 123.3162). Han Wendi (reigned 180–157 BCE) increased the tribute that was paid to the Xiongnu to 1,000 pieces of gold a year to placate his northern rival (*Hanshu*, 94B:12b).

This appeasement, or heqin policy, however, was ended by the more militant Emperor Wu (the "martial" emperor). The story of how Emperor Wu precipitated a war between China and the Xiongnu is told in great detail by Sima Qian. In 134 BCE, the Chinese attempted to trap Gunchen Chanyu (the grandson of Modu) and the Xiongnu army in an ambush. The plot failed, but just five years later in 129 BCE, full-scale war erupted between the two empires and would continue on and off until the final dissolution of the Xiongnu Empire more than two hundred years later in the late 1st century CE. Fortune initially favored the Han, as the death of Gunchen Chanyu in 126 BCE during the early stages of the war between the Xiongnu and Han China precipitated the first serious succession crisis among the Xiongnu since the accession of Modu Chanyu. This internal struggle severely hampered Xiongnu efforts to counter the military challenge from the Han, and furthermore compromised the loyalty of Xiongnu vassals. Defections of key subkings to the Han deprived the Xiongnu of control over the Gansu region, and Han armies also pushed the Xiongnu out of the Ordos. By 60 BCE, after more than six decades of war with China, the Xiongnu lost control over the Tarim basin and faced massive rebellions among their subject peoples: the Wusun, Wuhuan, and Dingling.[46]

All these reverses were due partly to a chronic leadership crisis in the Xiongnu state. Between 114 and 58 BCE, the Xiongnu enthroned no fewer than eight short-lived Chanyus. Of these ephemeral emperors, only two lasted for more than ten years. Factional conflict at the imperial court, sometimes exacerbated by growing regional power struggles, seriously undermined the ability of the Xiongnu central government to suppress internal uprisings and resist Han encroachment. By 57 BCE, the struggle over the imperial throne had reached a crisis point, producing no fewer than five regional contenders. In 54 BCE, the field was narrowed to two contestants, Zhizhi in the north and Huhanye in the south, but Huhanye, in order to eliminate his northern rival, allied with the Han and offered to reverse the tributary relations that had existed earlier between the Han and Xiongnu. Huhanye became a vassal of the Han Empire[47] and received

subsidies and military support with which to defeat Zhizhi. By 36 BCE, Huhanye, with Han support, was master of the whole of the Xiongnu realm, but his was a much weakened and reduced empire.

The Xiongnu, however, gradually rebuilt their military power, and while the Han dynasty descended into civil war due to the usurpation of Wang Mang, the Xiongnu used the breathing space to crush rebellious vassals, such as the Wuhuan in the east, and reconquer lost territories in the west, most notably the Tarim basin. The resurgent Xiongnu then demanded that the tributary relationship between the Han and Xiongnu again be reversed, with the Chanyu assuming the position of overlord of the Han Chinese emperor.

Yet another succession dispute, however, halted the revival of Xiongnu power. In 46 CE, Punu Chanyu was crowned by the Xiongnu in the north, but in the south, eight disaffected tribes and their nobility proclaimed another pretender, Bi, as their Chanyu. In 50 CE, Bi sent his son to Luoyang, offering to submit to the Han Empire in return for aid against Punu. Bi's Southern Xiongnu then broke away permanently from the main Xiongnu in the north (henceforth, the Northern Xiongnu) and entered the Xihe-Ordos region, setting up a rival court (*Hou Hanshu* 89.2943). These Southern Xiongnu have often been treated as sinicized "federates" of the Han Empire (subject to direct or indirect Chinese rule), reminiscent of the dependent *foederati* of the Roman Empire in the West. However, as Miller points out, the Southern Xiongnu continued to maintain their distinctive Xiongnu political organization and were essentially independent of their Han overlords.[48] What they were attempting was the rerun of the policy of Huhanye a century earlier, who utilized Han aid to retake the north.

This goal was not realized, however, due to the complete disintegration of the Northern Xiongnu in the traditional center of the Xiongnu Empire in Mongolia. In 73–74 CE, the Northern Xiongnu lost the Tarim basin to the Chinese once again. This loss was then followed by the invasion of the formerly subject Xianbei from the east. In 87 CE, the Xianbei hordes inflicted a catastrophic defeat on the Northern Xiongnu, killed the reigning Chanyu, and flayed his body. Worse was to follow as fifty-eight Xiongnu tribes then deserted to the Han Empire. In 89 CE, the Chinese general Dou Xian defeated the next Chanyu in the very heartland of the Xiongnu, Mongolia. The Northern Xiongnu allegedly suffered 13,000 casualties, and 81 Xiongnu tribes consisting of 200,000 people are said to have surrendered to the Han Empire. The coup de grace came just two years later in 91 CE when another crippling defeat in the southern range of the Altai mountains ended all Northern Xiongnu pretensions to imperial rule in Mongolia. The role of the Xiongnu was now taken over by the victorious Xianbei.

Legacy of the Xiongnu

The end of the Xiongnu Empire in Mongolia, however, was not the end of the history of the Xiongnu. The Southern Xiongnu in the Ordos maintained themselves as a separate political entity from China up to the 4th century CE, and they even managed briefly to conquer northern China in the first two decades of the century at the expense of the Chinese Jin dynasty (which had briefly reunified China after the Period of the Three Kingdoms). The history of the Southern Xiongnu in China is beyond the scope of this article. However, attention must be given to the long-disputed question as to whether the famous Huns of Central Asia and Europe originated from the Xiongnu Empire. If the Huns were in some way associated with the Xiongnu, then the most profound Xiongnu legacy in later world history would be their contribution to the geopolitical and cultural reconfiguration of the Eurasian world in Late Antiquity, brought about by the expansion of the Huns into Central Asia, Europe, Iran, and India.

In the 18th century, the Jesuit priest Deguignes in *Histoire générale des Huns, des Turcs, des Mogols et des autres Tartares occidentaux* first argued (or rather in passing guessed) that the European Huns of the 4th and 5th centuries CE were Xiongnu. Because the subsequent scholarly debate on the connections between the Xiongnu and the Huns was then focused on identifying the ethnic composition of the two groups and discovering putative blood links between the Huns and Xiongnu, no consensus could easily be reached. However, this whole debate was arguably based on the erroneous assumption that the Huns and Xiongnu constituted a specific race or a particular ethnic group. As explained earlier, the Xiongnu were a heterogeneous political entity, rather than a homogeneous ethnic group. The key to answering the question of the connections between the Xiongnu and the Huns is to determine whether the Huns claimed the political heritage/legacy of the Xiongnu Empire, and whether their ruling tribes traced their origins to the territory once controlled by the Xiongnu state.

Due to the recent research of Etienne de La Vaissière, it is now recognized that the name *Hun* meant Xiongnu to the residents of Central Asia and India, indicating that whoever was using the name Hun was harking back to the political legacy of the Xiongnu Empire. The first confirmation of this recognition, in fact, came in 1948 when the esteemed German scholar of Middle Iranian languages Walter Henning published a letter written by a Sogdian merchant named Nanaivande dating to 313 CE. The letter was sent by the merchant from the Gansu region and referred to the sack of the imperial Chinese capital, Luoyang, by the Southern Xiongnu two years earlier in 311 CE. In the letter, Nanaivande, without any ambiguity or generalization, calls the Xiongnu Huns. La Vaissière provides more evidence: the translations of the Buddhist sutras *Tathagataguhya-sutra* and *Lalitavistara*. These texts, which were translated by a certain Zhu Fahu, a Buddhist monk of Bactrian descent from Dunhuang writing in 280 and 308 CE, equate the *Huna* (appellation of the Huns in Indian sources) with the Xiongnu, again without any ambiguity or generalization. The Xiongnu are also identified as a specific political entity adjacent to China.[49] Therefore, it is now virtually indisputable that the Huns of Central Asia and Europe were using the imperial name of the Xiongnu as their state or ethnic name.[50]

The archaeological evidence, as always, is much more problematic, since identifying archaeological cultures with ethnic or political groups in history, especially in Inner Asia, is fraught with difficulties. The available evidence does, however, tend to support the existence of strong cultural links between the Huns of Europe and Central Asia and the old territory ruled by the Xiongnu. Most experts on Inner Asian history now agree that Hunnic cauldrons, presumed to be an important archaeological marker of a Hunnic presence, ultimately derive from older "Xiongnu" cauldrons of the Ordos region (although, as mentioned, applying the ethnic marker "Xiongnu" to these archaeological objects must be done with caution).[51] These cauldrons apparently had a religious function, and in both Xiongnu and later Hunnic contexts, they were used in very similar ways, their placement being on the banks of rivers. Cultural and religious continuity between the Xiongnu and the Huns in Central Asia and Europe can therefore be suggested.

The available information from Chinese primary sources also confirms the hypothesis that the Huns originated from the old territory of the Xiongnu. The *Weilue* (=*Sanguozhi* 30.863–864) a mid-3rd-century CE source, shows that after their defeat at the hands of the Xianbei, the Northern Xiongnu still existed as a political entity in the Altai region, just west of their original power base in Mongolia. The *Weishu* (103.2290), the official history of the Tuoba Xianbei Northern Wei in China, gives further indication that toward the beginning of the 5th century CE, Xiongnu remnants were still to be found to the northwest of the Rouran (Mongolia). The *Weishu* (102.2268) also adds that a people called the Yueban, remnants of the Northern Xiongnu, were in the 5th century CE occupying the old territory of the Wusun in the Zhetysu region (eastern Kazakhstan). These Yueban Xiongnu are referred to as the weak elements among the Northern Xiongnu, who were left behind by the "strong" Xiongnu in the area north of the city of Qiuci (now in central Xinjiang), when the stronger elements migrated further west. The *Weishu* (102.2278–9) then explains that the Central Asian White Huns originate from the Altai region. They are said to have moved into Central Asia around 360 CE[52] (strikingly enough, this is exactly the same time that the European Huns pushed into Europe farther north).

Adding more evidence in favor of the argument that the Huns of the west were of Xiongnu origin is the remark in the *Weishu* that the 5th-century rulers of Sogdia, that is, the White Huns, were of Xiongnu origin (102.2270). It also calls the country they rule "wen-na-sha," pronounced Huna sha in Early Middle Chinese, that is, King of the Huns.[53] Therefore, the literary evidence strongly validates the thesis that the western Huns were the political heirs of the Xiongnu.

Another important legacy of the Xiongnu is superbly outlined by Brosseder in her 2015 publication: the facilitation of interaction and exchange of political symbols, ideas, and material culture.[54] During the period of Xiongnu hegemony over much of Inner Asia, two vast interaction spheres emerged across Inner Asia and the steppe zone of eastern Europe, both of which were connected via a network of warrior elites that shared a common status symbol: belt plaques and geometric ornaments.[55] As Brosseder points out, the Xiongnu are likely to have been the chief Inner Asian "agent" of this prolonged and

sustained interconnectivity and exchange across the Eurasian continent, which saw Chinese and Inner Asian goods being circulated in the western steppe zone, and western goods being traded and purchased in Xiongnu territory in Mongolia.[56]

Another legacy (indirect in this case) of the Xiongnu was the foundation of the famous Kushan Empire of the Yuezhi and the collapse of the Greco-Bactrian states of Central Asia in the 2nd century BCE. The Kushans, who created an empire that in its heyday stretched from the Tarim basin in the north to northwestern India in the south, were one of the five Da Yuezhi tribes driven out of Xinjiang and Gansu by the Xiongnu in 162 BCE. The Chinese source *Hanshu* (61 4B) provides a succinct account of their forced migration west from their home territories. After their catastrophic defeat at the hands of the Xiongnu, the Yuezhi evidently pushed into the lands of the Sai (Saka)[57] in eastern Kazakhstan. Under pressure from the Yuezhi, the Saka then in turn invaded the Greco-Bactrian kingdom ruled by the successors of Alexander the Great (Strabo, Geography 11.8.4). The Greeks of Central Asia were quickly overwhelmed, and the Saka, with the Yuezhi pursuing them, advanced even farther west before being checked by the Parthians in Iran.[58] The Yuezhi eventually settled in Bactria under their five "Yabghus,"[59] and later the king or lord of the Guishuang/Kushan tribe emerged as their supreme ruler. Under the aegis of the Kushan dynasty, the Yuezhi state then came to dominate much of Central Asia and parts of South Asia until their defeat by the Sassanian Persians in the mid-3rd century CE during the reign of Shapur I (reigned 240–70 CE).

Primary Sources

The most important primary sources on the Xiongnu are, as briefly mentioned above, the *Yantielun, Shiji, Hanshu*, and *Hou Hanshu*. With regard to the connections between the Xiongnu and the Huns of Central Asia, the most important source is *Weishu*, the official history of the Tuoba Xianbei Northern Wei compiled in the sixth century **CE** by Wei Shou. For specialists, the easiest way to access these primary sources is via the excellent database of Chinese texts provided by the Institute of History and Philology (IHP), Academia Sinica (Taiwan): the Scripta Sinica (*Hanji dianzi wenxian*) database. This resource provides almost all Classical Chinese texts for scholarly reference. For beginners and nonspecialists, probably the easier way to access the first four of the aforementioned primary sources would be via the **Chinese Text Project portal**, although in all instances, the Scripta Sinica database is to be preferred. For the *Shiji* Xiongnu *liezhuan*, in particular, the most easily accessible translation for the beginner remains the translation by Burton Watson cited in note 23.

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(2.) Tian Guangjin. “Taohongbalade Xiongnum (The cemetery at Taohongbala),” *Kaogu Xuebao* 1 (1976): 131–142.

(3.) N. Di Cosmo, “Aristocratic Elites in the Xiongnu Empire as Seen from the Historical and Archaeological Evidence,” in *Nomad Aristocrats in a World of Empires*, Nomaden und Sesshafte7, ed. J. Paul (Wiesbaden: Dr. Ludwig Reichert Verlag, 2013), 23–54; 39.

(4.) For discussion, see J. Wright, W. Honeychurch, and C. Amartuvshin, “The Xiongnu Settlements of Egiin Gol, Mongolia,” *Antiquity* 83.320 (2009): 372–387; 375.

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(9.) Z. Batsaikhan, “The Xiongnu-Progenitors of the Classical Nomad Civilization,” in *Xiongnu Archaeology: Multidisciplinary Perspectives of the First Steppe Empire in Inner Asia*, Bonn Contributions to Asian Archaeology 5, eds. U. Brosseder and B. K. Miller (Bonn: vfgarch.press uni-bonn, 2011), 121–128; 122; and W. Honeychurch and C. Amartuvshin, “States on Horseback: The Rise of Inner Asian Confederations and Empires,” in *Archaeology of Asia*, ed. M. T. Stark (Malden, MA, and Oxford: Wiley Blackwell, 2006), 255–278; particularly 262.

(10.) E. G. Pulleyblank, “The Consonantal System of Old Chinese,” *Asia Major* 9 (1962): 58–144, 206–265; Pulleyblank, “The Hsiung-nu,” in *Philologiae et Historiae Turcicae Fundamenta* 1, ed. H. R. Roemer (Berlin: Klaus Schwarz, 2000), 52–75; especially 62–65; and A. Vovin, “Did the Xiongnu Speak a Yeniseian Language?” *Central Asiatic Journal* 44.1 (2000): 87–104.

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(14.) R. Tapper, “The Tribes in the Eighteenth- and Nineteenth- Century Iran,” in *The Cambridge History of Iran*, vol. 7., eds. P. Avery et al. (Cambridge: Cambridge University Press, 1991), 506–541; 525.

(15.) Kradin, “Nomadism, Evolution, and World-Systems,” 368–388. See also his 2011 article: N. Kradin, “Stateless Empire: The Structure of the Xiongnu Nomadic Super-Complex Chiefdom,” in *Xiongnu Archaeology: Multidisciplinary Perspectives of the First Steppe Empire in Inner Asia*, Bonn Contributions to Asian Archaeology 5., eds. U. Brosseder and B. K. Miller (Bonn: vfgarch.press uni-bonn, 2011), 77–96; particularly 82, 94.

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(19.) Di Cosmo, “Ethnogenesis, Coevolution and Political Morphology,” 44–45.

(20.) Pulleyblank, “The Hsiung-nu,” 64.

(21.) R. de Crespigny, *Northern Frontier: The Policies and Strategy of the Later Han Empire*, Asian Studies Monographs, n.s. 4 (Canberra: Australian National University Press, 1984), 178.

(22.) The supreme ruler and the equivalent of the Turco-Mongol Khagan. For discussion, see E. Kürsat-Ahlers, *Zur frühen Staatenbildung von Steppenvölkern* (Berlin: Duncker & Humblot, 1994), 268–270.

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(33.) Christian, *A History of Russia, Central Asia and Mongolia*, 194.

(34.) Yü, “The Hsiung-nu,” 124.

(35.) Kollautz and Miyakawa, *Geschichte und Kultur eines völkerwanderungszeitlichen Nomadenvolks*, 45. For Xiongnu elite governance and “feudalism,” see Yü, “The Hsiung-nu,” 135–136.

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(48.) For the later history of the Southern Xiongnu and the nature of their relations with the Han Empire, see Miller, "The Southern Xiongnu," 151–168.

(49.) E. de La Vaissière, "Huns et Xiongnu," *Central Asiatic Journal* 49.1 (2005): 3–26; 11–15.

(50.) Pulleyblank, "The Hsiung-nu," 60–61, via a detailed examination of phonetic evidence, concludes that there is no alternative but to agree that the European Huns had exactly the same name as the Xiongnu. De Crespigny, *Northern Frontier*, 174, agrees. See also C. P. Atwood, "Huns and Xiongnu: New Thoughts on an Old Problem," in *Dubitando: Studies in History and Culture in Honor of Donald Ostrowski*, eds. B. J. Boeck, R. E Martin, and D. Rowland, 27–52 (Bloomington, IN: Slavica, 2012), who, via a radically different interpretation of the available phonetic evidence, nevertheless arrives at the same conclusion, that the Huns are the Xiongnu. See also D. C. Wright, "The Hsiung-nu-Hun Equation Revisited," Eurasian Studies Yearbook 69 (1997): 77–112; and J. E. Hill, Through the Jade Gate to Rome: A Study of the Silk Routes during the Later Han Dynasty 1st to 2nd Centuries *ce*: An Annotated Translation of the Chronicle on the "Western Regions" from the Hou Hanshu (Lexington, KY.: Book Surge, 2009), 73–74, for further information on phonetic and other evidence in favor of Xiongnu–Hun identification.

(51.) L. Hambis, "Le Probleme des Huns," *Recherches historiques* 220 (1958): 249–270; 262; Maenchen-Helfen, *The World of the Huns*, 330–331; La Vassière, "Huns et Xiongnu," 17; Bona, *Das Hunnenreich*, 140; and M. Érdy, "Hun and Xiong-nu Type Cauldron Finds

Throughout Eurasia," *Eurasian Studies Yearbook* 67 (1995): 5–94. There is no absolute consensus, however.

(52.) La Vaissière, "Huns et Xiongnu," 21.

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(54.) U. Brosseder, "A Study on the Complexity and Dynamics of Interaction and Exchange in Late Iron Age Eurasia," in *Complexity of Interaction along the Eurasian Steppe Zone in the First Millennium CE*, Bonn Contributions to Asian Archaeology 7, eds. J. Bemmann and M. Schmauder (Bonn: vfgarch.press uni-bonn, 2015), 199–332; especially 272 ff.

(55.) Ibid., 272–273.

(56.) Ibid., 277.

(57.) For discussion on this identification, see Benjamin, *The Yuezhi*, 97–100; and Hill, *Through the Jade Gate to Rome*, 537.

(58.) M. J. Olbrycht, "Arsacid Iran and the Nomads of Central Asia—Ways of Cultural Transfer," in *Complexity of Interaction along the Eurasian Steppe Zone in the First Millennium CE*, Bonn Contributions to Asian Archaeology 7, eds. J. Bemmann and M. Schmauder (Bonn: vfgarch.press uni-bonn, 2015), 333–390; 334.

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Hyun Jin Kim

University of Melbourne

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Warfare and Arms of the Early Iron Age Steppe Nomads

Oleksandr Symonenko

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Summary and Keywords

At the turn of Bronze and Early Iron Ages, the nomads of the Eurasian steppe brought about a new and progressive phenomenon in world military history: cavalry warfare. Spanning the vast distance from the Danube in the West to the Hwang Ho in the Far East, among nomadic peoples including the Cimmerians, Scythians, Sakas, Sarmatians, Xiongnu, and Xianbei, a universal mode of warfare, more or less similar in tactics, battle, arms and armor, and horse harness, dominated.

The chronological frames of the Early Iron Age are differently determined in various historiographical traditions, but for the history of steppe Eurasia the frame is customarily considered to begin in the 10th century BCE and end in the 5th century CE. The main sources used in studying the military art of Early Iron Age nomads are of two categories: the literary sources (Greek, Roman, Chinese), and archaeological finds of weapons, armor, and horse harnesses belonging to the various archaeological cultures of steppe nomads. The literary sources noted the Cimmerians (10th–8th c. BCE); people of the Scythian ethnic group (7th–3rd c. BCE), the proper Scythians and the Sakas, Massagetians, Issedonians, and Sauromatians; the Sarmatians (2nd c. BCE–4th c. CE); the Xiongnu (2nd c. BCE–1st c. CE); their contemporaries the Wusun and Yuezhi, and some other peoples.

The light-armed cavalry was a basic military force of the nomads. Each nomadic man was an armed and skillful warrior. Judging from archaeological material and narrative sources, the nomadic light cavalryman was armed by bow and arrows, light javelin and/or lance, and probably lasso. The light cavalry consisted of the common nomads. Since the 7th c. BCE noble nomad formed the heavy armored cavalry where the horsemen, and sometimes their horses, wore body armor and helmets.

The tactical principles and fighting methods of nomads were conditioned by the composition of their army, with light cavalry prevailing. One of the main methods was raids, which varied in duration, range, and composition of personnel involved. The battle tactics of nomadic troops developed due to a need to overcome a resistance of deep infantry formation. Since the long spears of infantry inhibited close combat, nomadic horsemen first covered the adversary with a massive and dense, although undirected, torrent of arrows. After that, light horsemen approached and threw spears and javelins from shorter distances, thus causing confusion in the ranks of the infantry. Then heavy cavalry rushed into the breach for fighting with close-combat weapons, spears, and battleaxes.

Keywords: nomads, Eurasian steppes, warfare, horse, cavalry, Cimmerians, Scythians, Sarmatians, Xiongnu, archaeology, weapons

Eurasian Steppe Belt Geography

From East to West

The steppe zone stretches approximately between latitudes 35° and 50° north, from the Hwang Ho River in the Far East to the Danube Basin in the West, deep into the continent and far from the seaside.

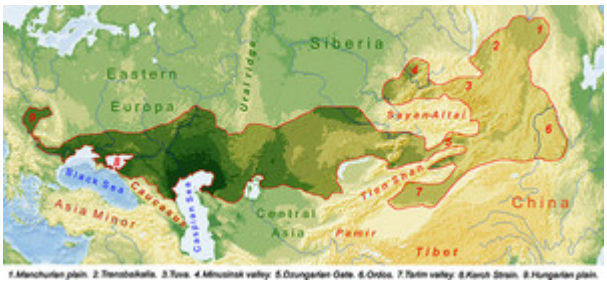

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Figure 1. Map of the Eurasian Steppe zone. Design by O. Symonenko.

It is a flat corridor that extends from the Pacific coasts to the foothills of the Western European mountain systems, the Tatras and the Alps. Broad open spaces of herbage are almost devoid of woodlands; dominating is the continental, or acutely continental, climate, which is arid in the south of the zone, with torrid summers and frosty winters. This huge corridor of the Eurasian steppes is as if closed from north and south by landscapes unfavorable to nomads, leaving only one direction free for their movement: from east to west.

Steppe in Asia

The eastern border of the steppe zone begins in Manchuria and opens the way for nomads to the North China Plain in the lower Hwang Ho River basin. To the west, the Manchurian steppes pass into the rocky plain of Mongolia, which further to the south gradually transforms into the Gobi Desert, the southern boundary of the steppe zone of Inner Asia. To the north, the mountain of Sayan-Altai and Khingan mark out the steppe enclaves of Tuva, Transbaikalia, and the Minusinsk Depression. Further to the west, the Sayan-Altai mountain system in the north and the Tian Shan spurs in the southwest constrict the borders of the steppe zone, forming the so-called Dzungarian geosyncline (the historical “Dzungarian Gate”), the only convenient route leading to the vast territories of the Western Siberian steppe region.

To the south of the Dzungarian Gate, behind the Tian Shan spurs, in the Chinese province of Xinjiang, one more steppe enclave took shape in the Tarim River valley. In the north, it is confined by the Pamir mountain chains, in the south by the Taklamakan Desert. Since long ago, the Tarim valley was a region occupied by nomads; in addition, across the passes of Hindu Kush and Pamir it served as a bridge between China and Eastern Turkestan.

The Dzungarian Gate leads to the West Siberian part of the steppe zone of Eurasia—to the plains of the upper reaches of the large Siberian rivers: the Ob’, the Irtysh, the Ishim, and the Tobol. In the south, in the territory of contemporary Kazakhstan, the steppe zone gradually passes into the Mujunkum sands, and then to Central Asia with its Kara-Kum and Kyzyl-Kum Deserts. The northern boundaries of the Western Siberian steppe border with the taiga zone is preceded by a narrow belt of the forest-steppe zone.

The Urals and the northern shores of the Caspian Sea constrict the steppe corridor again. Arid steppes and a semi-desert zone are located between the Ural and Volga rivers. In the north, the East European steppe gradually passes into the forest-steppe zone. Its southern border goes along the Caspian Sea coast; westward it follows the Caucasian Mountains to the Kerch Strain—the ancient Cimmerian Bosporus.

Steppe in Europe

To the west of the Don River, the steppe zone becomes narrower due to the forest-steppe encroachment in the northwest. The steppe zone occupies the northern part of the Crimean Peninsula; further on it follows the lower reaches of the Dnieper, Southern Bug, and Danube Rivers and continues up to the Carpathians. Along the lower flow of the Danube, the narrow strip of steppe passes around the southern spurs of the Carpathians and then widens again northward—for the last time—between the Tisza and the Danube Rivers in Hungary, where it forms the last steppe enclave, the Hungarian Puszta.

In summary, the Eurasian steppe zone stretches from East to West for about eight thousand kilometers, while its total area reaches eight million square kilometers. It comprises the territories of contemporary China, Mongolia, Kazakhstan, Russia, Ukraine,

Romania, and Hungary. Climatic and natural conditions throughout the steppe on the whole were rather similar, giving rise to the most efficient form of human economic activity in the region: *pastoral nomadism.*

Emergence of the Mounted Warriors

The military art of nomadic horse breeders of the Eurasian steppes is a unique phenomenon in world military history. Its emergence and evolution can be attributed to three interrelated factors: the unique geographic conditions of the steppe zone, the emergence of pastoral nomadism, and horseback riding.

At the Dawn of Riding

The horse breeders of the Eurasian steppes gave rise to a special kind of military art: mounted warfare. Specific features of the economy of these peoples included roaming long distances (as a rule, from several hundred to several thousand kilometers) and using the horse (and, to a lesser extent, the Bactrian camel) for transportation and, primarily, as riding animals. Large masses of mounted nomads were in a state of constant military alert, ready to easily engage with the enemy and, equally easily, to escape it. Thus, it was the horse breeders of the Eurasian steppes who invented and developed strategy and tactics of mounted warfare that had no analogies in world military history.

In the Eurasian steppes nomadism emerged simultaneously with riding; one may say that the former gave rise to the latter. Steppe stock breeders learned riding and, finally, became mobile and able to cover long distances. Nomads turned riding into a new and victorious type of warfare. Archaeological and figurative art sources indicate that cavalry as a type of armed force most probably emerged at the beginning of the 1st millennium BCE.[1]

Perhaps it is training with horses in an atmosphere of permanent danger and compulsion to obedience that develops in a person certain consistent qualities of character: self-confidence, rapid decision-making and execution, courage and even necessary cruelty in action, and the habit to command and to achieve goals by all means necessary, not to mention the physical advantages (quick reaction, physical strength and agility, good vestibular apparatus, etc.). Horse breeders have always realized their superiority over others: they know things that others do not know, and that they fear, and the sacred horse obeys them. These features probably helped such people become the military and political leaders of ancient societies, and to form their elites. It is significant that in some European languages, the word for “nobleman” means “rider”: *chevalier* (French), *caballero* (Spanish), *Ritter* (old German). In these countries the social elites consisted of

Alans, Huns, and Vandals who were demobilized from the Roman cavalry and received allotments in the territories of modern France, Spain, and Germany.

The main characteristics of nomadic military art changed little during the millennia of the existence of their cultures. Types of weapons, tactical methods, warfare strategy, army organization, main combat principles, and military traditions had much in common in synchronous nomadic societies. The differences were mostly connected to specifics of the military organization of the adversaries of the individual nomadic societies.[2]

Nomads

Who is to be called a nomad? It was Professor Anatoly Khazanov who formulated an extended definition of pastoral nomadism. He distinguished its five main characteristics: (a) pastoralism as the main economic activity; (b) livestock kept all year round on natural pasture; (c) periodic mobility within pasture territories; (d) migration of the entire population with their livestock; (e) subsistence production oriented toward the satisfaction of immediate needs, in contrast to a capitalist economy.[3]

In various regions of the Old World, pastoral nomadism had its geographic particularities: tundra reindeer breeding in the north of Eurasia, from Lapland to the Chukchi Peninsula; sheep and horse breeding in the Eurasian steppe zone; yak and small stock breeding in the Asian highlands of Tibet and Pamir; camel, sheep, and goat breeding in the Near East (Iran, Afghanistan, Arabic countries). The focus here is on Eurasian steppe horse breeders, who developed the art of riding and periodically conquered huge parts of the ancient world.

Nomadic Empires: The Special Steppe States

It is difficult to reconstruct the social and economic relations of ancient nomads, primarily because of the scarcity of literary sources. However, we have a great deal of ethnological evidence concerning nomads in modern times. Taking into account the fact that the living environment, the economy, and the traditions of nomads barely changed over the centuries, it is possible to use this data retrospectively to reconstruct ancient realities with a reasonable level of reliability.

The nomadic horse breeders of Eurasia developed an original type of statehood: the steppe empire. In this unit there were such state institutions as the central government, army, justice, the court, and state ideology. Yet the strong cultural specificity of steppe civilization predetermined the peculiar forms of nomadic statehood.

The nomadic empire can be described as a society of nomads organized according to the military-hierarchical principle, occupying a relatively large area and usually obtaining the necessary non-pastoral resources through outward operations.

As a rule, the formation of nomadic empires in the Early Iron Age was connected with the emergence among the nomads of a talented political and military leader who managed to integrate all of the tribes into a united empire (Ateas the Scythian, the Xiongnu Maodun Shanyu, the Xianbei Tanshihuai). Ultimately the motives of association acquired credibility depending on the fortunes of war and the talent of the leader. The leader's abilities, demonstrated by victories and wealth, determined the extent to which steppe allies joined in his ambitious plans. These persons were the main creators of steppe states. After the unification of nomads, in order to maintain the unity of the country the ruler had to organize the flow of surplus products from the outside. If he failed, the empire would fall apart.

In general, the mutual obligations between the supreme steppe leader and his allies were rather limited. The leader served as the commander in chief, received the honors and the better share of loot, collected taxes in his own favor, and accepted any service from his subordinates, but did not have the final word in the internal affairs of his tribal allies. The very first military defeat or conflict with supporters, of course, could mean the end of the empire and its leader.

The Outward Exploitation

The military and political power of the nomads was secured by a high level of militarization of their societies. Military actions played a considerable (if not the main) role in their functioning, and every adult man was a warrior. Such militarization of nomad society was brought about not by some inherent "bloodthirstiness" or "bellicosity" of nomads but by trivial economic reasons. Pastoral nomadism per se did not secure a constant increase of surplus products; therefore, it could not provide stable prosperity. Accumulation of a surplus product by economic means was considerably hampered by the specific character of pastoralism: natural reproduction of livestock is a rather slow process. Thus, "home" exploitation did not guarantee a stable enrichment of the upper stratum of nomadic societies. Personal independence of ordinary nomads, cultivated for centuries and supported by their mobility, hampered the development of exploitation inside nomadic societies. Therefore, outward exploitation was the main way of obtaining surplus products, and, correspondingly, active enrichment of the upper social strata of their societies.[4]

The first steps of the implementation of outward exploitation were direct military actions: wars, raids, caravans pillage, etc. Thus, having frightened their victims with the prospect of confrontation, the nomads offered them a chance to buy peace with contributions, tributes, protectionist policy in trading, etc. Regular tributes were a means of outward exploitation that rendered a prompt and stable surplus profit.

Arms, Armor, and Horse Harnesses of Eurasian Nomads

The varying levels of social organization and ethnic leadership of Eurasian steppe nomads in different eras, as well as a certain similarity of weaponry and horse harnesses during definitive timespans, permits us to distinguish four long epochs in the development of their warfare. Named according to the dominant ethnic and tribal group of nomads in their respective times, they may be called Cimmerian, Scythian-Sakas, Xiongnu-Sarmatian, and Huns-Xianbei.

The Cimmerian Age, 10th–8th Centuries BCE

Ethnic and Historical Background

The Iranian-speaking tribes of the Cimmerian cultural sphere (the Cimmerians and bearers of Karasuk, Uyuk, and Aldy-Bel archaeological cultures in Siberia) characterize the military art of the first nomads. The nomads of the Cimmerian period were tribal societies of the “chieftain” type. These peoples originated in the steppes of Altai and Tuva and during the next two centuries reached Ciscaucasia and the North Pontic region, from where they made predatory raids into Central Europe and the states of Asia Minor, Urartu, and Assyria.

The panoply of a warrior of the Cimmerian period consisted of a composite bow of the “Scythian” type; arrows with bone or cast bronze-socketed bilobate heads; bronze, iron or bimetal (with an iron blade and a bronze hilt) swords and daggers; spears with large heavy heads; and bronze and iron battleaxes. The protective armor was, most probably, made of leather and reinforced with bronze plates of various shapes. From their conflicts with Zhōu China, these nomads borrowed heavy, cast bronze helmets that became prototypes of Early Scythian helmets of the so-called “Kuban” type.[5] Cimmerian archaeological sites often contain several pairs of bronze bits and bronze cheek-pieces. No information about Cimmerian saddle types is available.

Archaeological data and the few available pictorial materials indicate that cavalry was the main force of the Cimmerian army. In their time, the Cimmerians were a powerful force that for almost half a century harassed Phrygia, Lydia, Mannea, Urartu, and Assyria.[6]

The Scythian-Sakas Age, 6th–3rd Centuries BCE

Ethnic and Historical Background

In the Scythian-Sakas period, Iranian-speaking nomads dominated the Eurasian steppes. They were at an early state level of social organization, characterized by an emergence of

unstable polities with elements of statehood. Such polities were headed by the most energetic, courageous, and venturesome tribal leaders, called “kings” in the literary sources.

Tribes of the Asian part of the steppe zone, from Mongolia to Central Asia, are known from Persian and Greek sources as Sakas, Massagetae, and Dahae. The territories further westward, from the Ural to the Don rivers, were inhabited by nomads called by Herodotus the Issedonians and Sauromatians. The European Scythians were the western neighbors of the Sauromatians and, to a certain extent, were related to them. The territory of Scythia stretched from the Don Basin in the east to the Carpathian foothills in the west, from the forest zone in the north to the Crimean Mountains in the south.

Arms and Harness

The main weapon of the Scythians, Sauromatians, Sakas, and other nomads of their time was the bow, repeatedly mentioned in the works of classical authors. The composite bow of the “Scythian” type was made of several different pieces of wood. Such a bow was not large, 60 to 70 cm long. Archaeological finds of bows are almost unknown; therefore, they have been reconstructed on the basis of pictorial data, first of all found on toreutic objects. Arrows were from 40 to 70 cm long, made from reed or birch tree, with fletching. Their heads were of a pyramidal shape, made of bronze, casted, and socketed. The average length of a Scythian arrowhead was 2.5–3 cm. Arrowheads for Scythian, Sauromatian, Sakas, and Massagetian bows were almost identical, with small typological differences. Classical authors mentioned that Scythians used poisoned arrows.

A bow with arrows was carried in a *gorytos*, as a rule, made of wood and leather. One compartment contained the bow, while the other held the arrows. *Gorytoi* of Scythian aristocrats and kings were covered with golden plates (presumably made in Macedonia) bearing stories from classical mythology; similar decoration is unknown to the east of the Don.

Close-combat weapons of the nomads of the Scythian-Sakas period included swords and daggers, as well as battleaxes. The average length of a sword varied from 40 to 60 cm, although longer (up to 1 m) swords occasionally were used as well. The latter were most often found in Sauromatian and Sakas burials, while they were not popular with the European Scythians. Handles and sheaths of ceremonial swords were decorated with gold. A series of golden covers of sword sheaths made by Greek artisans has been found in burials of Scythian aristocrats.

The panoply of a nomad of this period, discovered in burials, always included a spear and one or two javelins. Their length did not exceed 2 m; they had iron heads and butts. Slings and lassos were additional kinds of throwing weapons possessed by ordinary nomads.

The main type of armor of the period was scale armor (*lorica squamata*). This cuirass was supposed to protect the torso, while armored chaps and a scaled shield were worn

separately. Such a cuirass was flexible but rather heavy. An additional means of protecting the legs might have been scaled, or could have consisted of imported Greek greaves.

About two hundred armors have been discovered in Scythian graves,[7] while such finds are very rare in Sauromatian or Sakas lands.[8] It is possible that the Sakas favored cuirasses made from organic materials: leather, textile fabrics, or thick felt.

North Pontic Scythians widely used helmets. In the 6th century BCE they were of the so-called “Kuban” type and later of Corinthian, Attic, or Chalkidian types, sometimes with various modifications (eliminated cheek covers). Scaled helmets were properly Scythian.

Horse harnesses of the Scythian-Sakas period were diversified and perfected for the warfare of their time. The iron bit was fastened to the bridle by decorated bronze cheek-pieces. The bridle was decorated with bronze, silver, or golden sets of plaques, figured cheek covers, and frontlets. In this era so-called pad saddles were common, consisting of two leather cushions, unevenly filled, with thickenings at the front and from behind, without stirrups. Such saddles were widespread from China to the Dnieper.

Archaeological materials of this period demonstrate that Scythian cavalry was already divided into light cavalry, armed with bows and javelins, and heavy cavalry, equipped with armor, swords, and spears for close combat. It is unclear whether such division existed among Sauromatian and Sakas troops—as has already been mentioned, finds of armor are almost unknown there. It is probable that the absence of a permanent enemy with heavy infantry did not favor the development of heavy cavalry by eastern nomads. The Scythian armored cavalry consisted of well-to-do nomads: almost all known armors have been found in noble graves.

Finds of arrowheads in the ramparts of Scythian forest-steppe fortified settlements and in skeletons from some Scythian burials testify to internecine conflicts and even wars. Classical sources contain information about Scythian-Sauromatian military conflicts.[9]

The Xiongnu-Sarmatian Age, 2nd Century BCE–4th Century CE

Ethnic and Historical Background

In this period the steppe was dominated by two political and ethnic groups: Xiongnu in the east and Sarmatians in the west. Their polities were hardly different from the polities of the Scythian-Sakas period; however, they had a higher level of political integration. Tribes of the Xiongnu-Sarmatian period formed militarily strong, but short-lived, political unions: “nomadic empires.”

The first “nomadic empire” was created by the Xiongnu at the end of the 3rd century BCE during the reign of Maodun Shanyu. He came to power in 209 BCE and launched several conquering campaigns.[10] He had defeated the Donghu; later, some of them divided into the Wū huán and Xianbei. The Xiongnu were the main and most dangerous enemy of the

Chinese empires of Qin and Han. After a series of internecine wars and division into “Northern” and “Southern” polities (48 CE), the Xiongnu became weakened, and in 91 CE they were defeated by Xianbei. In the middle of the 2nd century CE, the Xianbei under the leadership of Tanshihuai won a decisive victory over the Xiongnu and replaced them as the main adversary of the Han Empire.

The western part of the Chinese province Gansu was inhabited by Yuezhi, who probably spoke one of the languages that belonged to the Tocharian group of the Indo-European linguistic family.[11] At the beginning of the 2nd century BCE, the Yuezhi were defeated by the Xiongnu and retreated to the west, conquering the country of Dàyuān (Fergana Valley). At the end of the same century (between 123 and 80 BCE), the Yuezhi invasion devastated the Greek-Bactrian kingdom,[12] and their ruling clans established the dynasties of the Kushan Empire.

The Wusun nomads were located by Chinese chroniclers in the area of Gansu Province that bordered the Yuezhi territory. After war with the Yuezhi in 160 BCE, the Wusun resettled in the lands of the Sakas-Tigraxauda behind the Tian Shan, in southeastern Kazakhstan. In the west, the Wusun territory bordered with Kanghu; in the east they bordered the Xiung-nu, while in the South their lands reached the Fergana Valley.[13]

According to the information in Chinese chronicles, from the 2nd century BCE until the 3rd century CE, in the territory of southwestern Kazakhstan existed the nomadic state of Kanghu. The Kanghu, Wusun, and Yuezhi nomads were related and shared the so-called Sarmatized culture,[14] which was similar to the culture of the Sarmatians.

The lands of the latter began to the west of Kanghu, in the area of the Aral Sea. Sarmatian is a general name of a large group of Iranian-speaking nomadic tribes, by which these peoples were known to Greek and Roman authors. By their origin the Sarmatians were related to their eastern neighbors: the Yuezhi and Wusun. From the 2nd century BCE to the 4th century CE, the Sarmatians roamed the steppes stretching from the Aral Sea to the Danube. Strabo provides information about the names and location of some Sarmatian tribes in the 2nd–1st centuries BCE. Aorsians inhabited the basins of the Ural, Volga, and Don Rivers; Siracians lived in the North Caucasus; lands between the Don and the Dnieper were occupied by Rhoxolans; while Yazygians lived further westward. In the mid-1st century CE the Alans, a military strong clan, migrated to Eastern Europe from the borders of Xiongnu lands and gained political leadership among all Sarmatian tribes. At the same time Yazygians crossed the Carpathians and settled in the interfluves of the Tisza and the Danube, on the border of the Roman Empire. Sarmatians dominated in the European steppe until the middle of the 4th century CE when, in 375, they and their allies the Goths were conquered by the Huns.[15]

Arms and Harness

Archaeological materials of this period demonstrate further progress in the development of nomadic weaponry. One achievement was the invention of the bow of the so-called “Hunnic” type. It was bigger than the “Scythian” type (up to 1.5 m long), and it was

composite and reflex—that is, in a loose state such a bow would bend in the opposite direction. This construction considerably increased the compressive strength and destructive force of the bow. The middle and end parts of the bow of “Hunnic” type were reinforced by bone stiffening laths, with limbs alone remaining flexible. Arrows for such bows were 0.8–1 m long and had larger (up to 5 cm) and heavier heads in comparison with heads for the “Scythian” bow. Tactics changed as well; archery became less massive and more targeted, since the new type of arrows had better aerodynamic qualities than the Scythian ones.

The earliest known finds of bone plates belonging to a “Hunnic” bow were located at Xiongnu sites and are dated to the 2nd century BCE. In the 2nd and 1st centuries BCE, such bows spread amongst the neighbors of the Xiongnu: the Yuezhi, Wusun, and bearers of the Sargatka culture in Southern Siberia. In the 1st century BCE, the Yuezhi brought new bows to Central Asia; the bows were also adopted by the Kanghu and Parthians. In the 1st century CE, the Sarmatians (Alans) spread the bows of “Hunnic” type in Eastern Europe, although the size and weight of most of their arrowheads indicate that the Sarmatians continued to use bows of the “Scythian” type.[16]

Gorytoi of a peculiar construction should be regarded as an eastern innovation of the Xiongnu-Sarmatian period. They consisted of two cylindrical quivers for arrows sewn to a bow case or attached to it in some other way. Such *gorytoi* survived in the necropolis of Niyä in the Tarim River Valley, in graves of the 2nd century CE.[17] They are depicted on belt plaques from an Alan burial ground of Orlat in Sogdiana and on Bosporan grave stones.

During the Xiongnu-Sarmatian period, short swords were gradually replaced by long (up to 1 m) blades. Xiongnu, South Siberian Sargatka, and Sarmatian warriors sometimes obtained long Chinese swords with jade cross-bars and scabbard slides. Such swords or their jade elements were found at the sites of those nomads.[18] Using long swords, the nomads of the Xiongnu-Sarmatian time gained the ability to slash from the horse. Thus, beginning from the 2nd century BCE, nomads from the Xiongnu in the east to the Sarmatians in the west used long swords, often with disc-shaped pommels. They were made from alabaster; some specimens were polychrome, made from chalcedony, rock crystal, or amber, and decorated with gold. In the 1st century CE, such swords became usual weapons of the Sarmatians and Kanghu, although short swords with various pommels continued to prevail in graves as symbols of the military status of the deceased. Ceremonial daggers have been found in the burials of Sarmatian and Kushan kings, handles and sheaths richly decorated with golden plates bearing coral and turquoise inserts.

The spear became an indispensable weapon of armored warriors; spearheads almost always accompanied finds of armor from this period.

The armor of the Xiongnu-Sarmatian period also differed from that of the Scythian age. Lamellar armor became widespread, its elongated plaques joined together by a complex system of cords. This armor did not require a leather or textile base; it was lighter than the scaled one and more practical. Lamellar armors were used by the Xiongnu, Xianbei, Wusun, Kanghu, Sarmatians, and warriors of the Sargatka culture.

In the east, the Xiongnu and their nomadic neighbors preferred lamellar helmets, while in the west the Sarmatians liked to wear Greek, Celtic, and Roman imported helmets.[19]

The dominant horse harness of this period also underwent considerable changes. Its characteristic feature became a *phalerae*—silver gilded ornamented roundels decorating the breast plate on the horse's shoulders and massive frontlets. However, the nomads' main innovation of the period was a new type of saddle, with vertical arches.[20] Wooden arches were attached to asymmetrically filled cushions on the pad-saddle, making the seat more comfortable and safer.

The Huns-Xianbei Age, 4th–5th Centuries CE

Ethnic and Historical Background

After a series of defeats inflicted by the Xianbei, the Xiongnu tribes migrated westward and came into close ethnic and cultural contact with the late Sarmatians. This process resulted in an emergence of a new population, known as the Huns in literary sources. Beginning their westward migration in the middle of the 4th century CE, the Huns established their domination over the Sarmatian population of the Volga and Don regions and conquered the Crimea and the Gothic Hermanarix kingdom, partially destroying the Goths and Alans and partially incorporating them into their polity. Thus, after 375 CE, the nomadic empire of the Huns took shape in Eastern Europe.

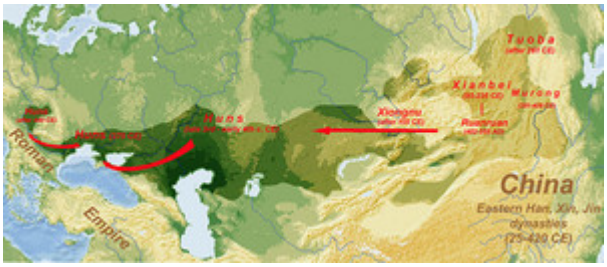

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Figure 2. The horse-breeder nomads of the Huns-Xiangbei period (4th–5th centuries CE).

From 425 CE the Huns began their move further westward, into the territories of the Roman Empire. In 445 CE, the famous Attila became the ruler of the Huns. Attila's permanent wars with Rome ended with his defeat at the Catalaunian Plains, in France, in 451 CE. After Attila's death, his empire gradually broke down.[21]

On China's northern borders, at the end of the 3rd and the beginning of the 4th century CE the Xianbei became divided into the Mùróng and Tuòbá dominions. Attacks of these nomads against China alternated with periods of peace. In the 5th century CE, their

dominating position in the steppes to the north of the Great Wall of China was taken by the Ruănruan—another ramification of the breakup of the Xianbei. The Ruănruan kingdom existed from 402 until 555 CE, when it was destroyed by the Turks.

Arms and Harness

By the dawn of the Huns-Xianbei period, all nomads already used a strong and long-range bow of the “Hunnic” type. The Huns spread this type of bow up to the borders of the Roman Empire, and prevailing finds of large iron trilobate arrowheads, calibrated for such bows, diagnose the disappearance of the older “Scythian” bow.

Short swords had also almost disappeared, replaced by long double-edged blades. The Xianbei introduced single-blade straight broadswords, prototypes of a saber. Handles and sheaths of Hunnic swords were often decorated with inlaid incrustations in the cloisonné technique.[22]

In this period, lamellar armor was popular; it was widely used by the Huns, Xianbei, and Ruănruan. Archaeological finds and iconographic and literary sources indicate that the Xianbei had heavy cavalry, in which not only horsemen but also horses were protected by lamellar armors. There is no doubt that the development of heavy cavalry was favored by the necessity of presenting an adequate response to heavy Chinese infantry armed with crossbows.

It is customary to consider the Huns the inventors of the frame-saddle. But recent study[23] indicates that they still used the pad-saddle with wooden arches, which appeared as early as the Xiongnu-Sarmatian period. The first saddles with a wooden saddle tree and high arches most probably were made by the Xiangbei in the 4th century CE. At least, the first finds of the details of such saddles date to that time.

Fight, Tactics, Warriors

The tactical principles and fighting methods of nomads were conditioned by the composition of their armies, with light cavalry prevailing.

Raids

Raids, varying in duration, range, and composition of personnel involved, were one of the main war methods. They were not aimed at the physical destruction of the enemy but rather at the capture of booty and the demonstration of military power in order to establish tributary relations and other kinds of outward exploitation.[24] This “law of war” was ideologically substantiated by traditional nomadic consideration of pillage as a prestigious and honorable business. Bedouins, for example, considered it a shame for a

young warrior to avoid taking part in a raid without serious reasons. Thus, in addition to the seizure of loot, these raids contributed to the development of military skills, providing a kind of school for young nomad warriors.

The raids were organized by various means. They were initiated at turns by not-numerous groups of volunteers, by individuals, and by larger forces of a tribe or several tribes. We have a unique description of the organization of Scythian private raids written by Lucian from Samosata:

> When a man has been injured by another, and desires vengeance, but feels that he is no match for his opponent, he sacrifices an ox, cuts up the flesh and cooks it, and spreads out the hide upon the ground. On this hide he takes his seat, holding his hands behind him, so as to suggest that his arms are tied in that position, this being the natural attitude of a suppliant among us. Meanwhile, the flesh of the ox has been laid out; and the man's relations and any others who feel so disposed come up and take a portion thereof, and, setting their right foot on the hide, promise whatever assistance is in their power: one will engage to furnish and maintain five horsemen, another ten, a third some larger number; while others, according to their ability, promise heavy or light-armed infantry, and the poorest, who have nothing else to give, offer their own personal services. The number of persons assembled on the hide is sometimes very considerable; nor could any troops be more reliable or more invincible than those which are collected in this manner, being as they are under a vow; for the act of stepping on to the hide constitutes an oath.[25]

Almost 2500 years later, in the 19th century, the Turkmens gathered volunteers to participate in the *alaman* (raid) in a similar way, though with differing details: the initiator of the *alaman* "puts the long lance with a pennon near his tent. Then anyone who will follow him in the raid sticks his lance alongside; when the number of participants is sufficient, the leader announces the venue as well as a time of start . . ."[26]

The passage from Lucian describes the "revenge" raid. The Turkmens of modern times called such a raid *chapaul*. Judging from the date of Lucian's story, the classification of the raids into categories according to their participants and aim first appeared in ancient times. On the example of Turkmen raiding practice, we could suggest a similar phenomenon for the ancient nomads. Except for *chapaul*, the common raid, *alaman*, in order to capture booty or pastures, would likely have been permitted by a board of Turkmen elders. There was also the raid *kaltaman*, organized and carried out mostly by young people. *Kaltaman* was not sanctioned by the community and was carried out by the instigators at their own risk, mainly for the combat practice of young warriors. Tribe or clan did not carry the responsibility for it.[27]

Riding horses

Eurasian nomads setting off for a military campaign took two or more horses each, so that they had reserves. The use of reserve horses, which significantly enhanced the mobility of the nomads, was their usual habit: “And they run over very great distances, pursuing others or themselves turning their backs, being mounted on swift and obedient horses and leading one, or sometimes even two, to the end that an exchange may keep up the strength of their mounts and that their freshness may be renewed by alternate periods of rest,” wrote Ammianus Marcellinus about the Sarmatians.[28]

Riding horses were an important component of the military success of Eurasian nomads. They were of the aboriginal steppe type, similar to modern Kazakh or Mongolian horses: stocky, with a short neck and a big head, with powerful short legs. The shoulder and hip of the silver horse figurine from the Sarmatian “royal” grave near Porohy (Ukraine) bear miniature *tamgas*, which prove that Sarmatian horse keepers branded their horses. An excellent description of these horses is provided by the procurator of the province of Cappadocia Arrianus (2nd century CE): “Scythian horses . . . first are difficult to speed up, so one can treat them with full contempt, while comparing them with a Thessalian, Sicilian or Peloponnesian horse, but they endure difficulties whatsoever; and then one can see that swift, fleet, mettlesome horse straining himself to the utmost, while this short and scabby jade first catches up with him and then leaves him far behind.”[29]

Paintings in Bosporan vaults and in gravestones of the Sarmatian period bear images of horses of a slightly different type: tall, with long necks and slender small heads, resembling horses of Akhal-Teke breed. Horses of a similar constitution are depicted on the already mentioned bone belt-buckles of the 1st century CE from the Orlat burial ground; see also XIONGNU-SARMATIAN AGE, 2ND CENTURY BCE–4TH CENTURY CE: ARMS AND HARNESS.

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Figure 3. Horses of nomads. 1. The Scythian horse of steppe race on a silver vase of the 4th c. BCE; 2.

The steppe horse of Kazakh breed; 3. A horse of the Akhal-Teke type on a carpet of the 3rd c. BCE; 4. The modern Akhal-Teke horse.

Battle Tactics

The first mention of the famous Scythian tactic of the “simulated retreat” dates to the Scythian-Saka period. This trick aimed at luring the enemy deep into Scythian territory, and simulated flight with “Parthian” release at the pursuing enemy. The best-known examples of such tactics are the war of North Pontic Scythians with King Darius I (about 514 BCE) and that of the Central Asian Massagetae with his predecessor Cyrus (about 530 BCE).

Armored horsemen of the Scythian period did not practice spear charge because of their lack of comfortable saddle; they were in danger of falling down. For this reason their cavalry lost the advantage it should have held from the force of a compact formation multiplied by the pace of the horses. To overcome the resistance of the deep formation of the phalanx, it was necessary to develop specific tactics. Since the long *sarissai* of the infantry inhibited close combat, nomadic horsemen first covered the adversary with a massive and dense, although un-aimed, torrent of arrows. This is the reason why several hundreds of arrowheads were found in the *gorytoi* of the Scythian-Sakas period. After that, light horsemen approached and threw spears and javelins from close by, thus enhancing confusion in the ranks of infantry. Then heavy cavalry rushed into the breach for fighting with close-combat weapons, spears and battleaxes. At that period, the development of the military art of the steppe nomads was influenced by their confrontation with professional armies of the Near East (Urartu, Assyria, Persia) and the classical world (Greece, Macedonia, Greek cities of the North Pontic region).

During the Xiongnu-Sarmatian period, saddles with high arches had appeared. Such a saddle most probably was invented by the Xiongnu or a related people at the Han border. This saddle held the horseman firmly during the recoil of the spear and gave rise to a radically new battle method—a mounted spear charge. This method became the basis of the tactics of heavy cavalry of the *cataphracti* and, later, of medieval knights, lancers, and even Cossacks of modern times. The *cataphracti*, charging at the full pace of their horses, delivered blows with their spears to the enemy ranks, completely destroying them.

Nomadic armored horsemen charged in compact formation, bristling with spears 3 m long. The hypothesis about very long Sarmatian spears—up to 4.5 m—is wrong. It is based on a literary understanding of rather conventional images.[30] After breaking the enemy’s formation, warriors abandoned their spears and slashed the unmounted enemy with their long swords. However, the bulk of the troops, as in the previous period, consisted of light cavalry armed with bows.

The Amazons

It is assumed that a peculiarity of the Sarmatian military art consisted in the participation of women in warfare. This opinion is based on female burials containing weapons and on the information of ancient authors.[31] However, female burials containing weapons are present in many cultures of the Eurasian nomads. The nomads probably practiced the involvement of women in hostilities only in extreme cases: during defense against numerically stronger enemies or in the absence of male warriors. Apparently, nomadic women were armed with bows, javelins, or lassos.

Military Psychology, Customs, and Rituals

The nomads established military and political control over conquered territories and tributary relations with their populations. Sedentary peoples and nomads formed a kind of economic symbiosis: they could not exist without each other. The military aspect played an important role in this symbiosis. The sedentary population adopted, first of all, riding skills, cavalry, and all other characteristics associated with horse breeding and mounted warfare.

In the confrontation between nomadic and sedentary worlds, the nomads had several military advantages.[32] First, it was not necessary for nomads to keep the expensive, specialized professional army that a sedentary society needs. Most nomads in peacetime were shepherds and became soldiers only during war, whereas each nomadic man was an armed and skillful warrior. The ratio of warriors to the total population in nomadic societies was 1:5 and sometimes even 1:4. Herodotus said that the Scythians, in the 5th century BCE, were the type of society “where everyone is a mounted archer.”

Second, nomadic military organization was based on the clan and tribal principle. They had no specialization of warriors. Each horseman was able to shoot with bow and arrow at full gallop and to fight in close combat. The difference in equipment and arms depended only on the degree of prosperity of the warrior.

The third military advantage of Eurasian nomads was their way of life. All the boys prepared for careers as warriors almost from birth. Contemporary ethnographical examples allow us to confidently assert that in nomadic society some age-related groups had always existed, whose task it was to educate boys as future warriors. At a very young age each boy was presented with his first weapon—a knife—and put on horseback. The Turkmens, for example, did it between the ages of five and eight years in different tribes.[33] The transition to the next age group was accompanied by initiations (varying for different nomads) and the change in the legal status of the future warrior: the young man had the right to feast with adult warriors, could carry and use weapons, etc. In the next age group young warriors became full members of the military community and were ready to fight for the tribe. Thus, a nomad entered into the cycle of military training from the time he could first walk.

Yet the most important advantage of Eurasian nomads was their great number of saddle-horses. The transformation of the horse into a weapon of war was one of the highest achievements of human civilization, if not the most progressive. The first and most important step in this direction was the development of the release of the bow from a galloping horse. For comparison, in the Assyrian reliefs of the 9th–middle of the 8th c. BCE the mounted archer shoots from a standing horse held by a footman. The mobile nomadic archers amazed the unaccustomed warriors of settled peoples, who were "smashed" by the charge of a close cavalry formation. Physical and psychological characteristics of the horsemen's charge, as a rule, made it quick and victorious. The image of an avalanche of galloping horses, crashing hooves, grinning muzzles, and the heavy breathing of animals, as well as the upraised arms of horsemen, plunged footmen into horror and shock. As Franco Cardini said, "just imagine for a moment a huge mass of steel, riding on a sweaty horse, the very embodiment of the sacred ancient horror and a new apocalyptic nightmare."[34] It is not without reason that all service regulations forbade infantry from taking to flight from cavalry—encounters could still be won, but flight meant certain death.

Ideology played an important role in the consolidation of nomadic armies. As their highest spiritual qualities, the nomads cultivated personal courage, military heroism, mercilessness to enemies, and defiance of death, as well as friendship and self-sacrifice toward friends. A special place in nomadic military morality was occupied by a cult of a "victorious hero," according to which commonly held values of grace, pity, honesty, and nobility of spirit were not applied to defeated enemies, who were not considered human beings at all. These dominating worldviews were consolidated by traditions, religious beliefs, and heroic epos, as well as by civil and, significantly, by gender morality. A coward, an awkward warrior, or a loser was despised by women, and he risked remaining without descendants. The material reward—each warrior had his share in the booty—also raised the fighting spirit of nomadic warriors. All these factors guaranteed an availability of numerous skilled and victorious troops to nomadic leaders.

We have little literary evidence of the warrior ceremonies and military cults of the ancient steppe nomads. Archaeological finds have yielded even less evidence. However, the presence of warrior burials with weapons and armor among general masses of nomadic graves itself speaks to the existence of some specific military funeral rites. Herodotus described the altars of the Scythian god of war Ares:

> In each district of the several governments they have a temple of Ares set up in this way: bundles of brushwood are heaped up for about three furlongs in length and in breadth, but less in height; and on the top of this there is a level square made, and three of the sides rise sheer but by the remaining one side the pile may be ascended. Every year they pile on a hundred and fifty wagon-loads of brushwood, for it is constantly settling down by reason of the weather. Upon this pile of which I speak each people has an ancient iron sword set up, and this is the sacred symbol of Ares. To this sword they bring yearly offerings of cattle and of horses; and they have the following sacrifice in addition, beyond what they make to the other gods, that is to say, of all the enemies whom they take captive in war they sacrifice one man in every hundred, not in the same manner as they sacrifice cattle, but in a different manner: for they first pour wine over their heads, and after that they cut the throats of the men, so that the blood runs into a bowl; and then they carry this up to the top of the pile of brushwood and pour the blood over the sword. This, I say, they carry up; and meanwhile below by the side of the temple they are doing thus: they cut off all the right arms of the slaughtered men with the hands and throw them up into the air, and then when they have finished offering the other victims, they go away; and the arm lies wherever it has chanced to fall, and the corpse apart from it.[35]

The further—medieval—history of the military art of Eurasian horse breeders is associated with Turkic-speaking peoples, and with two outstanding inventions of the nomads: stirrups and the sabre.[36]

Discussion of the Literature

The arms and warfare of Eurasian nomads of the Early Iron Age are the topic of numerous scientific and popular articles and books. It is impossible to analyze all of them, even briefly. Therefore, this discussion will limit itself to the key scientific monographs containing the publication of artifacts—pieces of weapons and horse harness—as well as works analyzing the military history of Eurasian nomads of the Early Iron Age. This review will focus on scientific publications in Russian. They are less known to Western readers but contain basic information on the archeology and military history of the Eurasian nomads of antiquity and the Great Migrations period, since the majority of the archaeological artifacts of Eurasian nomads have been found in the territory of Russian-speaking scientific space.

Also, a great deal of the Western literature addresses the ancient nomadic horse breeders. However, there is some disparity with regard to the specifics of the archaeology of nomads: while Russian-speaking scholars have paid equal attention to the publication of artifacts and theoretical studies, Western authors have preferred to study the military history and warfare of nomads in the context of their political history.[37]

Weapons and horse harnesses of the Cimmerians have been published in many articles, but a summary work by V. I. Klochko on this topic has appeared recently.[38] It deals with objects from the territory of Ukraine; many artifacts found in Russia were not included.

The first classification of the Scythian and Sarmatian swords formed the basis of the book by W. Ginters,[39] which today has only historiographical value. To date, the basic work on the typology and chronology of Scythian weapon is the monograph by A. I. Melyukova,[40] whose classification remains relevant. The books and articles of Ukrainian scientist E. V. Chernenko have become classics of Scythian military studies.[41] Weapons and warfare of Asian nomadic tribes of the Scythian Age are the topic of works by K. F. Smirnov,[42] M. V. Gorelik,[43] S. I. Rudenko,[44] and Antony Karasulas.[45]

The warfare and arms of the Sarmatians are studied in detail in books and articles by A.M Khazanov[46] and O. V. Symonenko.[47] The monograph by R. Brzezinski and M. Melcharek[48] is basically the English translation of the positions of Russian-speaking authors, including their positions on the book by T. Sulimirski.[49]

Asian nomads of the Sarmatian Age—the Xiongnu, Yuezhi, and Wusun—are the subject of plentiful literature in Russian, English, and Chinese. It is impossible to refer here even to small part of it. These works consider the problems of the military and political history of the Xiongnu and their neighbors, their relationship with the Han Empire and neighboring nomads, and the description and publication of weapons. Among Russian research, books by A. V. Davydova and S. S. Minyaev[50] deal with the Xiongnu sited in the Trans-Baikal region and Mongolia. Xiongnu weapons formed the topic of works by Yu. S. Khudyakov.[51] The problems of the military organization and history of the Xiongnu occupy a significant place in the works of N. N. Kradin,[52] some of which are translated into European languages. The fundamental works of Thomas Barfield,[53] Nicola Di Cosmo,[54] Craig Benjamin,[55] and Ying-shih Yü[56] are classic studies of the military and political history of the Xiongnu, Yuezhi, and other Asian nomads of late antiquity. The sensational finds from the Yuezhi cemeteries in the Tarim Valley were published in several works.[57]

Among the nomads of the Great Migration period, the Huns have most interested European scientists. However, their archaeological connection with the earlier Xiongnu is still disputable,[58] and the Russian scientist S. G. Botalov has proposed an interesting hypothesis about the formation of the culture of European Huns in the milieu of Late Sarmatian tribes of the Urals and Northern Kazakhstan.[59] The majority of archaeological sites of Eurasian Huns in the territory of the former Soviet Union have been published in Russian by I. P. Zasetskaya.[60] Hun sites of Central and Western Europe are summarized in the books of Joseph Werner and Istvan Bóna.[61] In these publications a lot of space is devoted to weapons and horse equipment. The books by E. A. Thompson also should be mentioned.[62] A special mention should go to the fundamental research of Otto Maenchen-Helfen, containing a sophisticated chapter on the Hunic warfare.[63] Among other works, J. Lebedinsky's book about weapons and battle traditions of the "barbarian" peoples of the

Great Migration period should be mentioned;[64] it contains quite a lot of talk about the Huns.

The abundant European[65] and Chinese[66] literature is devoted to military and political history, military training, and arms of the contemporaries of the Huns who roamed along the steppes north of the Great Wall of China—Xianbei, later transformed into Ruănruan.

Primary Sources

The main sources for the study of the military art of Eurasian nomads consist of textual evidence (works by Greek, Roman, and Chinese authors; decrees and inscriptions), visual sources (the depictions of warriors and arms in toreutics, petroglyphs, frescoes, reliefs, paintings, graffiti, etc.) and archaeological materials. This discussion covers only part of the literature, with a focus on works containing the most principal and objective or the most sophisticated and spectacular data.

The first mentions of the Cimmerians and the Scythians are contained in Assyrian cuneiform texts of the 8th–7th centuries **BCE**. However, the most complete selection of information about them, and about Sauromates, Issedonians, Sakas, and Massagetae, as well as about smaller tribes of Eurasian steppe nomads, are contained in the fourth book of Herodotus's *History*, "Melpomene,"[67] written in the 5th century **BCE**. The nomads of the Sarmatian period (Sarmatians, Dahae, Parni, Massagetae, Sakas, and others) were described at the dawn of the Christian era by Strabo,[68] in the 1st century **CE** by Pliny the Elder,[69] and in the 2nd century **CE** by Claudius Ptolemaeus,[70] Cornelius Tacitus,[71] and others. Later, information on the Huns and Alans was provided by the 4th-century author Ammianus Marcellinus.[72]

Apart from classical authors, precious evidence about the nomads of Asia (Xiongnu, Wusun, Yuezhi, Sakas, Kanghu, Sarmatians) is contained in Chinese chronicles: historical records[73] (Shǐ-jì) by Sima Qian (between 109 and 91 **BCE**), *History of the Han Dynasty*[74] (Han shu) by Ban Gu et al. (62–82 **CE**), *History of the Later Han Dynasty*[75] (Hou Han shu) by Fan Ye and Sima Biao (5th century **CE**).

Among the numerous depictions of nomadic warriors, it is worth noting the well-known golden comb and gilded silver vase with the images of Scythian warriors from royal barrows Solokha and Kul-Oba in Ukraine,[76] the frescoes from Pantikapaion crypts and grave stones,[77] spectacular bone belt-buckles with battle and hunting scenes from Orlat cemetery,[78] and the Chinese depictions of Xiongnu, which are, however, rather stylized.

The most objective category of available sources consists of archaeological materials from nomadic graves: swords, daggers, spear- and arrow-heads, remnants of bows, as well as helmets, body armor, and horse trappings.

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Oleksandr Symonenko

Institute of Archaeology, Ukrainian National Academy of Sciences

Xiongnu Empire

URSULA BROSSEDER
University of Bonn, Germany

The Xiongnu empire (3rd century BCE to 2nd century CE) is the earliest and longest-lasting of the so-called steppe or nomadic empires witnessed in Inner Asia over the past two millennia. It extended from the Ordos to Lake Baikal and from Manchuria to eastern Kazakhstan with its heartland in Mongolia. What is known about the Xiongnu Empire relies mainly on Chinese chronicles and archaeological evidence. Because it was the first empire in the steppes, the Xiongnu case also plays a major role in theoretical approaches to empire formation in Inner Asia.

What we know about the Xiongnu as a historical phenomenon is based mainly on a few Chinese chronicles – the Shiji, Yantielun, Han-shu, and Hou Han-shu – between the 2nd century BCE and the 5th century CE. These provide accounts of the Xiongnu Empire, after its establishment, when it played a major role in the geopolitics of the Qin and Han dynasties. The term "Xiongnu" was mostly used by Chinese court historians to record diplomatic and military dealings with the northern steppe leaders. It described both a polity and a group of people. The label of Xiongnu does not denote a coherent entity of people with the same language or the same ethnic affiliation. Rather, it refers to numerous peoples or tribes within a political confederation and designates a political entity of groups from distinct regions, with various cultural and social regimes, across a broad territory via a formalized integrative imperial system (Brosseder and Miller 2011: 31). Because of this more sociopolitical meaning, there is no straightforward answer to the question of the origins of the phenomenon known as the Xiongnu.

Another field of debate is the character of the Xiongnu polity, which revolves mainly around the question whether the Xiongnu entity (depending on the criteria applied) qualifies as an early state or a super-complex chiefdom (e.g., Kradin 2011). Yet it is beyond discussion that it constitutes an empire – in the sense of a political formation that extended far beyond its original territory and integrated a variety of regions and peoples (Di Cosmo 2011). Several models have been proposed to explain why and how a comparatively sparse society of pastoralists formed an empire in the Inner Asian steppes. Apart from general theories that emphasize climate change, an inherent militant lifestyle, or economic pressures on pastoralist societies, the most predominant model for the Xiongnu Empire arose from a geographically oriented approach centered on the relations between China and the steppe. This approach projects a sharp dichotomy between two separate systems that collide in a singular frontier zone. This frontier zone is central, even "imperiogenetic," to theories of steppe dependency or co-evolution that explain the formation of steppe empires. Having the centrality of the frontier in mind and based primarily on assumptions of overall deficient steppe social complexities and pastoral economies, Barfield (2001) asserts that the Xiongnu depended critically on agriculture from China and formed a secondary phenomenon or "shadow empire" of China's Qin dynasty.

Such dependency theories have been rejected, or even transformed, by anthropologists in favor of more sophisticated models of co-evolution. Although these models still

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project the frontier zone between China and Inner Asia as still central to formation processes of steppe empires, Turchin (2009) deems the Xiongnu Empire the result of long-lasting co-evolutionary processes and co-dependencies on both sides of the frontier that led to the formation of contemporaneous imperial polities. However, such polarized perspectives tend to underestimate or neglect developments within steppe societies, and historians and archaeologists alike have begun to propose alternate models that emphasize the internal dynamics of the steppes (Honeychurch and Amartuvshin 2006; Di Cosmo 2011).

Historians have convincingly demonstrated that for the Xiongnu Empire circumstances of crisis, exacerbated by Qin incursions into the steppes, initiated processes of state formation through the supplanting of traditional aristocracies (Di Cosmo 1999). Historical narratives recount this development as centered around the charismatic leader Modun who killed his father and, after a coup, quickly began conquests to subdue neighboring groups. In the process, the Xiongnu crushed Chinese forces and in 198 BCE secured a treaty, called *heqin*, involving Chinese princesses and lavish gifts from the nascent Han dynasty for several generations afterward. Xiongnu expansions peaked in the early 2nd century BCE when Modun proclaimed "all the people who draw the bow have now become one family and the northern region has been pacified" (trans. in Di Cosmo 2002: 186).

The organization of the unified Xiongnu polity was based on a decimal structure of leadership and an appanage system of territories of the "left" (east) and "right" (west). Although scholars have often assumed this structure reflects Chinese organizational logics, evidence points more to parallels westward in the Achaemenid Empire (Di Cosmo 2011: 47). At the top of the political order was the supreme ruler, the *chanyu*, who belonged to a ruling royal lineage, and the highest political ranks were restricted to this and only a few other secondary lineages, tied to the royal lineage by intermarriage. The uppermost ranks consisted of the 24 Great Chiefs, referred to as kings and commanders, which were hereditary positions at the head of a military decimal system (i.e., the Chiefs of Ten Thousand Cavalry) and were linked to particular "left" and "right" appanages. These were followed by several other ranks of kings, high-order generals, commanders, and officials, some of which were open to other lineages. Each of the Great Chiefs appointed his own subordinate kings and officials, and such lower-level leaders within and outside of the recognized system surely represented significant social forces in the steppe polity (Miller 2014). The Xiongnu sought to replicate their political and military titles at the local level to support the hierarchical structures in the center and thus incorporate the elites of conquered people (Di Cosmo 2013: 34). The elite ranks also included a group of high-ranking appointments amidst the Xiongnu nobility, which included foreigners, such as Chinese defectors, who were directly placed under the authority of the *chanyu*, indicating a personal entourage of trusted advisors for the latter (Di Cosmo 2013: 30–31).

The Xiongnu Empire endured difficulties when the Han appeasement policy of *heqin* failed in the middle of the 2nd century BCE and the Han emperor Wudi began to wage war. By the end of his reign (87 BCE) the far western regions, which constituted an important economic base for the Xiongnu, were under the control of the Han. The loss of this neighboring power base exacerbated internal conflicts among Xiongnu leaders that culminated in a civil war (57–47 BCE). After the mid-1st century BCE little information about the internal affairs of the Xiongnu exists in the Chinese chronicles. This has often

erroneously been interpreted as a decrease in power of the steppe rulers, even though the *chanyu* Huhanye soon restored sovereignty in the steppes and ushered in an era of revived Xiongnu strength that lasted until the end of the 1st century CE (Miller 2014). In 50 CE, another internal conflict between claimants for Xiongnu rulership led to large factions surrendering in the northern Chinese frontier and establishing a fledgling "southern" Xiongnu polity, which eventually aided in the destruction of the "northern" Xiongnu steppe empire at the end of the 1st century CE and remained there until the beginning of the 3rd century. The combined attacks that finally brought down the Xiongnu empire included the Han Chinese and other groups, particularly the Xianbei from the eastern flank who are claimed to be the successor empire in the steppes.

There has been a century-long discussion as to whether the Xiongnu can be deemed the predecessors of the European Huns of the late 4th to early 5th centuries CE. This discussion, however, frequently lacks methodological precision and recurrently conflates different notions of a people, designations of political confederations, and concepts of cultural names that should otherwise remain distinct. While the names Xiongnu and Hun can be linguistically correlated, the written and archaeological evidence that is drawn upon to link the two historical phenomena into a singular people is far too faint to withstand scrutiny.

Apart from the narrative of empire developed via Chinese chronicles of the Xiongnu "other," archaeological sources must also be evaluated as they form another critical primary source, independent from the written records, that holds equal potential to elucidate facets of the Xiongnu Empire. The question that firstly affects Xiongnu archaeological studies is how to establish a link between a historically attested political entity and an archaeological culture – a problem that still needs to be completely resolved for the case of the Xiongnu Empire. Researchers have yet to fully define, analyze, and agree upon the collective archaeological culture groups of Late Iron Age southern Siberia, Mongolia, and northern China, much less to distinguish all the elements of what might correlate to the Xiongnu Empire.

The most plausible corpus of archaeological remains in Late Iron Age Inner Asia to be linked to the Xiongnu phenomenon consists of a spread of sites, centered mostly in Mongolia, which share similar mortuary expressions as well as numerous artifacts across a wide expanse of territories. Progress has recently been made in chronological refinements of this material, allowing us to see a temporal sequence highlighting changes over time – distinctions that are crucial for comparing and combining historical and archaeological narratives. During the 2nd century BCE, a new style of burials appeared in the Mongolian steppes. They are discerned by the large rings or small clusters of stones on the ground surface which demarcate their interments. During the late 2nd to early 1st centuries BCE, a broad adherence to a group of open-work animal-style belt plaques indicates intense interregional elite communications. The appearance of a homogeneous style of weaponry, namely the introduction of the compound bow with bone strengtheners, as well as a homogeneous assemblage of pottery, points to similar interregional connectivities. Differences in status and/or rank can be observed within these burials and assemblages, but by the late 1st century BCE (and up through the 1st century CE) monumental terrace tombs containing overwhelmingly ostentatious burial assemblages with numerous exotic goods began to be erected in the steppes (Brosseder 2009). As indicated by the exotica, predominantly from China but also from Central Asia and even further west, these elites participated in far-reaching

networks. Through the internal redistribution of goods some of the exotica were acquired also by lower ranks (Di Cosmo 1999; Brosseder 2015) indicating a wealth-based or prestige goods economy.

Since the 1990s, international investigations of archaeological remains of the Xiongnu period, especially in Mongolia, have grown rapidly. Today thousands of tombs in Mongolia, southern Siberia, and northern China have been documented. However, only a handful of cemeteries have been excavated sufficiently to allow for intensive analyses. Furthermore, as most interments were heavily disrupted in Antiquity, our knowledge of these graves is quite limited. Moreover, the process of reopening tombs, which is often understood as looting, has yet to be investigated in order to more clearly discern the time-frames and processes of disruption. Such studies might elucidate the nature of the grave opening in relation to issues of looting, desecration, or ritual reopening.

Beyond studies of mortuary arenas, the field of settlement studies for the Xiongnu is still relatively underdeveloped. Aside from pastoral campsites, identified by small scatters of debris, archaeologists have also unearthed settlements of semi-subterranean houses with evidence for some agriculture subsistence and craft production, such as bone working. Several walled sites with platforms have also been found, though their function is not yet fully understood as none of these places have yet been systematically explored. Because of their monumentality and foreign-inspired architectural elements, however, they probably held a central position in society (ritually, economically, politically, and/or socially) on a par with the terrace tombs. In addition, as information on artisans and local production sites is scarce, the economic sectors of Xiongnu society are still poorly understood. Debates on import versus local steppe production of goods and materials are therefore hindered. Yet some evidence that might aid in the debunking of dependency theories has begun to surface in Xiongnu archaeology, including preliminary evidence for local uses of foreign techniques as well as local sources of gold and local sites of intense iron smelting.

Some scholars have attempted to match the historically documented political system of center, left, and right territories to cores and peripheries in distributions of archaeological remains. Yet such correlations, especially with heavy emphases on a handful of elite cemeteries and a dearth of settlement data, remain problematic conjecture at best. Moreover, both the historical and archaeological records point to more complex strata of local elites (Miller 2014), and scholars have yet to elucidate the manners in which they were integrated into the wider polity. Distinctions of "cultural cores," "frontiers," and the mechanisms of greater or lesser integration of these territories into a political entity, while simultaneously acknowledging regional, cultural, social, and economic diversity, still need to be empirically addressed. Although material expressions of political participation, as well as cultural, social, and economic integration, may highlight different cores and frontiers, we should be wary of outlining precise boundaries of a polity according to an archaeological culture. Instead, it may be more promising to consider varying degrees of interaction and integration within the empire (see Miller 2015).

Turning again to chronological delineations, the most recent radiocarbon dating efforts have shown that some graves in the northern steppes, while appearing very similar to those of the Xiongnu period, date to the 2nd and even 3rd centuries CE, well after the formal collapse of the historically documented Xiongnu Empire. It is in this period that Chinese chronicles have suggested the Xianbei formally ruled over large portions of the steppes that had previously been under

Xiongnu control. However, this supposition raises numerous questions. In addition to issues of the sometimes problematic correlations between historical polities and archaeological cultures, it highlights problems surrounding our understanding of the nature of the collapse of polities.

SEE ALSO: China, imperial: 1. Qin dynasty, 221–207 BCE; China, imperial: 2. Han dynasty, 206 BCE–220 CE; Dependency theory; Dong Hu tribal confederation; Hunnic Empire; Türk Khaganate; Xianbei Empire

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STATELESS EMPIRE: THE STRUCTURE OF THE XIONGNU NOMADIC SUPER-COMPLEX CHIEFDOM

Nikolai N. Kradin

Introduction

The Xiongnu formed the first nomadic empire in Central Asia. The military and political talent of Modun, the founder of the empire, played a great role in the process of political formation, which began amidst the need to resist the aggressive territorial expansion and acculturative efforts of the Chinese to the south. This nomadic empire was configured internally as a chiefdom and tribal confederation, and outwardly as a conquesting xenocratic nomadic polity. Every pastoral nomad, chief, follower, or ordinary herder was included within a social structure of genealogically-based inequalities among the various tribes and clans. At the same time, every nomad was also a warrior in a military structure organized according to a decimal system.

Over a period of 250 years, dramatic military, economic, and diplomatic interactions occurred between the Xiongnu and their southern neighbors, the Chinese Han dynasty. During those 250 years China had not been able to gain complete control over the Xiongnu problem. The nomadic empire of the Xiongnu collapsed because of the ecological catastrophe of 44–46 AD and a surplus of elite people with their struggle for power. Despite the fact that the population of Han China, according to a census taken during the middle of the dynasty, has been counted at about 60 million people as compared to the total population of nomads north of China, which is postulated as not reaching 1.5 million people, the Xiongnu still managed to withstand, and parlay on equal terms with, the Qin and Han dynasties.

There exists a significant amount of historical records concerning Xiongnu history that provide some of the earliest information about the social organization of pastoral nomads, and the Xiongnu are one of the rare groups of ancient nomadic peoples of Asia – just like the Scythians in Europe – for whom so many archaeological sites and materials have survived to be discovered. To a certain extent, this allows for the use of conclusions drawn from historical evidence of Xiongnu society in reconstructions of the political organizations of other Eurasian nomads during equivalent ancient times. Also, the initial interests within Western scholarly fields in the examination of Xiongnu society was mainly mediated by the myth of the great migration of the Huns to Europe from their Asian homeland. Since the Xiongnu entity was the first large political union of nomad groups in Asia, this of course begs the question: What are the principles for its formation? The basic principles of the Xiongnu political system – decimal hierarchy, centralized power, triple-dual separation – can be, to one extent or another, documented down through developments of subsequent nomadic empires in Eurasia. Was this an accidental outcome resulting from similarities in steppe societies or a deliberate adoption of political precedents that led to a transfer of traditions?

FORMATION OF THE XIONGNU EMPIRE

Many scholars have postulated that political integration and the subsequent appearance of an early state system depend on many internal and external factors, including ecology, agriculture, population density, technology, conquests and military pressure, cultural influence, foreign commerce and so on[1]. However, the roles of such factors in the social evolution of nomadic societies differed due to the ecological and economic particularities of the numerous arid zones which they occupied. Although settled peoples often developed more technologically advanced industries than their nomad counterparts, prevailing strategies such as horse and camel stockbreeding generated increased mobility and military capability that allowed for domination of steppe peoples in Eurasia and North Africa during pre-modern times.

Researchers of steppe groups have proposed numerous reasons for the formation of a nomadic empire. These include drastic climatic changes, like drought or flooding, an inherent militant lifestyle of the nomads, and demographic and economic pressures which forced nomads to reach beyond the steppes, preying on weak and fragmented settled societies and supplementing their own weak and imbalanced pastoral subsistence bases with the spoils of raids from agricultural groups. While the majority of these notions have their own explicable rationale, the nature and importance of many associated aspects have been overestimated.

Hypotheses of conflict struggle for political formations have proved to be erroneous[2]. At present, paleo-geographical data do not show any significant periods of steppe desiccation, humidification with periods of decline, that correlate with the rise and fluorescence of nomadic empires (Ivanov/Vasil'ev 1995, Tab. 24; 25). The possible role of demography in sociopolitical change is not entirely understood, since increases in livestock, rather than human population, appeared to be the more principal problem of overcrowding in the steppe territories. Significant increases in livestock counts would often lead to the destruction of pastures through overgrazing and thus a crisis of the ecosystem. The nomadic lifestyle can, naturally, contribute to the development of some military characteristics, especially in cavalry and overall mobility, but settled agricultural societies outside the steppes were often exponentially more populous, established more defendable permanent fortifications, and developed more complex subsistence economies and craft industries.

From an ecological standpoint, pastoral nomadic groups do not need a state structure to have a stable economy. Pastoralism in the steppes retains a specific character of an extensive mode of management. A concentration of large herds at the same place leads led to overgrazing, excessive trampling down of grass, and a higher risk of infectious diseases spread among animals. Furthermore, livestock cannot be hoarded or amassed to infinite amounts in a single area. Thus, despite any potentials of productivity in pastoral economies, maximum accumulation quantity of livestock in any individual locale is limited by the pasture quality of the landscape. In addition, regardless of precautions taken, the majority or entirety of a herd could be decimated by summer droughts or "zud" winter disasters[3]. Therefore, it was more secure and profitable for individual

1 Carneiro 1970; Claessen/Skalník 1978a; Haas 1982; Korotaev/Chubarov 1991; Earle 1997; Kradin et al. 2000; Trigger 2003; Grinin et al. 2004; Rogers 2007, and others.

2 Markov 1976; Khazanov 1984; Kradin 1992; Kradin/Skrynnikova 2006.

3 Winter disasters, called "zud" in Mongolia, occur as "white" disasters: heavy precipitation covers the pastures deep in snow; "black" disasters: minute precipitation leaves almost no pre-winter rains or late-winter melting snow to hydrate pastures and is often accompanied by colder temperatures; and "iron" disasters: fluctuating temperatures melt snow and continually refreeze it as a hard ice over the pastures.

herder groups to partition livestock out for pasture to fellow kith and kin. Livestock could be "loaned" out to those who did not possess sufficient herds, thereby allowing for the distribution of large accumulations of animals across an essentially wider expanse of pastures and in the hands of greater numbers of caretakers while still retaining nominal ownership. Livestock could also be distributed as "gifts", thereby raising the social status of the donating herder groups or individuals. In this scheme, all aspects of herd management, distribution, and production could be carried out within extended local networks of family relations and lineage groups, only episodically employing labor co-operation at the sub-tribal and tribal levels. In addition, considerable pressure on mobile herders from a tribal chief, or other supra-local leader who sought to gain personal power, could lead to mass departing away from them[4]. These circumstances meant that the intervention of supra-local leaders was relatively insignificant and thus cannot be compared with the numerous administrative obligations of rulers in settled agricultural societies. By virtue of this collective situation, the power of supra-local leaders in the steppe societies could not develop on the basis of regular taxation of herders, and the steppe elite had to rely on systems of gifts and irregular presents.

If not a necessity of the pastoral mode of production, then, in such situations, what incited pastoral nomads to create large empires and conduct raids? The eminent researcher of Mongolian nomadism, Owen Lattimore (1940, 522), who spent a prolonged period among pastoralists of Mongolia, wrote that a nomad can easily manage with the products received from his herd of animals, but a pure nomad will always remain poor. Nomads are in need of foodstuffs of farmers, products of craftsmen, silk, arms and refined adornments for their chiefs, chiefs' wives and concubines. All this can be obtained from two ways: war and peaceful trade, nomads used both ways. When they felt their superiority or invulnerability, they mounted their horses and left for a raid. However, the neighbor was a powerful state and pastoral nomads preferred to carry on with it a peaceful trade. But quite often governments of settled states prevented trade as it went out of control. At that time, nomads had to assert their right for trade by using arms.

The complicated hierarchical organization of power in the form of nomadic empires and similar political formations was developed by nomads only in those regions where they have been forced to have long and active contacts with more highly organized agricultural-urban societies, like in the case of the Scythians with the ancient oriental and western states, the nomads of Inner Asia with China, the Huns with the Roman Empire, the Arabs, Khazars and Turks with Byzantia[5]. In Khalkha-Mongolia, the first steppe empire – Xiongnu – has emerged just as in the Middle China plain after a long period of internal wars the Chinese national centralized state emerged – the Qin and afterwards the Han empire (Kradin 1996, 19–27; 34–49). The nomadic empire can be defined as a nomadic society organized on a military-hierarchical principle, occupying a large space and exploiting nearby territories. Exploitation took, as a rule, external forms of exploitation, like robbery, war and indemnity, extortion of gifts, non-equivalent trade, laying under tribute, etc. One can identify the following characteristics of nomadic empires:

1 multi-stage hierarchical character of the social organization pierced at all levels by tribal and super-tribal genealogical ties; 2 dualistic (into wings) or triad (into wings and center) principle of administrative division of the empire; 3 military-hierarchical character of the social organization of the empire's center, frequently on the decimal principle; 4 horse relay messenger

4 Lattimore 1940; Markov 1976; Irons 1979; Khazanov 1984; Fletcher 1986; Barfield 1993; Kradin 1992; Masanov 1995; Golden 2001, and others.

5 Lattimore 1940; Khazanov 1975; 1984; Barfield 1981; 1992; 2001b; Fletcher 1986; Kradin 1992; 1996; Golden 2001; Honeychurch/Amartüvshin 2006a and others.

service "iam" as a specific way of organizing the administrative infrastructure; 5 specific system of power inheritance where the empire is property of the whole khan clan, the institution of a co-government, "khuriltai"; 6 specific character of relations with the agricultural world (Kradin 1992; 2003).

It is necessary to distinguish the classical nomadic empires from similar mixed agricultural-pastoral empires, in which the nomadic element played a great role (Arabian caliphate, state of Seljuks, Danube Bulgaria and Volga Bulgaria, Ottoman Empire) and quasi-imperial nomadic statehood formations, which were smaller than empires, like the European Huns, Avars, Hungarians, Azov Bulgaria, Kara-Khitans, and the Tatar Khanates after the collapse of the Golden Horde.

Three models of nomadic empires (typical, tributal, aggressive or conquest) are identified:

1. Nomads and farmers coexist over a distance, acquisition of surplus product is provided through distant exploitation with raids and extortion of gifts (racket, in a certain sense), etc. This model applies to the Xiongnu, Xianbei, Turks and Uighurs.
2. Farmers under nomad rule with an exploitation by tribute payment, as it is the case for the Golden Horde and the Yuan dynasty.
3 Nomads conquer the agricultural society and migrate into its territory, a regular taxation of the farmers and townsmen takes the place of robbery and tributes, like for example the Wei dynasty of the Tuoba Xianbei, Il-khan state (Kradin 1992, 166–178; 2000; 2003).

There are four identified variants of how steppe polities could possibly emerge: the Mongolian way – through usurpation of power; the Turkic way – in the process of struggle for independence; the Avar way – by migration to the territory of the agricultural state; the Khazar way – separation of independent polities from one great steppe empire, like the separation of Khazars from the First Turk Khaganate.

The process of the Xiongnu power formation was implemented in accordance with the above mentioned principles. Xiongnu power conforms to the first, most prevalent model. The appearance in the nomadic environment of a talented political and military figure, like Modun of the Xiongnu, Tanshihuai of the Xianbei, Shelun of the Rouran, Abaoji of the Kitan, Chinggis Khan of the Mongols, who has managed to join all tribes and khanates into a common steppe power is characteristic.

As a whole, the history of the Xiongnu power formation fits in the general picture of the origin of nomadic empires in Eurasia. Sima Qian depicts in Chapter 110 of the "Shiji" how a chanyu ruler of the Xiongnu should be, and how he should capture the throne (Sima Qian 1959, 2888 pp.; Zhongyang 1958, 15–16), however, in this story, the echos of true historical events and elements of fantasy are mixed. This story resembles more a fiction than reality as it contains several incredible aspects: Political revolutions are prepared in secret. In this case, all the preparatory measures had been carried out in concourse and it is not likely that chanyu Touman had no knowledge of them; Why did the murder of the loved (!) wife by Modun remain unpunished? How did he explain such a cruel action to his father and his wife's relatives? Why did a custom of blood feud not infringe on him? The number of the loved wives was quite great: three in the story; Why did the chanyu and his retainers fail not only to stop a terror that was unleashed by Modun in his district but also had no knowledge of repression?; How did Modun make himself so bold as to kill his loved horse before his father's eyes? It is common knowledge what value the horse has for a nomad and striking a blow to another's runner implies striking a blow to its owner; The fact of the father's murder itself is very doubtful. In the history of the nomadic world, the events of murders in the struggle for the throne were often noted. But I do not know any other ruler of a nomadic empire who killed his father.

Therefore the existence of chanyu Touman as a real historical person can be questioned. Shiratori (1902) and Hirth (1900) noted a consonance of this name with the word "tuman" meaning "ten thousand" warriors. Thus, it is possible that Touman is a collective image but not Modun's real father.

On the whole, the story of Modun's advent to power closely resembles a tale or epic work. The text has a clear composition structure and is divided into two parts. In the first one, a sequence of events of Modun's advent to power is depicted, while, in the second, an account of his diplomatic relations with the Donghu ruler and war against him is given, which comes to a happy end as it often happens in literary works. All events in both parts run on the principle of chain, and the tension grows gradually until it finally ends with some action. Such a way of text construction is called an effect of cumulativity by V. Propp (1976), and was widely used in different forms in folklore works.

The second fundamental likeness of the story of Modun's rise with folklore works consists in a principle of triplicity. All events of the chain are repeated three times (as in a tale) but every time with a cumulative increase in tension[6]. Initially, Modun shoots at his horse, then at his wife and at his father's horse. Only at the third time, he won the unanimous support on the part of his fighting men. In the second part, he gives up his horse and wife and only at the third time he mounts a horse and takes the field against the Donghu.

The third likeness with folklore works is present in the composition structure. In the folklore, horse and wife are traditional elements, and the enemies threaten to capture them from the main hero, as for example, Jangar, Geser or tales. Twice, Modun was forced to leave the beloved wife and loved horses.

The fourth likeness of the story of Modun's rise with folklore works lies in the description of the main personages. In the epics and tales, all main characters are positive. They express, as a rule, the ideas of the ethnic or mass consciousness. Even if the protagonist is forced in the course of events to accomplish actions which are condemned in real situations, this does not apply for the hero of the tale. In the case of Modun, we see an absolute analogy with the aforementioned.

Here, new questions arise and two of them appear to be most important. The first one is related to the dating of all the events mentioned in the legend. Time in folklore works is not consistent with real time. It obeys the subject and changes in accordance with the events (characters). But the second question is even more complicated: who was the founder of the black legend of chanyu Modun? The answer to this key question provides us with a clue to solve the problem as a whole.

By the logic of the legend, everybody must ferociously hate him. He is a usurper, patriarch and tyrant. However, in legend and reality, Modun does not appear as a dictator[7]. Thus, Sima Qian's story of Modun's advent to power cannot be considered as a reliable account of the events occurring in Mongolia at the turn of the third to the second century BC. Conclusively, one can only say that Modun came to power by means of usurpation and, thereafter, he defeated the Donghu and forced them to pay tribute.

During the period immediately preceding the accession of Modun to the throne at the turn of the 3rd to the 2nd century BC, Xiongnu society appears as a centralized political system with

6 The following particular story is narrated in Sima Qian 1959, 2889.

7 Here, a certain parallel comes to my mind with the literary image of Chinggis Khan and his role in the history of the Mongol empire.

social stratification, as the title of the Xiongnu chanyu, rules of inheritance, etc. suggest. The last hypothesis is indirectly supported by the studies of monuments of the Warring States period in Inner Mongolia, which were earlier attributed to the Xiongnu (but see Pan Ling, this volume). Already in this earlier period, significant social differences in the funeral rites are visible in society. Burials of the nomadic aristocracy and chiefs contained numerous furnishings made of gold and bronze. Within a single burial at the famous cemetery of Aluchaideng in Inner Mongolia, where 218 items with a total weight of more than 4 kg and artifacts made especially for chiefs were discovered: a plate with the title "shao fu", furnishings for a ceremonial cap, which were worn by Xiongnu chiefs (Tian/Guo 1980a; 1980b).

The main reason for the integration of tribes and chiefdoms of the Xiongnu into a centralized imperial confederation was the formation of a common centralized state on the Chinese plain, at first, the Qin empire and afterwards the Han empire. The Xiongnu quickly felt the consequences of Chinese integration. Already in 215 BC, a large army (100,000–500,000 people) re-conquered from the nomads the Ordos, renowned for its succulent pastures, by order of the Qin ruler (Sima Qian 1959, 2886). On the retaken territories, the Chinese constructed more than 40 fortresses and roads, and populated this territory with convicted offenders. The erection of the Great Wall was still more impressive ("walls of 10,000 'li' length") which, in accordance with the intention of the Chinese, was supposed to be a firm barrier on the way of the barbarian raids from the north. The Wall was constructed by a vast number of soldiers, convicted offenders, state slaves and peasants mobilized from all provinces of the empire by force.

In order to successfully oppose China, the nomads needed to join into a nomadic empire. However, in contrast to the tribal confederation, the political structure of the steppe empire was highly personified and depended on the personal talents of its ruler. The chanyu (khagan, khan) was never surrounded with such splendid and secretive ceremonies as the Chinese emperors or other rulers of the agricultural countries. His purpose was quite material: to organize a receiving of booty and to distribute it among the tribes. He could not in person take part in the forays and battles, but he was responsible for a result. If the ruler of the steppe power did not meet the expectations of the tribes, the empire could break into smaller quasi-imperial polities. At last, when the chanyu died, there was a certain risk of the steppe empire collapse. It was insufficient for his heirs to assert their legal rights to come to the throne, in addition, they were supposed to demonstrate a presence of real personal talents.

The arranged military system has formed the basis for the domination of the Xiongnu in Inner Asia. The Chinese sources repeatedly mention the aggressive way of life of the northern neighbor. From early childhood, boys and youths were in training in archery and horse races. All of the adult men were members of the military-hierarchical organization of the Xiongnu society[8]. The chroniclers called the Xiongnu power figuratively the "empire of military horses", while they compared the nomads themselves with a "whirlwind" or "lightning" (Ban Gu 1962, ch. 72; Zhongyang 1958, 233; Taskin 1968, 75). In the official documents the Xiongnu are called, in contrast to the settled Chinese, as "those who draw the bow" (Sima Qian 1959, 1347; 2896; Zhongyang 1958, 32). However, the militarization of life was only a prerequisite for the subsequent successful battles. The organizational and military transformations, especially, the decimal system and harsh military discipline established by chanyu Modun, have played a more important role. The advantages of the decimal system are quite evident. The military history gives

8 Sima Qian 1959, 2879; Watson 1961b, 129; Zhongyang 1958, 3; 31; Taskin 1968, 34; 36.

a countless number of examples where armies have been victorious over superior forces only by the fact that they had the better inner organization.

At periods of might of the Xiongnu empire, the tribes and chiefdoms of the confederation had used, with respect to their neighbors, different forms of distant exploitation and tribute. For example, they have received a tribute from their implacable enemies, the ancient population of Donghu or Wuhuan. The peoples of Sayan, Altai and Tuva have also been forced to contribute. They were ruled by the Xiongnu governor-generals and supplied the metropolis with ore and handicraft products[9]. The settled population of the rich oases of Central Asia rendered tribute to the nomads by wool, clothes and handicraft products and fulfilled their obligations. The nomads also controlled the profitable caravan routes to the Western countries[10]. The other prevailing form of distant exploitation entailed plundering raids on neighbors with the objectives of robbery and taking captives. At last, it is known that the peoples dependent on the Xiongnu were obliged to provide military support for operations on the metropole of the nomadic empire or to fulfill similar obligations within their territories[11].

These times did not last forever. During periods of crises and weakening of the Xiongnu, peoples dependent on the power ceased to render tribute, to provide the military units and even themselves, (and/or in agreement with the Chinese), they conducted plundering raids on the possessions of the former suzerain. However, as soon as the situation within the metropolis of the nomadic empire had stabilized, the punitive raids of the Xiongnu military leaders returned the insurgents and traitors to submission. This situation has practically remained until the collapse of the Xiongnu empire at the end of the 1st century AD.

The Economy of the Xiongnu Empire

The Chinese chronicles describe the Xiongnu way of life. Very early, in his chapter 110, the great Chinese historian Sima Qian writes about the northern neighbors:

"As for their livestock, they have mostly horses, cattle and sheep... children are able to ride the sheep, to shoot at birds and mice using a bow; when they grow older they shoot at foxes and hares which are used then for food; all virile youths who are able to bend a bow act as armored cavalry. It is their custom, during peaceful times to herd livestock and hunt birds and beasts as their occupation, while at critical times the people train in the military arts in order to carry out raids" (Sima Qian 1959, 2879; Lidai 1958, 3; 31; Taskin 1968, 34; 36.).

Strangely enough, similar circumstances have been observed one and a half millennium later by the Venetian merchant Marco Polo (Komroff 2001, 76–78). Comparable descriptions concerning nomads are visible in the studies of 19th to early 20th century (Przheval'skii 1875, 141; Maiskii 1921, 33–35; Radlov 1989, 130; 153–162; 168; 260; 335). However, it is strange that the

9 Ban Gu 1962, 3010; 3797 pp.; Zhongyang 1958, 244; Bichurin 1950a, 103; 105; 144; 216; 1950b, 161; 188; Taskin 1973, 54; 126; 1984, 65; 297–298; 328.

10 See especially Ban Gu 1962, 3797 pp.; Zhongyang 1958, 16; 18; 29; 205; 208; 241; Bichurin 1950a, 45–50; 55; idem 1950b, 155; 218; Taskin 1968, 38–39; 41; 43; idem 1973; 25–26; 30; 49; 125; idem 1984, 65.

11 For descriptions of Xiongnu relations with foreign elements, see chapters 99 and 110 of Sima Qian (1959) and chapter 70 of Ban Gu (1962). Citations from Russian translations include: Bichurin 1950a, 54; idem 1950b, 155; 214; Taskin 1968, 40; 70; 75; idem 1973, 125 etc.

Xiongnu population and quantity of livestock are quite commensurable with the Mongol population and their livestock in the early 20th century (Maiskii 1921, 67; 124; 134; Egami 1963; Khazanov 1975, 264–265). All of this allows us to assume that many of the most important features of the economy, the social organization, the way of life and the mentality of nomads of the Mongolian steppe were determined by the specific ecology of arid zones and that, basically, they had changed little from antiquity to more recent times. As a whole, such ecological and economical adaptation requires quite restricted and simple mode of existence.

It is seemingly simpler for nomads to supplement their economy with agriculture. Signs of agriculture are found in many pastoral cultures. However, mass sedentism and agriculture are only possible where the annual precipitation is not less than 400 mm or a branched river network occurs (Masanov 1995, 41). The greater part of the Mongolian territory within which the Xiongnu migrated does not conform to these conditions. Only 2.3% of the lands are suitable for agriculture.

In addition, an abandonment of the mobile way of life was considered by nomads as an undesirable alternative. Free nomads have not taken to sedentariness as they conceive such a way of life as offensive. It is not accidental, for example, that the medieval Mongols and Tatars had the proverb "let you as a Christian stay at one place and smell your own stench" (Mekhovskii 1936, 213). Therefore, as numerous ethnographic data show, nomads who had to change to a settled way of life considered their state as forced and at the first opportunity returned to mobile pastoralism (Tolybekov 1959, 335–338; Markov 1976, 139–140; 163; 165; 243–244; Khazanov 1984, 83–84 etc.).

For these reasons, nomads preferred to develop the agrarian sector in the economy by including settled population of neighboring states into their societies. These could be: captive farmers and craftspeople; persons escaping to the nomads owing to different circumstances, like criminals, debtors, poor men, slaves, and others and residents of the settled nations annexed by the nomadic empire.

All of these variants are also known in Xiongnu history. The description of relations between the Former Han dynasty and the Xiongnu provides extensive numerical material concerning the replenishment of the agricultural-handicraft sector of the Xiongnu economy with captive Chinese. One can identify three surges in the campaigns of the nomads to Han-China to take prisoners. The first wave is the ruling period of the first three very famous chanyus, Modun, Jiyu (Laoshang)[12], and Junchen with the alternation of raids and exaction of gifts from China. In the chronicles, the periodic mentioning of carrying off of population is recorded from the beginning of the Xiongnu empire to the establishment of stable border trade in 157 BC. The second surge falls in the Xiongnu-Han war launched by the aggressive Han emperor Wudi[13]. The third surge is related to the Xiongnu-Chinese wars under the emperor-usurper Wang Mang. Captures of Chinese are known of the years 11, 12, 25–27 and 45 AD. Yet, most likely, prisoners were taken to the Mongolian steppes during the course of all wars until the collapse of power in 48 AD (Zhongyang 1958, 31; 33–34; 44–45; 48–50; 190; 205; 254–256). In all probability, the number of deserters into the Xiongnu empire was also considerable, although precise numerical information is missing. The apprehension of the Chinese administration with

12 This second name of the chanyu Jiyu is the one used most often in the Chinese narratives and is an address of respect. "Laoshang" literally means "Elder Venerable One".

13 This included the carrying off of prisoners in 128–123, 121–120, 108–107(?), 102, 91, and 73 BC.

respect to this problem has time and again forced the Han emperors to request the chanyu not to take on deserters[14].

The prisoners and deserters were settled in special settlements, at places suitable for agriculture. They have supplied the nomadic part of the Xiongnu imperial confederation with agriculture and handicraft products. Several settlement sites with agricultural and handicraft production are identified by archaeological survey in Mongolia and Transbaikalia, but it remains unclear which goup(s) inhabited these places (Davydova 1968; 1995; Hayashi 1984; Danilov 2004).

The fortified settlement of Ivolga in Russia, situated near the modern city of Ulan-Ude, is the most investigated one among them. The site was an irregular rectangle with sides equal to approximately 200 and 300 m. On three sides, it was protected by fortification works of three walls alternating with three ditches while on the fourth side the site was protected by the Selenga river. As a result of long-term archaeological studies, about a tenth of the whole area was excavated, more than 50 dwellings as well as many household and other constructions were studied. It became clear that the majority of residents of the site were occupied with agriculture, herding, and fishing[15]. Along with agriculture, a part of the residents were engaged in handicraft production (Davydova 1985; 1995). By the example of the fortified settlement of Ivolga, one can reconstruct the nature of the economic activities of the settled population of the Xiongnu power (Kradin 2005a). The number of residents living at the same time in Ivolga is estimated between 2500 to 3000 people. The residents were able to provide themselves with grain from the territory of active household use[16]. The products were sufficient to sustain nomads, for example, in winter, and they were possibly exchanged or used for tributary payments.

At the same time, this sedentariness could not entirely provide all Xiongnu society with products of its own agriculture and handicraft. Therefore, nomads obtained additional products by means of trade with China and Central Asian countries, establishing tribute relations with the weaker neighbors, as well as by alternately periodic raids on China and exaction of gifts from the Chinese administration.

In the sources, there is information about near-border trade between Chinese and Xiongnu during particular periods. Officially, the markets were opened only for non-strategic goods but, in reality, the Chinese smugglers have supplied the nomads with the prohibited goods of arms and iron (Yü 1967, 101; 117–122). Trade between Xiongnu and Han reached its florescence in the second half of the 2nd century BC. The necessity of trading posts for the nomads was so great that they functioned sometimes even during periods of Xiongnu raids in China[17]. The Chinese understood very well that nomads were in greater need of the exchange of products than they were themselves and often used foreign trade as a means of political pressure on pastoralists. Nomads were often forced to assert their rights to trade by armed opposition.

Despite the peaceful relations between the Xiongnu and the Chinese, the extent of the Xiongnu militarization should not be underestimated. The nomads have always posed a certain threat to the Chinese kingdoms. "The Xiongnu consider openly the war to be their business" said one of the Chinese defecting to the nomads' side in a conversation with the Han's ambassador (Sima Qian 1959, ch. 110; Zhongyang 1958, 233; Taskin 1968, 46). "The Xiongnu have

14 Sima Qian 1959, ch. 110; Ban Gu 1962, ch. 94a; Lidai 1958, 32; 230, Taskin 1968, 49; idem 1973, 41.

15 The following animals were determined: dogs: 29%, sheep: 22%, cattle: 17%, pigs: 15% (Davydova 1995).

16 One hour of pedestrian movement from the settlement equals 5 km.

17 Sima Qian 1959, ch. 110; Ban Gu 1962, ch. 94a; 94b; Lidai 1958, 33–34; 191; 242; 261; Taskin 1968, 50–51; 1973, 22; 51; 64.

quick and bold warriors who appear like a vortex and disappear like a lightning" one of the functionaries of the Chinese emperor Wudi warned (Taskin 1968, 46). This opinion is even traced in the official records. In the heading of the letter of the Han emperor to the Xiongnu ruler in 162 BC, the Han are characterized as the nations "wearing belts and caps of functionaries", while the Xiongnu are described as those "who draw the bow" (Sima Qian 1959; Ban Gu 1962, ch. 52; Zhongyang 1958, 32; Taskin 1968, 47–48; 75). The statistics show that during the 250 years of the Xiongnu empire, the nomads, by different methods of calculation, conducted between 47 to 80 operations on Han territory while the Han carried out only 15 campaigns to the north beyond the Great Wall (Kradin 1996, 68).

SYSTEM OF POWER

The Xiongnu power, like other nomadic empires, had an autocratic and state-like appearance on the outside, as it was established to withdraw surplus products from outside the steppe, but it was based on tribal relations on the inside. Such polities can be called xenocratic[18]. The stability of nomadic empires directly depended on the abilities of chiefs and khans to organize silk, agricultural and handicraft products as well as jewelry from settled territories. Since we do not have evidence that these products are produced on a large scale for all Xiongnu empire, their seizing by force or extortion was a top-priority duty of the ruler of the nomadic polity. Being the sole intermediary between China and the steppe, the ruler of the nomadic polity had the chance to control the redistribution of booty. This allowed him to strengthen personal power and, at the same time, to maintain the existence of the imperial confederation which could not exist on the sole basis of an extensive pastoral economy.

Such a duality can be found in the political economy of the imperial confederation of the Xiongnu. Th. Barfield (1981, 58) has quite correctly noticed this dual character of chanyu power: "The imperial level of government was financed by drawing on resources from outside the steppe, not by taxing the nomadic animal breeders within the empire. Obtaining this 'foreign aid' by force or by peaceful means was the primary obligation of the imperial government". If, during times of war, the chanyu used raids to obtain political support from tribes, members of the imperial confederation, then, during peaceful periods, he extorted gifts from the Han for distribution to relatives, chiefs of tribes, and armed forces, and he asserted rights for all subjects to trade near the border.

It is significant that the gifts of the Chinese emperors remained at the top level of the Xiongnu power pyramid. It is known that the annual Han payments to nomads amounted to 10,000 "shi" of rice wine, 5,000 "hu" of millet and 10,000 "pi" of silk (Ban Gu 1962, ch. 94A; Zhongyang 1958, 191; Taskin 1973, 22). At the same time, it is known that, based on Chinese norms, the average annual ration of grain for the adult man reached about 36 "hu" (720 l) or rather more (Kriukov et al. 1983, 200–201). In case of such rationing, the above mentioned amount of grain could only be sufficient for about 150 people. If grain products were used as food addition, of for example, at the rate of 20% of the norm, this volume of grain would be sufficient to feed

18 Derived from the Greek words xeno – outside and cratos – power: Kradin 1992; 2000.

about 700–800 people in the course of one year. Hence, the imperial deliveries of grain could only be meant for the satisfaction of the needs of the chanyu headquarters (Barfield 1992, 47). This is also confirmed by archeological sources. The lacquered wares as well as other things made in China are largely found in the burials of persons of high status in elite burial mounds (Rudenko 1969; Konovalov 1976; Kradin et al. 2004).

Chinese rice wine enjoyed wide popularity among nomads who only drank koumiss and milk vodka. 10,000 "shi" of rice wine are equal to 200,000 liters. In case of a daily norm of consumption, this comprised more than 550 liters a day. By convention, more than 1.5 liters of rice wine fell on every representative of the highest military Xiongnu elite (chiefs of thousand warriors and higher). It is clear that not only military leaders drank wine; the volumes of deliveries are impressive. The Chinese turned the nomads into drunkards. A similar phenomenon happened time and again in history starting with the contacts of the Scythian with the Greek city states and ending with the developing of the New World by American pioneers.

As a mechanism connecting the steppe empire government with tribal chiefs, the institution of a gift economy was applied. Manipulating with gifts and distributing them among companions-in-arms and chiefs of tribes, the chanyu improved his political influence and prestige as a lavish ruler and, at the same time, obliged the persons who received gifts to return the favor. On the one hand, the tribal chiefs obtaining the gifts were able to satisfy their personal interests, while on the other hand, they were able to improve their intra-tribal status by again distributing gifts to fellow tribesmen or by organizing ceremonial festivals. In addition, by receiving a gift from the chanyu, the recipient acquired with it a part of the chanyu's supernatural charisma which additionally contributed to his own prestige.

Among the Han gifts, silk has been of greatest value. Its total quantity delivered every year to the steppe has been estimated at 10,000 "pi". Based on the measuring system accepted in the Han empire, one "pi" represented a piece of 9.24 m length and 50 cm width (Kriukov et al. 1983, 160). Based on these data, one can calculate that 10,000 "pi" amounted to about 92,400 m, which could serve for several thousand silk caftans. It is evident even from these approximate calculations that silk was expended for mass distributions to tribal chiefs and warriors and was a commercial good on the northern routes of the Silk Road rather than for the manufacturing of clothes for the chanyu's court.

When sending gifts to the nomads, Chinese politicians very likely relied simply on human greediness. They believed that the chanyu would get drunk from the quantity and diversity of uncommon curiosities and would save them in a treasury causing envy among his subjects or that he would squander them for extravagant behavior. However, they never understood the basis of a functioning steppe polity (cf. Barfield 1981; Kradin 1996; 2002a, 112–116; 184–189). Even later, they did not understand for what purpose Chinggis Khan's son, Ögedei, was occupied with mass distributions, which seemed senseless from their point of view (Kradin/Skrynnikova 2006, 283–295). Yet, the psychology of the nomad differs from that of the farmer and townsman. The ruler's status in a nomadic empire depended on the one hand on the opportunity to provide his subjects with gifts and material wealth and, on the other hand, on military might to execute raids and extort gifts. Therefore, a necessity to support stability of the military-political structure rather than personal avidity, as the Chinese believed erroneously, was the reason of permanent demands of the chanyu to increase presents. The greatest insult to a steppe ruler was the accusation of stinginess. Thus, spoils of war, gifts of the Han emperors, and international trade were the main sources of political power in the steppe. Consequently, gifts flowing through and leaving their hands did not only weaken but, on the contrary,

strengthen the power and influence of the ruler in an imperial confederation (Barfield 1992, 36–60).

As long as the Xiongnu chanyu obeyed these principles, the unity of the steppe empire was imperturbable. One can identify four stages of the Xiongnu-Han relations[19]. In the first stage (200–133 BC) the Xiongnu attempted to alternate periods of war and raids with periods of peaceful co-existence with Han-China to exert higher profits (Barfield 1981; 1992). The first raids had been carried out to obtain booty for all members of the imperial confederation of nomads regardless of their status. By this, the chanyu ensured the support of a majority of tribes as members of the confederation. After the devastating raid, the chanyu sent, as a rule, ambassadors to China with an offer of a new "heqin" agreement of peace; otherwise, the nomads continued with their raids until the Chinese offered to conclude a new agreement. After accepting the agreement and obtaining gifts, the raids ceased for some time. However, when the booty plundered by simple nomads was finished or became worthless, the herders again began to demand from their chiefs and chanyu satisfaction of their interests and needs. The chanyu was forced to release some of the pressure and discontent by ordering to renew the raids (Sima Qian 1959, ch. 110; Zhongyang 1958, 28–29, 48; Taskin 1968, 43; 58).

The second stage (129–58 BC) of Xiongnu-Han relations comprises the governing period of the Han emperor Wudi, who decided to abolish the strategy of active expansion to the north. The war had been waged with variable success but losses on both sides, and neither the Han nor the Xiongnu achieved clear victory. On the whole, the campaigns show that nomads, in spite of being outnumbered by the Chinese, had irrefutable advantages in war on the open steppes. The strengthening of the Han positions in the Western Regions can be considered as the most important achievement of the aggressive anti-Xiongnu policy of Wudi. A "cold war" of sorts between the Steppe and China continued all the way until the outbreak of civil war among the Xiongnu tribes.

The third stage (56 BC–9 AD) of the Xiongnu-Chinese relations can be correlated with the time when the chanyu Huhanye declared subservience to the Han emperor. A policy of placating the nomads with "gifts" was formally replaced by the system of "tribute" relations. The Xiongnu ruler recognized the suzerainty of the Han and agreed to pay a nominal tribute to demonstrate their subordinate status. For this, the emperor provided the chanyu with his protection and gave to him gifts equivalent to a vassal in return. As it turned out, the new system of "tribute" and reciprocated "gifts" enacted by the nomads undermined the Chinese ideological superiority as it resumed the old nomad policy of extortion under different pretenses, the only difference being the return gifts of the Chinese emperor were vastly larger than before. In addition, as was perhaps necessary, the chanyu obtained agricultural products from China to support his citizens.

The fourth and last stage (9–48 AD) of relations between the Han empire and the Xiongnu imperial confederation was similar, by its content, to the first stage. As pretexts to interrupt peaceful relations served the territorial claims of the Chinese emperor-pretender Wang Mang, his intervention in internal affairs of the nomads and, finally, the substitution of the chanyu seal by the Chinese ambassadors. Judging from all this, as opposed to the first stage of relations between the Xiongnu and China, the nomads have changed their foreign-policy strategy towards the stimulation of raids to the Han territory. This was possibly related to the weakening of the

19 For details see Kradin 1996, 42–68.

frontier might of China and an instable political situation within the country. Earlier, the northern frontiers of China were protected by a powerful network of signaling guards and towns, and most crucial sections of the Great Wall were protected by garrisons armed to the teeth. Then, at the beginning of the Late dynasty of Han (since 23 AD), the maintenance of such an army was beyond the Chinese government's means. The raids were found to be safer and remained unpunished for inhabitants of the steppe regions, just like in the first stage.

Social Structure

The Chinese chronicles about the Xiongnu contain detailed hierarchies of the imperial elite and their entourages. The chanyu was the supreme ruler of the Xiongnu steppe empire and its representative in the political and economical relations with other countries and nations. His competence included the declaration of war and peace, the conclusion of political treaties, the right to obtain gifts and tribute and to re-distribute them, dynastic marriages, etc. Most likely, the chanyu was also chief commander and superior judge (Taskin 1973, 7–11). He was also the concentration of irrational power and performed the most important devotions providing the nomads with a patronage of the super-natural forces. In the Chinese documents which address the period of prosperity for the Xiongnu empire, the chanyu is called the "born by Heaven and Earth, raised by sun and moon, great chanyu of Xiongnu" (Fan Ye 1965, ch. 91, 7b; Zhongyang 1958, 30). The chanyu had numerous relatives who belonged to his ruler's clan of Luandi: brothers and nephews, wives, sons and daughters, etc. The most highly titled relatives of the chanyu were ten superior commanders of ten thousand warriors which were comprised of four and six horns respectively[20]. The first four of them were called "wang" (king) by the Chinese chroniclers. Besides the chanyu's relatives there were other noble families (clans): Huyan, Lan, Xubu, and Qiulin were among the highest Xiongnu aristocracy (Fan Ye 1965, ch. 91, 7b; Zhongyang 1958, 680–681).

The next level in the Xiongnu hierarchy was occupied by the tribal chiefs and elders. In the annals, they are mentioned, as a rule, as 'subordinate kings', 'chief commandants', 'household administrators', "juqu" officials[21]. Probably, a part of the 'chiefs of a thousand' were tribal chiefs. The 'chiefs of a hundred' and 'chiefs of ten' were, most likely, clan leaders of different ranks. The economic, judicial, cultic, fiscal, and military functions were considered to be responsibilities of chiefs and elders (Taskin 1973, 9–11).

The Xiongnu had a particular stratum of service nobility (Kradin 1996, 152 pp.), advisers, immigrants from China and bodyguards. First of all, these are men-at-arms of the chanyu bound to him by personal devotion. It was probably the most trusted men-at-arms who obtained the title of gudu marquis ("gudu hou"). Besides the nomads, defectors from China, such as the famous Zhong Hangyue, could also be subsumed within the ranks of the administrative aristocracy. These immigrants proved to be very useful advisers, as they familiarized the nomads with

20 Even though Fan Ye composed the Houhanshu hundreds of years later than the existence of the Xiongnu empire, one can still gain useful information for the Xiongnu, see Taskin 1973, 3–16.

21 Zhongyang 1958, 17; see also de Groot 1921, 55; Watson 1961a, 163–164; Taskin 1968, 40.

Chinese tactics of military science, agricultural activities, systems of record keeping, principles of court etiquette, and administration practices (Pritsak 1954, 178–202).

Slightly lower in the hierarchical ladder was the position of the chiefs of non-Xiongnu tribes in the imperial confederation. In the scale of rank the chiefs of non-Xiongnu tribes, chiefs of dependent tribes and of territories paying tribute, were situated slightly lower than the service nobility.

The population of the Xiongnu empire consisted of ordinary nomads, or herders. Based on some indirect data, one can assume that many important features of the economy, the social organization, and the way of life differed only little from the features of the nomads of the Mongolian steppes of more recent times (Kradin 1996, 86–90).

In the written sources, there is no information concerning different categories of poor persons and persons who did not possess full rights and who were engaged in herding within Xiongnu society. It is also unknown how widely and in which social group slave-owning was distributed in Xiongnu society. Cross-cultural anthropological studies however demonstrate a lack of development of slavery in pastoral societies[22]. On the other hand, researchers have conjectured that the overwhelming majority of prisoners of war seem to have engaged in agricultural and handicraft production in specially established settlements (Gumilev 1960; Davydova 1975; Rudenko 1969). However, it would seem that the majority of the people, many of whom were free deserters from elsewhere, did not hold a socio-economic position equivalent to slaves. Social statuses of commoners most likely varied: from conditional vassalage to some semblance of serfdom. The fortified settlement and adjacent cemetery of Ivolga (Davydova 1995; 1996) is a classic example for this type of commoner settlement.

Archaeological data corroborate to a great extent the hierarchical nature of Xiongnu society mentioned in the Chinese chronicles. Increasing expenses for funeral structure and more splendid burial furnishing indicate numerous status levels. In Noyon Uul, Gol Mod, Duurlig Nars, Solbi Uul, etc. in Mongolia and at Il'movaia Pad', Tsaram, Orgoiton in South Buriatiia, monumental burial mounds of the Xiongnu elite are located, the construction of which required considerable effort. These monumental constructions, including a burial entry as "pathway to the Other World", formed specific sacred spaces for the "kingly" burials which symbolized their elevated status and profane power. Formulating an entire landscape that centered around these "kings" and represented the maximum sacral nature of the society, these monuments embodied the real political control and property. For example, the best known Xiongnu burial mounds investigated in 1924–1925 by P. Kozlov's expedition recorded a terrace structure of 14 × 16 m broad and more than 1.5 m in height, underneath which a grave pit descended by steep ledges to a depth of 9 m. The entryway, or "dromos", on the south side was framed in stone and led to the central burial pit that contained a painted and lacquered outer chamber and an inner coffin draped with refined woolen carpets and silk cloths and yielded rich furniture (Umehara 1960; Rudenko 1969)[23].

The graves of ordinary nomads were much simpler and poorer with respect to construction and furnishing. These generally have rounded or quadrangular stone burial markings of 5–10 m in breadth and grave pits of 2–3 m deep. At the bottom was placed a wooden coffin (or in rare

22 See for example Khazanov 1975, 133–148; 1984, 160–161; Kradin 1992, 100–111.

23 Monumental terrace tombs were excavated more recently at Noyon Uul in 2006 and 2008 (Polos'mak et al. 2008a; 2008b), as well as at other similar tombs at Gol Mod (Mongolie 2003), Tsaram (Miniaev/Sakharovskaia 2006; 2007a; 2007b), Duurlig Nars (Duurlig Nars 2009), and Takhiltyn Khotgor (Miller et al. 2008).

instances an inner and outer nested coffin furnishing), and the deceased were accompanied by household goods, weaponry, horse-riding gear, adornments, and funeral food offerings[24]. The graves of settled peoples, for example those living in the area of Ivolga, were even simpler and poorer (Davydova 1995; 1996). Together, these three major categories of burials, and divisions within them, demonstrate the complicated multilayer social structure of the Xiongnu society.

A statistical analysis of 342 graves of the four most extensively studied Xiongnu cemeteries in Transbaikalia, Il'movaia Pad', Cheremukhovaia Pad', Dyrestui, Ivolga, revealed a social differentiation among the different gender and age groups (Kradin et al. 2004; Kradin 2005a). The richest burials are concentrated in the Sudzha necropolis of Il'movaia Pad'. Here, three ranks are discerned among the graves of females and males. The male burials of Cheremukhovaia Pad' and Dyrestui combine into different groups, which possibly reflect characteristics of their activities and roles during their lifetime. Among the female burials at Cheremukhovaia Pad', both rich and more simple graves were identified, while among the female graves of Dyrestui, there was no apparent differentiation. At the Ivolga cemetery of the settled population, four hierarchical ranks among males and five ranks among females were revealed[25]. Among burials of children of the Xiongnu period in Transbaikalia, there is evidence for a possible differentiation between rich and poor graves[26]. All of these differentiations collectively evidence the presence of a complex, multilevel hierarchy of defined statuses in Xiongnu society, only the uppermost levels of which are mentioned in parts of the ancient Chinese chronicles.

How strict was this social pyramid? Was it possible for an individual to overcome the hierarchical stages and to raise his administrative and social status? Social anthropological studies of the Eurasian people show that a so-called genealogical system of kindred was characteristic of the pastoral nomads[27]. Its significance, as applied to the problem of vertical mobility, is expressed in the fact that: status and power, as a rule, were transferred within one genealogical group in accordance with the principle of seniority, that no individual could live beyond the framework of any clan-tribal group and that social status of a particular individual quite often depended on the status of his genealogical group among other similar groups. Hence, the opportunities of vertical mobility were restricted by the place of clan subdivision in the social genealogy. The most realistic way of advancing the personal status, was devotion to the ruler and personal military valor.

Political Organization Dynamics

The eminent Chinese historian Sima Qian gives a detailed description of the administrative system of the Xiongnu empire[28]. The empire under Modun was divided into three parts: centre and left and right wings. The wings, in turn, were divided into subsections. The complete supreme power was concentrated in the hands of the chanyu. Concurrently, he was in charge of the centre

24 Dorzhsüren 1961; Konovalov 1976; 2008a; 2008b; Tseveendorzh 1985; Miniaev 1998; Törbat 2004 and others.

25 Status of women at Ivolga have also been discussed by Brosseder 2007b.

26 Most distinct differences are found at the Ivolga burial ground where 3–4 groups are identified.

27 Bacon 1958; Krader 1963; Markov 1976; Khazanov 1984; Masanov 1995, and others.

28 Zhongyang 1958, 17; see also de Groot 1921, 55; Watson 1961a, 163–164; Taskin 1968, 40.

– tribes of the metropolis of the steppe empire. The 24 highest officials, who were in charge of large tribal associations, were in the military rank of a chief of ten thousand, and were subordinate to the chanyu. His elder brother – successor to the throne – was in charge of the left wing. The nearest relatives of the ruler of a steppe empire were his co-ruler, the leader and co-ruler of the right wing. They were attributed the title 'kings' ("wang") as the highest title possible. 'Kings' and six most noble 'chiefs of ten thousand' were considered to be "strong" and were in command of not less than 10,000 riders. The rest of the 'chiefs of a ten thousand' were in fact in command of less than 10,000 cavalrymen (e.g. Zhongyang 1958, 17; Watson 1961a, 163–164).

At the lowest level of the administrative hierarchy, local tribal chiefs and elders were situated. Officially, they submitted to 24 deputies from the center. Yet, in reality, the dependence of tribal leaders was limited. The headquarters was far away and local chiefs enjoyed support of related tribal groups. Thus, the influence of the imperial deputies on local authorities was, to a certain extent, restricted and they were forced to take into account the interests of subordinate tribes. The total quantity of these tribal groups within the Xiongnu imperial confederation is unknown.

The use of military terms by the Chinese historians, such as "chief of ten thousand", "chief of one thousand", "chief of ten hundred", side-by-side with traditional Chinese terms, like "kings", "marquises" of different rank, "chief commandants", "household administrators", and other officials (e.g. "juqu"), gives ground to propose that even though they entailed different functions, the systems of military and civil hierarchy co-existed. The system of non-decimal ranks has been used during wars when a great quantity of warriors from different parts of the steppe joined into one or several armies (Barfield 1992, 38).

The power of chanyu, highest commanders and tribal chiefs at local places was supported by strict but simple traditional ways. As the Xiongnu laws were estimated by the Chinese chronicles, the Xiongnu's punishments were generally "simple and easily realizable" and were mainly reduced to strokes, exile, and death penalty. It provided an opportunity to quickly resolve conflict situations at different levels of the hierarchical pyramid and to maintain the stability of the political system as a whole. It is no mere chance that for the Chinese, accustomed from childhood to an unwieldy and clumsy bureaucratic machine, the management system of the Xiongnu confederation seemed to be extremely simple: "management of the whole state is similar to that of one's body" (Sima Qian 1959, ch. 110; Zhongyang 1958, 17).

The consistent rank system developed under Modun did not remain in the future. This is related to the fact that, owing to the traditional nomadic aristocracy's practice of polygamy, the reproduction of elite in the nomadic empires occurred in an almost geometric series. It is clear that, as a rule, sons of the senior wife rather than all of the heirs had the succession to the status and the major property. The others only inherited a quite high status, most likely, in accordance with the principle of the conical clan. However, this did not exclude all heirs from the genealogical hierarchy. In addition, the exceptions were always observed with respect to favorites or children from young beloved wives. As for numerous near and distant relatives of the chanyu, the king's blue blood flowed in their veins and all of the members of the Luandi: kin without exception had the right to pretend to the place under the sun in the Xiongnu social hierarchy.

Several periods when new titles were most actively introduced can be identified. The first of them falls between approximately 100–50 BC. During this time interval, an excessive surplus of Xiongnu elite representatives arose. Since it was impossible, to provide all members of the noble clan with a place in the social hierarchy corresponding to their noble birth, intense competition for one or another status and respective material benefits inevitably evolved. In the end, this resulted in a temporary collapse of the Xiongnu power into several formations leading to civil war from 58–36 BC.

The next period of a massive introduction of new titles and posts started in the last third of the 1st century BC. The new combination of political forces formed after the civil war had gradually hardened into a strong hierarchy. From the point of view of a new foreign policy, a correction of the administrative system was required, a portion of old titles proved to be marginally compromised because of their relation to dead enemies or betrayers. It was necessary to strengthen a new principle of power inheritance, to develop the principles of making political decisions, to introduce new posts and appropriate splendid titles. Finally, a new growth in number of the representatives of the nomadic elite resulted in the intensified collision for the limited resources and collapse of the steppe empire in 48 AD into a northern and a southern confederation.

The third and last large-scale appearance of new titles goes back to the time of division of the Xiongnu power into groupings, which were at odds with each other. The Chinese historian Fan Ye gave the same detailed description of the political system as his eminent predecessor Sima Qian (Fan Ye 1965, ch. 79; Zhongyang 1958, 680; Taskin 1973, 73). It provides a unique opportunity to observe the dynamics of the political institutions of the Xiongnu throughout 250 years.

The most considerable differences between the power of the Modun epoch and Xiongnu society before the collapses are as follows: There has been a transition from the three-partite administrative division to a dual tribal/chiefdom division into wings. Sima Qian wrote clearly about the development of a military-administrative structure with 'chiefs of a ten thousand'. Fan Ye does not mention a decimal system and instead of military rank of 'chiefs of a ten thousand', civil titles of 'kings' (wang) are enumerated. According to Fan Ye, the so called first ten "strong" 'chiefs of a ten thousand' had a more independent position with relations to the chanyu headquarters. In the Xiongnu empire, the order of succession to the throne changed. If originally the throne of chanyu had been passed from father to son, except in several extraordinary cases, a different order became predominate: from uncle to nephew. In Xiongnu society, a principle of joint government had prevailed according to which the ruler of the nomadic empire has a co-ruler, junior by rank, who controlled a wing. The capacity of junior co-ruler was inherited within his lineage but his successors could not pretend to the chanyu's throne (Kradin 1996, 132–135).

Therefore, these changes demonstrate a gradual weakening of the autocratic relations in the empire and their substitution for federative relations as expressed partially by a transition from a triple administrative-territorial division to a dual one. The military-hierarchical relations were suppressed and the genealogical hierarchy between seniors and juniors by differently ranking tribes were pushed into the foreground.

Super-Complex Chiefdom

How can we estimate the character of a society of this kind? Can we even use the term state when speaking about the Xiongnu? I should note that there is no unanimity in this question among different scholars, and it is a controversial issue not only for Xiongnu studies, but for nomad studies as a whole[29]. While earlier scholars in the field of nomad studies tended to classify

29 See in details Kradin 1992; 2002b; 2008.

Xiongnu society as pre-state[30], most scholars claim that some form of early statehood for the Xiongnu polity is beyond any doubt[31].

In their very important book about early statehood, H. Claessen and P. Skalník (1978a) consider the manner of polity described above as a centralized socio-political organization. Social relations are regulated by a complex stratified society divided into, at least, two basic strata or social classes: rulers and subordinates. The relations between them are characterized by the political domination of the former and tribute duties of the latter; the formality of these relations is sanctified by a common ideology of exchange of service (Claessen/Skalník 1978a, 640). Which were the most typical features of the early state that can be identified[32]? What signs of an early state can be found in the Xiongnu confederation?

Of the typical early state, the conservation of clan-lineage relations is characteristic but there is also the case of some extra-clan relations in the management subsystem. In Xiongnu society, the highest posts were occupied by the representatives of the ruling lineage and several noble clans (Watson 1961a, 163–164). The other sign indicating an early state is related to the way of income acquisition by the administrative elite. Here, the financial source of the functionaries is fed at the expense of their subjects as well as by wages from the center. Nomadic elites have always received presents from pastoralists. The chanyu of the Xiongnu had no money in order to pay wages to the chiefs and patriarchs, so he gave presents to their companions-in-arms. One of the most important sign of the early state is the presence of a written code of laws, which the Xiongnu are lacking.

Another indicator for an early state is the availability of special judicial manpower which was responsible for the majority of legal questions. The presence of persons who investigated disputes and conflicts was known in Chinese sources (Fan Ye 1965, ch. 79; Zhongyang 1958, 680; Taskin 1973, 73). One more sign of early statehood consists in the fact that a share of the surplus was requisitioned via levying of tribute and forced labor by the ruler. There is only one attempt known to impose taxes which was under the second Xiongnu chanyu Jiyu on the advice of a Chinese adviser, castrate (Sima Qian 1959, ch. 110; Zhongyang 1958, 30; Taskin 1968, 45). However, there is no other information. Xiongnu society was based on an economy of gifts rather than on taxes, and the chanyu did not collect taxes from the pastoralists. He provided his warriors with military trophies and distributed Chinese tribute payments to the tribal chiefs.

The situation which existed in Xiongnu society was not extraordinary for a nomadic empire. The inner taxation was also absent in the imperial confederation of Huns in Europe (Maenchen-Helfen 1973, 190–199). All the loot was distributed to the nomads. The Secretary of the Roman embassy Priscus met on his way to the Attila's headquarters many Greeks who were earlier captured by nomads. They reported to Priscus that life in Attila's kingdom is better than that in the Roman empire. They particularly liked the absence of taxes. While the population of the empire suffered from extortions and abuses of fiscals, Attila did not collect taxes at all. He was in no need to take care of taxes as the treasury was always full with trophies of war and Byzantine tribute (Prisc., frag. 8).

30 Gumilev 1960; Rudenko 1969; Markov 1976; Yamada 1982 etc.

31 Pritsak 1954; Dorzhsüren 1961; Taskin 1973; Davydova 1975; Khazanov 1975; 1984; Sükhbaatar 1980; Kürsat-Ahlers 1994; Kychanov 1997; Di Cosmo 2002; Kljaštornyj/Sultanov 2006.

32 For details see Claessen/Skalník 1978a, 22; 641.

Maximum confusion arises with respect to the last and in our view most important aspect. According to H. Claessen, special officials and their assistants appear in early statehood (Claessen/Skalník 1978a, 22; 641). However, the extent of this state machinery is not stipulated in this case. According to the more precise definition of Claessen this apparatus can be limited to a few functionaries only (Claessen, personal communication). It is difficult to agree with this point of view because here, the boundary between the chiefdom and early state is eliminated.

The state is not simply a group of persons ruling over a society and persons engaged in administrative functions exist everywhere. As a category, the state may be qualified as a big group of people involved in the administrative labor with a common ideology. This group may be divided into specialized sub-units, like ministries, offices, etc., or may not be institutionalized, as it exists at court, the headquarters of the ruler. It is also necessary to take into account that the bodies of management in heterarchical or homoarchical societies differed from those of the territorial hierarchical states which tend to develop multilevel bureaucratic hierarchies (Trigger 2003, 219–220). In addition, it is important to note that the persons carrying out the administrative duties are divided into: 1 common functionaries whose activity can cover several lines of work; 2 special functionaries carrying out their duties only in one field of management; 3 informal persons whose professions were not directly related to the management, however, they, by virtue of their status or other reasons, can influence the decision making (Claessen/Skalník 1978, 576). As the common functionaries and informal persons can exist not only in the early states but also in chiefdoms for example, only the category of special functionaries can serve as a criterion of the statehood. At last, the state is no individual persons engaged in the administrative activities but a totality of particular organizations and institutions. These institutions have their internal structure and consist of a particular number of members receiving the reward for the execution of special duties.

The specialized administrative institutions are well known in early state societies and, all the more, in existing traditional states. But we cannot say that the Xiongnu had a state apparatus. The Xiongnu had many titles for the rulers of the segments within the empire confederation. In addition, there were special functionaries ("gudu hou"). The Chinese chronicles report that "the gudu marquises assist the chanyu in the administration of the nation" (Watson 1961a, 163–164). In a special work Pritsak (1954, 196–199) assorts their place in the Xiongnu political system. Nonetheless, the number of these functionaries was very limited.

Thus, as to Xiongnu society, only one sign of early statehood can be identified: judges. Two more signs can be considered to have been in their infancy[33]. For such societies which are more numerous and structurally more developed than complex chiefdoms and which are at the same time no states (even inchoate early states), the term "super-complex chiefdom" has been proposed (Kradin 1992, 152). This term has been accepted by many nomadologists (Skrynnikova 1997; 2000; Medvedev 2003; Vasiutin 2003).

The theory of chiefdom is one of the important achievements of political anthropology. E. Service characterizes chiefdom as socio-political organization with centralized direction and hereditary clannish hierarchy of theocratic chiefs. In a chiefdom, inequality of social status and property occurs, however, there is no formal and legally repressive machinery enforced (Service 1975, 15–16; 151–152; 331–332). Up to now, numerous studies devoted to the theory of chiefdom

33 An unsuccessful attempt to introduce taxes during the reign of chanyu Jiyu and presence of common functionaries gudu marquises.

and its variations in different areas have been published[34]. A. Khazanov (1984) was the first who used the term chiefdom to describe the societies of pastoral nomads.

As for the complexity of the hierarchy, the term is generally used to distinguish simple from complex chiefdoms. For simple chiefdoms one level of hierarchy is characteristic. Their population is generally not high and comprises approximately several thousand people. Complex chiefdoms consisted of several simple chiefdoms. Their population reached already tens of thousands people. Among the characteristic features of the complex chiefdoms are also probable ethnic heterogeneity as well as exclusion of the administrative elite and a number of other social groups from the immediate production activity.

One can also identify super-complex chiefdoms. The principal difference between complex and super-complex chiefdoms consists in a new principle rather than in the number of hierarchy levels. The weakness of the complex chiefdoms lies in the fact that when they have many links, the supreme chief cannot overcome the separatism of sub-chiefs and the structures quickly break up. In super-complex chiefdom, the ruler removes sub-chiefs and appoints his supporters to control the separate segments (Carneiro 2000; Kradin 2000). This allows to consolidate multinational polities of several 100,000.

Similar structural principles are visible in the history of the Xiongnu. Xiongnu power consisted of a multi-ethnic conglomeration of chiefdoms and tribes including the imperial confederation. The tribal chiefs and elders were incorporated in the decimal hierarchy. However, their power was to a certain degree independent from the center and was based on the support of the fellow-tribesmen, at the same time the tribes were members of the imperial confederation. The chanyu relied upon support of his nearest relatives and companions-in-arms who held the title of commanders of "ten thousand cavalry" ("wanqi"). They were heading the special super-tribal subdivisions integrating the subordinate or allied tribes into military divisions which numbered approximately 5,000 to 10,000 warriors. These persons were to support the center's polity in the provinces. Other nomadic empires in Eurasia were similarly organized[35].

The Xiongnu imperial confederation is the classic example of a super-complex chiefdom. Later nomadic empires had some new institutions but their basis was similar to that of the Xiongnu society. For this reason, one can discuss the structural similarity of ancient and medieval nomadic empires in Inner Asia. It was a special variant of stateless adaptation in arid steppe areas, one of the nomadic pathways to social complexity.

34 Carneiro 1981; Drennan/Uribe 1987; Earle 1987; 1991; 1997; Stein/Rothman 1994; Redmond 1998; McIntosh 1999; Skalník 2004, etc.

35 For details see Kradin 2000, 281.

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Xiongnu "Kings" and the Political Order of the Steppe Empire

Bryan K. Miller
University of Bonn
millerbryank@gmail.com

Abstract

Descriptions of the political order of the Xiongnu empire rely heavily upon Chinese historical narratives and, as a result, often simplify steppe politics and gloss over provincial political agents. This paper therefore discusses the entire spectrum of "kings" and regional elites in the steppes in order to elucidate shifting power politics over the course of the Xiongnu empire. Furthermore, a comparison of historical dynamics with the archaeological record suggests that competition from local leaders against the ruling factions spurred changes in material regimes of the imperial political culture, leading to a bifurcation of the steppe elite and pronounced expressions of authority.

Keywords

Politics – competition – empire – king – Xiongnu – Inner Asia

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> Lord and vassal [relations] are simple and easy, [such that] the governance of one state is equivalent to one body. 君臣簡易一國之政猶一身也 (Shiji 110: 2900)[1]

⁘

Descriptions of the Xiongnu empire (209 BC-98 AD) have often portrayed a "simple" and loose confederacy contingent upon interior and exterior coercion and prone to fission (de Crespigny 1984; Yü 1986; Barfield 1989).[2] While Chinese accounts provide an outline of the "body" and "limbs" of the political structure of the steppe empire, historical studies of these narratives increasingly reveal a normative agenda of the Han imperial chroniclers that rationalized what little was known about the northern neighbors into a purported comprehensive understanding of their society (Di Cosmo 2002: 294-297). Thus, an explicable and simple nature for the political system of the Xiongnu is more a reflection of the Chinese perspective and their need to rationalize, and thereby control, the Xiongnu entity of the steppe.

In addition to normative limitations, historical narratives have predominantly focused on the uppermost echelons of the nomadic elite. While rulers and their retinues certainly play a central role in political formations like the Xiongnu empire (Di Cosmo 1999; 2002: 161 ff.), a more nuanced understanding of sociopolitical dynamics requires elucidations of provincial agents and the interplay between local and supra-local elite factions (Brumfiel and Fox 1994; Stark and Chance 2012). In accordance with such needs, recent historical discussions have attempted to expand descriptions of the political agents and apparatus of the Xiongnu, drawing attention to the need for explorations into mid-level leaders (Di Cosmo 2011: 43) and subordinate chiefs (Kradin 2011: 90-93) within the steppe empire.

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1 The parallel phrase in the *Hanshu* (94A: 3760) varies slightly, characterizing lord-vassal relations as "simple [yet] can endure" 簡可久 and equating state governance not merely to a "body" 身 but to a collection of "limbs" 體. (see Giele 2011a: 276.n.248)

2 The term of 'empire' is not taken here as an *a proiri* assumption, but relies on recent discussions of the Xiongnu and its political characteristics and possible formations, including alternative models such as 'stateless empire', 'empire before state', and 'super-complex chiefdom' (Di Cosmo 2011; Kradin 2011; Scheidel 2011). It is in the most basic manner that I discuss the Xiongnu entity as a 'polity' (sec. Renfrew 1984) and, more importantly, one of an 'imperial' nature (Goldstone and Haldon 2009) that extended over a territory of mostly steppe environments.

Archaeological endeavors have also customarily devoted disproportionate attention to the uppermost echelon of the Xiongnu through studies focused on the largest ostentatious tombs and more opulent goods. (Miniaev and Sakharovskaia 2007; Shinjlekh et al. 2011; Polos'mak et al. 2011) Although these portions of the archaeological record provide substantial evidence for elite high culture and long-distance interaction, they do not relate evidence of the lives of local elites or the vast constituents of the steppe empire that supported the imperial rulers supposedly interred in the monumental tombs. Recent archaeological inquiries into Xiongnu social hierarchies (Kradin et al. 2004) and the more "common" components of Xiongnu society (Törbat 2004) have brought to bear empirical analyses of groups outside the realms of the core uppermost echelon. Such an archeological refocus, alongside a historical turn toward the middle and lower social strata, may help expand our understanding of not only the political order but also social dynamics within the Xiongnu empire.

In order to demystify the enigma of the Xiongnu political structure and its substrata, this paper sheds light on historical and archaeological indications of regional and local leaders and their factions outside a core imperial nobility and addresses their possible roles in social, cultural and political developments during the life of the steppe empire. First, I revisit historical accounts of the Xiongnu polity in order to illustrate the extensive ranks in the steppe political order which not lie beyond those listed in the formal descriptions of imperial aristocracy but also challenge the current normative understanding of the Xiongnu political order. These seldom addressed subordinate dignitaries and other "kings" attest to powerful non-central groups and their leaders, and an examination of the entire corpus of Xiongnu "kings" scattered throughout the Chinese records reveals a more complex and extensive overall political network in the steppes.

Second, I present a revised narrative of the historically-attested Xiongnu empire that emphasizes the agency of regional leaders. This resulting revised understanding of historical dynamics is then compared to dynamics apparent in the archaeological record of Inner Asia, a corpus of material for Xiongnu studies that has grown significantly in recent decades. (see Brosseder and Miller 2011; Eregzen 2011) This interdisciplinary approach to the Xiongnu polity seeks to elucidate the relationships between the often addressed imperial ranks and the lesser known regional leaders and serves to expand currently "thin descriptions" of social dynamics within the Xiongnu empire.

The Xiongnu Political Order[3]

The most explicit descriptions of the Xiongnu 匈奴 political order are provided in a handful of paragraphs in the Chinese histories from the Han 漢 dynasty. (Shiji 110: 2890-2891; Hanshu 94A: 3751) The political structure recounted by Chinese historians often re-presented Xiongnu titles in Chinese fashion or via Chinese equivalents (Psarras 2003: 127) and was most likely an idealized version different from the functioning political network and its components. (Xie 1969) Nevertheless, it represents some of the essential social institutions and political agents operating within the Xiongnu empire. In addition to these succinct descriptions of the highest ranks of the imperial nobility, cursory mentions elsewhere are given to the rank and file members who supposedly occupied an assemblage of positions within the lower levels of a politico-military order. The following overview of titles and positions strives for a balanced presentation that highlights the institutional and functional differences between these greater and lesser constituents.

Aside from a supposed difference in the size of territories and armies under their control, formalized divisions of power and lineage-based restrictions sought to elevate and distinguish the principal kings and commanders from the swath of local leaders. Wittfogel and Feng (1949: 206-207) suggest that the Xiongnu had surnames (*xing* 姓)[4] only for the imperial aristocracy, as a way to "restrict the privileges of clanship . . . and ancestral worship as the exclusive practice." Although the opening statements of the Han chapters on the Xiongnu claim they were "without family or courtesy names" 無姓字, (Shiji 110: 2879) evidence to the contrary appears not only in the family names of the royal clans but also in additional clan or lineage names (see below) used by groups outside of the core Xiongnu nobility.

The little description that is given for social conventions of the Xiongnu alludes to a broadly observed suite of practices centered on the preservation of families (*zhongxing* 種姓) and ancestry (*zongzhong* 宗種) (Shiji 110: 2900), which suggest that aristocratic lineages were not extraordinary in their

3 Thorough treatments of the upper ranks of the Xiongnu political order are given in numerous other studies. (e.g. Xie 1969; Di Cosmo 2002: 176-178; Giele 2011a: 261-263) The present review of these dignitaries is given in order to fully complement and contextualize the discussion of mid-level leaders that have received much less direct attention.

4 This term denotes both a "family" and a "family name," or surname/cognomen, and is referred to throughout this paper as both, depending on the context of the word. The *xing* name designating one's family is different from a personal name or courtesy name (*zi* 字) given to a particular individual.

practices of clanship or ancestral worship.[5] Nevertheless, a delineation was made between "noble clans" (*guizu* 貴族) and "great clans" (*dazu*大族). (e.g. Hanshu 94B: 3707-3708) This implies not only the recognition of greater versus lesser clans but also the differentiation of particular noble clans from other powerful ones.[6] Perhaps the declaration of a few core "lineages" (*shi* 氏) as the "state clans" (*guozu* 國族) (Hou Hanshu 89: 2944-2945)[7] provides the true distinction, asserting certain lineages as elevated above all others and equated with ultimate authority. But despite the presence of a handful of elevated noble lineages, only one lineage held exclusive rights to the ultimate position of power in the empire.

The pinnacle of the Xiongnu political order was the supreme ruler, who was addressed as Chengli Gutu Chanyu 賛犁孤塗單于, meaning "Heaven's Son, the Magnificent [One]". (Hanshu 94A: 3751) The Chanyu repeatedly addressed himself as being "established by Heaven" 天所立, and even expanded this notion to claim that he was the "born of Heaven and Earth and established by the Sun and Moon" 天地所生日月所置. (Shiji 110: 2899)[8] The position of Chanyu, ordained by Heaven, was thus limited to a single lineage of the surname Luanti 攣鞮.[9] When "the Xiongnu established the Chanyu" 匈奴立單于, a supreme leader was selected from among the immediate male relatives of the previous Chanyu via the collective approval of the establishment of

5 DNA studies of a fully excavated Xiongnu burial ground in Mongolia demonstrate family relations as a guiding principle in the arrangements of graves. (Keyser-Tracqui et al. 2003) Although kinship was not the only factor in the placement of individuals, the authors argue that this particular cemetery, which was the largest and most central in the valley, represents the interments of a handful of family groups over an extended time—perhaps indications of certain prominent lineages in the area.

6 I follow von Falkenhausen's (2006: 23) understandings of the terms *zu* and *shi* respectively as "clan" and "lineage."

7 One must nevertheless bear in mind that such terms are Chinese concepts used to describe the nomadic society to their north, and therefore face difficulties in describing the kinship systems of a different society. For narratives of the northern nomads, names listed as "cognomen" or "family" appear interchangeable with "lineage" designations.

8 This latter assertion is echoed in the offerings to Heaven and Earth 祭天地 and obeisance to the Sun and Moon 拜日月 which the Chanyu made as part of Xiongnu rituals (Shiji 110: 2892), and may relate to the gold or iron pairs of disc (sun) and crescent (moon) found in Xiongnu coffins.

9 The later *Hou Hanshu* (89: 2944) lists the royal lineage as Xulianti 虛連題, exemplifying the variant Chinese transliterations of proper names for the Northerners, though Old Chinese reconstructions for "luan-di/ti" and "xu-lian-ti" (Baxter and Sagart 2011: 79, 80, 83, 127, 147) suggest these names were even closer in pronunciation and represented the same name in the original language from the North. For convenience of reading and comparison to previous research all such names in this paper are referred to by their modern pronunciations.

tribal leaders. If a leader "established himself as Chanyu" 自立為單于, he could theoretically be in conflict with the combined approvals of the majority of the tribal leaders. However, such occurrences were rare and met with eventual consent (e.g. Yichixia 伊稚斜 see Shiji 110: 2888, 2907) instead of spurring widespread conflict. Only in the mid first century BC did an explosion of competing claims from well outside the primary royal lineage spawn crippling political fission.[10]

The highest ranks of the political order were occupied not only by the Luanti lineage but also by constituent secondary lineages—Huyan 呼衍, Lan 蘭, and, "later," Xubu 須卜. (Shiji 110: 2890-2891) These lineages were tied closely to the primary royal line through exclusive exchanges of consorts (*yanzhi* 閼氏) and princesses (*juci* 居次). Together, they made up the distinguished "noble stock" (*guizhong* 貴種) of the Xiongnu that held restricted rights to the supreme positions of the Great Chiefs 大長.[11] These ranks are described as "hereditary offices" 世官, but perhaps only insofar as they remained, in principle, occupied by the same lineage groups. Several examples exist of newly selected Chanyus appointing new persons to these high positions without apparent conflict.

The Great Chiefs, or Twenty Four Chiefs 二十四長, of the Xiongnu consisted of various "kings" (*wang* 王) and commanders, each category of which was partitioned into Left and Right divisions across the empire (Fig. 1). They occupied the uppermost ranks of the military decimal system and were thus referred to as the [Chiefs of] Ten Thousand Cavalry (*wanqi* [*zhang*] 萬騎[長]), denoting the vast numbers of troops under their direct control.[12] The highest

10 The conflicting claims that led to the splintered establishment of the so-called Southern Xiongnu faction in northern China during the mid-first century AD did not appear to cause the same manner of political fission within the northern steppes. See discussion below.

11 This label, and many others mentioned by the Chinese for Xiongnu ranks, exemplifies the assumptions and connotative baggage of Han designations for the Xiongnu. The more literal translation for *zhang* 長 would be "elder," which in Han society could refer to someone at the head of or in charge of a unit or task. In the case of the Xiongnu, such persons were leaders and chief among others, dignified by an official title. These leaders were also referred to as "Great Ministers" (*dachen* 大臣), employing yet another Chinese term to denote their position as dignitaries of the supreme ruler. Many scholars have adopted the label of "chief" for the *zhang* of the Xiongnu (e.g. Di Cosmo 2002: 178), as do I in this paper, while still acknowledging that the order and nature of the titles recorded in the Han accounts, and the order in which they are given, reflect Chinese institutions and would have made sense to a Chinese reader of the time. (Giele 2011a: 263 n. 169)

12 Despite the title of "Ten Thousand Cavalry," the text states that the greater of these chiefs had over ten thousand while the lesser of them had but several thousand. We should

FIGURE 1 *Political Order of the Xiongnu*

of these were the Tuqi 屠耆 and Luli 谷蠡 Kings,[13] followed by high order generals (*jiang* 將), commandants (*duwei* 都尉), and danghu 當戶 officials, the last of which appear to have been administrative positions bearing a Xiongnu title name. (Giele 2011a: 261) Each of these Great Chiefs appointed his own subordinate kings, chancellors, and danghu and juqu 且渠 (且居) officials as well as Chiefs of Thousands, Hundreds and Tens, (Shiji 110: 2891) and "each had allotted territory" 各有分地 within which his constituents could migrate. (Shiji 110, 2879, 2891) The Great Chiefs were thus positioned at the head of a military decimal system of sociopolitical organization and exercised seemingly autonomous control over independent appanages. (Di Cosmo 2002: 177)[14]

The Gudu Marquises 骨都侯 were the lowest ranks listed among the imperial nobility and, it should be noted, came from "different families" (*yixing* 異姓) of lineages not counted among the few imperial clans. There is no mention of appanages or subordinates for them, and since their specifically mentioned function was to assist in governing, (Shiji 110: 2891) we may assume that

therefore consider these designations as approximate and relative divisions rather than reflecting exact counts of their constituent forces.

13 These names reflect Xiongnu words for the titles, for which only "Tuqi" is explained as the Xiongnu word for "worthy" (*xian* 賢). (Shiji 110: 2890)

14 This may correlate to the delineation of pasture territories and migratory circuits under local leaders, also documented in medieval Inner Asia, (Drompp 1991: 105) Mongolia during the early twentieth century, (Simukov 1933; 1934; Fernández-Giménez 1999b) and even among local kin-based territorial configurations in the modern post-decollectivization era. (Murphy forth.)

these dignitaries depended greatly on their personal connection to the ruler who had put them into positions of power. They thus constituted a retinue of political administrators under direct control of the central authority—the Chanyu—but it is not known to what degree, if any, they formed an administrative network along with and extending into the ranks of ministers, danghu, and juqu associated with the "subordinate lesser kings."

Lesser Kings of the Xiongnu Polity

While no explicit descriptions of the so-called Lesser Kings appear in the historical records, references to various chiefly leaders of constituent groups scattered throughout the realms and ranks of the Xiongnu polity nevertheless supply some insight into the political substrata and their interactions with the imperial aristocracy. What the Chinese chroniclers termed a "king" among the Xiongnu was equivalent to a "great man" 大人 or "chiefly commander" 渠帥[15] at seemingly any level of the military decimal system. Its broad application to other chiefs besides the Great Chiefs suggests the presence of powerful leaders outside the core imperial aristocracy yet within the political order. An assortment of non-royal "kings" are mentioned with a variety of labels—"name kings" (*mingwang* 名王), "boundary kings" (*bianwang* 邊王), "frontier entrenchment kings" (*outuowang* 甌脫王), and collectively the "various kings and great men" (*zhu wang daren* 諸王大人). These appear scattered throughout the historical records but are collectively analyzed here (Fig. 2).

The boundary and frontier kings relate to those peripheral leaders who were incorporated into the growing conquest polity, even though these groups often shifted allegiances between the Xiongnu and other neighboring powers such as the Han to the south and the Wusun 烏孫 to the west. The label of "name king," however, appears to be the most telling for powerful leaders outside the imperial nobility.

> Name kings are the nobility of the various kings. [They] take on duties, receiving given mandates and carrying out duties. 名王，諸王之貴者。受事，受教命而供事也。(Hanshu 70: 3012)

15 The military connotations of the term *shuai* 帥 ("commander") was certainly one that would have made sense to the Chinese chroniclers, as would the label of *ju* 渠 as "great" or "chiefly."

Kings (王)	given names	designations	Territories
Boyang 白羊		Xiongnu state	Ordos
Chanhuan 單桓		Hu King	Western Regions
Dong(East) Pulei 東蒲類	Zilizhi 茲力支	"Xiongnu . . . king"	Western Regions, Pulei Kingdom
Fuli符離		king title	
Gou 句	Gaobushi 高不識	king title	
Guxi 姑夕	Fu 富; Su 蘇		in East, adjacent to Wuhuan
Han 韓		Xiongnu king title; lineage	
Hesu 郝宿	Xingweiyang 刑未央		
Huduni 呼毒尼		Hu King; subordinate king of Hunyu King	
Huluzi 呼盧訾			
Hunyu 葷粥/薰粥/渾庾/渾窳, **Hunye** 渾邪/昆邪		has ministers, generals, subordinate kings	state north of Xiognu; became Xiongnu Western Regions King; moved to Zhangye region
Huqie 呼揭			West
Huyutu 呼于屠		king title	
Jizu 稽沮/稽且			
Juli 車利		Xiongnu Great Man	
Liwu 犁汙			
Loufan 樓煩		Hu state	Ordos
Louzhuan 樓專/樓剸	Yijikan 伊即靳		
Luhu 盧胡 **("Enemy Hu"?)**		Hu state name	
Lutu 盧屠			
Puni 蒲泥		king title	
Puyin 蒲陰			
Qinli 禽梨 /禽黎		Hu king; subordinate king of Hunyu King	
Qiutu 酋涂		Hu king	West

(*Continued*)

FIGURE 2 *"Xiongnu Kings" Mentioned in the Chinese Dynastic Histories*

FIGURE 2 (*Continued*)

Kings (王)	given names	designations	Territories
Rizhu 日逐 **(Shizhu** 尸逐**)**	Xianxianchan 先賢撣: (brother of Chanyu demoted to Right Rizhu King)	Xiongnu king; Left & Right designations	Western Regions
Sanmulouzi 三木樓訾		Northern Xiongnu Great Man; 38,000 people, 100,000+ livestock	
Subu 遫濮/遫濮 **(=Xubu** 須卜**?)**		tribal name; state name	
Ti 題			
Tuntou 屯頭		Hu (or Xiongnu) king title	
Wenyudi 溫禺鞮/ **Wenyudu** 溫禺犢/ **Wenoutu** 溫偶駼		Xiongnu king title; territory name	near Zhangye
Wuchanmu 烏禪幕			originally a small state between Wusun and Kangju, submitted to Hulugu Chanyu, set up in Right territories
Wuji 烏藉/**Wuqi** 烏揭			north and west
Xiao 校		Right king	
Xiqi 西祁		Xiongnu king	
Xiutu 休屠		Xiongnu king title	Right/West (near Zhangye)
Xiuxun 休旬			
Yicuoruo 伊酋若	Shengzhi 勝之 (younger brother of Woyanqudi)		became affiliate state of Ordos
Yimozi 伊莫訾		(Northern) Xiongnu King	
Yinchun 因淳/ **Yinshu** 因孰	Fuluzhi 復陸支		
Yingbi 鷹庇/**Yanbi** 雁疪		subordinate king of Hunyu King	

(*Continued*)

FIGURE 2 (*Continued*)

Kings (王)	given names	designations	Territories
Yiqu 義渠		Hu	South?
Yizhizi 伊秩訾		Left & Right Kings; generals; also a Xiongnu official title	
Yujian 奧鞬/薁鞬		Left & Right designations	
Zhelan 折蘭		Hu state name; Xiongnu surname	
Zhuobing 涿兵		Xiongnu Great Man	

Although "name kings" were considered "noble," they were clearly beneath the imperial kings and were obliged to carry out mandated duties. Also, despite the seeming autonomous control of their territories and constituents, they nonetheless occupied a subservient role in the political hierarchy of the empire. Yet these name-worthy "kings" were still considered among the higher ranks of leadership.

> Name kings are those so called who are of great renown, and are different from the various small kings. 名王者，謂有大名，以別諸小王也。(Hanshu 8: 262)

The names of such renowned leaders are often equated to the names of "great clans" (Hanshu 94B: 3808), "families," "tribes," and "states" (or even "lands") among the Xiongnu that existed outside the imperial nobility yet seemingly above the lesser dignitaries. Such differentiation may account for additional mentions of "Xiongnu kings," perhaps among the ranks of "small kings" with no clan or family of mention. At these lower sociopolitical levels, the Chinese label of "king" becomes an obscured designation. Other Chinese nobility labels, such as "marquis" (*hou* 侯) for the Xiongnu position of *jiruo* 籍若 (Shiji 111: 2929), are also used by the Han scribes to distinguish powerful leaders among the so-called Northerners (*Hu* 胡).[16] However, one should not assume

16 *Hu* was a general term for the nomadic groups to the north of the Chinese, and is often a label interchanged with the designation of Xiongnu in Chinese records. (see Di Cosmo 2002: 127 ff.)

that designation of king and marquis imply that all these positions were enfeoffed in the same manner as in Han society. (cf. Xie 1969: 243)

Even though the titles and surnames of the uppermost nobility are explicitly named in the histories, an understanding of the positions, identities, and roles of lesser leaders remains obscured amidst scattered descriptions of so-called name kings and great men. Several Xiongnu labels that are described as "office titles" 官號, such as Yizhizi 伊秩訾 (Hanshu 8: 266; 54: 2461) and Husulei 呼遫累, (Hanshu 94B: 3796) also appear as left and right king titles (Hanshu 94B: 3797, 3842) and a Chanyu personal name (Hanshu 8: 266) respectively. This calls into question the variable applications of certain Xiongnu proper nouns as well as the Chinese understanding of the Xiongnu political order and the spectrum of titles. It becomes increasingly apparent that the Han scribes did not know of or comprehend, much less record, the entirety of the Xiongnu noble and administrative ranks. The number of overlaps in the usage of particular labels makes it difficult to take the supposedly complete Xiongnu political order presented in the Han histories at face value, but the Chinese annals nevertheless present us with a general picture of hierarchical dynamics at play within the Xiongnu imperial aristocracy.

The most critical form of overlap occurs between those occupying the restricted imperial ranks and the remaining greater "renowned" leaders. Select clans such as the Huyan were deemed of "noble stock" and thus integrated into the highest levels of the imperial hierarchy. Yet they also established kings outside of the imperial orders of Twenty-Four Chiefs and the associated ranks. (see Hanshu 94B: 3806)[17] Such groups clearly represent powerful regional clans that, despite being rooted in the core imperial nobility, were able to preserve themselves amidst shifting sociopolitical orders.

If we accept the equation of the Xubu to the Subu 遫濮, (Mori 1950: 7) a name deemed to represent both a tribe (*buluo* 部落) and a state (*guo* 國),[18]

17 Commentators in the Chinese histories have equated this Huyan group to the Huyan 呼延 who were later recorded among the Xianbei 鮮卑—a group from among the Eastern Hu (Dong Hu 東胡), in present-day Manchuria and eastern Mongolia, whom the early Xiongnu conquerors had subjugated. (Shiji 110: 2890; Hanshu 89: 2945) It remains to be seen whether this group was of Xianbei origins and were incorporated into the highest ranks of the Xiongnu aristocracy during the early expansions, or were of Xiongnu origins and later became subsumed by the Xianbei as they became the hegemonic steppe power in the wake of the collapsing Xiongnu empire.

18 The term *guo* has been interpreted as both "state" and "kingdom." While I will not engage in the semantic discussion and its implications, it is important to recognize both connotations of the word in relation to the greater "state" and polity of the Xiongnu as well as to smaller regional entities ruled by provincial "kings," hence the label of "kingdom." Again,

(Shiji 111: 2929) then we are confronted again with a certain regional group and their independent leaders that were "later" incorporated into the restricted ranks of the Xiongnu imperial aristocracy. Although the Xubu are described as managing trials and disputes among the Xiongnu, (Shiji 110: 2890; Hou Hanshu 89: 2945) and thus may have occupied a particular judicial niche in the Xiongnu political order, (Giele 2011b: 262 n. 161) their status as secondary royal lineage, alongside the Huyan and Lan lineages, would also have granted them access to the ranks of the Twenty Four Chiefs. The extension of membership in the imperial noble stock to new groups and the simultaneous retention of local positions of power by those groups would have held the potential for conflict between imperial and regional retinues. This overlap raises the question of whether explicitly non-royal groups managed to garner positions, even lower ones like the juqu, within the uppermost imperial ranks. The names of groups well outside the imperial noble stock of the three core lineages may represent "different families," such as those which filled the lower ranks outside of the Twenty Four Chiefs. (Shiji 110: 2891) Furthermore, descriptions of their ranks and constituents can provide an estimation of their ranks and roles within the Xiongnu political system.

This broad spectrum of both lesser and greater "kings" outside of the more well-known upper nobility elucidates additional sociopolitical agents that affected both frontier dynamics as well as interior politics. Many Xiongnu kings and dignitaries are mentioned because of their submission and reestablishment in the Chinese frontier, although most preceding king names are not mentioned for these "former Xiongnu kings" 故匈奴王. Among records found at the Han frontier garrison at Dunhuang was an "Ordinance for Rewarding Xiongnu Who Surrender" 匈奴降者賞令, which describes the surrender of whole groups of the Xiongnu and the manner of incorporating them into the Han. (Gansu 1991: 1357-1362, cited in Giele 2011b: 61-62) Despite an apparent diminishment in the number of their constituent households, these documents imply an investiture system that maintained the relative positions of the surrendered leaders over their own constituents. The number of households with which these submitted nobles were reestablished thus provides an informative, though indirect, window on some of the lesser-known grades of local leaders in the Xiongnu polity (Fig. 3).

Two of the three observed outliers were kings who commanded larger hordes at the periphery of the Xiongnu empire—Loufan in the south and Hunyu in the northwest—and attest to the power and persistence of large

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we must remain cognizant of the use of explicitly Chinese terms to discuss social actors and political entities well outside the Han realms.

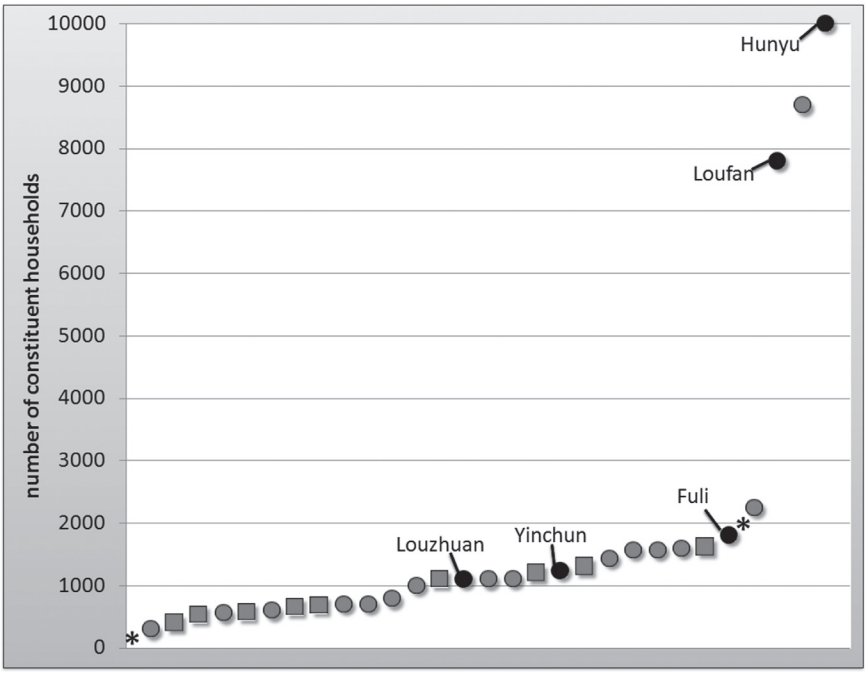

FIGURE 3 *Surrendered Xiongnu leaders and their constituents: ○ position with no title noted; □ position with title noted; * position mentioned in frontier garrison ordinances* (*see Giele 2011b*)

autonomous groups that made up the Xiongnu polity. The Hunyu King, who submitted to the Chinese with a host of over forty thousand,[19] was enfeoffed with ten thousand households. These greater leaders appear to have controlled hordes on par with the imperial Chiefs of Ten Thousands and could have posed significant challenges to the ruling upper elite of the Xiongnu empire. Yet certainly not all leaders within the Xiongnu polity commanded such large entities.

The majority of submitted leaders recorded in the histories retained between five hundred to two thousand households, which may roughly equate to leaders who had previously been in the category of Chiefs of Hundreds and Chiefs of Thousands; in other words, those listed among the middle ranks of

19 The total horde with which the Hunyu king submitted was a combination of his own forces and those of the corroborating Xiutu king, whom he killed as soon as they had submitted. Counts of both forty and one-hundred thousand are given at different mentions, though one citation clarifies that his horde of over forty thousand merely placed the Hunyu King in the category of what was called "One Hundred Thousand". (Hanshu 94A: 3796)

the Xiongnu decimal-based military political order. Of these, some leaders (marked by squares in Fig. 3) had been generals, commandants, ministers, or danghu officials—all of which were lower ranking titles outside of the Twenty Four Chiefs and seemingly below the "kings" of the Xiongnu. But regardless of the connotations of the Chinese titles used to designate some of these lower Xiongnu dignitaries, they clearly represent leaders who were able to mobilize sizeable groups in maneuvers as significant as defecting to the Han empire. Furthermore, they appear to have been of a size sufficient to be mentioned in the Chinese dynastic histories.

Documents from Han frontier garrisons, (Gansu 1991; 1994) on the other hand, provide evidence of a stratum of even lesser leaders and their smaller hordes. The frontier ordinances mentioned above describe surrendered leaders with two thousand and two hundred households, (Giele 2011b: 61-62; see asterisk marks in Fig. 3) the second of which further attests to groups below the level of Chiefs of Thousands. Reports of enemy incursions mention groups usually amounting to less than a hundred cavalry, (Wang 2008: 302-303; Giele 2011b: 53) which demonstrate local groups within the Xiongnu polity acting as smaller, and perhaps independent, units. These minor hordes may indicate groups on par with Chiefs of Tens, and certainly represent the smallest known assemblages of households and cavalry forces that operated within the northern steppes. Yet there is no consideration of these smaller groups in the major historical narratives, in the lists of surrendered and re-enfeoffed chiefs, or even in frontier documents about rewarding surrendering Xiongnu leaders. Nevertheless, one must acknowledge the presence of smaller groups and lesser leaders and consider the roles they played in political dynamics.

Not surprisingly, the Chinese chroniclers at court appear most concerned with politics of the steppe imperial nobility and their effects on the Han frontier. Yet, from information scattered throughout court histories and frontier documents, one may glean a growing crucial presence of powerful leaders, whom Chinese chroniclers relegated to categories such as "name kings" and "frontier kings," as well as a persistent presence of mid-level leaders ranging from Chiefs of Thousands and Hundreds to lesser Chiefs of Tens. A greater attention to such agents helps demonstrate the critical roles that leaders of all sorts outside the imperial nobility played not only in inciting political crises but also in inducing political developments.

"Kings" and "Chiefs" in the Course of the Steppe Empire

Historical reconstructions of political developments in the steppes have largely been constrained by static depictions of the Xiongnu polity, which portray a

sudden emergence and initial era of steppe supremacy followed by crises on the battlefields and amongst the nobles that prompted an era of continual decline. (Yü 1990; Christian 1998: 200-203; Wang 2004; Chen 2007; Golden 2011: 31) Archaeological remains, however, attest to the presence of powerful leaders in the steppes during this later period. Thus, when coupling monumental tombs and exoticized prestige assemblages of the first century BC to first century AD with historical narratives that depict a Xiongnu decline at that time, scholars have purported a "conundrum" of evidence for powerful steppe leaders only in the latter centuries of supposed irreparable political decay in the steppes. (Erickson et al. 2010: 147) Yet this dilemma arises from a narrow understanding not only of Xiongnu history and material culture but also of the nature of, and relationship between, the different records of the past.

Careful reconsiderations of the available historical records demonstrate not an irreparable decay in the late first century BC, a view that emerges from the sinocentric nature of the written sources, but rather a resurgence of Xiongnu power in the steppes which lasted through the first century AD. (Miller 2009: 125 ff.) Furthermore, increased investments in demonstrations of power, seen in ostentatious tombs and opulent goods (discussed below), were a result of intensifying competition between supra-regional and regional elites over the course of the early centuries of the Xiongnu empire, which culminated in a bifurcation of the steppe elite in the later period and the further elevation of ruling components of the steppe empire. Changes in material culture and social practices in the steppe empire may thus be understood through an expanded consideration of political agents both amongst the imperial elites and those outside this uppermost echelon.

Regional groups and established local leaders are often critical agents in the formation and cohesion of polities as well as the development of political strategies by central authorities. (Stark and Chase 2012) The supra-regional hierarchical political order of the Xiongnu that developed at the end of the third century BC most likely grew out of the reorganization of existing sub-regional hierarchies of local chiefs, (Di Cosmo 2002: 187) and such substrata continued to affect the course of political developments of the Xiongnu empire well into the first century AD. In order to advance discussions of Xiongnu politics beyond merely large tombs and imperial kings, the following narrative addresses the critical roles that local leaders played in the steppe polity, explicates their manners of interface with members of the imperial nobility, and endeavors to frame their challenges to centralized authority as the impetus for social and cultural changes in the latter centuries of the Xiongnu empire.

Subjugation of Regional Leaders

One of the fundamental maneuvers of empire building includes the subjugation of new regions and peoples. Groups within the central Mongolian steppes are not mentioned by name in the accounts of conquests, as these were most likely the core groups that constituted the Xiongnu polity at the end of the third century BC. Some "kings" of larger neighboring conglomerates, such as the Eastern Hu, were "destroyed" and their people and animals seized. (Shiji 110: 2889) Other "kings," like the Loufan and Boyang in the Ordos region along the northern edge of China, were "brought together" under the control of the Xiongnu at the end of the third century BC. (Shiji 110: 2890)[20] Yet recurrent mentions of Loufan and Boyang "kings" during campaigns against Xiongnu groups in the late second century BC implies that such factions and their leaders were, to some degree, preserved. This resonates with the fact that some "lands" (*di* 地) were deemed as belonging to particular "kings" (e.g. Hanshu 94B: 3810) and each leader and his associated hordes had their own allotted territory. (Shiji 110: 2879; 2891) If we recognize the preservation of local distinctions and accord a pronounced degree of local control, it comes as no surprise when regional groups sometimes asserted control over their own leadership positions.

Several groups along the northern fringes of the Xiongnu are mentioned as having been subjugated by Modun, the first Chanyu of the steppe empire—the Hunyu, Quyi 屈射, Dingling 丁零 (丁靈), Gekun 鬲昆, and Xinli 薪犁. (Shiji 110: 2983)[21] Although these groups appear to have remained peripheral entities incorporated into the Xiongnu sphere of influence and not necessarily into the political order, the core Xiongnu nobility and its Chanyu ruler made attempts to control peripheral leaderships. Judihou 且鞮侯 Chanyu appointed two military defectors from China—Wei Lü 衛律 and Li Ling 李陵—as kings of Dingling and Xiao 校, respectively. (Hanshu 54: 2457) Dingling being the afore-mentioned group subjugated during the early northern conquests of the Xiongnu, one might deduce that the Chanyu was appointing an outsider, loyal

20 The extravagant wealth found in elite burials of this region just prior to the emergence of the Xiongnu empire attests to the power of local groups and their leaders (Wu'en 2007: 322-356), who may have given allegiance to the Xiongnu rulers in exchange for the maintenance of their positions and territories.

21 The locations of these "northern states" are vague, but numerous references to the Hunyu and Dingling, even into the periods after the fall of the Xiongnu empire, imply that they were located somewhere in South Siberia to the northwest of the Mongolian steppes, perhaps in present day Cisbaikal, Tuva, or Russian Altai.

to him, as a king of a regional subjugated power.[22] One might also assume that the Right Xiao King was also a leader of a similarly conquered group. This indicates at least some attempt to control regional groups through the appointment of outsiders into their highest ranks. However, not all such attempts by the Chanyu to control regional leaderships were met with consent.

The Yujian, a group given mention as one of the five major groups of the Kangju 康居 located somewhere to the northwest of the Xiongnu, also appear to have retained autonomy and asserted control over their local leadership. When the Yujian King of the Left died, the Chanyu Woyanqudi 握衍朐鞮 appointed his young son as the new Yujian King, though kept him at court. But the Yujian nobles protested and established the son of the previous Yujian King, and those in support moved east with them. (Hanshu 94A: 3790) As both the Huqie and Yujian kings later made claims for the supreme position of Chanyu, regional leaders appear to have thrived with the continuation of regional identities and often pronounced degrees of local power. Furthermore, the assertions and relocation of the Yujian exhibits a persistent autonomy of local leaders despite their participation in the supra-regional political order.

When subjugating formidable groups and "kingdoms" of the Tianshan and Altai regions of the west—especially the Huqie, Wusun, and Loulan 樓蘭—the result was claimed as "all are henceforth considered as Xiongnu."[23] Yet, as elsewhere, many of these groups and their leaders appear to have been left intact, demonstrating that inclusion into the empire did not always equate to complete local reorganization. When a king of the Pulei 蒲類 defected in the 1st century BC, he was described as the "Xiongnu Eastern Pulei King [named] Zilizhi" 匈奴東蒲類王茲力支. (Hanshu 96A: 3874) The Kingdom of Pulei, and the lake from which it took its name, had earlier been part of the Xiongnu realms, but by the first century AD it was again an independent entity linked with the Jushi 車師 and other entities of the Western Regions. (Hanshu 8: 243; 96B: 3919; Hou Hanshu 88: 2928)[24] Again we see the existence of regional entities initially subjugated by the Xiongnu, and formally incorporated into their

22 It should be noted that Wei Lü, though bearing a Chinese name and a general of the Han when he submitted to the Chanyu, was of at least partial Hu origins, his father being from the Changshui 長水 Hu group. (HS 54: 2457)

23 This phrase occurs in the Shiji (110:2896) as "all **are considered** Xiongnu" 皆以爲匈奴, though the parallel phrase in the Hanshu (94A:3757) appears as "all **henceforth are** Xiongnu" 皆已爲匈奴. Both phrases are accompanied by the same commentary that explains this as "all entered into the Xiongnu as one state" 皆入匈奴一國.

24 The ancient Pulei Lake correlates to the present Balikun Lake in eastern Xinjiang. Furthermore, archaeological remains along the northern edge of the Balikun mountains have been attributed to the Pulei of the Xiongnu era. (Wang and Xi 2009: 34-35)

realms, that later reappeared still as local groups with distinct identities. It should be noted, however, that this does not preclude the existence of a supra-regional political identity or a political culture of the steppe empire, a contention to which I shall return.

Although some scholars have proposed that high mobility, and thus the ability to "vote with one's feet," among constituent pastoral groups were a weakness of the so-called tribal confederacies and a problem for supra-regional nomadic polities, (Barfield 1989; Doyle 1986; Goldstone and Haldon 2009: 6; Turchin 2009: 194) de Crespigny (1984: 179-180) has asserted such movements as rare and problematic displacements, since the movement of livestock into or through the grazing lands of other tribes would have created disruptive conflicts. In fact, movements of large herder groups in the Mongolian steppes have tended only to happen in the absence, not presence, of stable supra-regional governing institutions, which serve to mediate possible tensions from *otor*-migrations outside of normal mobility patterns. (Murphy 2011)[25] In the case of the Pulei, it seems, the long term results of the Eastern Pulei King's defection was not the relocation of that group but a shift in political allegiance. Local leaders were surely cognizant of the likely detrimental repercussions of large scale migration into distant occupied lands.

The Western Ru 西嚩, a group in the Left territories (i.e. East) of the empire, which the Xiongnu had previously conquered, drove their livestock southward, battling through frontier groups, to submit to the Chinese for support. (Hanshu 94A: 3788) This group consisted of several thousand people, led by their lords and chiefs. Their flight south through the territories of other frontier groups, a migration that resulted in great casualties, occurred at a time of rampant starvation and death of livestock within the steppes. Such migrations of large groups thus appear to have occurred only in extenuating environmental, economic, or political circumstances, in which the probable loss of people and livestock was a calculated risk.

Similarly, kings of greater groups already along the periphery, like the Hunyu and Loufan, could defect to neighboring powers, though the possible relocation of such large hordes would certainly have caused tension with existing

25 Large transmigrations can cause significant conflicts in the areas into which such groups migrate. An influx of herders and their livestock into already utilized pastures or campsites may result in excesses beyond the capacity of a particular area, or what may be referred to as a 'hoofed disaster' (*malyn khöliin zud*) of pasture trampling and overgrazing. (Fernández-Giménez et al. 2012: 837; Murphy 2012: 70) See also the crises of excess pastoral groups migrating into northern China during the collapse of the Uighur Empire. (Drompp 2005)

pastoral groups of the areas to which they emigrated. Thus, it is no surprise that movements of large hordes and their leaders seem to have been in the minority of those who surrendered to the Han, and that the defecting Hunyu were delegated to salt marshes relatively "empty and without Xiongnu". (Shiji 123: 3167)[26] Minor kings in charge of less than a couple thousand households appear to have been more common (see Fig. 3), and interior relocations within the Xiongnu realms may have been even more limited to minor leaders and their constituents.

Challenge of Regional Leaders

Despite direct attention to such agents outside the imperial nobility, the histories reveal a rise during the early-mid first century BC, after prolonged warfare with the Chinese, in the prominence of non-royal leaders within political and military endeavors that were usually limited to the core imperial elite. Chinese forces sought to eliminate these local kings, (e.g. Zhelan and Luhu; Shiji 111: 2929-2930) force them to surrender (e.g. Yinchun and Louzhuan; Shiji 111: 2937), or turn them against each other. (e.g. Gou attacking Huyutu; Shiji 111: 2931) Xiongnu "name kings" first appear as substantial contingents at the end of the second century BC when they began submitting to the Han with large forces. (Hanshu 64B: 2817) Some of these non-royal leaders, such as the Lutu King, were seen as a possible threat to kings of the Twenty Four Chiefs, (Hanshu 94A: 3781-3782) and some began to head up important entourages of the Chanyu which had previously been led by members of the imperial nobility. The Liwu King was sent to inspect the frontier forces, (Hanshu 94A: 3783) the Yujian King was made the head of a major military campaign to the Western Regions, (Hanshu 94A: 3788) and the Ti King headed a delegation to the Chinese to request a renewed treaty of peace and tribute. (Hanshu 94A: 3789) Even though this particular mission failed, the collateral gifts that came with heading a diplomatic mission to the Han empire were surely of a manner that brought great prestige on par with the imperial steppe nobility.

However, these eminent missions and positions did not appear to be procured permanently by such renowned kings, and were likely attained via close connections to different members of the imperial nobility who vied with one another. When Xulüquanqu 虛閭權渠 Chanyu passed, the Hesu King was in charge of summoning the various imperial kings for a great gathering. Yet, once the new Chanyu, Woyanqudi 握衍朐鞮, ascended, the Hesu King and other nobles whom Xulüquanqu had used were executed. They were replaced

26 Salt marshes are mentioned within the Han frontier commandery of Shuofang 朔方, located in the vicinity of the upper bend of the Yellow River. (Hanshu 28B: 1619)

by the sons and younger brothers of Woyanqudi, such as the Yicuorou King, who constituted the new entourage of the Chanyu. (Hanshu 94A: 3789)[27]

Prominent non-royal kings continued to be used by Chanyu rulers as well as by those who made claims to the supreme position. In the mid first century BC, the royal claimant Huhanye was supported mainly by an eastern faction of the kings of Guxi and Wuchanmu, (Hanshu 94A: 3789-3790) and the royal claimant Zhizhi 郅支 was supported by numerous "name kings". (Hanshu 70: 3015) Furthermore, in the upheaval that followed the defeat of Woyanqudi Chanyu, non-royal kings not only provided the main support for royal claimants, they also began to make claims of their own, thus heralding an unprecedented crisis for the core imperial clans. Previous contentions for the position of Chanyu had all come from members of the royal lineage, even the self-establishment of Yichixie 伊稚斜 in 126 BC. (Shiji 110: 2907) But by 50 BC, Yujian in the East as well as the Hujie and Wujie in the West had all made competing claims for the supreme rulership of the steppe empire, sometimes even forming alliances among themselves to further these claims. These constituted the ultimate challenge to the authority of the reigning imperial clans and signaled the climax of a turn in political dynamics within the empire.

Scholars have also debated the creation of new imperial titles as a significant political development that may have created tension. (Mori 1973) Though it is difficult to ascertain whether differences in the imperial hierarchies outlined in successive Chinese histories reflect changes in political structure or a greater understanding over time by the Chinese historians recording the Xiongnu titles and political system. (Uchida 1953: 38) This underscores the distinct possibility that not all ranks and offices of the Xiongnu political order were recorded or known by the Chinese, or at least that they were understood in a different fashion by the Chinese.

While the political hierarchy may or may not have changed, the number of lineages incorporated into the restricted upper ranks clearly expanded. Sometime during the early centuries of the Xiongnu empire, the constituent clan Xubu (or Subu) was brought into the restricted folds of the imperial nobility. (cf. Mori 1953 and Pritsak 1954 as to when) Then, during the first century AD, yet another clan—the Qiulin 丘林—appeared in the ranks of imperial nobility within the splintered entity of the Southern Xiongnu. Thus, it would not have been an expanding royal lineage via marriages and procreation (Golden 2011: 109-11; Kradin 2011: 92-93) so much as powerful non-royal groups

27 The claim of Woyanqudi (60-58 BC) as Chanyu was perhaps contentious, as he was a far distant relative of Xulüquanqu Chanyu, and only because his great-grandfather had been Chanyu (Wuwei 烏維 114-105 BC). This long detachment from the direct royal line may explain why his family members were leaders of groups outside the imperial nobility.

and their leaders—heading prestigious delegations and important campaigns, being accommodated as additional imperial lineages and high-ranking dignitaries, and even asserting themselves into the supreme position of rule—that constituted the growing pains of the polity.

Han policies toward the Xiongnu impart an indirect, though important, account of this contention between the imperial steppe nobility and the regional leaders over whom the steppe rulers attempted to exert authority. Chinese strategies for dealing with the Xiongnu varied, but those which sought to fan potential fires of dissent highlight tensions between the uppermost echelon and the political substrata of the steppe empire. The most famous and frequently adopted policy toward the Xiongnu was the "kinship peace" (*heqin* 和親), though Di Cosmo (2002: 215 ff.) underscores a conceptual misunderstanding of the Xiongnu political system on the part of the Han as the main source of this policy's failure to ensure long-term peace.[28]

The Han assumed the manner of sovereignty that existed for their emperor over China was also possessed by the Chanyu over the steppe peoples. Thus, marriage alliances with and tribute for the Chanyu supreme ruler would by proxy ensure peaceful relations with those Xiongnu groups that bordered the Han empire. However, the Chanyu was a not an absolute sovereign but rather primary leader of a supra-regional community of nomadic aristocrats, upon whose consent his authority rested, that asserted control over the steppes. (Di Cosmo 2002: 223) The *heqin* policy was fiercely debated among the Chinese, and critics often emphasized a lack of control that the Chanyu exercised over regional groups who continually raided the frontier.

> As for the situation of the Chanyu, can [he] make certain his people do not violate the agreement? 又況單于, 能必其衆不犯約哉 (Hanshu 94B: 3804).

Other strategies, such as the "Three Models and Five Baits" (*sanbiao wu'er* 三表五餌), proposed to solve the Xiongnu problem by attending to subordinate steppe leaders and enticing them to defect to the Han.[29] The focus laid specifically on the local nobles, heads of households, and even the populous of the Xiongnu empire. (Xinshu 4: 136, 138) This diplomatic tactic advised bestowing gifts, from ornate garments to decorated chariots, upon Xiongnu leaders who came to the frontier as well as entreating them with meat and wine

28 See T. Chin (2010) for a recent in-depth discussion of the *heqin* agreement and its politics.

29 See Sanft (2005: 282-321) for a thorough treatment of this proposal by the early Han scholar Jia Yi 賈誼.

feasts—all of a degree of lavishness that would contest the prestige of their steppe rulers. (Xinshu 4: 136-137) Such an appeal to the constituent leaders would theoretically undermine the Chanyu's authority and dismantle the network of political and military support for the steppe rulers. (Xinshu 4: 138)

Numerous treatments of Xiongnu history have read the accounts of the first century BC as just such an undoing and have interpreted this period as the beginning of the end of Xiongnu power. Yü (1990: 141-142) argues that the "cohesive solidarity which had characterized the Xiongnu empire under Modun, Laoshang and Junchen was lost forever." We are therefore confronted with a persistent historical narrative that outlines an imperial founding at the end of the third century BC leading into an era of steppe superiority, which then erupted in crises of the first century BC that caused irreparable damage and gave way to a period of steady decline lasting into the second century AD. (Yü 1990: 141-142; Sneath 2007: 23) However, H. Bielenstein (1967: 90-92) has rightly challenged the sinocentric perspective of this historical narrative, arguing that the long wars with Han China and the eventual capitulation of Huhanye Chanyu to the Chinese court only resulted in an era of peace and not in Xiongnu subjugation or inferiority. The later era of the Xiongnu polity is, instead, arguably one of great social, cultural, and political transformations which, though subtly observable in the historical records, are clearly evident in the archaeological record.

Reconfigurations and Regional Leaders

Relatively little information exists in the dynastic histories for the dynamics of the Xiongnu empire after the crises of the mid first century BC, leaving us with a murky period of textual narrative and a relative dearth of historical knowledge about the inner operations of the Xiongnu empire in its latter years. Furthermore, once the seceding southern Xiongnu entity was established in the Han frontier in 50 AD, not even the names of Chanyu rulers of the north, between Punu 蒲奴 (48-?) and Youliu 優留 (?-87), were recorded. Yet this increasing scarcity of narration should not be equated to an increasing deficiency in power of the steppe rulers or a lack of dominance of the Xiongnu steppe polity, lest we forget the accounts of strong diplomatic assertions by the Xiongnu or their military incursions deep into Han territory during the first century AD. (Bielenstein 1967) Even though scholars continue to speak of a "slow demise" of the Xiongnu empire, frontier documents nevertheless record a significant and increasing number of raids from the Xiongnu "Northerners" during the mid first century BC to the mid first century AD, (Giele 2011b: 51-53) which echo the raids and invasions recounted in the dynastic histories. One must thus come to terms with a condition of the Xiongnu polity after the rise

of Huhanye in the mid-late first century BC that may be characterized as nothing less than a resilient, active, and dominant entity. (Miller 2009: 129-142)

Given the rise in prominence of non-royal kings during the early to mid first century BC, one may certainly speak of the tensions between imperial rulers and subordinate leaders as culminating in a crippling political crisis. Yet Huhanye Chanyu, after formally capitulating to the Han court, soon reclaimed sovereignty over the steppes, and was followed by an era of revived Xiongnu strength that did not falter until the late first century AD. (Psarras 2004: 41; Lewis 2007: 137) Around this turn of events, I propose a new historical periodization of the Xiongnu political phenomenon, with an early Xiongnu period (209-58 BC) and late Xiongnu period (47 BC-98 AD), being divided by a decade of political and military crises.

This not only contests periodizations of the Xiongnu into two dichotomous eras of rise-and-fall, but also challenges models of an almost four-century-long Xiongnu empire, (e.g. Ganbaatar 2011) which well outlasts theorized durations of 150 years for the majority of Inner Asian polities. (Cioffi-Revilla et al. 2011: 107; 4b) Rather than treating the Xiongnu empire as an enduring entity of a singular nature, we should recognize sociopolitical "hazards", (Cioffi-Revilla et al. 2011) contentions, or crises and their results as important factors in the restructuring of polities during their lifespan. (e.g. Schwartz and Nichols 2006) This calls for a substantial revision, from both archaeological and historical perspectives, of the treatment of the first century BC, the latter centuries of the Xiongnu phenomenon, and the overall chronology of the empire.

Just as Di Cosmo (1999) argues for crises as the impetus for nomadic state formations, so might crises after the founding of a supra-regional polity provide a pivotal point during which supra-regional leaders, in order to avoid permanent political disintegration, develop and implement significant social, economic or cultural changes. (Goldstone and Haldon 2009) As such crises in empires often lead to reformations of social and cultural institutions as well as re-formations of political systems, (Morris 2006) we must begin to consider "life histories" of empires that address changes in strategies of central, regional, and local elites through the course of changing social, economic, and political conditions. (Stark and Chase 2012) Due to the relatively skim historical narratives about the inner workings of the Xiongnu during this later period, I turn now to the archaeological record, which presents a rapidly growing corpus of data, especially of the later era, in order to address socio-political and cultural changes that occurred as a result of interactions between imperial nobility and regional elites of the steppe empire.

Power Politics in a Dynamic Empire

The Xiongnu historical phenomenon has been correlated with a consistent assemblage of personal adornments, pottery, and burial practices, not to mention widespread equivalence in weaponry and bridle technology, that occurred within the Mongolian steppes and surrounding areas between the second century BC and second century AD. (e.g. Batsaikhan 2002; Törbat 2004; Eregzen 2011) Both the time span and the general area of this archaeological phenomenon correspond with the time and place of the Xiongnu as described in the Chinese accounts.[30] However, an equation of the historical entity to any archaeological sites or material culture(s) is admittedly difficult, and has continually been fraught with conflicting notions of what the label of Xiongnu entails. (Brosseder and Miller 2011)

The historically attested entity of the Xiongnu was most certainly a political one, founded on a supra-regional hierarchical social order. Only by considering politics and its relation to political cultures may we begin to equate historical and archaeological categories of evidence and address the above-examined dynamics of the Xiongnu empire through analyses of material remains. And while the political regime may be linked to a pervasive cultural regime, we should refrain from mistaking a particular widespread culture for a unified ethnicity. (Jones 1997) Cultural assertions, social integrations, political participations, and economic interactions vary greatly and can constitute strikingly different boundaries. (cf. Parker 2006) Therefore, we should speak not of a precise or bounded territory of the Xiongnu polity, but rather of degrees of interaction with and/or participation in the polity, the processes of which may be manifested in aspects of material culture.

If we engage archaeological remains across the steppes in such a dynamic fashion, we must also recognize not a continual and unvaried 'Xiongnu' culture of prestige goods and ritual arenas but rather a collection of materials and traditions that likely exhibit some sub-regional differences and that could, and did, undergo significant widespread changes. Through the following diachronic discussion of archaeological remains, I demonstrate changing material manifestations of integration that evidence not only a period of imperial formation but also a period of significant reformation for a more dynamic depiction of the Xiongnu empire.

30 The refinement of chronologies for archaeological remains during the Xiongnu period has made significant progress recently from heightened efforts for absolute dates of unearthed materials. See especially the project Radiocarbon Dates for Xiongnu Period Burials. (e.g. Brosseder et al. 2011)

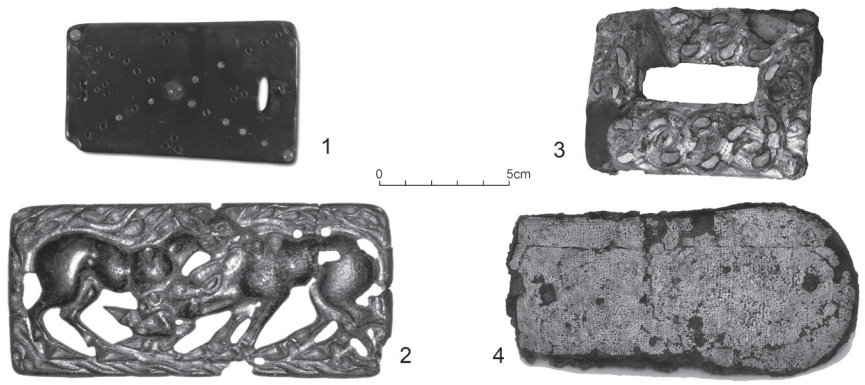

FIGURE 4 *Elite belt ornamentation of the Xiongnu:* Early: (*1*) *stone with geometric-design: Salkhit, Darkhan Uul* (*Eregzen 2011: 134*); (2) *bronze open-work with horses in combat: grave 102, Derestui* (*after Brosseder 2011: 367; Miniaev 1998: pl.85*); Late: (*3*) *gilded iron with corral and turquoise inlays and intertwined serpent motifs: grave 27, Burkhan Tolgoi* (*Törbat et al. 2004*); (*4*) *gilded iron: grave 15, Shombuuzyn Belchir* (*Miller et al. 2009: 11*)

Formation of the Xiongnu Polity

During the 2nd to 1st centuries BC, a relatively consistent assemblage of ornate personal ornaments, especially belt plaques, spread across Inner Asia, and has been taken as evidence of intense interregional elite communication and exchange. (Brosseder 2011)[31] The equivalent combinations of styles, techniques, motifs, and forms occurred as either stone plaques with geometric designs or bronze open-work animal-style plaques, and often exhibit exact copies in far-distant regions from North China to South Siberia (Figs. 4.1-2). In relation to the Xiongnu historical phenomenon that emerged in the 2nd century BC, we may arguably link this proliferation of homologous prestige goods not to ethnogenesis or mass migrations of peoples (cf. Frachetti 2011) but to heightened interaction between varying regions of the steppe and perhaps even integration of a certain degree.

Competitive emulations, symbolic entrainments, and increased flows of goods are all processes associated with competing 'peer polities', and often lead to significant sociopolitical changes and the emergence of new homologous institutions. (Renfrew 1986) These may, though not always, serve as foundations for varying forms of interregional integration or larger political establishments. In the case of Inner Asia at the end of the first millennium BC, the establishment of the Xiongnu polity may have ridden on the back of such

31 A parallel spread of relatively uniform pottery styles and forms also demonstrates intense degrees of exchange and interaction across Inner Asia. (see Hall and Minyaev 2002)

intensifying exchanges and interactions, and, very likely, contributed to their further intensifications alongside the emergence of new homologous social and cultural institutions.

The presence of distinct competing regional groups in the steppes before the emergence of Xiongnu hegemony is clear from the historical records, as is the frequent preservation of their regional identities when subjugated and incorporated into the growing Xiongnu polity. It is thus no surprise that beneath the impressive veneer of uniform prestige assemblages and pottery styles throughout Inner Asia, there was a persistence of local ritual practices evident in starkly different burial structures, body treatments, and offering rites. (Miller 2009: 297-301) This would seem to suggest more accommodating strategies of political cohesion without the full imposition of a unified political culture for the Xiongnu steppe empire. (Honeychurch and Amartuvshin 2006: 275-276)

The first two centuries of the Xiongnu phenomenon may thus be characterized by an underlying persistence of regional practices and local identities that correlate more to a loose "confederate" configuration than a pervasive interregional social and cultural amalgamation. It is amidst this setting that regional leaders asserted themselves from within the Xiongnu polity and eventually challenged the authority of the supra-regional ruling elites. However, by the turn of the millennium, steppe politics appear to have changed with the reassertion of authority by the Xiongnu imperial aristocracy and the emergence of a more standardized material regime of accoutrements, arenas, and practices that permeated all regions of the steppe empire.

Reformation of the Xiongnu Empire

Just as interregional competition and intensified interactions can be the driving force for the formation of larger sociopolitical institutions and entities, (Renfrew and Cherry 1986) regional leaders and factional competition may constitute significant forces of social change from within large political entities. (Brumfiel and Fox 1994; Stark and Chase 2012) The historically narrated challenges from non-royal Xiongnu leaders in the first century BC must surely have affected strategies of the imperial rulers in their reassertions of authority during the subsequent years of the empire. And as competition yields discernible material evidence, (Brumfiel 1994: 10) one might expect noticeable changes in the archaeological record of the Xiongnu regions from the first century BC onward. It is thus not surprising that by the turn of the millennium, arenas and accoutrements of the steppe elite demonstrate significant changes.

In contrast to dominant historical narratives of an earlier "cohesive solidarity" followed by disintegration of the steppe empire after the mid 1st century BC,

(Yü 1990: 141) the archaeological record in fact indicates increased socio-cultural cohesion within the steppes more so in the latter years. The material cultural changes resulting from competition should be seen as evidence not of an overall fission of Xiongnu society but rather of the engagement of Xiongnu supra-regional elites with new strategies for asserting authority over competing factions.

From the mid first century BC and into the second century AD, burial traditions and material culture assemblages became increasingly homogeneous across the steppes of Inner Asia, forming a pan-regional hierarchy of ritual investments and social expressions. It was also at this time that exotic materials from China and western Eurasia became a more significant and dominant component of prestige assemblages (Miller 2009: 302 ff.) and monumental ramped tombs suddenly appeared among the Xiongnu. (Brosseder 2009; forth.) These changes reflect intensified relationships and stronger degrees of connectivity between previously diverse regions, transforming preceding interregional connectivity into interregional integration. Thus, the turning point of first century BC appears not to be one toward waning political cohesion, but rather of a coalescence of social practices manifested in increased uniformity of, and heightened investments in, expressions of power and authority.

Mortuary arenas of the Xiongnu in this later era contained two basic burial types—the smaller shaft pit grave with a circular stone demarcation and the larger ramped stepped-pit tomb with a square mound demarcation (Fig. 5). These became the dominant burial forms throughout the Inner Asian steppes and may be ascribed to the spread of a Xiongnu political culture (Fig. 6). The

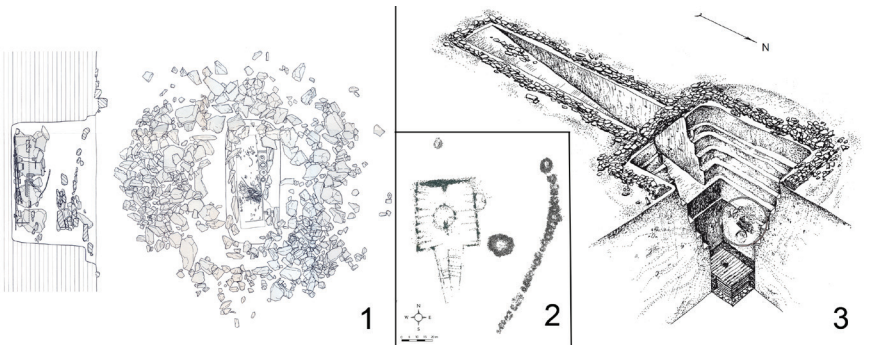

FIGURE 5 *Late Xiongnu Burials of Mongolia: (1) Circular Grave: Grave 2, Hudgün Tolgoi (after National Museum of Korea et al. 2003: 201-203); (2) Square tomb complex with accompanying circular graves: Tomb 1, Gol Mod 2 Cemetery (after Miller et al. 2006: 3); (3) Square tomb: Tomb 20, Noyon Uul Cemetery (after Polosmak et al. 2008: 86)*

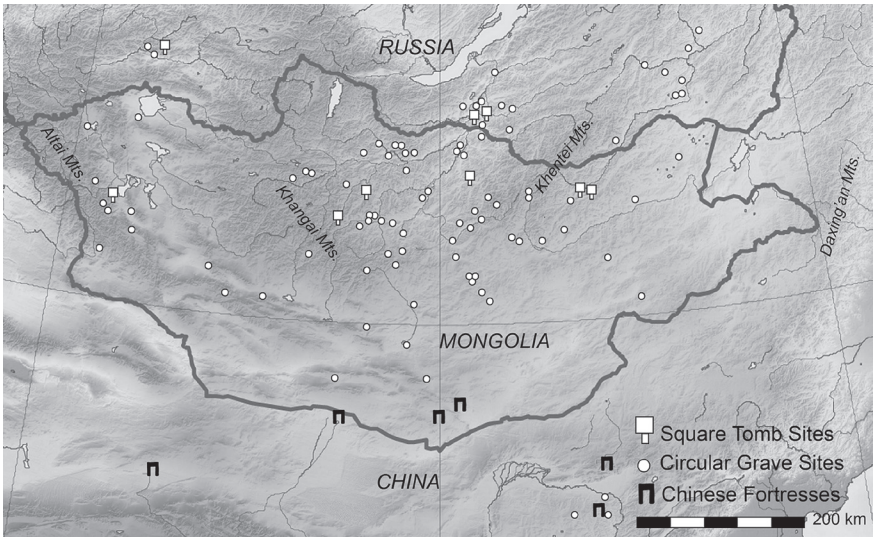

FIGURE 6 *Map of Late Xiongnu Cemeteries*

more common circular graves, though smaller than the square tombs, still contained furnishings and exotic goods indicative of high status (Törbat 2004) and may be correlated to local or even regional elites. As the specific grave orientations, body treatments, and practices of livestock offerings associated with these circular graves spread throughout Inner Asia, the previous bronze animal-style plaques and other belt ornaments were replaced by new forms of belt ornamentation, emphasizing gilded iron and a variety of designs and materials influenced by exotic imports (see Figs. 4.3-4). However, the increased homogenization of burial practices, alongside new material assemblages, was also accompanied by distinctions in interments and prestige goods that signaled an elevated elite stratum present throughout the empire.

The size range of the square tomb mounds was categorically distinct from the sizes of the stone circles demarcating the other graves (Fig. 7). Furthermore, the mounded, square, and ramped form of the larger tombs, as well as their placement in recessed locations and frequent accompaniment of flanking smaller burials (Fig. 5.2), made them qualitatively as well as quantitatively different from the circular graves. In addition, burial assemblages within the square tombs often contained materials not found in the circular graves, which seem to have been subject to restricted consumption rules. (Miller 2012; Miller and Brosseder 2013) These differences clearly set the occupants of the larger tombs apart from the others, and may relate to a distinguished upper elite echelon of Xiongnu society.

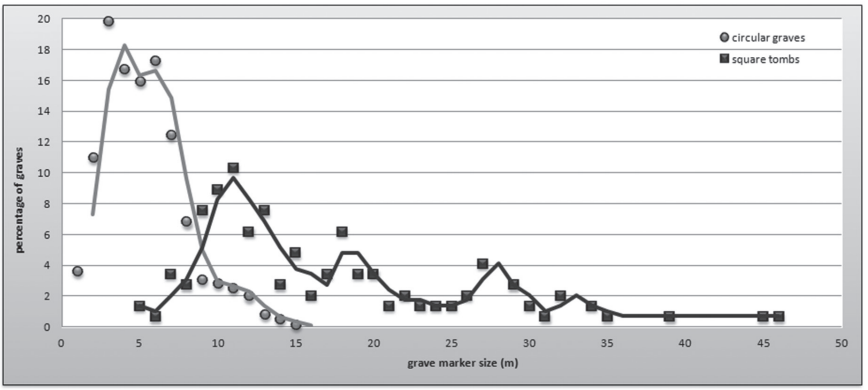

FIGURE 7 *Size Distributions of Late Xiongnu Burials: Square Tombs (n=145) vs. Circular Graves (n=863)*

Drawing on Kossack's (1974) theory of "ostentatious graves," Brosseder (2009: 271-277) explains the appearance of the monumental square tombs and more lavish burial assemblages in the late first century BC as a response to sociopolitical crises resulting from competing elites. The ostentatious tombs were thus a development of the upper elites to up the ante of competitive expressions in their assertions of authority and power. Yet, escalating competition within elite strata of the Xiongnu led not merely to greater investments in arenas and accoutrements, but also to a bifurcation of the elite, manifested in the creation of exclusive burial complexes and the restricted consumption of certain, often exotic, materials for those buried within the monumental tombs.

The creation of exclusive arenas, as well as the restriction of certain prestigious items, both demonstrate and concedes legitimacy for those who control them. (Joyce 2000) But while elaborations of prestige assemblages and revisions of sumptuary laws serve to further differentiate social strata and elevate certain groups, proliferation of the associated prestige assemblages simultaneously serves to unite disparate social groups into cohesive cultures. (Kenoyer 2000) Thus, we may deem the "high culture" (Baines and Yoffee 1998) that disseminated throughout Inner Asia in the first century BC and afterward as equivalent to a political culture that both differentiated and integrated various levels of elites within the Xiongnu political order. Such revised cultural regimes were undoubtedly exploited by the imperial nobility in their attempts to elevate themselves well above the status of any non-royal elites that might challenge their authority, while simultaneously increasing cohesiveness within the empire through social practices that integrated the various regional groups.

In addition to the categorical separation of the square tombs from the standard circular burials, there are clear hierarchies between various square tombs and even between the handful of square tomb sites. (Brosseder 2009) At larger and more central cemeteries such as Gol Mod 2, (Miller et al. 2006) there is a clear differentiation between the square tombs and the circular graves, in terms of their size, number, and placement in the burial ground. However, at smaller more peripheral cemeteries, such as Takhiltyn-Khotgor, (Miller et al. 2009) there is only a qualitative difference, as the size and number of large circular graves are on par with the large square tombs at the site. This highlights the fact that despite trends of categorical bifurcation amidst elite strata, a significant overlap can still be discerned throughout the Xiongnu realms between larger circular graves and smaller square tombs (Fig. 7). This emphasizes the persistence of competition and overlap, especially at lesser cemeteries, between those elites buried in the circular and square burials. (Miller 2011)

These dynamics of competition in the western peripheries are coupled with the persistence at many sites in the Altai and Tianshan regions of local customs amidst the adoption of many aspects of Xiongnu political culture. As certain groups and locales were integrated to varying degrees into the sociopolitical networks of the Xiongnu empire, so did they participate to varying degrees in the political culture of the Xiongnu empire. Sites in present-day Tuva (e.g. Mandel'shtam and Stambul'nik 1992) exemplify an adoption of many of the burial forms and burial furnishings seen within the core Mongolian steppes but still demonstrate preservations of certain burial customs such as body treatment. (Miller 2011: 563-566)

Burials attributed to the Pulei in eastern Xinjiang (Xinjinag and Xibei 2007; 2009)—equivalent to the frontier of the Xiongnu with the so-called Silk Routes region—demonstrate striking similarity in burial demarcation and furnishings, including the quatrefoil and lattice coffin decoration seen in the more elaborate Xiongnu graves. However, significant secondary and sacrificial burial practices and, more importantly, ceramic traditions in both pottery forms and decorations together indicate a material culture that emphasizes local traditions over aspects of the Xiongnu political culture. It is thus no surprise that historical records describe the Pulei kingdom and its "kings" as having been within the fold of the Xiongnu empire only during the early period and later becoming independent with wavering alliances to the Xiongnu, Han Chinese, and other Western Regions kingdoms. We should thus recognize a spectrum of degrees of incorporation and, to emphasize local agency, participation in the Xiongnu empire and its political order by the various regional entities and their "kingly" leaders.

Power Politics and the Political Orders

Although manipulations of the expressions of social power often emanate from central authorities and closely respond to the concerns of upper elites, regional agents remain an important factor in such social and cultural reformations. (Stark and Chase 2012: 199) The archaeological features addressed above clearly demonstrate a continued contention between elite strata, despite significant alterations to steppe high culture that might bolster expressions of political sovereignty for specific supra-regional ruling elites. After the new cultural regimes associated with the square tombs had emerged, an increasing number of upper elites surely exploited these arenas in fiercely competitive displays, which may have accompanied rising tensions that gave way to a second wave of crises and fragmentation in the late first century AD. (Brosseder 2009: 270-272)

These sorts of contentions—seen in historical narratives of steppe elites and materially manifested in elite arenas and prestige assemblages—are the driving forces of social and cultural change. We should therefore emphasize the interplay between the uppermost echelon and other social agents, namely within various levels of elite strata, (Brumfiel 2000: 134) throughout the course of an imperial polity. In the case of the Xiongnu, both historical and archaeological evidence points to several elite strata and competition amidst them. This may explain the appearance of monumental tombs, which likely served to distinguish and elevate a restricted imperial aristocracy.

Within the overall hierarchical structure of the Xiongnu political order (Kradin et al. 2004) there were surely heterarchical elements, (cf. Crumley 1995: 4) even among the elevated uppermost echelon, which competed among each other to maintain authority. The collective nature of sovereignty commanded by the ruling clan, whose close kin members were distributed into ranks of Great Chiefs throughout "Left" and "Right" territories of the empire, may also explain the presence of several large square tombs sites in central Mongolia and the lack of a recognized Xiongnu imperial "valley of the kings" (Brosseder 2009: 247) or singular putative imperial city. (Wang 1983; Bemmann 2011) The handful of large square tomb cemeteries, clearly representative of more than just the Chanyus and their immediate associates, (Brosseder 2009: 247) may indeed represent regional powers. (Di Cosmo 2011: 38-39) However, when we consider the various royal kings and their retinues as members of a heterarchical ruling elite stratum, these few sites appear not so contradictory to a cohesive empire of collective, though exceedingly restricted, sovereignty. Those associated with the square tombs may be part of a heterarchical core of supra-regional elites that continually strived to assert and maintain authority and control over a hierarchical imperial political system and, more importantly,

over the regional and mid-level leaders who could, and did, challenge that authority.

Even with the thorough investigation of regional agents of the political substrata presented here, numerous questions remain: Who filled the ranks of the non-royal "name kings," Chiefs of Thousands, and lower local elites? What powers did lesser Chiefs of Hundreds and Tens retain, and how did these low-level leaders engage with regional and supra-regional elites tied into the upper levels of the Xiongnu political system? Furthermore, to what degree, if any, were local leaders incorporated into such a political order? The scant and indirect nature of the historical record for the Xiongnu likely prevents any ample answering of such questions.

Nevertheless, the growing body of archaeological data related to the Xiongnu, (Brosseder and Miller 2011) especially with attention to smaller mortuary sites (Miller et al. 2011) as well as habitation remains (Wright et al. 2009; Houle and Broderick 2011) and lifeways, (Makarewicz 2011) provides the possibility for elucidating aspects of local communities and their leaders within the contexts of the steppe empire. (Brosseder and Miller 2011) Examinations of intensively investigated burial grounds (e.g. Törbat et al. 2004) and integrated studies of social dynamics between sites for focused regions with the broader sphere of the Xiongnu realms (e.g. Kradin et al. 2004) hold the collective key to understanding local politics of the steppe empire.

Conclusion

The integration of historical and archaeological studies outlined in this paper offers a means of circumventing seeming enigmas or conundrums of the evidence of the past. The intersection of historical and archaeological data may, through commonly established research inquiries, contribute to new understandings of past dynamics. (Laurence 2004; Galloway 2006) Rather than searching for answers to inconsistencies, supposed contrasts between the historical and archaeological records force us to more fully integrate these data and disciplines (Isayev 2006) and create new contexts of understanding (Andrén 1998) that challenge purported conundrums.

The Xiongnu political order outlined by Chinese chroniclers glosses over lesser "kings" and regional leaders, but also upon close examination of all available records, appears full of holes and paradoxes. These historical records, like archaeological remains, should be treated as fragmentary but nevertheless a corpus of information suitable for reconstructing social and political dynamics. Despite their sometimes scattered nature, mentions of powerful local leaders

in the historical records help formulate a context for understanding the sudden appearance of monumental tombs and opulent assemblages. Significant evidence in the archaeological record for lavish investments, in turn, offers a new context for understanding the interior steppe politics and society of the late first century BC to late first century AD to which the historical records scarcely attend. In this manner, scholars may engage in interdisciplinary historical archaeological investigations that will supplant traditional descriptions of the steppe empire and alter our understandings of political and social change in early Inner Asia.

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A study of Xiongnu tombs

Yueying Shan*

* Exhibition Department I, the National Museum of China. Dongcheng District, Beijing 100006.
E-mail: shanyueying@yahoo.com.cn

Abstract

This paper makes an in-depth analysis to the Xiongnu tombs in the light of recently discovered data and new achievements in the study of relevant issues. It comprises four parts: distribution and date, unearthed typical artifacts, structural features and burial ritual, and periodization and zoning. By analyzing the unearthed artifacts, this paper sums up the general characteristics (identity) and traditional regional elements of the Xiongnu culture. By studying the tomb types, coffin structures and burial customs, this paper makes conclusions on the general characteristics, burial ritual systems and regional differences of Xiongnu tombs and their hierarchies reflected from the tomb structure and grave goods. Finally, based on the grave goods and tomb features, as well as the evolution and the identity and variety of burial ritual systems, this paper divides the available Xiongnu tombs into the early (late 3rd century BCE to mid 1st century CE), transitional (mid 1st century to early 2nd century CE) and late (early 2nd century to mid 3rd century CE) phases and, geographically, into the area from Transbaikalia to the middle Yellow River valley, that in the middle and upper Yellow River valley and that in Semirechye, with the first area further divided into four sub-areas. This paper believes that the first area was the dominion of the Xiongnu Empire; the second one, the region of the South Xiongnu submitting to the Han Dynasty; and the third one, the territory where the North Xiongnu launched their activities after their westward migration.

Key words: Periodization; regionalization; Xiongnu (ethnic group)–tombs-archaeology

General introduction of the issue

Since Tal'ko-Gryntsevich discovered burials of Xiongnu tribesmen in Transbaikalia in 1896, thousands of Xiongnu tombs have been revealed. Of them approximately 900 tombs lie in Transbaikalia and Tuva of Russia, including nearly 400 excavated; about 30 cemeteries in Mongolia, comprising nearly 2,000 tombs, including about 500 excavated; nine cemeteries in north China, including above 60 tombs. In Semirechye of Kazakhstan, five related cemeteries were discovered, where about 200 tombs have been excavated, including a considerable number of Xiongnu burials. Based on the unearthed data from these burials, the present paper first makes an attempt of comprehensive systematization and integrates study of Xiongnu tombs and their grave goods, and then carries out researches on their periodization and regionalization.

In the above-mentioned regions, Xiongnu cemeteries are usually distributed in forest-clad mountain valleys, on the banks of large rivers and their tributaries or at river and lake outlets linking with gorges, each comprising several to thousands of burials. In general, large-sized tombs co-exist with medium and small ones, the former lying at the center while the latter surrounding them seldom with intrusion and superimposition. Judged by the unearthed Han "*wuzhu*"coins, bronze mirrors, lacquered ear-cups with exact dates and other chronologically indicative objects, these cemeteries can be assigned to the late 3rd century BCE to 2nd century CE by and large, a temporal span, as known from historical documents, roughly conformable to the time of the Xiongnu ethnic group's activities in these territories (Figure 1). Related historic literatures and the distribution of Xiongnu burials suggest that the Xiongnu tombs of the late 3rd century BCE to mid 1st century

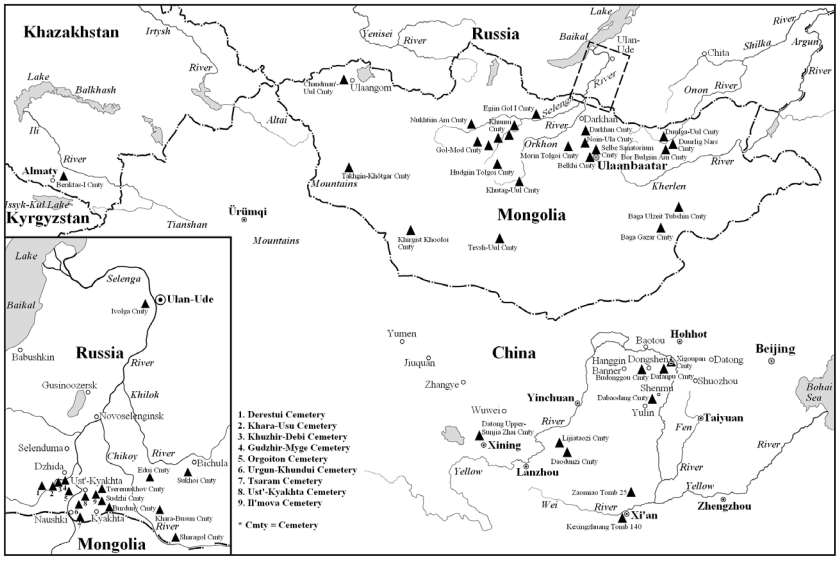

Figure 1 Sketch Map of Xiongnu Tombs.

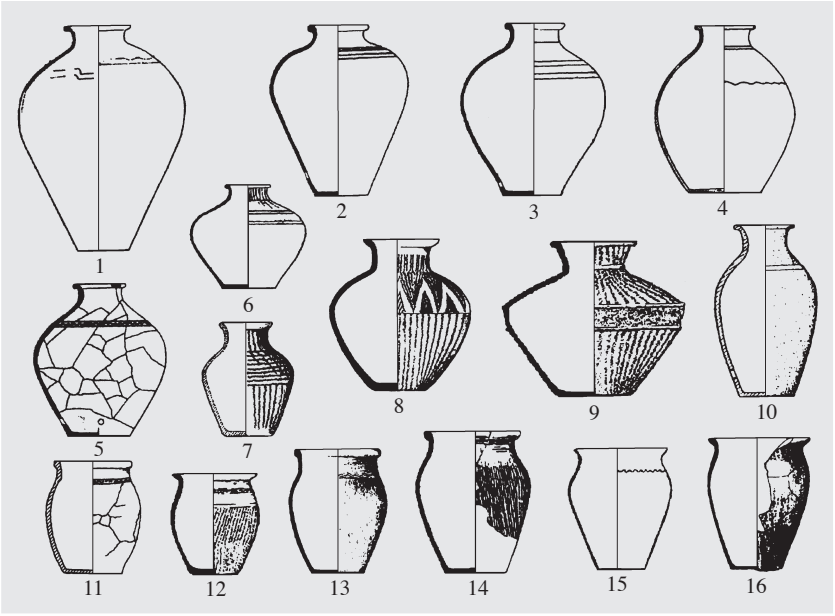

Figure 2 Pottery Jars.
1–5. Type Aa; 6. Type Ab; 7 and 8. Type Ac; 9. Type Ad; 10. Type Ae; 11, 13 and 14. Type Ba; 12, 15 and 16. Type Bb (1. Noin-Ula Cemetery; 2. Gol-Mod Cemetery; 3 and 14. Il'mova Cemetery; 4. Daodunzi Cemetery; 5 and 11. Egiin Gol I Cemetery; 6. Tseremukhov Cemetery; 7–9, 12 and 13. Derestui Cemetery; 10. Xigoupan Cemetery; 5. Budonggou Cemetery; 16. Ivolga Cemetery)

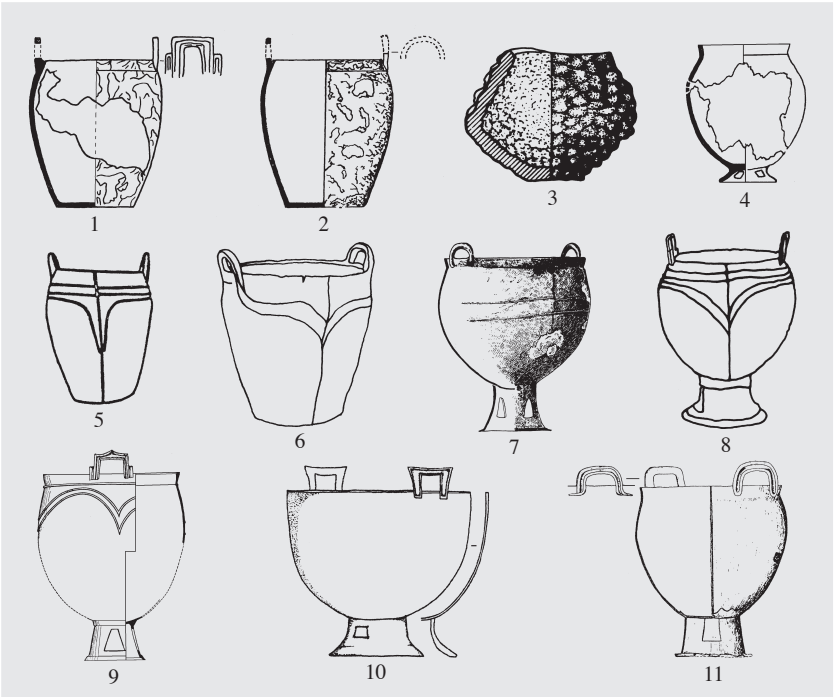

Figure 3 Fu-cauldrons.
1, 2, 5 and 6. Type Aa; 3. Type Ab; 4. Type Ba; 7–11. Type Bb; (1–4. Iron fu; 5–11. Bronze fu. 1, 2 and 4. Budonggou Cemetery; 3. Lijiataozi Cemetery; 5. Duulga-Uul Cemetery; 6, 8 and 10. Egiin Gol I Cemetery; 7. Ivolga Cemetery; 9. Noin-Ula Cemetery; 11. Derestui Cemetery)

CE discovered in Transbaikalia and Tuva of Russia and in Mongolia belong to the period of the Xiongnu Empire; those recorded in a small number in Transbaikalia and Mongolia and dated to the mid 1st century CE and later should be assigned to the North Xiongnu community; those in Cemetery Beriktas I within Semirechye of Kazakhstan must be remains of the westward migrating North Xiongnu people; those of the mid 2nd century BCE to the early 1st century CE revealed in North China, graves of Xiongnu tribesmen having surrendered to the Han Dynasty; and those of the mid 1st century CE and after should be assigned to the South Xiongnu.

The main characteristics and hierarchies of Xiongnu tombs

A number of city sites and dwelling sites of the Xiongnu period have been discovered in archaeology, but the importance of the then tombs in the Xiongnu Culture was determined by the strong mobility of Xiongnu as a steppe nomadic Empire. Thus the whole aspect of the Xiongnu Culture can be exhibited from the typical grave goods and distinctive features of the discovered Xiongnu tombs and the burial rituals they reflect. These tombs are great in number, rich in variety and complex in structure. Their representatives have circular or square barrows on the ground, which are largely built of stones with loess sandwiched in sometimes. The circular barrows occur mostly on ordinary tombs, while the square ones mainly on large- and medium-sized graves. The interior is generally a rectangular earthen pit with the major axis pointing to the north and south and the lower walls made of stones. The ordinary tombs have no tomb-passages, while the large-sized elite ones are usually furnished with an open-air ramp extending from the southern side. The dead are principally buried in wooden outer and inner coffins, singly in general, in an extended supine position heading north. The common grave goods include vessels, weapons, harness and

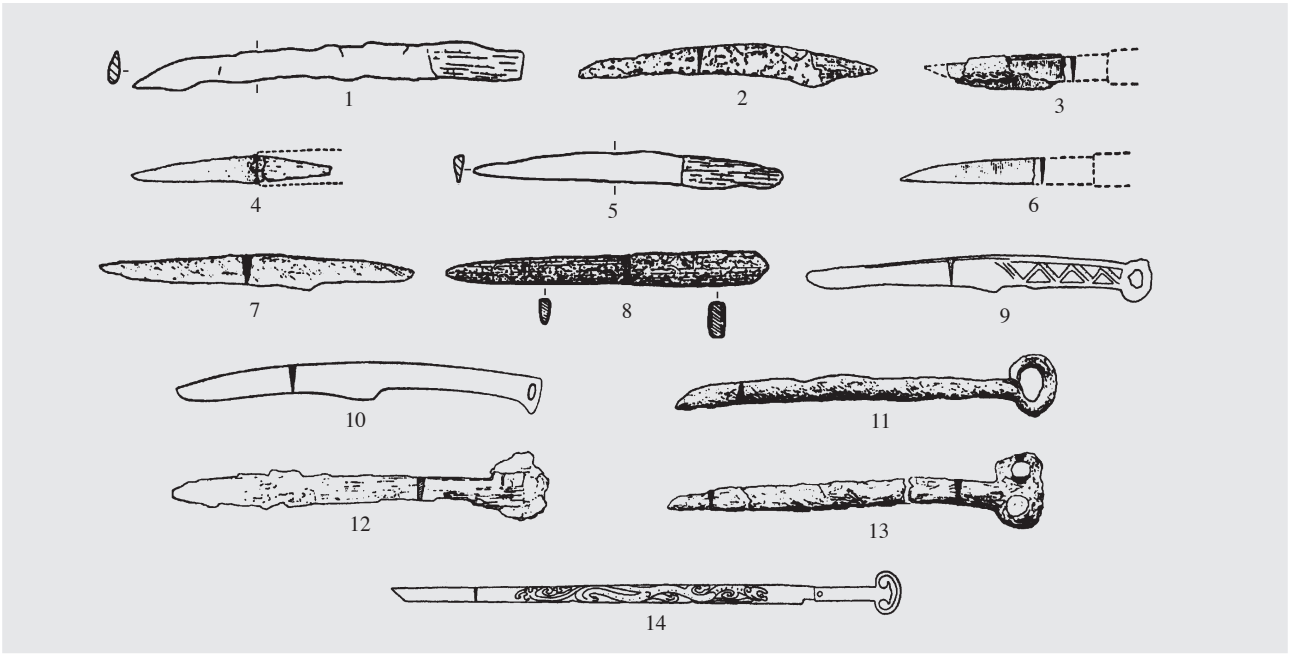

Figure 4 Swords (Knives).

1–7. Type A; 8. Type B; 9–14. Type C (1-8 and 11-13. Iron Swords and Knives; 9, 10 and 14. Bronze Swords and Knives. 1 and 5. Ivolga Cemetery; 2. Budonggou Cemetery; 3 and 6. Tseremukhov Cemetery; 4. Il'mova Cemetery; 7, 11 and 13. Derestui Cemetery; 8. Beriktas I Cemetery; 9 and 12. Daodunzi Cemetery; 10 and 14. Datong Shang Sunjiazhai Cemetery of Han-Jin period)

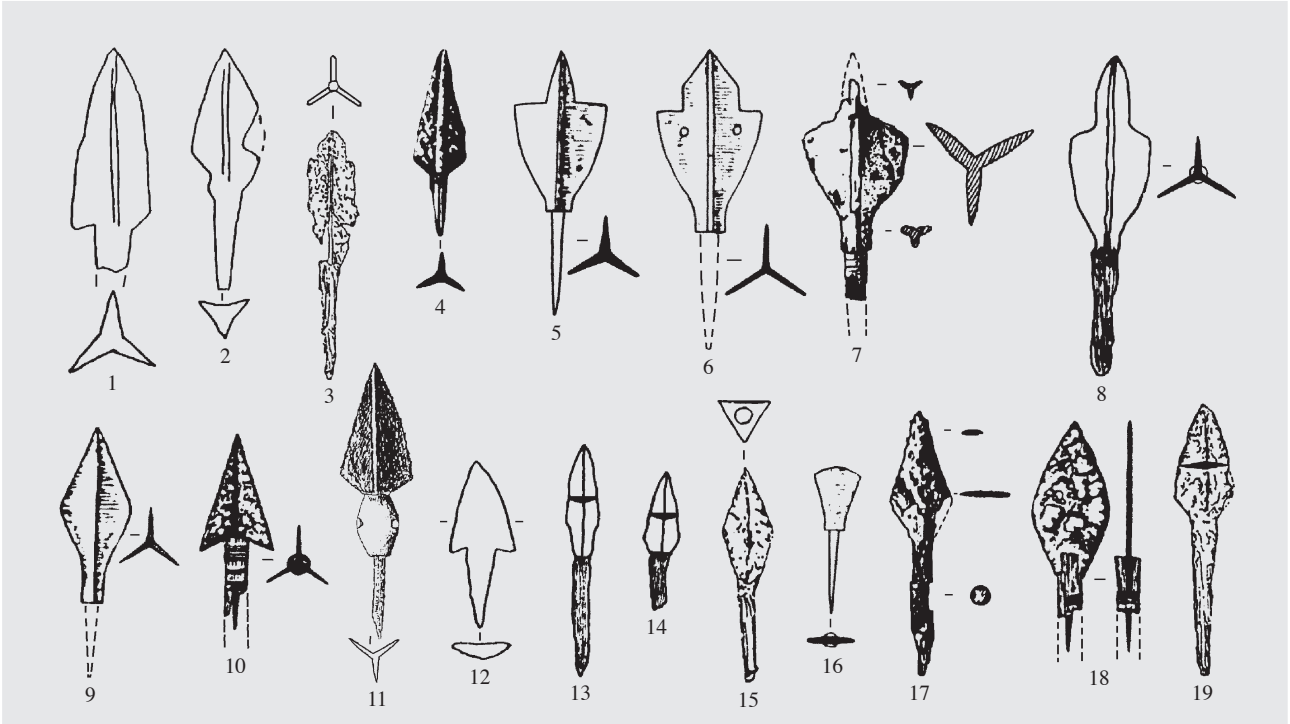

Figure 5 Iron Arrowheads.

1. Type Aa; 2. Type Ab; 3. Type Ac; 4. Type Ad; 5. Type Ae; 6. Type Af; 7 and 8. Type Ag; 9. Type Ah; 10. Type Ai; 11. Type Aj; 12. Type Ba; 13. Type Bb; 14. Type Bc; 15. Type C; 16. Type Da; 17. Type Db; 18. Type Dc; 19. Type E (1, 2 and 12. Ivolga Cemetery; 3, 15 and 19. Budonggou Cemetery; 4–6 and 16. Tseremukhov Cemetery; 7, 9 and 17. Il'mova Cemetery; 8, 13 and 14. Egiin Gol I Cemetery; 10, 11 and 18. Derestui Cemetery)

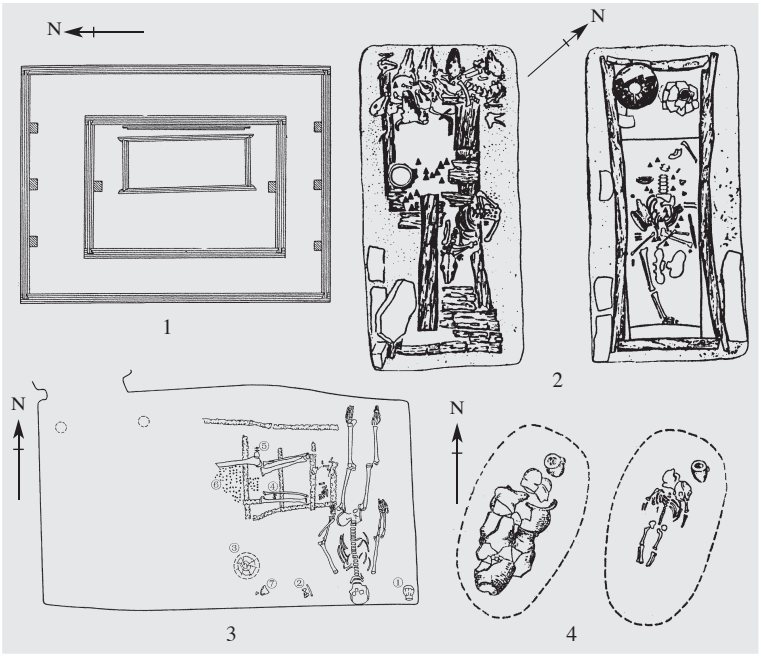

Figure 6 Tomb Types (I).
1. Double Outer and Single Inner Coffins Tomb; 2. Single Outer and Single Inner Coffins Tomb; 3. Wooden Stretcher Tomb; 4. Urn Burial Tomb; (1. Tomb 6 in Noin-Ula Cemetery; 2. Tomb 58 in Il'mova Cemetery; 3. Tomb 1 in Beriktas I Cemetery; 4. Tomb 95 in Ivolga Cemetery)

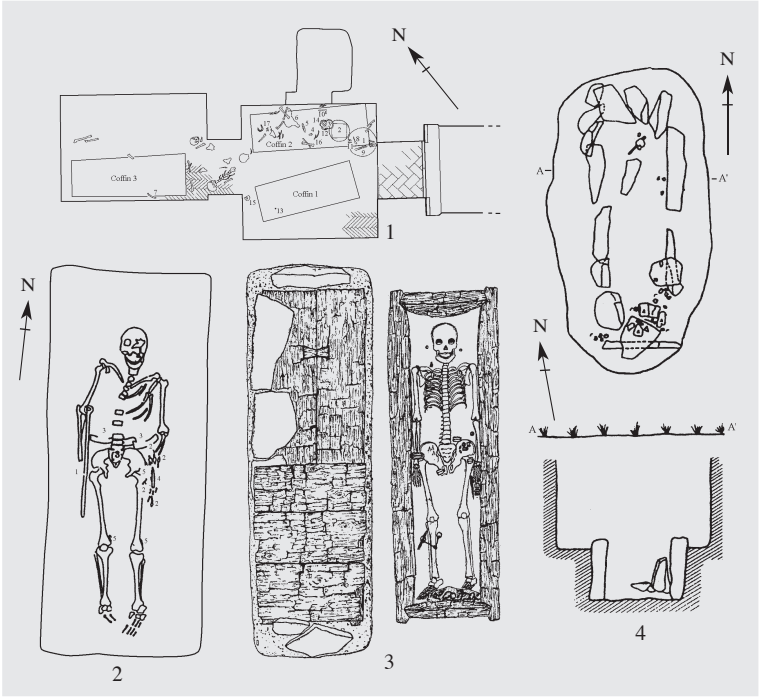

Figure 7 Tomb Types (II).
1. Multi-burial Tomb; 2. Coffin-less Tomb; 3. Single-coffin Tomb; 4. Cist or Sarcophagus Tomb; (1. Tomb 4 in Shenmu Dabaodang Cemetery; 2. Tomb 3 in Budonggou Cemetery; 3. Tomb 33 in Derestui Cemetery; 4. Tomb 197 in Ivolga Cemetery)

metal ornaments, which are mainly jars, *fu*-cauldrons, knives, swords, arrowheads, bits, cheek-pieces, openwork-decorated bronze rings, spoon-shaped bronze ornaments, belt buckles and waist plaques (Figures 2–5). Horses', cattle's and sheep's skulls and limb bones occur as prevalent animal victims.

In the light of their difference in coffin furnishing, the Xiongnu tombs, on the whole, can be classified into nine types, namely double outer single inner coffin, single outer single inner coffin, single outer multiple inner coffin, multiple inner coffin, single coffin, cist or sarcophagus, wooden stretcher, urn-coffin and coffin-less tombs (Figures 6 and 7). Judged by the tomb shapes, coffin structures and grave good assemblages, they fall into four ranks. The double outer single inner coffin tombs belong to the highest rank and must be assigned to the Xiongnu royal kin and senior aristocracy; the single outer single inner coffin ones, to the second rank, i.e. to the Xiongnu aristocracy; the single coffin and cist or sarcophagi ones with more grave goods, to the third rank, i.e. to the lower aristocracy or common people; and the single coffin and coffin-less ones with scanty grave goods, to the fourth rank, i.e. to the lowest poor people.

The funeral customs and burial rituals of the Xiongnu tombs

Through an analysis of the available data from their tombs, the Xiongnu people's burial rituals can be summed up as follows:

1. The earlier Xiongnu tombs are mainly of single burial, collective burials occurring as exceptions, the dead being laid in an extended supine position heading north a little by west or east. The later ones are of multiple burials for an overwhelming majority, the dead lying usually in an extended supine position heading in varying direction.

2. The earlier Xiongnu tombs are generally furnished with half-log outer and plank inner coffins, whose decorations varied in richness according to ranks of the tomb occupants. The later tombs contain wooden stretchers or simple coffins; outer coffins emerged only in a few cases. No decoration was applied to any kind of coffin.

3. The grave goods in the earlier Xiongnu tombs include pottery, bronzes, ironware, gold wares, silverwares, jade and other precious stone ornaments, bone artifacts, lacquered wooden articles and silk fabrics. Animal

victims are quite popular, mostly represented by horses', oxen's and sheep's skulls and limb bones. Their quantity is generally in accordance with the tomb ranks. In the later tombs, animal victims are sharply decreased, and pottery, bronze, iron, gold and silver wares are the principal grave goods. These objects often present local cultural features, distinctly differing from their counterparts in earlier Xiongnu tombs in both style and type.

4. The male tomb occupants are largely accompanied with horse fittings and weapons, whereas the females' tombs generally contain tools, though arrowheads and horse fittings occur in some cases. It reflects the division of labor between the two genders in the Xiongnu society.

The periodization of Xiongnu tombs

The Xiongnu tombs show strong consistency in feature, burial rituals and typical grave goods, but as time went on, they underwent changes in the shapes of their structures, the characters of their grave goods and the burial customs. Based on a comprehensive analysis of tomb data with references of historic literatures, the present paper divides them into three developmental stages, namely the early, transitional and late phases (Figures 8–10).

1. The Early Phase (late 3rd century BCE to mid 1st century CE) belonged to the Xiongnu Empire period, when the Xiongnu ethnic group controlled the vast territory from Lake Baikal in the north to the Yinshan Mountains in the south and from the Pamir Heights in the west to the Liaohe River valley in the east. As is known in archaeology, Xiongnu tombs are widely distributed in Transbaikalia, Mongolia, Tuva and the middle Yellow River Valley. In general they feature a rectangular or square earthen pit in a north-south orientation, in a slight slanting to either side in some cases, a relatively low circular or square cairn or earthen mound, stone walls and single burial with the occupant lying in an extended supine position heading north, northwest or northeast. In the pit are a half-log outer coffin and a plank inner one, which are occasionally substituted by a cist or sarcophagus. The outer and inner coffins are largely decorated with silks or felt blankets, the inner coffin is lacquered on the surface, and the gaps above the two coffins are usually filled with large stones. The grave goods include pottery jars, bits, cheek-pieces, iron arrowheads, swords, knives, and bows discernable by the remaining decorative pieces. The most characteristic ornaments are various waist plaques and bronze rings, both with openwork designs. Animal

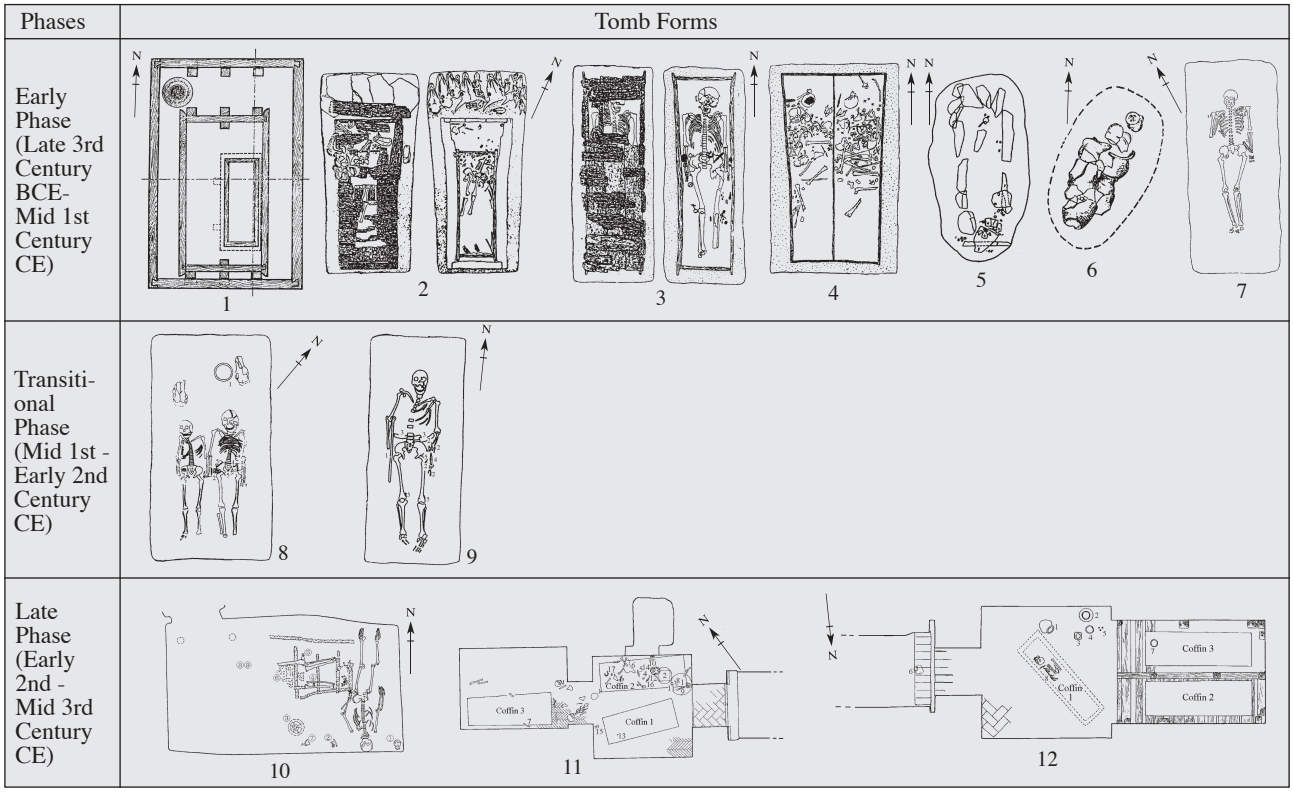

Figure 8 Periodization of Xiongnu Tombs.

1. Tomb 1 in Noin-Ula Cemetery; 2. Tomb 52 in Il'mova Cemetery; 3. Tomb 28 in Derestui Cemetery; 4. Tomb 62 in Tseremukhov Cemetery; 5. Tomb 197 in Ivolga Cemetery; 6. Tomb 95 in Ivolga Cemetery; 7. Tomb 11 in Xigoupan Cemetery; 8. Tomb 1 in Budonggou Cemetery; 9. Tomb 3 in Budonggou Cemetery; 10. Tomb 1 in Beriktas I Cemetery; 11. Tomb 4 in Shenmu Dabaodang Cemetery; 12. Tomb 18 in Shenmu Dabaodang Cemetery

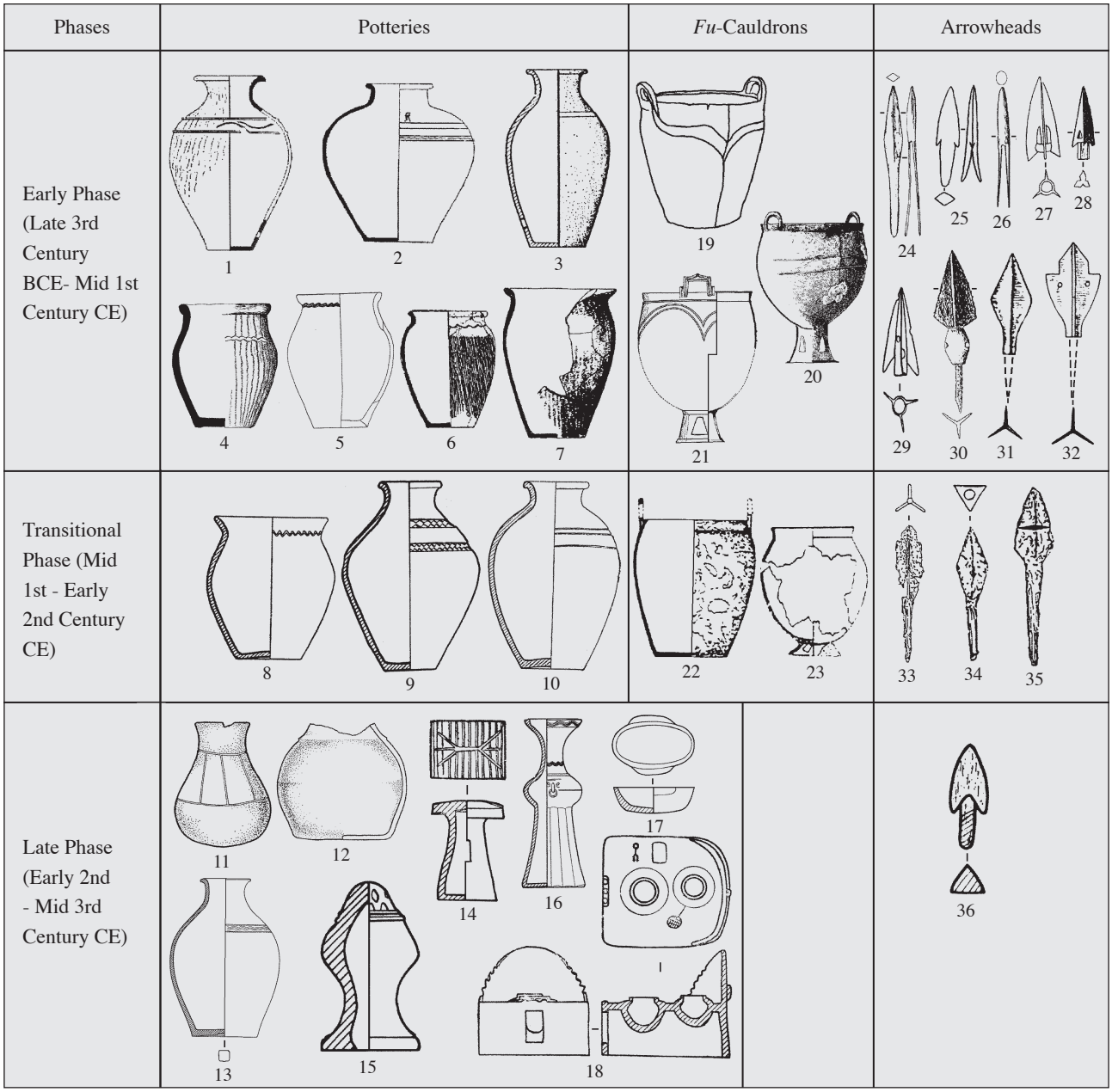

Figure 9 Periodization of the grave goods unearthed from Xiongnu tombs (I).
1–13. Pottery jars; 14. glazed pottery granary; 15. glazed boshan censer; 16. glazed pottery pot; 17. pottery ear cup; 18. pottery stove; 19–21. bronze *fu*-cauldrons; 22 and 23. iron *fu*-cauldrons; 24–26 and 36. bone arrowheads; 27–29. bronze arrowheads; 30. whistling arrow; 31–35. iron arrowheads (1 and 21. Noin-Ula Cemetery; 2, 6 and 31. Il'mova Cemetery; 4, 24, 26, 28 and 30. Derestui Cemetery; 5 and 19. Egiin Gol I Cemetery; 7, 20, 25 and 27. Ivolga Cemetery; 8 and 10. Dafanpu Cemetery; 9, 22, 23 and 33–35. Budonggou Cemetery; 11, 12 and 36. Beriktas I Cemetery; 13. Shenmu Dabaodang Cemetery; 14–18. Datong Shang Sunjiazhai Cemetery of Han-Jin Period; 32. Tseremukhov Cemetery)

victim offering is commonly represented by entombing horses', cattle's and sheep's skulls and limb bones, which are mostly placed close to the northern tomb-wall, at the dead' heads, in pottery vessels or without containers. A lot of tombs contain Han period bronze mirrors, vessels and "*wuzhu*"coins, silks and lacquer ware. Obviously the early Xiongnu Culture presents strong expansionism, exerting vigorous influence upon and even assimilating the cultures in the conquered territories.

2. In the Transitional Phase (mid 1st century to mid 2nd century CE), the Xiongnu ethnic group was declining, and their empire was split into North and

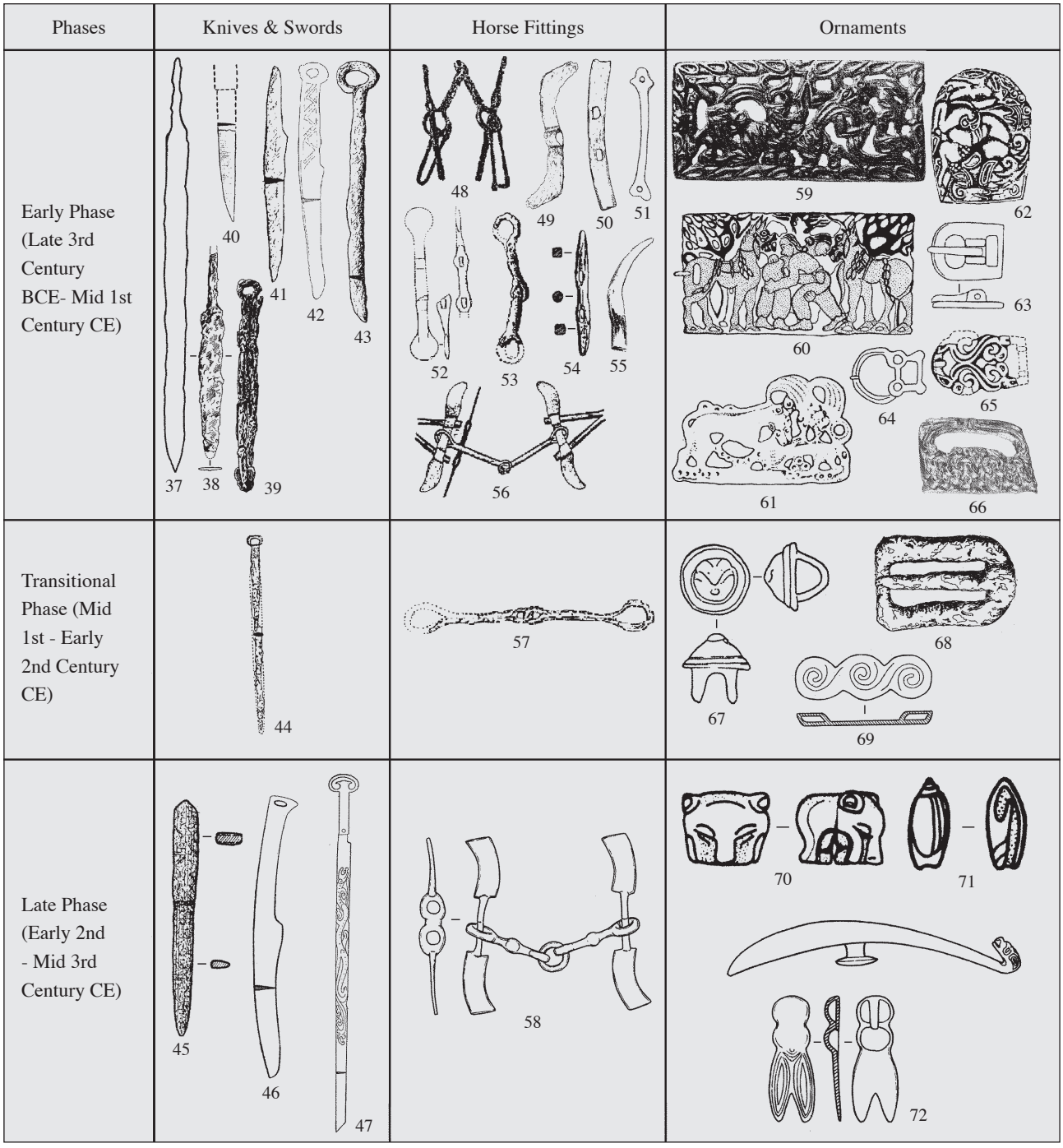

Figure 10 Periodization of the Grave Goods Unearthed from Xiongnu Tombs (II).

37 and 44. iron swords; 38 and 39. iron daggers; 40, 41, 43 and 45. iron knives; 42, 46 and 47. bronze knives; 48 and 56. iron cheek-piece and bit; 49 and 52. iron cheek-pieces; 51, 54 and 55. bone cheek-pieces; 50. horn cheek-piece; 53 and 57. iron bits; 58. bronze bit and cheek-piece; 59–61 and 73. bronze waist plaques; 62. gold-plated waist plaque; 63–65. bronze belt buckles; 66. gold-plated iron waist plaque; 67 and 73. bronze buckles; 68. iron belt buckle; 69. bronze ornament; 70 and 71. bone ornaments; 72. bronze belt hook; (37 and 55. Egiin Gol I Cemetery; 38, 39, 59 and 64. Ivolga Cemetery; 40. Tseremukhov Cemetery; 41, 43, 49, 50, 51, 56, 62 and 65. Derestui Cemetery; 42 and 63. Daodunzi Cemetery; 44, 57, 68 and 69. Budonggou Cemetery; 45, 70 and 71. Beriktas I Cemetery; 46 and 47. Datong Shang Sunjiazhai Cemetery of Han-Jin Period; 48 and 52. Noin-Ula Cemetery; 53 and 54. Il'mova Cemetery; 58, 72 and 73. Shenmu Dabaodang Cemetery; 60. Tomb 140 at Chang'an Kexingzhuang; 61. Tomb 25 in Tongchuan Zaomiao Cemetery; 66. Xigoupan Cemetery; 67. Dafanpu Cemetery)

South Xiongnu. The former surrendered the Eastern Han Dynasty, while the latter continued to control the northern steppes. The traditional features of Xiongnu tombs were gradually weakened. With the Xiongnu people's emigration, their culture began to be deeply influenced and even assimilated by the local traditional cultures in the territories they settled in.

3. The Late Phase (early 2nd to mid 3rd century CE) witnessed the westward migration of the North Xiongnu under the flanking attacks of the Eastern Han Dynasty, Xianbei and South Xiongnu, as well as the long-term relations and amalgamation of the South Xiongnu with the Han ethnic group. The North Xiongnu burials can be represented by Tomb 1 in Cemetery Beriktas I, while the South Xiongnu burials, by the Shenmu Dabaodang and Datong Shang Sunjiazhai Section B Cemeteries. As time went on, the burial customs of the North Xiongnu having finished westward migration and the South Xiongnu subjected to the Han Dynasty were gradually evolved from a relatively typical Xiongnu mourning institution into entombment manners with local elements adopted more and more and was finally assimilated by local cultures.

The regionalization of Xiongnu tombs

The Xiongnu tombs can be divided into three regions in the light of their shapes, grave goods and burial rituals (Figure 11).

1. Region I covers Transbaikalia to the middle Yellow River Valley, embracing Transbaikalia, Tuva, Mongolia and the middle Yellow River valley. It features greatness in tomb number and dates from the Xiongnu Empire period. Judged by the tomb types, the features of grave goods and the burial rituals, it can be pointed out that there was no clear chronological variety but rather distinct disparity territorially existed. According to the available data, this region can be further divided into four areas, which are numbered Sub-regions IA, IB, IC and ID respectively.

Sub-region IA covers northern Transbaikalia. It was in the Xiongnu Empire's northeastern territory and archaeologically is represented by the Ivolga Cemetery. In this area, the Xiongnu Culture definitely held the dominant position and clearly coexisted with other cultural elements, which resulted from the complex composition of the population. The tombs are largely rectangular earthen pits with neither stone-built chambers inside nor buildings on the ground. As shown by the usually seen humble coffins and grave goods, they are lower in rank with a few exceptions. The dead are buried in an extended supine position generally heading north, northwest or northeast. The grave goods are chiefly typical Xiongnu objects, though there also occur implements untraditional for Xiongnu, such as belly-slightly-swollen pottery vessels with incised oblique lines on the rim and vertical stripes on the body, ear cups, jars with a cup-shaped mouth, *fu*-cauldron-shaped vessels and *li*-tripod legs.

Sub-region IB, which mainly refers to Tuva, lying in the northwest of the Xiongnu Empire, chronologically belongs to the Xiongnu-Sarmatian period and is represented by Bai-Dag II and Chaskal II Cemeteries. The tombs are still rectangular earthen pits for the most, some of which having a tomb-passage untraditional for Xiongnu. The interior is usually filled with stones, and the surface is built with a mound. The tomb occupants are largely buried singly in an extended supine position; flexed skeletons occur in some cases and their heads point to various directions, mostly to the north or west. The burial furnishings are varied in shape, including outer and inner wooden coffins, log ones and cists or sarcophagi, and some tombs have no coffins. The grave goods present certain Xiongnu Culture features with elements of other cultures clearly mixed in.

Sub-region IC embraces southern Transbaikalia and all Mongolia and is represented by the Il'mova, Derestui and Noin-Ula Cemeteries. It shows great unity in tomb structure, grave goods and burial custom presenting a rather pure aspect of the Xiongnu Culture. The highest-ranked, largest-sized tombs of the Xiongnu Empire period and the elaborately-made huge pottery jars are discovered mainly in this area. The arrowheads are principally made of iron and possess high combat effectiveness, and the whistling arrows characteristic of the Xiongnu Culture are concentrated here. This sub-region must have been the central area of the Xiongnu Empire.

Sub-region ID occupies mainly the middle Yellow

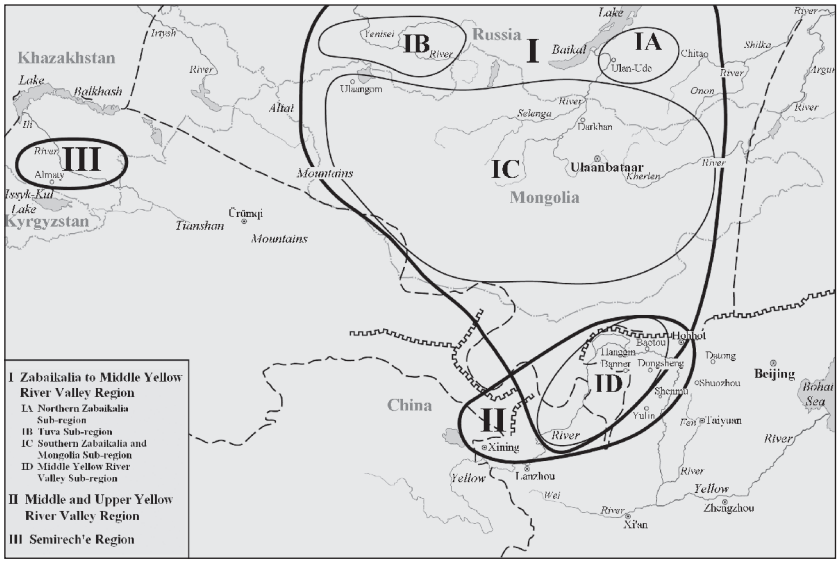

Figure 11 Sketch map of the regionalization of Xiongnu tombs.

River valley with the Han period Xigoupan, Daodunzi and Lijiataozi Cemeteries as its representatives. The prevailing entombment manner is single burial, the tomb occupants are laid in an extended supine position heading north, and offered with horses', cattle's and sheep's skulls and limb bones as animal victims and with pottery jars, waist plaques and openwork bronze rings characteristic of the Xiongnu people as grave goods, all of which constitute traditional features of Xiongnu tombs. Local cultural elements, however, are also clearly demonstrated. For example, some graves in the Daodunzi cemetery are furnished with a head niche and some consist of a side cave and a pit-shaped passage, the tomb walls bear no traces of retouch, and the grave goods include a considerable number of short-necked, swollen-large-bellied and flat- or round-bottomed pottery jars, which are obviously different from their counterparts among the traditional Xiongnu vessels. The tombs in the Xigoupan Cemetery contain no coffins. The brick-chamber graves in the Lijiataozi Cemetery are evidently built after a typical Han tomb style, which suggests that the local people had been deeply assimilated by the Han ethnic group.

The sub-division of Region I indicates that in the expansion process of the Xiongnu Empire, the native ethnic groups in the conquered areas, simultaneously with adopting Xiongnu culture, still kept and developed their original cultural components, which led to the formation of Xiongnu burials containing common Xiongnu Culture features as well as different local cultural elements. Nevertheless, Sub-region ID is a distinctive area for there were the clearest alternate rise and fall of Han and Xiongnu power and influence. This situation resulted in the co-existence of the tombs of the Xiongnu tribesmen controlled by their empire with still more numerous graves of the Xiongnu people having surrendered to the Han Dynasty.

2. Region II comprises the middle and upper reaches of Yellow River. Spatially it slightly overlaps Sub-region ID but temporally later than the latter. The tombs are distributed mainly in Ningxia, Shaanxi and Qinghai and represented by the Budonggou and Dafanpu Cemeteries, a part of the Shenmu Dabaodang Cemetery, and Section B of the Datong Shang Sunjiazhai Cemetery. They should be assigned to the South Xiongnu having surrendered to the Han Dynasty. The Xiongnu Culture features almost entirely vanished, and the Han Culture elements held the leading position.

3. Region III occupies the Semirechye area. The tombs are distributed chiefly in Semirechye (Seven-river Area), belong to the westward migrating North Xiongnu and are represented by Tomb 1 in the Beriktas I Cemetery. The grave goods present traditional Xiongnu cultural elements for a part of objects and at the same time demonstrate clear local cultural tradition. The burial features show obvious tendency of North Xiongnu tombs being amalgamated with local cultures.

To sum up the comprehensive analysis of the available data of Xiongnu tombs, it can be concluded that the Xiongnu burial institution and rituals were inherent in the Xiongnu ethnic group, and their culture in the Xiongnu Empire period featured distinct unity and rather strong expansionism. As the empire fell down, the Xiongnu Culture's own character was becoming increasingly dim, gradually losing its traditional style and finally assimilated thoroughly.

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Postscript

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Chinese warfare: Han and the Three Kingdoms (third century BCE to third century CE)

RAFE DE CRESPIGNY

The Han Dynasty of the Liu family ruled China for four hundred years from the beginning of the second century BCE. Contemporary with the late republic and early empire of Rome, it controlled a comparable area at the opposite end of the Eurasian landmass, but its nature, its enemies, and its methods of warfare were different. Most notably, whereas the Romans conquered and then controlled people as varied as the Egyptians and the Gauls, China was a unified culture, with common language and customs, based upon settled peasant agriculture. To the south there was steady colonization, reaching as far as Vietnam; but in the north the Chinese faced nomad peoples with differing levels of political organization in territory which could be neither settled nor directly controlled. The Great Wall was a symbol of this division, and the problem was central to Han military concern.

THE INHERITANCE FROM QIN

In 221 BCE, Ying Zheng (259–210), the king of Qin, completed the conquest of all rival Chinese states and proclaimed himself First Emperor. Many gentlemen regarded Qin, based on the Wei valley and present-day Shenxi, as a marginal member of the cultural community which had its heartland in the north China plain, but it was Chinese nonetheless, and the First Emperor confirmed his military achievement by introducing civil legislation, including the unification of the writing system, the currency, and weights and measures. The administrative geography of the empire was reorganized into a system of commanderies and counties, and the rulers of the former kingdoms were brought to the imperial capital where they could be kept under supervision.

Though unification had been in many respects a natural development of the increasing capacity of administration – so that conquered territories could be effectively incorporated into an expanding state – the newly centralized empire was widely resented, both for the severity of its laws and for the labor which was demanded for projects such as imperial highways, palaces and, notably, the Great Wall. When the First Emperor was followed by an inadequate successor, a series of rebellions, several based upon the pre-unified states, swiftly brought the Qin to ruin. In 206, Liu Bang (d. 195), leader of the army which had taken the capital, was named king of Han, and in 202, having destroyed his chief opponent, he took the imperial title; he is known posthumously as Emperor Gao.

Both Qin and Former Han had their capital near present-day Chang'an, on the Wei River in the "Land Within the Passes." From this protected territory the government could dominate the north China plain, and the demographic and economic power of that region kept the greater part of the Chinese world under control.

CONSOLIDATION OF IMPERIAL POWER AND INTERNAL SECURITY

The new regime was less centralized than that of Qin, and a number of Liu Bang's allies and subordinates were initially enfeoffed with kingdoms. Within a few years, however, one excuse or another was found to depose or destroy these new rulers,

The Encyclopedia of War, First Edition. Edited by Gordon Martel.

and from that time on the title of king was reserved to members of the imperial Liu family. This did not entirely resolve the problem, for the imperial kinfolk were jealous of their power, and in 154 BCE a number of them rebelled. The War of the Seven States ended in decisive victory for the central government, and from that time on the authority of kings was steadily reduced: eventually a king held no more than his title and a pension; all matters of government were in the hands of court-appointed officials.

The empire was eventually organized into some hundred commandery units, including twenty kingdoms, which in turn controlled more than a thousand counties with an average registered population of some fifty thousand people. Counties were the basis of administration, the lowest level headed by centrally appointed officials: the magistrate, his civil assistant, and a commandant. The commandant was responsible for military matters, including police and anti-banditry work, and also recruitment and training. All able-bodied men were liable for conscription, beginning with training in their home commanderies as skilled soldiers, cavalrymen or, by the Yangzi and other waters, as sailors in towered warships. This was followed by a year as guards at the capital or as troops on the frontier or within the empire. After these two years they could return home, but remained available for call-up and review each autumn, and they could be summoned in time of emergency.

This militia was adequate to deal with most sources of trouble. If rebellion or banditry became too serious, the commandery administrator could raise troops from all counties under his command, and in time of real danger the authorities might call upon the resources of the so-called Northern Army, the strategic reserve based at the capital. Intervention on that scale, however, could be ruinous, and even the most contumacious bandits or the most rapacious landlords were reluctant to allow the situation to deteriorate so badly as to attract such dramatic measures.

The Northern Army of Former Han eventually comprised eight regiments, each with eight hundred officers and men. The regiments could be used separately or together, and they were available as stiffening for the militia in time of internal troubles or to serve with regular and local troops on the frontier; this is discussed further below. What is noteworthy, however, is that the military strength of Former Han lay in its militia: whereas the legions of Rome were stationed as garrisons, and a good deal of attention was paid to ensure that soldiers served away from their homelands, within the Chinese Empire security was in local hands.

In the Yangzi basin and beyond, the southern frontier of the empire was open to Chinese colonization. That region is broken by mountains and valleys, so no major political entity could form which might challenge the dominance of the northern plain, and paddy-rice cultivation was adapted quite readily to the peasant agriculture, likewise based upon irrigation, which had developed in the drier lands of the north. Despite opposition from local tribes, Chinese settlement was spread by steady migration, backed by administrative and military pressure, and confirmed by intermarriage and education. At the end of Qin, the officer Zhao Tuo (d. 137?) established an independent state stretching from present-day Guangdong in Vietnam, but his successors surrendered to Han in 111. The territory was likewise organized into commanderies and counties, while the empire also extended control into the southwest, through present-day Sichuan into Yunnan towards Burma.

THE XIONGNU AND THE CAMPAIGNS OF EMPEROR WU

The general imperial control within China, and its steady expansion to the south and southwest, was in considerable contrast to the situation on the northern frontier, where farming gave way to the grasslands of the steppe and the expanse of the Gobi Desert. There was some irrigation along the Ordos loop of the Yellow River and other major streams, but the core economy of the region was nomadic herding rather than settled agriculture, and the forces of Han were faced by the rival confederation of the Xiongnu. At the beginning of the dynasty Liu Bang attacked the Xiongnu founder Modun, but was himself besieged and escaped only with difficulty. The Han then sought to control their opponents by trade restrictions, but this caused unrest and frequent raiding, and the Chinese were forced into appeasement, aided by marriage alliances.

As Emperor Wu of Han (157?–87) came to the throne in 141, however, his government felt prosperous enough to embark on a more aggressive policy, and the emperor's long reign saw a strategy which combined direct action against the steppe with the establishment of a flanking position in the west and expansion into central Asia. As a first step, the Chinese advanced to the frontier established by Qin, and then went beyond to create a new barrier along the Ordos loop of the Yellow River east and west of present-day Baotou in Inner Mongolia. The Great Wall of Qin, which ran south of the Ordos, had been abandoned after the fall of that dynasty, but the renewal of garrisons, and the northern extension, restored Chinese presence. The wall was also extended northwest along the present-day Gansu corridor, with a series of commanderies established after 120, so that Yumen the Jade Gate became the new frontier, and an oasis at Juyan presented a salient into Xiongnu territory. Bamboo strips recovered from the desert attest to the professionalism of the garrisons in that region, with regular inspections of equipment, tests of military competence, active patrolling, and control of travel. It has been estimated that there were some five thousand men in station, some conscripts, some volunteers, and many reprieved convicts.

In 104, following reports from the explorer Zhang Qian (d. 113), a great campaign into central Asia under the general Li Guangli took Chinese arms around the Tarim basin. There was a plan to ally with the Yuezhi of Afghanistan, but more practically this expedition marked the beginning of Chinese authority over the city-states of present-day Xinjiang, displacing Xiongnu hegemony and "cutting off the right arm" of the enemy. In 108, the Chinese had also embarked on an offensive which led to formal control of southern Manchuria and northeastern Korea.

All these strategic initiatives, however, were overshadowed by attacks directly against the Xiongnu. Beginning in 133, a series of great armies, numbered in the tens of thousands and led by generals such as Wei Qing (d. 106) and Huo Qubing (ca. 140–117), raided the northern steppe, striking directly at the enemy homeland about present-day Ulan Bator. The search-and-destroy missions were not always successful – in 99 the general Li Ling (d. 74) was forced to surrender – and they were vastly expensive in blood and treasure. They did, however, demonstrate the Chinese ability to exercise force at a distance, regaining the initiative and holding the Xiongnu in respect. By the early first century BCE, both sides were exhausted, but the Han Empire had been greatly extended.

WEAPONS, ARMOR, AND TACTICS

The terracotta figures found in the tomb complex of the First Emperor of Qin provide a remarkable picture of the armor and weapons of the late third century BCE, and other tomb figures as late as the second century CE confirm that there had been no great changes. Armor was generally plates attached to a surcoat, but many troopers wore plain cloth.

Notably, besides swords, lances, and shields, the Chinese had the crossbow, whose trigger system had been developed by the fourth century BCE. Used by infantry in the field, the crossbow was effective at two hundred meters, far beyond the twenty meters of a Roman javelin, and also beyond that of regular bows used in the West. It needed to be, for Xiongnu horsemen had the compound bow with similar range. On the other hand, though seven Roman legions at Carrhae (53 BCE) were destroyed by Parthian horse-archers, Li Ling in 99 and just five thousand men held out for a time against odds with a combination of crossbowmen protected by infantry with shields and halberds.

Large crossbows were used for fixed defenses, but watchtowers on the wall were also equipped with flags and wood for beacon fires to give warning of enemy approach, and there was constant patrolling to check for suspicious movement. Like the Roman *limes*, the wall served both as an obstacle and an early-warning system: any breach was signaled to reserves stationed at the rear, and invaders could be caught in a killing ground with limited chance of escape. Properly manned, the wall was too dangerous to attack.

Infantry are the natural arm of a peasant society, but cavalry were useful support on the steppe and were a valued strike force over distance. Horse parks were therefore maintained in northern China, and one reason for expeditions into central Asia was to o0btain the "blood-sweating horses" of Ferghana, present-day Uzbekistan, to improve the Chinese breed. Stirrups were used for mounting though not for riding, but saddles were firm enough to give support, and Han horsemen were equipped with compound bows like those of their opponents: there are accounts of shooting down targets from horseback, an exercise still practiced in the nineteenth century.

Plate 20 Terracotta figure, Qin Dynasty, 210 BCE. Tomb of Qin Shi Huang Di, Xianyang, China. Bridgeman Art Library.

The Han had a sophisticated system of allocated rations of salt and grain per man, and teams of bullock wagons to bring up supplies on the open steppe. Despite the use of maps and scouts, it was always difficult to link columns advancing by different routes; generals were liable to heavy penalty for failure to make rendezvous, and still greater for failure in battle. On the other

hand, though they might suffer heavy losses, and they could not hold territory on the steppe, the armies of Han were formidable, and were generally successful in their punitive purposes.

WANG MANG AND THE LATER HAN RESTORATION

The last years of Emperor Wu saw an economic crisis within China, but the Xiongnu too had been fought to a standstill, and the authority of their *shanyu*/khan was weakened. During the 50s BCE, a succession struggle gave opportunity for Chinese intervention, so that for more than half a century the *shanyu* paid formal tribute to Han, Chinese brides acquired influence at his court, and there was an identifiable faction in favor of peace. At the same time during this period, the emperors of China had come increasingly under the influence of their consort families, and by the latter part of the first century BCE the government was dominated by the Wang clan. In 9 CE, Wang Mang deposed the child sovereign of Han and proclaimed his own dynasty of Xin.

Wang Mang proved to be an idealistic and Sinocentric Confucianist, and within a few years his arrogance had turned the Xiongnu *shanyu* against him. At the same time, moreover, a rising of the former imperial clan was joined by commoners affected by disastrous flooding of the Yellow River across the north China plain, and the combination of Liu loyalists, peasant rebels, and confrontation with the Xiongnu brought Wang Mang to ruin: he was killed in the capital, Chang'an, present-day Xi'an, in 23 CE.

A member of the Liu family was now placed upon the throne, but his position depended upon bands of commoners, and these proved ambitious and unreliable. A cousin of the new ruler, Liu Xiu (5 BCE–57 CE), made a position for himself in the north China plain, and as his kinsman was deposed, Liu Xiu claimed the title and set his capital at Luoyang in present-day Henan. Gathering allies among leading regional families, he defeated the peasant insurgents and then dealt with his rival warlords. After fifteen years of fighting the new Emperor Guangwu largely restored the state of Han.

This period of civil war left much of the structure of government and society intact. Peasant rebels had presented a problem, but their leaders had small education and limited political or administrative ability, and they could be brought to heel by a regular army; their followers thereafter were generally content to accept some form of settlement. On the other hand, the emergence of such numbers of trained insurgents had presented a serious threat, and one attempt at rebellion against Wang Mang had been planned for the occasion of the annual provincial review. Emperor Guangwu therefore abolished compulsory military service for the inner commanderies of the empire. There was a scutage tax, and men of the frontier were still liable for service, but most troops at the capital and on the frontier were now volunteers or amnestied convicts.

While it was certainly an advantage that rebels within China would lack training and experience, and could be dealt with by troops from the capital, the new policy meant that many conscripts and militia were ineffectual: as one observer remarked, to use such troops was to throw them away. Men on the frontier were trained, but there were fewer of them, and mass mobilization was more difficult.

Emperor Guangwu also reduced the number of troops at his capital, Luoyang. The palace guards declined in numbers and training, so they were largely unavailable for real combat, while the Northern Army comprised only five regiments with some 4,500 men. Though it was still an effective military reserve, it was, for example, substantially

smaller than the Praetorian Guard of imperial Rome. Allowing for guards on the wall and garrisons elsewhere on the frontier, Later Han may have had no more than fifteen thousand men in its regular army; for major operations it relied upon emergency call-up and non-Chinese auxiliaries.

SETTLEMENT OF THE FRONTIER

The disruption of civil war in China had allowed the non-Chinese of the north and west to invade imperial territory, and even after Guangwu restored a unified government he had difficulty holding the line. By good fortune, however, in the late 40s CE the Xiongnu were divided by another succession quarrel, and the claimant Prince Bi sought support from China. He and his followers were settled in the Ordos region, where he kept court under Chinese supervision. As these southern Xiongnu became auxiliaries of Han, Guangwu and his generals regained much of the Former Han position in the north.

Further west in Liang province, present-day Gansu, the Qiang people lived either side of the frontier, often raiding the borders. They were defeated by the general Ma Yuan (14 BCE–49 CE), who allowed numbers of them to settle within imperial territory, where they mingled with Chinese citizens. In both these regions peace was secured by admitting non-Chinese within the formal boundaries of the empire, and a similar program in the northeast saw Wuhuan tribes, traditional enemies of the Xiongnu, endorsed as allies: one of the five regiments of the Northern Army at Luoyang was composed of Wuhuan horsemen.

In the south of China, Guangwu's government had small difficulty in controlling the lands beyond the Yangzi River, and though there was rebellion in Vietnam in the early 40s, it was firmly put down; the two Tr'ung sisters who led it, and their conqueror Ma Yuan, are remembered as culture heroes of that region.

By the middle of the first century CE, therefore, the empire had largely regained its former extent, albeit on a different basis to the past. Rather than general conscription and training, Later Han relied upon frontier militia, strengthened by the professional Northern Army and greatly aided by non-Chinese auxiliaries. The Han could still put large armies into the field, but their composition had changed.

The system worked well for almost fifty years. During the 60s, the office of general who crosses the Liao was established on the northern loop of the Yellow River to guard against the possibility that the Xiongnu might reunite, but the southern state remained generally hostile to their northern cousins, and opposed any Chinese initiatives for peace on the steppe. For some years the western Qiang troubled the borders, but they were eventually defeated and some were again resettled within China.

DESTRUCTION OF THE XIONGNU AND THE REBELLION OF THE QIANG

At the end of the 80s, however, the situation changed. Urged by the southern Xiongnu, the general Dou Xian, brother of the regent dowager Dou, led a great expedition into the steppe. The northern state was destroyed and its ruler driven away, but the southern court proved incapable of absorbing its former enemies, and was stretched to breaking point as it attempted to do so. Instead, the power vacuum on the steppe was filled by Xianbi from the east, equally warlike. So the destruction of the northern Xiongnu left the imperial borders exposed to endemic raiding from a loose grouping of tribes with no central regime that the Chinese could deal with or hope to control.

The military effort, moreover, had damaged imperial resources. Influenced by the great families which had supported Emperor Guangwu, Later Han never managed an effective land survey, and though there was vast wealth in private hands the government was unable to gain access to an adequate share. Despite its apparent military success, by the beginning of the second century the court had been obliged to reduce expenditure and embark on a program of austerity, and a few years later the situation became dramatically worse.

Aided by the success of Dou Xian, the Chinese agent Ban Chao (32–102) had restored the former Chinese hegemony over the states of the Tarim basin, but within a few years of his death further trouble arose. Rather than reinforcing the extended position, it was resolved to withdraw, but this was taken as an invitation to revolt by the Qiang people settled within the borders of Liang province in the northeast. Their rebellion in 107 marked the beginning of ten years' ferocious warfare, which destroyed Chinese settlement and stretched the imperial armies to the limit. Victory was achieved in 118, but great numbers of people had abandoned their former farmlands, and Liang province was ruined. The tax loss left the imperial government almost bankrupt, while attempts to transfer the burden to other regions brought only resentment.

From this time on, Later Han was in retreat: the Qiang remained dangerous; the Xianbi engaged in frequent raiding; and the southern Xiongnu state grew steadily more divided and less effective. Furthermore, despite prohibitions, there was a steady migration from the troubled frontier to the easier lands of the south. From the end of Former Han to the mid-second century CE, the census numbers in the northern commanderies declined from four and a half million to just three-quarters of a million, and this demographic failure removed the civilian support which should have maintained the military defenses.

A significant factor in this story of decline is the xenophobic approach of China's leaders to their neighbors and their insensitive attitude toward their own people. "Barbarians" outside the empire were seldom treated with respect, treaties and agreements were not honored, and the only peace contemplated was that which followed victory in the field. Within Chinese territory, though, "protectors" were appointed to deal with them, non-Chinese were exploited and oppressed, and the great Qiang rebellion came after years of unfair treatment. In a scorched-earth program during that time of turmoil, moreover, peasants were driven from their land as government troops destroyed their homes and wasted their fields. It is not surprising that later attempts to restore settlement and farming were greeted with reluctance, while registration in a frontier commandery was regarded as misfortune or punishment. A few officials and military men sought fair treatment and agreement, but the general policy was one of aggression, regardless of cost or consequences.

CAMPAIGNS OF DEFENSE

By the second half of the second century, the situation in the north had deteriorated so far that imperial control of the ground depended largely upon military force, real or threatened, not upon peaceful settlement. Three generals upheld the authority of Han: Zhang Huan (104–181), Huangfu Gui (103–174), and Duan Jiong (d. 179). Zhang Huan and Huangfu Gui combined an unusual sympathy for the non-Chinese with remarkable military and strategic ability, and Zhang Huan was sufficiently well-regarded that when he was appointed

to command of the north in 166 rebel Xiongnu and Wuhuan came to surrender, while Xianbi raiders fled across the frontier.

Zhang Huan, however, was not able to achieve a lasting settlement with the Qiang, and in 168 his rival Duan Jiong persuaded the imperial court to a more forceful approach. Having made his reputation against the Qiang beyond the borders from 164 to 167, Duan Jiong now undertook to deal with those inside Chinese territory, and he did so with a series of campaigns in 168 and 169: his policy was genocide, and he pursued and slaughtered the tribesmen across the region. The government of Emperor Ling (r. 168–189) received him in triumph, but his actions left the region desolate and did nothing for the long-term security of the state.

About this time, moreover, the Xianbi acquired a war leader, Tanshihuai (ca. 130–ca. 185), who established a piratical confederacy and launched attacks every year. Unable to control the raiding, in 177 the Han court approved a major punitive expedition: thirty thousand cavalry, including Xiongnu and Wuhuan auxiliaries, advanced a thousand kilometers into the steppe. They were met and defeated, however, by an army of the Xianbi, suffering three-quarters casualties, and this defeat – the first for three hundred years – did enormous damage to imperial authority. As Xianbi raids continued, a mutiny of Qiang auxiliaries in Liang province in 184 removed that territory from Han control, and the Wuhuan and Xiongnu were comparably restive.

By good fortune for China, Tanshihuai died about this time and raiding gradually eased, but none of the formerly allied tribes could be relied upon any longer, and the puppet Xiongnu state in particular had degenerated into a welter of warring clans. Chinese armies still maintained a presence, with varying success, but rather than being inspired by direct loyalty to Han they were now increasingly bound to their commanders.

This separation of frontiersmen from the politics of the capital had been noticeable earlier. Military men were seldom fully trusted by officials at court, and the unease was mutual: many successful generals were denied credit for their achievements, and even Duan Jiong, who had been given high appointment after his brutality against the Qiang, was later forced to kill himself. Zhang Huan and Huangfu Gui had interested themselves in affairs at the capital, but they were either misled or ignored; eventually, however, the fighting man Dong Zhuo (d. 192) came to seize power at Luoyang – and that marked the effective end of Han.

FALL OF HAN AND THE RISE OF THE THREE KINGDOMS

Within the empire, the absence of conscription did not guarantee a lack of fighting. There was always potential for conflict between leading families, which acquired increasing numbers of tenants seeking protection and which maintained bands of retainers to protect their interests and to engage in private vendetta. A second-century manual of estate management, between advice of when to sow grain and when to sell it, also discussed the time to prepare bows and other weapons for self-defense; while clay tomb models showed manor houses with walls, towers, and guards with crossbows.

By the time of Emperor Ling in the 160s and 170s such private conflict was commonplace, particularly in regions where the eunuchs of the imperial palace, who now held great power, sought to gain position for themselves or their kinfolk in local communities. The law was misused or defied, with atrocities on both sides, while many

young men joined marauding bands of "knight-errants" to bully their neighbors in the name of honor. The private armies were not large, but they had potential.

There were of course men of military training and experience in local communities, those who had served as regular soldiers or in commandery and county service. There was always some low-level banditry, though it could generally be handled by local troops, but there were also more substantial rebellions, several of them raised by leaders who claimed religious inspiration or took an imperial title. From the early 170s, moreover, a series of epidemics, possibly related to the Antonine plague of Rome, broke out year after year, and faith-healing became widely popular. In 184, the Yellow Turbans, a religious group combining magical medicine and millennial expectations, raised rebellion across the east of China, and though the rising was defeated the death toll was in the tens of thousands and there was enormous damage and social disruption.

Faced with this disaster and with the loss of Liang province, Emperor Ling nonetheless maintained a life of pleasure and continued to support his palace eunuchs, whom many blamed for the recent disasters. When he died in 189, leaving young sons under a regency, reformers planned to attack the eunuchs. The eunuchs sought to preempt them with a coup but were themselves massacred, and in the chaos which followed the frontier general Dong Zhuo seized power at the capital. Though he attempted some reforms, he held his position only by force, and a "loyal rebellion" was raised against him. Dong Zhuo was assassinated a few years later, but by that time the rebel alliance had broken up and China was divided among contending warlords.

The decade which followed, from 190 to 200, saw the end of the imperial structures of Han, as ragged armies surged across the former empire. The old leading families and their armies of retainers were no match for the new breed of fighting men thrown up by the conflict and, unlike the period after the fall of Wang Mang, the civil war destroyed local communities and displaced vast numbers of people from their land. On the north China plain, Cao Cao (155–220) created a form of resettlement with military agricultural colonies (*tuntian*), government farms self-sufficient in defense which provided supplies for his army, and he also gained control of the young Emperor Xian. In 200, he defeated his major rival Yuan Shao (d. 202) and later conquered his territory. Now master of north China, in 208 Cao Cao moved south into present-day Hubei and Hunan, but he was defeated at the Red Cliffs on the middle Yangzi and China was left divided.

Victory at the Red Cliffs was gained by Sun Quan (182–252), warlord of Wu on the lower Yangzi, and Liu Bei (161–223), a soldier of fortune who later took over Sichuan and proclaimed his successor dynasty of Shu-Han. After a quarrel over the middle Yangzi, in 219 Sun Quan destroyed Liu Bei's general Guan Yu (d. 219) and seized that whole region. A revenge attack by Liu Bei was defeated by Sun Quan's general Lu Xun (183–245), and after Liu Bei's death his regent minister Zhuge Liang (181–234) arranged that the two states allied once more to oppose Cao Cao's kingdom of Wei. In 220, Cao Cao's son Cao Pi (187–226) forced Emperor Xian of Han to abdicate in his favor, and his rivals likewise took imperial titles. China continued to suffer warfare, but the period known as the Three Kingdoms is still celebrated as the great age of heroism.

A SHORT-LIVED REUNIFICATION

The division of China at the end of Han was largely a function of demography.

During the second century CE, the Chinese population of the Yangzi basin had risen so greatly through migration that the warlords of the south could maintain their independence behind the natural defenses of the river, and the state of Wu developed a program of colonization and conquest which extended its territory and gained resources of men and material to use against the north.

Though smallest of the three states, Shu-Han maintained aggressive operations across the Qin Ling ranges for several years, notably under Zhuge Liang. In 263, however, the armies of Wei captured Chengdu, the capital of Shu-Han. Soon afterwards the general Sima Yan (236–290), whose family had for several years controlled the military affairs of Wei, deposed his ruler and proclaimed his dynasty of Jin. In 280, a final attack by land and by water compelled the surrender of Wu and restored the unity of China.

The Jin Dynasty, however, lacked the organization of Han, and the military structure of that time was less stable than before. Though armies were sometimes numbered in the hundreds of thousands of trained and experienced men, their component units depended greatly upon individual leaders, who came to hold virtually hereditary command, and they lacked the discipline and coordination of Han. Many battles were decided by the collapse of one side after an unexpected setback or surprise, no matter how minor; so the chief duty of a commander was to keep his force in being, and that was often more than he could manage.

The political structure of the Jin was likewise insecure, and a struggle for power, known as the War of the Eight Princes, was maintained for fifteen years from 291, with vast casualties and the ruin of imperial power. In 307, the Xiongnu and other non-Chinese commenced a series of rebellions and invasions, defeating and slaughtering the men of Jin, and culminating in the sack of Luoyang in 311. As the remnant Chinese government fled south to Nanjing on the Yangzi, the colonizing work of Three Kingdoms Wu became the basis for its survival, and for almost three centuries the former empire of Qin and Han was divided between Chinese dynasties in the south and a series of non-Chinese states across the north. This Period of Division, or Northern and Southern Dynasties, was ended only by the victory of the Sui in 589, followed by the great empire of Tang (618–907).

SEE ALSO: Cao Cao (155–220); Crossbow; Genocide; Guan Yu (d. 219) and Zhuge Liang (181–234); Militia; Nomadic warfare; Praetorian cohorts; Punitive expeditions; Roman warfare; Strategy; Sun Zi (Sun Tzu) (ca. fourth century BCE).

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A STUDY ON THE COMPLEXITY AND DYNAMICS OF INTERACTION AND EXCHANGE IN LATE IRON AGE EURASIA

Ursula B. Brosseder

Introduction

The fascination that the "Silk Road" holds for scholars and laymen alike has been amply illustrated over the last decades by an enormous production of literature both scholarly and popular, by numerous conferences and exhibitions, and by a UNESCO program. The general concept of the "Silk Road" is that of a weave of overland and maritime routes from China to the eastern Mediterranean coast, a vibrant commercial network that allowed goods and ideas to be exchanged from East to West and vice versa. This interpretation, however, makes no fine historical distinctions and while it may be correct for some time periods, its fundamentally dehistoricized view masks the complex dynamic of trans-Eurasian interaction and exchange processes along the "Silk Road" between the second century BCE and the first century CE[1].

The term "Seidenstrassen" (i.e., Silk Roads) was first coined in German by Baron Ferdinand von Richthofen in 1877, who stressed the importance of these routes for economic exchange[2]. Scholarship today takes a broader view by considering the transfer, borrowing, dispersal of cultural, religious and other elements apart from the economic dealings. But, because of the numerous historical records produced at the two end poles involved in these exchanges, China and Rome, the body of received scholarship is dominated by these two polities. This situation guides research to focus on Sino-Roman relations (Leslie/Gardiner 1996; Hoppál 2011) and not only makes indistinct the great diversity of other peoples who inhabited the length of the vast Steppe Belt that stretched from Inner Asia[3] to the Black Sea area but also disregards their agency as they remain silent in the written records.

Cross-cultural exchanges figure in world history prominently as a method to establish periodization and are relevant for the experiences and history of many people instead of a single small group (Bentley 1996). One peak within Bentley's age of classical civilizations (lasting from 500 BCE to 500 CE) was the cross-cultural interaction that "came with the elaboration of the intricate and well-articulated network of the so-called silk roads" (Bentley 1996, 761). While this period is certainly not the first during which archaeology notes that largers parts of Eurasia

1 Criticism on the Silk Road concept has been brought forward by Rezakhani 2010. S. Whitfield (2007) suggests that scholarship currently does not show that there was not a Silk Road, which is why she prefers to keep the term Silk Road.

2 von Richthofen 1877. Rezakhani critizising the concept of the Silk Road goes too far in believing that later researchers, such as J. Bentley (1996) or D. Christian (2000) turned the singular of von Richthofen into plural (Rezakhani 2010, 424) as von Richthofen himself constantly used the plural form in his lecture on June 2nd, 1877. See also Waugh 2007; Whitfield 2007; Parzinger 2008; Olbrycht 2013.

3 I use the term Inner Asia to designate the area from present-day Mongolia and South Siberia, i.e., Transbaikalia, Tuva to the Altai. With Central Asia mainly modern Uzbekistan, Tajikistan, Kyrgysztan, Turkmenistan and Iran are designated.

were connected[4], this peak of cross-cultural interaction witnesses a sudden and massive spread of Inner Asian and Chinese goods over a huge territory along the Steppe Belt, from China and Mongolia in the East to the Black Sea area in the West. This explosion of material exchange occurs in a short time period between the late second century BCE and the first century CE[5], and to explain the comparatively sudden appearance of Chinese artifacts in the West, scholars draw predominantly either upon the "Silk Road" and the economic exchanges that took place along it (e.g., Treister 2013c, 739–740 with fn. 107; Olbrycht 2013) or on migrations connected with the Alans[6]. To a lesser degree they also mention political gifting (e.g., Werning 2009, 202–204).

D. Christian (2000) has drawn attention to the importance of the trans-ecological exchanges between the Steppes and agrarian civilizations, directed mostly north-south, as being essential in the forming of these East-West interactions. This leads to a general question about the kinds of agents that actually influence these trans-Eurasian exchanges and, more specifically, about the role of the steppe people. In more general works that tend to collapse historical periods together into a generalized and timeless vision of the steppe, the roles of pastoral and nomadic groups[7] along the "Silk Routes" are identified variously as advisors, active traders and suppliers of horses and camels for caravans, or those who protected the caravans (e.g., Juliano/Lerner 2001, 16). During the early period (2nd century BCE – 1st century CE), it was hypothesized that the Xiongnu, who established the earliest of the steppe empires in Inner Asia, re-distributed Chinese goods to adjacent regions, an idea which E. Lubo-Lesnichenko (1994, 231) and D. Christian (2000, 17) consider plausible. Th. Barfield (2001, 19–22) reinforces this idea, and just recently W. Honeychurch (2015) carried this hypothesis further by discussing aspects of the political economy of the Xiongnu and drawing upon archaeological materials to support of this hypothesis. M. Raschke, based on a critical and thorough analysis of both the written records and archaeological evidence available at his time suggested, however, that the Xiongnu did not act as middlemen in the Silk Road trade, in distributing silk far beyond their own territory but that this far-flung distribution was created by other means[8].

These conflicting views reveal two types of schisms that divide research on exchanges along the Steppe Belt: one in source material and one in scholarly disciplines. The nature and availability of source materials vary greatly over time and space. The outer fringes of Eurasia, the Roman Empire and China, profit from information from a large quantity of written sources (Christian 2000, 4). Taking a look at the complete Eurasian landmass it is clear that written records roughly concentrate only on specific locales along its southern part and within this area do not incorporate Central Asia that lie between. For the northern part – the Steppe Belt of

4 I do not mention here the earlier exchanges through the Eurasian steppes, e.g., of the Bronze Age, that also encompass respectable distances and large areas, see e.g., Parzinger 2008; Frachetti 2008.

5 And this process is structurally different from the spread of Scythian traits (e.g., Im Zeichen 2007).

6 Simonenko 2001, 67; Symonenko 2012; Treister 2013c, 740 with fn. 109. For an overview over the impact of the migration paradigm on the archaeology of the Black Sea area connected with the Sarmatians see the critique by Mordvintseva 2013.

7 I am using the term "pastoralist" as a general term. While this term common in the English language literature on steppe people emphasizes the pastures for livestock, the term "stockbreeder", which is often used in the literature to translate the Russian term "kochevnik" puts its emphasize on working with the livestock itself. This is not the place to go into detail into a discussion on the term "nomad" instead it seems suffice to say that across the Eurasian steppe belt we find in the time period of interest various forms and degrees of mobility, various degrees of pastoral groups practicing agriculture and various forms of settling. The varying subsistence forms and settlements in Mongolia and Transbaikalia in the Xiongnu period are but one example.

8 Raschke 1978, 606 states: "When one ceases to see the role of the peoples along China's Northwest frontier, particularly the Hsiung-nu, as primarily that of middlemen in the international silk trade, the true situation is more readily comprehended"; Raschke 1978, 621: "There, thus remains no reason to suppose that the Hsiung-nu were the major middlemen in the silk trade with the Roman Empire".

Inner Asia, Siberia, Kazakhstan and the Black Sea area – archaeological materials are the dominating sources available to approach questions of interaction and exchange in these areas[9]. The evidential disparity between north and south is not only caused by different source materials, but also by the disciplines that utilize different sources in specific ways: history and archaeology. Additionally, while the written records have been treated and re-visited again and again, a comprehensive evaluation of the archaeological records is still missing, leaving the steppe people and their participation in exchange processes currently less visible in the scholarly debate[10].

The situation is further complicated by another sharp division in the traditions of Eastern and Western scholarship. Soviet and post-Soviet explanatory models for the exchanges along the Steppe Highway primarily draw upon migration paradigms (see Frachetti 2011), while Euro-American models tend to focus on the issue of economic exchanges[11]. Today, it still holds true that "ideally a study of exchanges between East and West would require the concerted labours of an harmonious and well-disciplined committee, whose members would include historians, geographers, and botanists; archaeologists and experts in palaeography; philologists and scholars versed in the language and literatures of the ancient Near East, the classical and Hellenistic worlds of Greece and Rome; and the cultures of the Middle East and India, South-East Asia and China" (Loewe 1971, 166). M. Raschke's work on Roman commerce with the East has clearly demonstrated that exchange processes need to be studied "within the contextual framework of the socio-economic and political systems which existed in Antiquity in all of the geographic regions touched by the trade" (Raschke 1978, 677).

The goal of this contribution, therefore, is to provide a deeper understanding of interactions based on mobility but possibly also on migration and exchange processes along the Eurasian Steppe Highway from ca. 200 BCE to 200 CE. This study is a macro-analysis of long-distance exchange processes that allowed goods and ideas to flow over approximately 6,000 km through distinct regions and different polities that each possessed specific economic and social structures that enabled these transfers. The concept of routes describes the geographical but also the social aspect of the flow of goods much better than the term "road". Through a comprehensive synopsis and evaluation of the archaeological evidence I intend to delineate the steppe people's role in the processes of interaction and exchange and thereby unravel the conundrum of the sudden distribution of artifacts across Eurasia from China to the Crimea in the first century CE. Since a number of materials in these exchanges are connected with the Xiongnu period in Mongolia and Transbaikalia my work concentrates on the involvement of those polities in the interaction processes. Thus, a voice can be lent to those who did not write. By bringing the archaeological record of the steppes, especially of Inner Asia, to the foreground I intend to balance the picture drawn by the reading of the historical sources and thus laying the groundwork for a dialogue with the Historians. This study does not aim at researching the complete network of East-West exchanges including the maritime networks but will focus on the steppe people's participation, and the Xiongnu in particular.

[9] Additionally, these materials have been analyzed mostly restricted regionally, and not comprehensively encompassing the Eurasian landmass. There is an overlap of written record and archaeological sources in Central Asia but this does not infer with the general picture.

[10] D. Christian (2000) and W. Honeychurch (2015) are also aware of these shortcomings.

[11] This preoccupancy or preset interpretation in economic explanations seems to me similar to the situation Grierson (1959) describes for the Dark Ages. He critizises the then unilateral interpretation of the sources as evidencing economic trade by projecting the agency of trade from later time periods to earlier times (Grierson 1959, 125) and by overlooking the evidence, especially when it concerns luxury goods that points to alternative ways of exchange.

To accomplish this goal in the first part, a framework for studying exchange processes will be presented focusing on models of long-distance exchanges including a short sketch of the economic anthropology. Also here, the focus is placed on the Xiongnu that may serve as a test case to illustrate the driving factors triggering interaction and exchange processes[12]. In the second part, a synopsis of the archaeological material will be discussed in three "acts" or time-slices: the time period immediately preceding the trans-Eurasian distribution of materials (ca. 4th and 3rd centuries BCE), then the classical period of the exchange processes (ca. end of 2nd century BCE to 1st century BCE) with a peak of interaction in the first century CE and last, the decline of these networks (ca. 2nd century CE). This approach allows for studying quantitative and qualitative changes in interaction and exchange over time since I discuss differences in the volume of goods and discern which social group is involved in and affected by these processes. In the last part of the study the results will be discussed against the background of the presented theoretical framework.

Setting the Framework for Long-Distance Exchange and Economic Anthropology

Clarifying the terminology of economic anthropology[13]

One can find very different meanings associated with words such as "trade" or "exchange". While such an endeavor may end up in book-length studies (e.g., Gregory 1982; Humphrey 1992) the purpose here is to state in which way the terms are being used throughout this study. The overarching notion is the interaction of individuals or groups that can result in the exchange, which is a two-way transfer or acquisition[14]. The matter that is being exchanged can either be material, such as objects of various kinds and people, or they can be immaterial, such as ideas, notions, contracts, etc. Exchange can take various forms, from economic exchanges to gifting, and these distinctions are more analytical than real as they rarely exist in their purest form alone, but denote different prevailing aspects of exchange processes. Economic exchange is used here for profit-oriented exchanges[15]. While this can involve money as a currency, this is not a precondition. Barter or goods exchange denotes a system of exchange where goods – and services – are exchanged for other goods or services[16]. Gifting, gift exchange or ceremonial exchange un-

12 Of course the economic anthropology of all other steppe communities and societies from Central Asia to the Urals and the Black Sea and their needs are equally important but cannot incorporated here for reasons of space; equally important are the needs of the Romans and Chinese which will be referred to in the discussion.

13 I prefer using the term "anthropological economy" instead of "political economy" as the former stresses the anthropological perspective on economic processes (Carrier 2012, 1) while the latter centers on the aspect of production (Robotham 2012) which is an understudied topic not only in the case of the Xiongnu but also other steppe people. Alternatively, I will use the term "archaeological political economy" (see Smith 2004, 77–78 with further literature).

14 The term "acquisition" stresses the active role of those who obtain something while the term "exchange" focuses on the mutual act.

15 I will for the most part not use the word "trade" in order to avoid confusion as it can denote a wide range of exchange relationships (Kipp/Schortmann 1989, 372). Moreover, it denotes in English a different meaning than "Handel" (= commercial exchange) in German which is my language background. Thus, misunderstandings may arise when Germans use the English word "trade" with a very explicit meaning in their mind (see e.g., Drauschke 2007).

16 Barter coexists mostly with other types of exchange. Humphrey and Hugh-Jones point out the negative implications of the English word and would use a different one, if there were one (Humphrey/Hugh-Jones 1992b, 3); see also Appadurai 1986b, esp. 9–11, and Strathern/Stewart 2012.

derwrites social relations. A vast amount of literature has already been written on this form of exchange[17].

Analytically, often objects that are being exchanged are categorized into commodities or gifts (Gregory 1982), but this strong contrast has been rightfully criticized (e.g., Appadurai 1986b, 11–12; Myers 2001). Depending on the context, gifts can become commodities and vice versa, and flows of commodities and gifts are known to be intertwined (Geary 1986; Strathern/Stewart 2012, 245; 252). Moreover, gifts or luxuries cannot be dissociated from contexts of economic exchange (Cutler 2001; Strathern/Stewart 2012, 245). Although conceptually and analytically different poles of exchange processes can be delineated, they are all aspects of the dynamics of a single process[18].

Commodities are objects of value with economic value that, following G. Simmel and A. Appadurai, is a judgment about an object and not an inherent property of that object[19]: "Economic exchange creates value […]. Focusing on the things that are exchanged, rather than simply on the forms or functions of exchange, makes it possible to argue that what creates the link between exchange and value is politics" (Appadurai 1986b, 3). This is a different process from that of value which was attributed to crafted goods from afar (Helms 1993). M. Helms (1993, 4) focuses on the symbolism accorded to those objects from distant, "outside" places in terms of their qualities or values. Skillfully crafted goods are more closely related to cosmological and ancestral sources and can serve as "encapsulations of cosmic power" (Helms 1993, 150). Ultimately, it is this connection that bestows value upon such goods, the possession of which, but also the knowledge about distant locations, can be a source of power (Helms 1988).

This brings us to the question of prestige, moreover, since the objects that are dealt with in this study are often valuables. Since "prestige" can be defined in various ways in different disciplines (see Hildebrandt/Veit 2009), I follow here a broad definition as a societal, economical, religious, judicial and aesthetic phenomenon and describes the reputation ascribed to objects and persons, but also behavior and imaginary concepts in a specific socio-cultural environment[20].

A framework for long-distance interaction and exchange

A vast amount of literature is concerned with interaction and exchange processes within and between ancient societies. Various models, concepts and theories, such as prestige goods exchange, peer polity interaction, interaction spheres, world-systems theory, trade diaspora, wealth finance, gateway communities or the framework of globalization can be employed, all aiming to enhance the understanding of the processes and dynamics of the exchange[21]. Basically,

17 See for example Strathern/Stewart 2012 and Myers 2001 with further literature. The literature essentially builds on M. Mauss' work "The Gift". For a close reading and a historical contextualization of Marcel Mauss' concept of gift that shows how deeply the concept of "gift giving" was rooted first of all in Western thinking and then later "detected" in foreign cultures as well as the importance of the oftentimes completely overlooked Germanic tradition in Mauss' work see Geary 2003; similarly cf. Myers 2001, 287; Wagner-Hasel 2003, or Liebersohn 2011, esp. 139–163.

18 This is, among other examples, very well illustrated in the Comanche Empire (Hämäläinen 2008).

19 Appadurai 1986b, 3–4; Cutler 2001; Graeber 2001. On the complexity of object value see also different chapters in Papadopoulos/Urton 2012.

20 "…Prestige als ein gesellschaftliches, wirtschaftliches, religiöses, rechtliches und ästhetisches Phänomen aufgefasst. Es bezeichnet dabei das Ansehen, das Gegenständen und Personen, aber auch Handlungsweisen und ideellen Konzepten in einem spezifischen sozio-kulturellen Umfeld zugeschrieben wird" (Hildebrandt 2009a, 15).

21 Basic are Brumfiel 1987; Renfrew 1986; LaBianca/Scham 2006; Parkinson/Galaty 2009a; Hirth 1978; Caldwell 1964; D'Altroy/Earle 1985.

all these models have their specific weaknesses and strengths therefore Parkinson and Galaty argue for a middle ground, an eclectic adaption of these concepts for different temporal, geographic and social scales[22]. It is clear that the following study deals with interregional, cross-cultural interaction processes on a macro-scale and there are few models that could serve as a conceptual framework for studying exchange phenomena on this scale (cf. Dark 2007, 9). Smith suggested that cross-polity exchanges can best be researched with an approach of core and periphery, long-distance commercial exchange or elite networks[23].

But in order to understand the driving forces which structure interaction and exchanges one needs to take a look at the social dynamics in each society. Analytically it is helpful to think along two intertwined and interdependent but separate analytical dimensions, which are the two poles of interaction and integration (Parkinson/Galaty 2009b, 10), or globalization and socialization (Gosline 2006). The nexus between the political system and internal political economy that constitutes exchange within and between states has been explored by M. Smith (2004; also Brumfiel/Earle 1987). He suggests a classification of ancient state economies by the degree of internal commercialization where "uncommercialized state economies lack marketplaces, independent entrepreneurial merchants, general-purpose money, and other institutions associated with commercial exchange. Full-time craft specialists work for the state or state connected temple-institutions, and agents of the state carry out long-distance transfers and exchanges"; the Inka and Egypt can be named as an example (Smith 2004, 79). At the other end of the scale states with advanced pre-capitalist commercialization, like Classical Greece or Rome, are listed. This classification which Smith emphasizes more than once should not be taken as a rigid typology. It illustrates the spectrum or the range of possibilities (Smith 2004, 80). For the political system, Smith distinguishes four types of ancient states ranging from weak states, city-states and territorial states to empires. While large territorial states show lower degrees of commercialization, city-states are highly commercialized. Empires, however, can display various degrees of commercialization, from the uncommercialized Inka Empire to the highly commercialized Roman Empire (Smith 2004, 80–81).

While details are still being discussed and the Xiongnu[24] case is disputed in terms of its political system, one may agree that we deal with an empire with a low degree of internal commercialization in which the elites, visible in the textual as well as the archaeological record, are the nexus of interaction and integration[25]. Although this is not the place to reconstruct the archaeological political economy of the Xiongnu, the most important aspects need to be pointed out to frame the study on pan-Eurasian exchanges. A prestige goods economy or wealth finance system most probably shaped the acquisition and usage of valuable goods within the Xiongnu polity and society[26]. Generally, in such a system political advantage is gained through exercising

22 (Parkinson/Galaty 2009b, 10). Interestingly, two reviewers of the book by Parkinson and Galaty arrived at a similar conclusion: as a suggestion to advance studies of interaction processes Schortman (2011) suggests the adoption of a networks perspective while Ulf (2013) suggests the application of networks theory for the study of interaction and behavior of the agents. This shows very well our own entanglement in current ongoing discourses.

23 Smith 2004, 88. The evaluation of long-distance exchanges in the framework of globalization (e.g., LaBianca/Scham 2006; Jennings 2011) will be discussed elsewhere (Miller/Brosseder forthcoming); see also Miller forthcoming.

24 On the usage of the term Xiongnu, its occurrence in the Chinese chronicles and the problems with the archaeological record see Brosseder/Miller 2011b; Di Cosmo 2011.

25 On the question of whether the Xiongnu Empire qualifies as a state see Di Cosmo 2011; but also Kradin 2011; Scheidel 2011; Di Cosmo 2013.

26 Frankenstein/Rowlands 1978; Brumfiel 1987; Schortman/Urban 2004. For the case of the Xiongnu see Miller 2009; Honeychurch 2015 and Di Cosmo 1994, 1117.

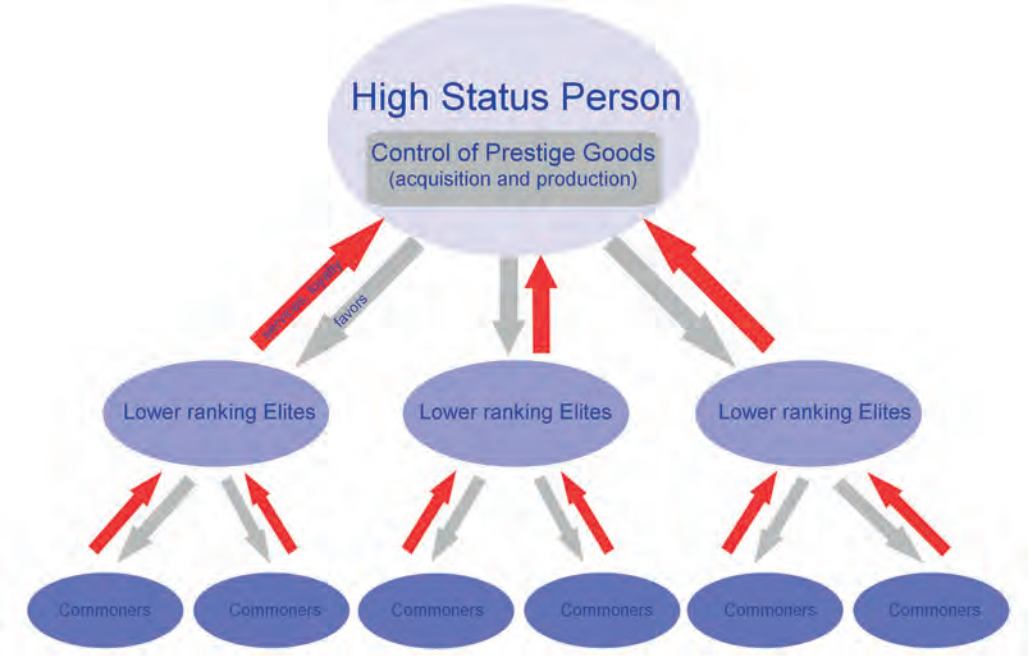

Fig. 1. Schematic of a prestige goods economy. The passing down of prestige, in terms of goods but also in terms of immaterial favors, fuels a growing demand of more and more exotic goods for the high status person in order to keep his distinct position.

control over access to resources that can be gained through external exchange with an emphasis on controlling the acquisition of wealth objects needed in social transactions (Frankenstein/Rowlands 1978, 76; Schortman/Urban 2004, 192–195) (Fig. 1). More generally, in this discussion, elite control over craft production of prestigious goods is central for the prestige goods economy as it bestows the elites with power[27]. In general terms, in this model it is assumed that the distribution of prestige goods, but also immaterial favors, such as offices, creates social cohesion in return. It is helpful to take a closer look at the mechanisms involved. Graham Clark (1986, 82) observed that "the transmission of precious substances in the form of jewelry or other objects of display has at all times and most notably during the last five millennia served the same purpose the world over, that of signaling and enhancing status". Gosden and Marshall pointed out that the "fame of objects and the renown of people are mutually creating, so that objects gain value through links to powerful people and an individual's standing is enhanced through possession of well-known objects" (Gosden/Marshall 1999, 170). M. Helms argues that elites are "involved in symbolically charged acts of both acquisition and transformation by which resources originating from locales outside society are obtained and brought inside society where they may be materially altered and/or symbolically reinterpreted or transformed to meet particular political-ideological requirements" (Helms 1993, 4). Her basic hypothesis is that the symbolism or meaning of long-distance exchange is similar to skilled crafting (Helms 1993, 91). Seeking to explain why this process works and how it had possibly started A. Plourde (2009) draws upon a costly signaling theory built on Gil-White/Henrich 2001 showing how prestige goods not

[27] Frankenstein/Rowlands 1978; Schortman/Urban 2004, 189–192. For the importance of craft production as a resource for elite domination see Schortman/Urban 2004, esp. 190, with relevant literature.

only operate on the level of individuals but also how they operate in political hierarchies and group competition. For our purpose, focusing on inter-group exchange processes it is important to note that when "groups are increasingly interacting with one another as units […] the quality of group strength and the ability to advertise it would take on a pertinence not previously possessed" (Plourde 2009, 272).

While control over the production of prestige goods or valuables is claimed to be key for the prestige goods theory, a closer look at this mechanism reveals that, first of all, acquisition and possession seems to be the central point. Controlling craft production is a stable way of acquiring the necessary crafted items, but there are other ways of controlling the acquisition including tribute payments and raids which were less stable but fulfilled the immediate need of the elite as well. Once acquired the elite had effective control over the "distribution of potent material symbols to fashion and proclaim identities to which the powerful alone can belong" (Schortman/Urban 2004, 193). While the prestige goods theory was mainly developed for agricultural societies this shift away from an emphasis on production control to emphasize control of the acquisition may fit better not only regarding the case of the Xiongnu, but possibly also regarding other, later steppe empires[28].

One reason that this perspective fits the Xiongnu case better is that archaeology over the past 90 years of research in Mongolia and Transbaikalia has recovered a fairly rich dataset of foreign goods and evidence of their use in burial contexts. Foreign goods from the ostentatiously furnished terrace tombs that belong to the highest echelon, but also goods from simpler graves as well allow for insights into this prestige goods economy (Brosseder 2009; Miller 2009; Miller forthcoming). While the Chinese chronicles report about various forms regarding how these goods came to the steppes by payments, marriage alliances, raids and frontier market exchange (Yü 1967; Di Cosmo 2002), we currently know very little about the crafts production in the steppes at that time period. The use of local gold sources, however, is attested and local production for some prestige goods is highly likely[29]. So, despite the fact that only a little information is available about the elite's controlling the production, we see abundant evidence in Xiongnu contexts for the acquisition and use of valuables from literally all over the ancient world.

Turning to the axis of interaction there are three main frameworks to study long-distance inter-societal exchanges which are being sketched briefly. Approaches that draw upon World-Systems were discussed recently by Parkinson and Galaty (2009a). Adopting a World-Systems perspective or framework (Kardulias 2009, 54; Sherratt 2009, 81; 84–85) can be useful to understand macro-regional patterns of exchange. However, its integral concept of center and periphery has caused more criticism and difficulties (Sherratt 2009, 85–86). The expanding economy or "a characteristic sequence that marks a region's progressive involvement in a growing economic system" (Sherratt 2009, 91–92) can be illustrated by the Aegean as a system that grows in scale, intensity and diversity of economic and cultural contacts, and of increasing economic integration

[28] Maybe this aspect of shifting from the acquisition to control of production is best illustrated in the case of the Mongol Empire where the well documented relocation – "acquisition" – of craftsmen and other personnel was the first step that led to the control of production and the accommodation of needs of the court (Allsen 1997; 2001).

[29] See Miller/Brosseder 2013. No information, neither textual nor archaeological, is currently available about craftsmen working in the Xiongnu Empire. Other sectors of production are well attested. Evidence exists for local crafting of pottery, bone working, bronze technology and recent findings, not only of slags but also of iron production sites point to the existence of an iron industry (Amartüvshin et al. 2012). Subsistence was based on herding and to some degree also agriculture was practiced, however, we do not know to what extent. Additionally, fishing is probably attested in some cases (Brosseder/Yeruul-Erdene 2011).

and cultural interaction, with all its side-effects that do not conform to Wallerstein's initial idea of World-Systems but nevertheless is systemic (Sherratt 2009, 101). Both aspects: the growing economic integration as well as the concept of core-periphery do not fit the case of the Eurasian Steppes well as will be shown in the discussion.

Another model that can be employed for understanding long-distance exchanges are elite networks for which the concept of salient affiliations may help to understand how these work. For this Schortman suggests to refocus on social identity as it forces one to ask "who is interacting with whom, under what conditions, and what are the effects of the contact on local social change" (Schortman 1989, 52). "Salient social identities are usually an affiliation or set of affiliations which are used more commonly than others and whose members, as a result, share a strong feeling of common purpose and support. These salient social identities founded on ethnicity and/or class can and have been used to create and maintain important contacts among spatially dispersed population segments" (Schortman 1989, 54; Schortman/Urban 2004, 193–194). Salient affiliations develop as a means to acquire and control resources defined as important by the interactors and are used sometimes to maintain exclusive control over some desired resource, trade, etc., while structuring interaction across identity boundaries as needed (Schortman 1989, 56). Social identities provide mechanisms that allow inter-societal interaction. Since they often have a symbolic expression there is a possibility that they can be recognized in the archaeological record. Having analyzed the cross-cultural interaction between the courts of Rome, Sasanian Iran and Sui-Tang China, M. Canepa shows that during a brief period the sovereigns "expressed power in forms that all courts could understand" (Canepa 2010, 144) and arrived at a similar conclusion that it was a process "primarily concerned with the formation and maintenance of imperial identity" (Canepa 2010, 144). The Hopewell interaction sphere defined by a standardized range of exotic goods (see Caldwell 1964) might reflect these processes just like the assimilation of the representational means of the Germanic elites in the early Roman Imperial period. These cases could be seen as representing spatially extensive salient-identity networks that linked the dispersed elite through the sharing of proxemics, ideological, and social assumptions symbolized by the observed patterns of highly visible material remains (Schortman 1989, 59). It seems also that the manipulation of these symbols was part of individual social strategies as suggested by their association with trade connections. The ability to obtain and monopolize control of certain goods enhanced local elite power and created a need for those goods which enforced high levels of interregional interaction (Schortman 1989, 59). Salient affiliations facilitated exchanges by providing a network of cooperation and communication along which goods could pass easily (Fig. 2). In this respect, the use of a social identity concept in archaeology directs the attention to the study of these networks (Schortman 1989, 59). As a result supra-local elite identities may be a regular concomitant of increasing local social complexity and as inter-societal interaction increases there is a greater dependence among societies, especially the elites, for needed goods (Schortman 1989, 60). And of course, exchange of goods and ideas move along such established communication routes.

Economic exchange is another framework to approach research of long-distance exchange. Its identification in the archaeological record is difficult. In theory international exchange institutions comprise, for example, long-distance merchants, administered trade and ports of trade (Smith 2004, 84–85)[30]. Economically driven long-distance exchange refers more to the exchange

[30] Just for clarification: here I only present the theoretical possibilities and do not imply that there were long-distance merchants travelling across land from East to West.

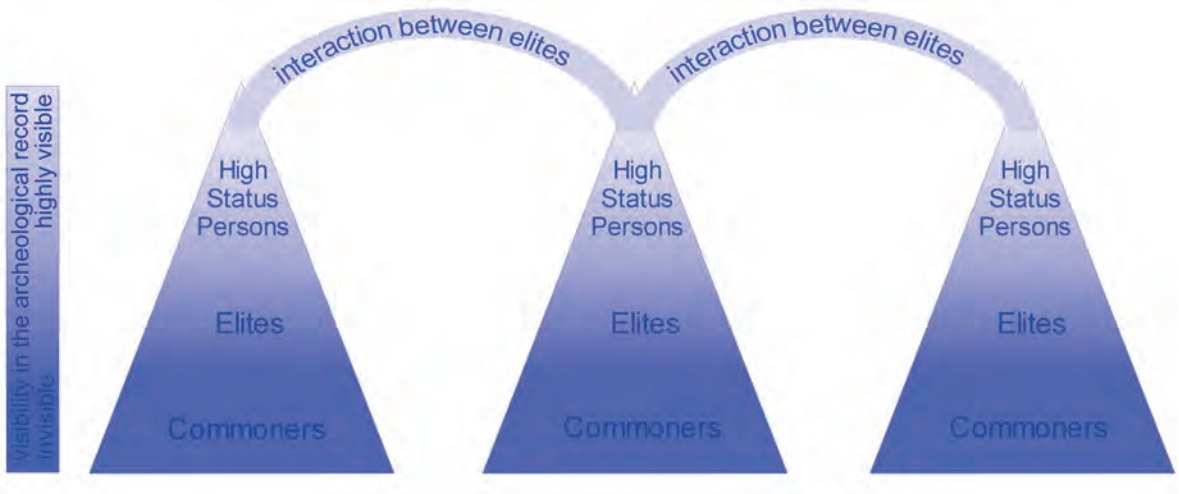

Fig. 2. Schematic of a salient affiliation model adopted for explaining long-distance interaction.

of bulk commodities and less to luxury ones (e.g., Schefold 2002) and has to take place with regularity and in certain quantity[31]. It needs to be reminded here, however, that the exchange of valuables cannot be separated from economics, and that in ancient societies long-distance exchanges responded to the desires and interests of smaller, but highly visible, social groups (von Reden forthcoming). Instead of running into an overly typological debate one can agree that social as well as economic aspects in different proportions are connected with long-distance exchanges and that the elite or state consumption is a major driving factor (von Reden forthcoming).

Economically driven exchanges can also be identified archaeologically through the location where the transactions took place, such as market-places, e.g., in Roman towns or Karawanserais[32]. Another way to grasp a glimpse of the economic side is to take a look at cargo loads, which we find in textual reports from Xinjiang only from later time periods (see Hansen 2012) or for example, by looking at the cargo-load of shipwrecks. Evidence of a built infrastructure is scarce in this time period, unlike later when we know of a relay system of postal stations across the Mongol Empire, for example (Allsen 2010). Approaching economic exchange through the distribution of artifacts is difficult because of the equifinality of artifact distribution patterns that different mechanisms can produce[33]. While the presence of coins as such cannot be taken as an indication of economically driven exchange the combination of coin hoards with masses of coins and the abundant occurrence of "foreign" transport vessels are good signs that economically driven exchange accounts for such distribution patterns as regularity accounts for the quantity. The Roman finds in India represent such a case (Tomber 2008; Howgego 2011). None of the above mentioned features, however, are visible in the archaeological record of Inner Asian and most other part of the Eurasian steppes during the time period of interest.

31 But see von Reden (forthcoming).

32 For generally studies on market-exchange in ancient societies refer to the internal markets see Garraty/Stark 2010 and Manning/Morris 2005. On Karawan-serais in Iran that are only known in medieval times, see the edited volumes of W. Kleiss, Karawanenbauten in Iran (Teil 1–6). Materialien zur Iranischen Archäologie 2–8 (Berlin 1996–2001).

33 Renfrew 1975; Hirth 1998, with a discussion on pp. 451–471; Hirth 2010; Stark 2010; but see recently Ossa 2013 with a networks expectations approach.

Finally, attention should be drawn to the effects of the intensification of the interregional exchange between elites that can stimulate the emergence of gateway communities located on key exchange routes (Hirth 1978, 36–37). Characteristic for gateway systems is the vertical hierarchy and a dendritic market pattern that is created by long-distance "trade" (Hirth 1978, 38). Such "dendritic networks are characteristic of many primitive economic systems and are frequently found in areas where the population is dispersed, transportation is difficult or underdeveloped, and where there is a strong external economic orientation" (Hirth 1978, 37). When these are studied using archaeological materials caution must be taken not to interpret the presence of similar goods at all centers as an indication of a mutual interaction sphere which is often characterized by horizontal connectivity matrices. Hirth also draws attention to the fact that economic systems are plastic, referring to the accumulative and retentive aspect of economies in that "new forms of production and distribution are created and added to existing economic arrangements without displacing older established forms of organization" (Hirth/Pillsbury 2013, esp. 645).

Adopting a networks perspective

Adopting a Networks Perspective or Network Thinking is helpful as it allows for looking at the axis of interaction as well as one of integration within the same framework. Another advantage of adapting a networks perspective is its emphasis on relational agency and allowance for capturing dynamic interactions that constitute political forms and their changes[34]. While social networks have already been long employed in the social sciences they are now also used in archaeology both as a metaphor and method[35]. Even though we cannot expect to retrieve all social nets of a society from the archaeological record those networks that are particularly salient in power competition can probably be recognized (Schortman 1989; Schortman/Urban 2011, 27–43, esp. 31).

So far Networks Analyses or Syntheses which are of interest for insights into archaeological studies of exchange processes were successfully explored for trade systems in the Mediterranean and the Baltic Sea[36]. In these case studies exchanges took place within a similar regime of values or within the same economic system, as the case of Bronze Age trade or the Viking commercial network illustrates (Sindbæk 2007; 2012; 2013). By understanding long-distance exchange processes between networks the feature of weak ties or bridges and their properties that connect separate networks are especially interesting[37]. As S. Sindbæk states, archaeologically visible is an impression of the underlying network where "communications across long distances were achieved through a spindly combination of hubs and weak ties" (Sindbæk 2007, 70). Sindbæk studies commercial exchanges in the Baltic Sea of the Viking Age based on materials from ships and ports, i.e. hubs, and comprehends the archaeological study of long-distance communication as one of reconstruction since the "fragmentary archaeological evidence presents researchers with the task of reconstructing the broken links of a ruined network from observable distributions and patterns of association in the archaeological record. In formal terms this is not a problem

[34] Schortman/Urban 2011; Schortman/Ashmore 2012; Campbell 2009, for adopting a network perspective; see in general Mann 1986.

[35] On social networks as metaphor and method see Knox et al. 2006; Campbell 2009; Schortman/Ashmore 2012; for applications of networks analysis in archaeology see Brughmans 2012; Knappett 2013, and Mills et al. 2013 with further literature.

[36] See the contributions in Knappett 2013; Sindbæk 2012; 2013.

[37] Granovetter 1973; Borgatti/Halgin 2011; see also Brosseder/Miller forthcoming.

of network analysis, but network synthesis: the classic problem of cracking codes or reconstructing black-box circuits" (Sindbæk 2013, 72). This is even more a problem when studying networks from a mortuary perspective as it brings us on the one hand one step further away from the actual long-distance exchange network since the goods were also distributed in their internal societal system and were selected in to accompany a deceased according to social and religious rules, a process which has little to do with the exchange network[38]. This bears a problem for the application of formal networks analysis in the study of interaction and exchange processes along the Steppe highway which can only be solved with a high degree of modeling (cf. Brughmans 2012; Knappett 2013). The mortuary remains, however, present a unique opportunity, as they may bring us on the other hand closer to some of the actual agents, or more agentive factions of local groups, who facilitated the long-distance exchanges. Although formal network analysis and network synthesis are not the avenues pursued here, the networks metaphor can be usefully employed for understanding the movement of goods and ideas that are being transferred through far-distant and significantly different regimes of value (Appadurai 1986b, 4; see also Brosseder/Miller forthcoming).

Synopsis of the Archaeological Evidence

Clarifying the specific characteristics of the archaeological dataset

The materials which are under study here are recovered from graves. Studying exchange processes from a mortuary perspective allows us to take a look at the past only through several filters which also vary from region to region. The first filter is that depositions of objects in graves underlie a selective process guided by believe systems, different for each society. Thus if a region is devoid of some objects, it needs to be carefully evaluated whether objects were in that area unknown or whether burial rites or other factors impede their deposition in the grave. Moreover, graves were in some regions re-opened and objects were removed so that we do not have the complete assemblage of artifacts selected for the specific burial. For example, more than 90 % of the Xiongnu period graves in Mongolia and Transbaikalia have been re-opened, in most cases probably not long after the burial process. The burial context of the objects under study here also implies that we capture only the last usage and function of a specific object with a longer biography or itinerary[39]. Another aspect which is predominantly discussed in the literature on hoards and especially important for valuable goods relates to the fact that with their final deposition in graves these valuables were removed from other social avenues they may have taken. Therefore through this mortuary perspective, we start from the consumption of the goods and have to reconstruct the routes and avenues how they were distributed and used.

[38] See below for a critique of the source filters that also contribute to this aspect.

[39] The use of the term "itinerary" has been recently suggested by H. Hahn and H. Weiss, as it combines modern-day pathways, stations and transitions of a traveller with older ideas of pilgrimage leading to the transformation of the traveller (Hahn/Weiss 2013, 2). The metaphor of the cultural biography of things or objects (Kopytoff 1986; Gosden/Marshall 1999) does not work well together with objects that gain a new usage, or second life, in tombs; and the term "itinerary" seems in this respect more differentiated (Hahn/Weiss 2013, 4).

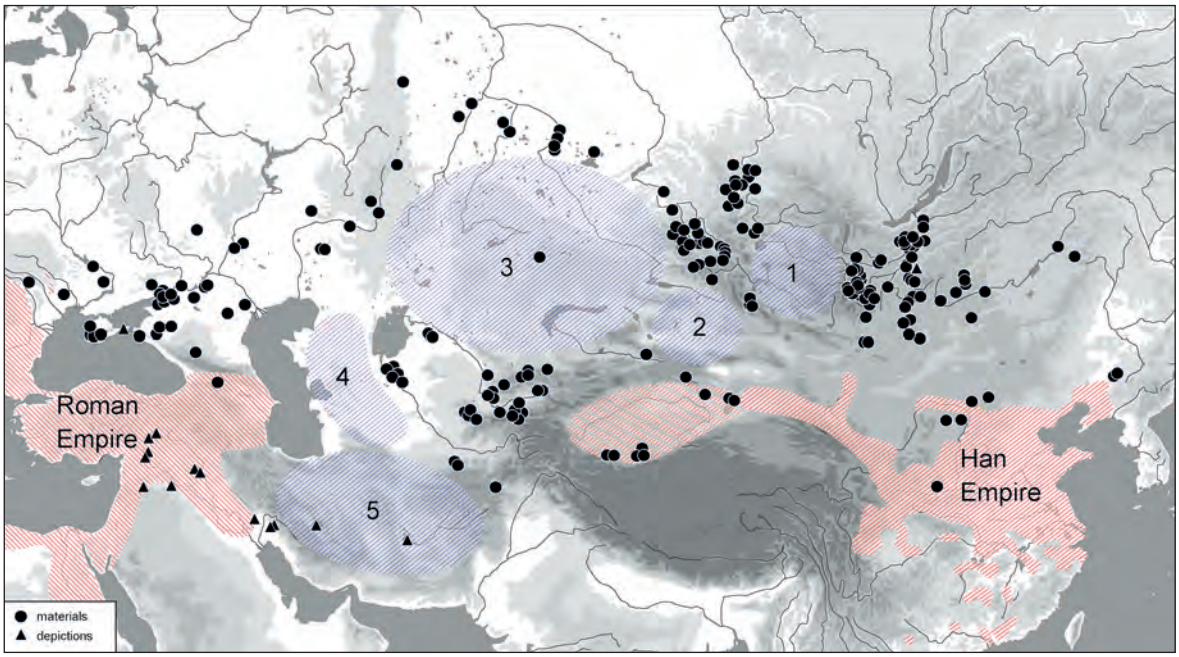

Fig. 3. Overview over the geographical distribution of the data used in this study. Numbers designate areas (hatched in blue) where no such materials were found: 1 Western central Mongolia; 2 Dzhungaria; 3 eastern and central Kazakhstan; 4 between Aral Lake and Caspian Sea; 5 Iran.

Oka and Kusimba observed a correlation between the presence of written records of a society/culture and the socio-economic paradigm for studying exchange: where extensive written records exist we know of economic exchange and traders. Without them exchange is interpreted as elite gifting (Oka/Kusimba 2008, 351). The identification of elite gifting from an archaeological perspective is dominating. By its nature it concerns mostly goods of high value that are often made using precious materials, such as gold, silver, or gem stones, which can archaeologically be retrieved and their use in respective lavishly furnished contexts can be identified. In contrast to this is the identification of bulk commodities, often perishable goods that become archaeologically invisible as well as the identification of commercial exchange through artifacts is more difficult. This implies that the eye of the steppe archaeologist is biased towards social forms of exchange.

A critical comment on the distribution maps is also necessary as on all maps the same empty regions appear: western central Mongolia, Dzhungaria, eastern and central Kazakhstan, east of the Caspian Sea and Iran. In western Mongolia in the area between the Altai Mountains in the west and the Khangai Mountains east of it (Fig. 3.1), only very few sites of the Xiongnu period are known (Brosseder/Miller 2011b, 24 Fig. 1), though this region has been studied less intensively by archaeologists it is clear that only few Xiongnu period monuments occur. The reason why Dzhungaria (Fig. 3.2) – geographically located central between the Altai Mountains and the Kazakh steppes further west – is never prominently featured on the maps is because archaeological research in this region is still in its infancy and substantial published information is scarce. Also my access to materials written in Chinese on this region in today's Republic of China is limited. Central and eastern Kazakhstan (Fig. 3.3) is also an area not featured prominently on the following maps, as materials known from this period are either unknown or rare which do not allow for a comprehensive evaluation of the archaeological evidence there (Parzinger 2006,

789–790). The region between lake Aral and the Caspian Sea is not a hub of archaeological expeditions either (Fig. 3.4). Iran is another region (Fig. 3.5) where the archaeology of the centuries at the beginning of our common era is not abundant. Mainly statues and depictions survived and materials from the art market but no modern excavations of cemeteries covering the time period of interest have been published or are available in a Western language. In comparison to the areas named above the archaeology from the Inner Asian steppes is fairly well balanced. The clustering of dots also indicates research intensities which account for clusters in central Mongolia, the Minusinsk Basin, the Altai region, Central Asia and the north-pontic steppes. For the distribution maps the territory of Han China proper was never included in this study.

The topic of periodization needs to be mentioned as well because the existing framework of chronological periodization does not have a high resolution that allows for a fine reconstruction of cultural and historical processes. Mostly one has to be satisfied if an object or context can be dated within one century. Independent dating through scientific methods is increasing and has been improving over the last few years, especially for contexts from Mongolia and Transbaikalia. However, dating in Central Asia and in the Black Sea area depends largely on "traditional chronologies"[40]. Especially in the wider Black Sea region, dates are often established through Roman imported goods or even historical events, the latter bringing about a mixed argumentation that has to be discarded. While the method of dating contexts through Roman imported goods was best practiced in Central Europe in the mid-20th century (Eggers 1951), the dearth of this approach was recognized as they realized that the expected use of time of the mostly prestigious Roman goods varied greatly (see e.g., Petrovszky 1993). Thus, the temporal periodization employed for the current study has to be viewed on a larger scale and only highlights tendencies. With these considerations in mind the stage is set to view the synopsis of the archaeological materials in three consecutive acts or time-slices.

PRELUDE: PAZYRYK, FILIPPOVKA, THE WARRING STATES AND THE ACHAEMENID EMPIRE

In order to illustrate the quantitative and qualitative changes in the long-distance contacts during the Late Iron Age in Eurasia and the role that the Xiongnu and other steppe people played in it a brief look shall be taken at interactions in Eurasia during the preceding time period, later Early Iron Age.

The Pazyryk culture in the Altai region (ca. 4th–3rd century BCE) and the elites of the Filippovka group in the Southern Urals became important players in the Eurasian steppes with the contemporaneous Warring States in China (ca. 475–221 BCE), the ending Achaemenid Empire (550–330 BCE) and succeeding Seleucid Empire (ca. 320–63 BCE) in Central Asia as powerful neighboring polities to the south.

The circumstances and history of the first contact between Chinese states and the northern neighbors of the steppes, the Hu people, are presented by N. Di Cosmo (2002, 127–158). Early

[40] While these can by all means be correct the problem lies in the fact that these chronologies are only based rarely on specific methods for establishing a relative chronology, such as, for example, seriation or correspondence analysis or the analysis of cemetery occupancy, let alone on scientific independent dating for the absolute chronology. An exception to this general rule is in example Malashev 2000.

texts mention the receiving of cattle, sheep, and most importantly horses, while Emperor Mu in return presented fine Chinese valuables of precious metal or of precious stones. Economic high volume exchange with the steppes can be confirmed by the third century BCE with "a trend in diplomatic and economic exchanges in which pastoral products were exchanged for high-value items, such as silk" (Di Cosmo 2002, 132–133). Although nothing is known from written records about the interaction of the Pazyryk peoples with these polities, archaeological materials illustrate that they participated, perhaps indirectly, in this exchange network.

From the territory of the former Achaemenid Empire a carpet and a shabraque from the 5th Pazyryk kurgan are attested together with seeds of cultivated coriander and the silver belt plates from kurgan 2 in Pazyryk and are supposed to be of Near Eastern origin, possibly the gold earring displays Achaemenid traces. Related to royal Achaemenid iconography are the square elements on top of the hood from kurgan 3 in Pazyryk and the winged sun disk. In Berel', influence from the Achaemenid Empire can only be traced indirectly[41]. Besides contacts from the declining or after the demise of the Achaemenid Empire and also imports from India are known, such as the tin bronze "musical" mirror with a horn handle from Pazyryk or the Indian silk from kurgan 1 of Ak-Alakha 3 (Polos'mak 2001a, 101; Polos'mak/Barkova 2005, 30), clearly indicating the far-reaching contacts of these elites.

From the Chinese Warring States silk, mirrors and lacquer were found in Siberia and in the graves of Pazyryk culture. Silks are known from kurgan 3 and 5 in Pazyryk, where it is remarkable that silk was used for a shabraque (Lubo-Lesnichenko 1994, 28; 33 Fig. 15). From kurgan 6 of Pazyryk comes the famous Chinese mirror decorated with four slanting T's. Such mirrors were concentrated in the Chu region, but are found across a vast territory up to Jilin in the north-east and Guangzhou in the south (Chou 2000, 25). In total four mirrors of this type were found in Siberia, two from the Altai region including one which is reported from East Kazakhstan and, beyond the Altai, one from the Minusinsk Basin (Fig. 4, blue triangle; list 1). They all are similar to the mirror C45 of B. Karlgren (1941, Pl. 16), as E. Lubo-Lesnichenko had already pointed out (Lubo-Lesnichenko 1975, 37; 1973, 28). Only one more mirror has been excavated in recent years, in Firsovo-XIV, north of the Altai, but since its context has not been published the only mirror from a closed find remains the long-known specimen from kurgan 6 in Pazyryk. There is no direct radiocarbon date for this burial, however the time span between the earliest and the latest kurgan of the eponym cemetery comprises approximately 50 years, between the end of the fourth century and the first half of the third century BCE (Evraziia 2005, 165; 215; Mallory et al. 2002)[42].

Besides Chinese silk and mirrors lacquer finds also indicate contacts with the Warring States, however, only tiny flakes survived so that we do not know what kind of object was received. The earliest remains in the Iron Age contexts of Siberia come from kurgan 3 of Pazyryk where lacquer flakes were used to adorn a headdress (Polos'mak/Barkova 2005, 89 Fig. 2.59a). In kurgan 5 which is dated to the late fourth and first half of the third centuries BCE (Parzinger 2006, 597–599; Evraziia 2005, 165–166), a lacquered saddle bow was found (Rudenko 1953, 374) and

[41] For the relations in general see Stark 2012, 115–121 with further literature; Lerner 1991; Rudenko 1953, 342–361; 1970, 293–309; Polos'mak/Barkova 2005, esp. 30; 88; 131–137; 165–169; Polos'mak/Litvinskii 2006, esp. 262–264; also Xin Wu 2007.

[42] From Ekaterinovka in the Minusinsk Basin a mirror with a feather décor, basically the same pattern that is known from the background of the mirror type before (Fig. 4, blue dot; list 2). Also this type of mirrors belongs to the Warring States period (Chou 2000, 24), but since the find in the Minusinsk Basin is a single find, the date of its deposition remains unclear. As will be shown below, mirrors of the Warring States period can also be found in later, Xiongnu period contexts.

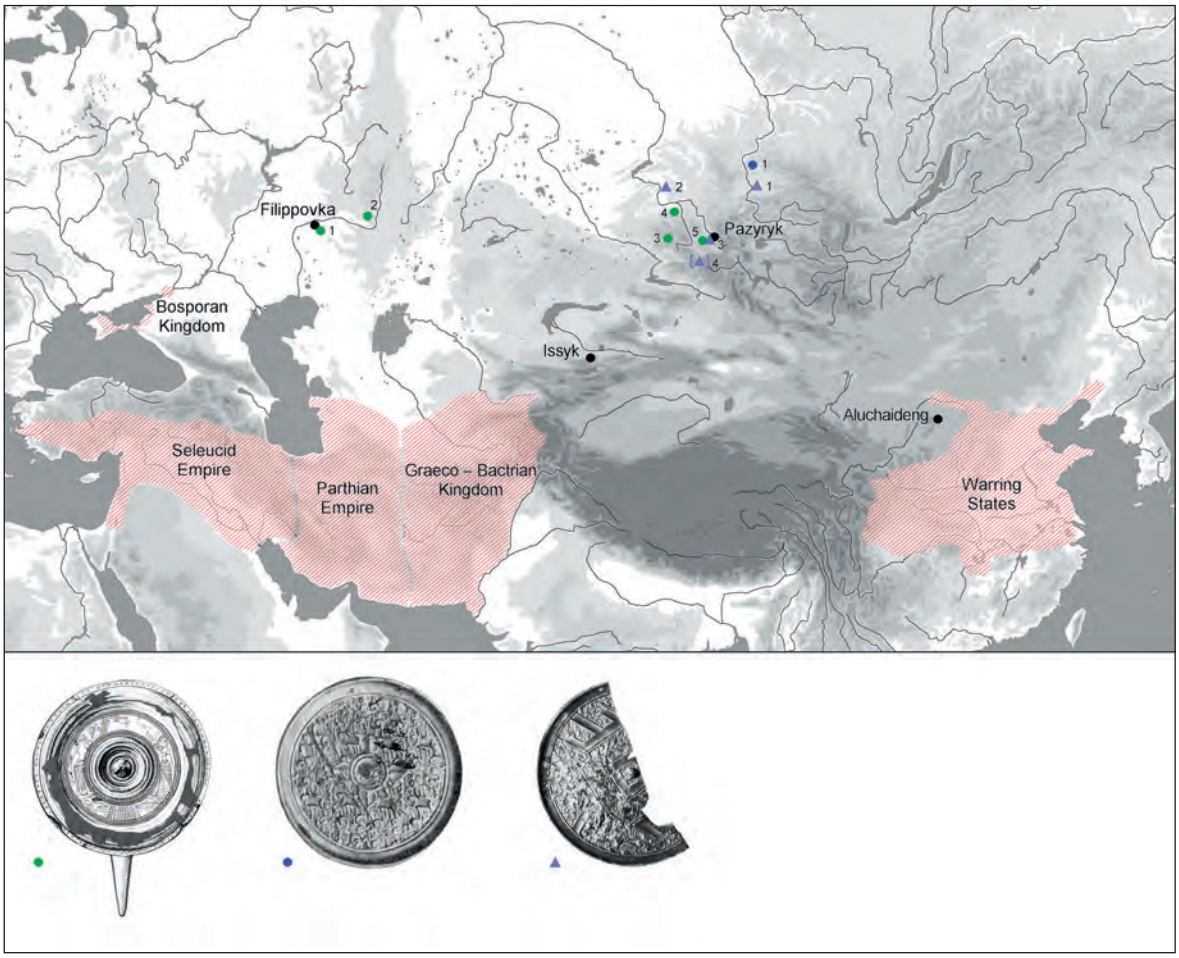

Fig. 4. Exotic mirrors in the steppe area in the late fourth and third centuries BCE. Mirrors of the Warring States found in Siberia: mirrors with four T's (blue triangles; list 1); mirror with feather décor (blue dot; list 2); musical mirrors, possibly from India (green dots; after Treister 2013d, 144–148).

in kurgan 7 a lacquered leather strip (Rudenko 1953, 118 Pl. 98.4). These objects point to long-distance relations with the Warring States to the south. Some of the clothing, such as the striped skirts or the head-gear, are not only known from the Pazyryk culture but were also found in Xinjiang and indicate similar notions of costume across a wider region (Polos'mak 2001b, 123–124; Polos'mak/Barkova 2005, 64–65; 72–76).

Richly furnished tombs, such as the one from Aluchaideng and the Issyk kurgan point to communication and a connection between the elites in larger parts of eastern Eurasia as they share ideas of status symbols, as the use of precious metal belt plaques illustrate. Pazyryk does participate in this fashion too but on a different level as mostly wooden belt plaques, sometimes covered with metal foil were used (Brosseder 2011, 354–355). Between Ordos and eastern Kazakhstan, ibex and tiger plaques are also shared and point to routes of communications through the northern Tianshan Mountains (Yang/Linduff 2013).

In the western steppes, taking a wider perspective on long-distance contacts in Eurasia of the fourth and third centuries BCE, Achaemenid or Achaemenid-inspired silver and gold vessels as well as gold jewellery, and rarely parts of furniture, weaponry and horse gear are found in

Early Sarmatian elite tombs from the Southern Urals, mainly in the Filippovka group[43]. It is noticeable that these objects were interred roughly 50 to 70 years later than they were produced. Especially interesting is a musical mirror probably from India found in Metchetsai, the same type as the one found in kurgan 2 from Pazyryk (Fig. 4, green dots), so both groups even received the same objects through their connections[44].

Because of the nature of the objects and its exclusive find contexts in a few outstanding graves, Treister sees the transfer of goods in the context of political, military, and marital alliances (Treister 2013b, 314–315). Bronze and silver toreutic items of the Achaemenid style and local imitations of them are also known from the northern Pontic area from the fifth and fourth centuries BCE (Treister 2010a). Additionally, Achaemenid stamp seals as well as those cut in Lydia, are known from eastern Crimea and the Taman peninsula and the western Kuban area, mostly found in graves of the Bosporan kingdom (Treister 2010a, 235 Fig. 8) which may reflect diplomatic relations[45].

Summarizing the archaeological evidence we see long-distance connections in Eurasia in the late fourth and beginning third centuries BCE that are mainly north-south directed. These connections, illustrated by valuables from afar affect a small group of elites, like the Pazyryk or the Filippovka group. Central Asia, more precisely the Achaemenid Empire and its successor states, serve as an important connection point. While in both steppe groups unsurprisingly the elite shaped these contacts, we note differences between the eastern and the western group: While the Early Sarmatians were importing metal vessels, this was not the case for the Pazyryk, neither from China nor from Central Asia[46]. Whether exotic textiles from the Achaemenids and their successors were transported not only to the High Altai but also to the Southern Urals remains unknown as the poorer preservation conditions in the western steppes do not allow us to evaluate this point.

Shifting Powers and the Opening of the Transcontinental Steppe Highway

The constellation of powers shifted with the growth of the Parthian Empire (ca. 250 BCE – 228 CE), the establishment of the Graeco-Bactrian kingdom (ca. 3rd and 2nd centuries BCE), its downfall at the hands of the Yuezhi (ca. 1st century BCE to 1st century CE) in Central Asia, as well as the Han Empire (206 BCE – 220 CE) in East Asia and that of the Xiongnu in Inner Asia from the third century BCE to the first century CE. The relations between the Han and the

[43] Treister 2010a; Treister 2013e, esp. 305–306. On Filippovka in general see Iablonskii 2008 and Treister/Yablonsky 2013 with further literature.

[44] Treister 2013b, 307. Also the technology of hot-forging and from high-tin bronze points to India as it is known in India already earlier (Ravich/Treister 2011; 2012).

[45] Out of discussion here are the earlier materials of the fifth century BCE which were found in the Southern Urals, which may have been partly acquired by theft as the traditional route of exchange between the Achaemenid Empire and the northern Steppes through Khorezm, a way of transfer that seems not feasible any more after Khorezm acquired independence not later than the ending of the fifth century BCE (Treister 2010a, 250–251). Moreover, the distribution pattern of pottery from Khorezm in the Southern Urals also speaks against this mode of transfer for the Achaemenid goods from the fourth century BCE (Treister 2013b, 312).

[46] We cannot rule out the possibility that Pazyryk imported lacquer vessels, but the preserved lacquer flakes are too small to identify the original object.

Xiongnu were closely enmeshed, for the purposes of our study we should differentiate between the Han relation with the Xiongnu and those with the Western Regions and beyond.

Evidence of contacts in the written sources

Chinese chronicles are quite detailed about relations with their neighbors to the north and west. The Xiongnu most profited from a variety of political, cultural, and economic relationships with the Han. A plethora of Chinese goods, including silk fabrics, foodstuffs as well as luxury goods are mentioned as materials sent to the north from the time of the unification of the Qin up through the Later Han period have been thoroughly discussed[47]. These goods flowed northward through a variety of channels: annual tribute payments stipulated by treaty, marital alliances, booty from raids, and frontier market trade are all mentioned in the *Shiji*. Two passages in particular illustrate this:

"Emperor Kao thus sent Liu Ching 劉敬 to offer a princess of the imperial house as the Shan-yü's Yen-chih [i.e., queen] and to annually offer the Hsiung-nu waddings, silk fabric, wine, grain, and [other] foodstuff, each in fixed quantities, and to conclude a marital alliance as brothers" (*Shiji* 110, 2895; after Giele 2010, 269).

In another passage the transfer of valuable goods is more emphasized:

"An embroidered robe with a thin openwork inner garment of silk, an embroidered, thin jacket with long sleeves, and a brocade thin gown, one each, one comb, one belt decorated with gold, one golden rhino comb, ten bolts of embroideries, thirty bolts of brocade, red thick silk and green thin silk, forty bolts each: [these are taken by] the Palace Grandee Yi 意 and the Director of the Internuncios Chien 肩 to present to the Shan-yü" (*Shiji* 110, 2897; after Giele 2010, 273).

In addition to the types of transfers of goods mentioned in these passages, we can also point to the existence and importance of frontier border markets: "From this onwards, the Filial Emperor Ching again made a marital alliance with the Hsiung-nu, [re-]opened markets at the [border] passes, provided for the Hsiung-nu with presents, and sent them a princess like in [the times of] the former agreement" (*Shiji* 110, 2904; after Giele 2010, 282).

Han's interest and involvement in the Western Regions and Central Asia developed in the context of the struggle against the Xiongnu under Emperor Wu's reign (141–87 BCE)[48]. His ultimate goal was to "cut off the right arm of the Xiongnu", who received important support and supplies from the oases kingdoms. This is also the context that Zhang Qian's mission has to be seen in. After his return, at great costs to the empire the Han established military colonies in Xinjiang (Di Cosmo 2000; von Falkenhausen 2010). The hegemony over Xinjiang changed numerous times: until the second century BCE the Xiongnu dominated Xinjiang. From 70 BCE onward the Han established their hegemony over the area until the Xiongnu in the beginning of the first century CE took over again for another half century. In the late first century CE domination went back and forth between Han and Xiongnu (Loewe 1979a; Di Cosmo 2000, 400–401). The report of Zhang Qian brought important and positive changes in Han's appreciation of the non-Chinese world by describing the "possibility of acquiring luxury goods for China's enrichment, of expanding Han territory and of increasing imperial prestige" (Loewe

[47] Di Cosmo 2002, 161–247; de Crespigny 1984; Miller 2009, 76–152; Miller forthcoming.

[48] Loewe 1979a, 40–41; Hulsewé 1979; Di Cosmo 2002, 247–251. For the Chinese sources and their views on Central Asia see also Leslie/Gardiner 1982 and on the travels of Zhang Qian see Benjamin 2007.

1979a, 41). Consequently, after the return of Zhang Qian several missions were dispatched from the Han court to the Western Regions and the exchange of embassies between the Parthian and the Han court is mentioned[49]. And about the circumstances dealing with the Western Regions we learn:

"Since the time when [Chang] Ch'ien had opened up the routes to the outer states and thereby gained honour and a high position, his officers and men vied with each other in submitting written reports describing strange wonders, the advantages and dangers of the outer states, and in seeking to be sent there on missions" (*Hanshu* 61, 7A, Hulsewé 1979, 221).

"On the outward and return journeys there could not fail to be cases where valuable goods were stolen or where the envoys ignored [imperial] instructions. As [the member of the missions] were well versed [in dealing with foreign states], the Son of Heaven always had the cases investigated and construed as being worthy of punishment by offering to go out on further journeys" (*Hanshu* 61, 7A, Hulsewé 1979, 221).

"The envoys all appropriated those officially owned goods that they carried, wishing to sell them at a cheap price for their own private profit" (*Hanshu* 61, 7B, Hulsewé 1979, 222).

"When the case of Han envoys arises, if they do not bring out valuables they do not get any food, and if they do not buy horses they have no means of travelling on horseback. The reason for this state of affairs is that Han has been regarded as being distant. However, Han possesses many valuable goods, and consequently purchasing has been necessary to acquire what is required" (*Hanshu* 96A, 19A, 39A, Hulsewé 1979, 137).

Even though "the earliest Chinese exports to Central Asia seem to be evidence of exchanges of gifts and tributes as a means of political leverage rather than evidence of commercial items within the framework of a burgeoning international trade" (Di Cosmo 2002, 248–249) the beginning of official trade with Central Asia, "was described by Ssu-ma Ch'ien as the opening of a land of opportunities" (Di Cosmo 2002, 284–285). É. de la Vaissière believes that silk left the diplomatic world and that a more localized, but "a real commercial circuit was established at the margins of the official diplomatic circuit, and was maintained at its expense" by the end of the second century BCE (de la Vaissière 2005, 31). Commerce developed in the shadow zone of diplomatic exchange (cf. Di Cosmo 2002, 248–249).

About the dealings of the Xiongnu in the Western Regions we learn that "when a Hsiung-nu envoy carrying tokens of credence from the *Shan-yü* reaches ones of the states, the states en route provide a relay service of escorts and food, and do not detain or harm the envoy" (*Hanshu* 96A, 19A, 38B, Hulsewé 1979, 137). But of course nothing is mentioned about the steppe people's involvement in any kind of exchanges with the West. Due to its geographical location between East and West the Ferghana Valley played an important role for exchange (Gorbunova 1986; Kidd 2007). In the Chinese chronicles the state of Dayuan, which probably comprised the Ferghana Valley (Hulsewé 1979, 131–136 with fn. 325) is mentioned because of its fine, blood-sweating horses that were believed to be related to the heavenly horses. Because of the great desire to obtain these horses, Han was – out of all states in the Western Regions – especially interested in Dayuan which is also the only area beyond the Western Regions where Han interevened with military forces in 101 BCE (Hulsewé 1979, 132–133 fn. 332).

For the western part of the steppes, in the Black Sea area, texts report of a flourishing exchange between nomads (Asian and European) and the Greek cities (Olbrycht 2001, 92–96; 2013).

[49] *Shiji* 123 (Sima Qian/Watson 1971, Vol. 2, 243); *Hanshu* 96A, 30 B, Hulsewé 1979, 117).

Strabo mentions "[…] the Upper Aorsi even a larger body, for they were masters of a greater extent of territory, and nearly the largest part of the coast of the Caspian Sea was under their power. They were thus enabled to transport on camels the merchandise of India and Babylonia, receiving it from Armenians and Medes. They wore gold also in their dress in consequence of their wealth"[50]. Olbrycht views this position as an indication of close commercial contacts between the Parthian Empire and the Sarmatian peoples which he sees also reflected in the distribution of Parthian coins in Transcaucasia and in Media Atropatene, present-day Iranian Azerbaijan (Olbrycht 1998, 28; 2001, 98–102).

Material evidence of contacts – from two interaction spheres to trans-Eurasian exchanges

Archaeology reveals two larger interaction spheres in Eurasia that become visible approximately by the late or end of the second and first century BCE (Fig. 5). In the western steppes, from Iran to the Wolga-Don area this is expressed by the types of framed belt plaques that are commonly shared in this wider region (Brosseder 2011, 384–392). While the archaeological research in Iran for that time period is scarce and thus does not allow for a proper evaluation of this region's participation on basis of the archaeological record, it is important to note that such belt plaques in Central Asia occur in Bactria and Sogdiana, but – as far as I can see – not in the Ferghana Valley.

In the eastern steppes rectangular openwork belt plaques with various motifs and different concentrations in their distribution are common between Ordos, Minusinsk Basin, and Transbaikalia[51]. Even though some types have a clearly restricted territory of distribution it is the same group of belt plaques that was shared in this wider region, with motifs displaying regional variability. This wider network is also reflected in the distribution of foreign goods, such as Chinese mirrors. In contexts of the Xiongnu period two groups of mirrors are found: those belonging to the earlier Warring States and those that belong to the later Han period.

A Warring States mirror found in a Xiongnu period context comes from pit 57 in Ivolga with a background decoration of spirals and rhombic elements, a square in the middle with birds sitting on the corner with drop-shaped elements in between (Figs. 6.1; 7, black dot; list 3). Among Karlgren's compilation there is no direct analogy, therefore A. Davydova compared the single elements: while the background motif and the birds can be compared best to the Karlgren mirror D35 (Davydova 1995, 36; Karlgren 1941, Pl. 34), the drop-shaped forms can be best compared to the ones depicted on mirrors D39 (Karlgren 1941, Pl. 35; Davydova 1995, 36). Thus, the Ivolga mirror can be best compared to the ones of the third section of category D, which Karlgren places into the third century BCE (Karlgren 1941, 78 p.). According to a radiocarbon date in the settlement of Ivolga, however, this mirror was deposited much later, between 5–12 CE[52].

The last mirror type of the Warring States period found in Siberia is a type with continuous arcs against a whorl pattern (Fig. 7, blue dot; list 4). Three specimen are known, one from Ialoman-II in the Altai, one from the Minusinsk Basin and one from the settlement of Ivolga, Transbaikalia. The latter shows a spiral-and-triangle background pattern while the first one seems to

[50] Strabo, Geographica 11.5.8 after http://data.perseus.org/citations/urn:cts:greekLit:tlg0099.tlg001.perseus-eng2:11.5.8.

[51] For details on the eastern group see Brosseder 2011, 364–384. Also P-shaped plaques can be added here which only add to the picture, cf. Brosseder 2011, 380 pp. Figs. 30; 31; 33.

[52] Sample of animal bone, KIA-39070, 1970±20 BP, calibrated in the 2 Sigma range between 38 BCE to 76 CE.

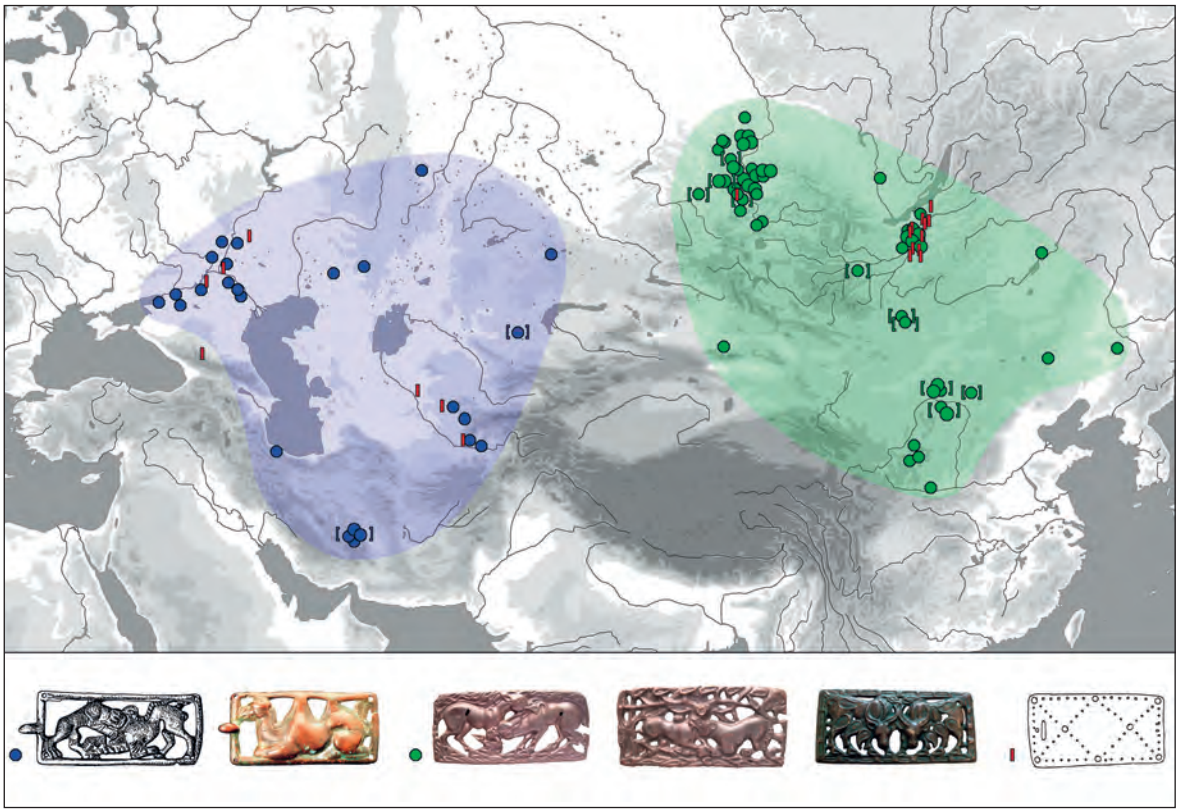

Fig. 5. Two interaction spheres in the late second century BCE and (early?) first century BCE illustrated with the distribution of rectangular openwork belt plaques (green dots; after Brosseder 2011, 364 pp. Figs. 13; 18; 19; 28) and framed plaques (blue dots; after Brosseder 2011, 384 pp. Figs. 35; 41). Both spheres are connected by belt plaques (red bar) with geometric ornament (after Brosseder 2011, 359 Fig. 6).

show no triangles. Such mirrors prevailed during the late Warring States period but lasted into the Western Han Period (Chou 2000, 30). Kurgan 52 of Ialoman-II is dated according to radiocarbon dating between 150 BCE and 1 CE[53], while building 49 of Ivolga dates between 51 BCE and 16 CE.

The earliest Han period mirrors are known from the Altai area, Transbaikalia, and from Mongolia. Several mirrors with a square band, four nipples and a grass leaf motif (Fig. 7, green triangels; list 5) belong to the category K mirrors of Karlgren's compilation. The specimen from the Altai and the one from Markovo in the Baraba steppe resemble most closely type K8 of Karlgren, which he believes belongs to the second century BCE (Karlgren 1941, 26; 112 Pl. 76). Examples of this type are found in the centers of the Han Empire, but also in the south as far as Zhejiang (Chou 2000, 33). A small fragment of a similar mirror was found in building 41 of Ivolga together with bone arrowheads along with Han triangular arrowheads. Judging from the design of the petals and adjacent "brush"-like petals this fragment, as well as some from Xichagou (Sun 1995,

[53] Two samples are reported from kurgan 52: COAH-5502, Sample of wood from the burial of kurgan 52, 2045±35, cal. BCE 167–50 CE, 2 Sigma; COAH-5048 bone sample of horse accompanying the dead, 2060±40, cal. BCE 196–48 CE, 2 Sigma (Tishkin 2007b, 266–267); while those two samples lie close together the third sample from this kurgan, sent to the St. Petersburg laboratory yields a broader range, Le-7434±80, sample material not specified, cal. BCE 381–64 CE, 2 Sigma (Tishkin 2007b, 271).

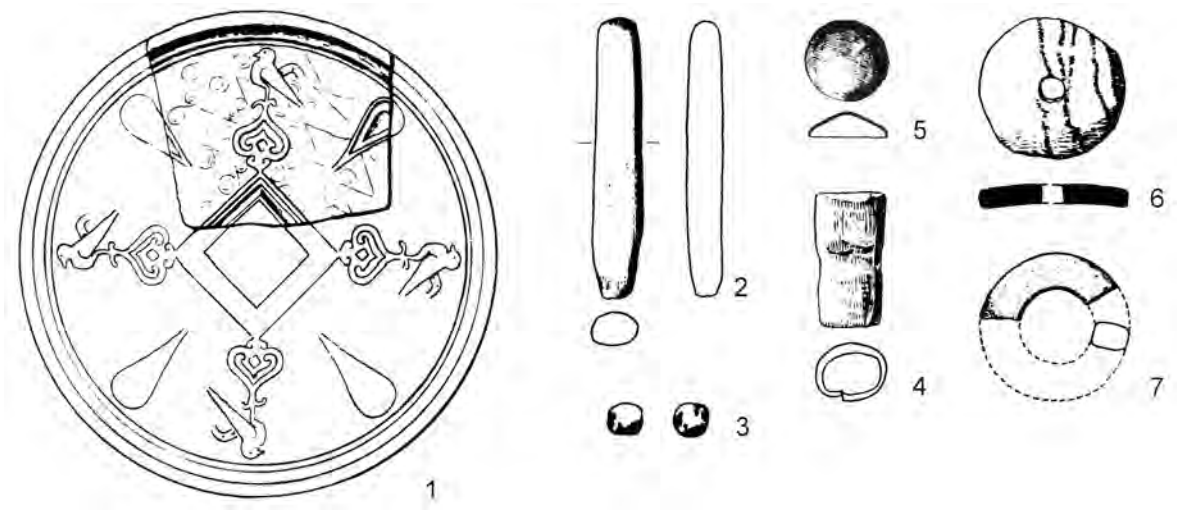

Fig. 6. Ivolga settlement, Rep. Buriatiia, pit 57, with Warring States mirror (after Davydova 1995, Pl. 130.2–8).

Pl. 2.1), seems most similar to mirror K11 (Karlgren 1941, Pl. 77) which Karlgren believed were most likely used from the 1st century BCE onwards (Karlgren 1941, 26; 112-113).

Probably to the second century BCE belong two mirror fragments which fit in category J of Karlgren's compilation (Fig. 7, red dot; list 6). Several complete mirrors are known from Xichagou, published without a context. One fragment is a chance find that was found in the Yeniseysk Governorate (Minusinsk Basin) and is best comparable to mirrors of Karlgren's type J15 with background volutes and curved lines (Lubo-Lesnichenko 1975, 38 cat. 6 Fig. 4; Karlgren 1941, 110 Pl. 73). The other fragment, found in grave 7 of Salkhityn am, a grave with a typical Xiongnu period inventory (Ölziibaiar et al. 2011), displays a design of S-formed spirals with a background of converging groups of parallel lines and can best be compared to Karlgren's type J20 (Karlgren 1941, Pl. 73). Most likely, the complete but heavily corroded mirror from grave 160 of Tamiryn Ulaan Khoshuu also belongs to this type. Karlgren assigns mirrors of the J category to the second century BCE (Karlgren 1941, 111). Its decoration of arcs inside the rim according to Nakano indicates "a style immediately preceding the thick mirrors of Western Han […]" (Nakano et al. 1994, 102).

The Chinese mirrors discussed above occur mainly in the Altai, in the Minusinsk Basin or Ivolga, and in Central Mongolia. In comparison to the Warring States mirrors deposited earlier (Fig. 4), the somewhat later mirrors are not only found in the Altai and in the Minusinsk Basin but also in Central Mongolia and in Transbaikalia, in Ivolga, and thus encompass a wider territory. They are distributed in those areas of the eastern steppes where the openwork belt plaques also occur. This may reflect a shift of power in the eastern steppes, which becomes much more pronounced in the following time period.

Having sketched these two separate areas of interaction, the archaeological record also shows that the eastern and western interaction spheres are connected. There is one specific type of belt plaque common in Inner Asia, Central Asia, and in the western steppes, which occurs in all areas roughly in the same time period; those are belt plaques with geometric ornament (Brosseder 2011, 357–364). They are known in Transbaikalia, northern Mongolia as well as in Bactria, Sogdiana and the Volga-Don area. Thus, within Central Asia, they occur in the same region as the framed belt plaques mentioned above (Fig. 5, red bars). Like those, the belt plaques

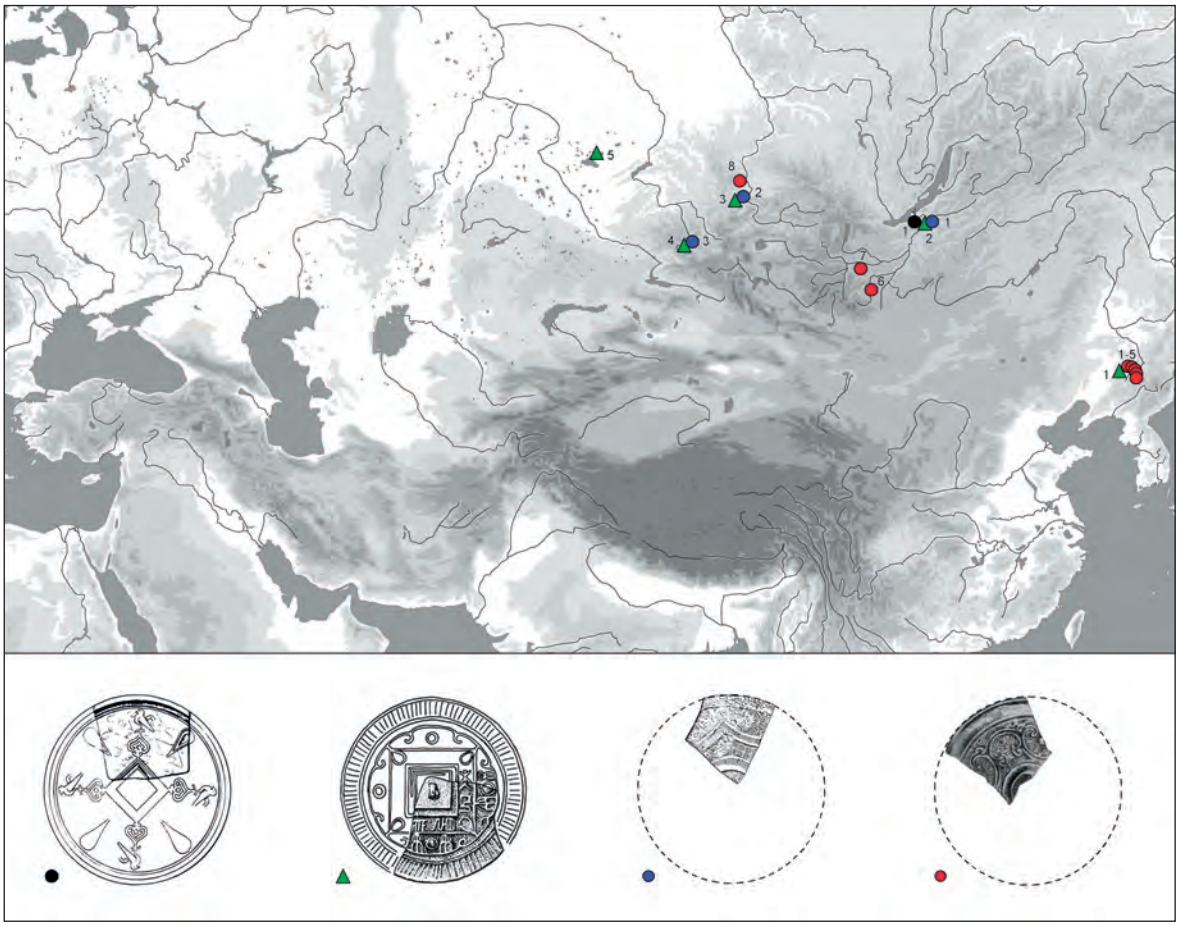

Fig. 7. Chinese mirror types in Siberia and Mongolia. Black dot: decoration with a square and two birds sitting on the corner with drop-shaped elements (list 3); blue dot: late Warring States mirror of continuous arcs against a whorl pattern (list 4); green triangle: Han mirror with square band and grass leaf motif (list 5); red dot: Han mirrors with S-spirals (list 6).

with geometric ornament, are not known to be from the Ferghana Valley. Interestingly, it is also the camel motif that seems to connect both larger areas, as one understands when taking a look at the distribution, regardless of the type of plaque on which the camels are depicted (Korolkova 2006, 206 Fig. 9). At the same time another trajectory illustrating contacts between China, Bactria and the northern Steppe area is noticeable. Cauldrons of the Barmašino/Tacht-i Sangin type reflect these connections in terms of their form, metallurgy and distribution[54].

East-West contacts become even more evident at the end of the first century BCE and in the first century CE. These contacts are reflected in three categories of objects: first, there are artifacts which are rooted within the traditions of the Inner Asian steppes, such as elements of dress, horse gear and some weaponry. Secondly, there are Chinese goods, silk, lacquerware and mirrors

[54] On these cauldrons see Boroffka/Mei 2013. Their distribution in Bactria and the occurrence of that type of cauldron in northern Kazakhstan at the Ishim River points to a similar distribution as the eastern part of the framed belt plaques indicate. For an overview over the contacts between China, Bactria and the western and northern steppes see also Boroffka/Mei 2013, 160 fn. 65, with further literature.

that are found in the West, and thirdly, we deal with western artifacts that are found in the East in the Inner Asian steppes.

We begin by exploring the materials which are characteristic of the mounted warriors, a forceful and highly mobile group of people that theoretically could make up the agents of exchange. In the second part Chinese materials that can be found throughout Eurasia are compiled and in a third, materials that originate in the West will be presented. Each category is discussed under the characteristics of its geographical occurrence, its dating in each archaeological culture as far back as possible and its context, its last usage in the burial along with its implications. Thus, we follow the strands of our analytical axes of interaction and integration. After each category the most important aspects are summarized.

Steppe materials

Four-lobed dagger sheaths

Four-lobed dagger sheaths have caught the attention of researchers dealing with the connection between the Altai world, Central Asia and the Black Sea area numerous times[55]. The earliest four-lobed dagger sheaths or miniatures of them are found in the Pazyryk culture where they were made out of wood and belong to the fourth to early third century BCE (Fig. 8, green dots; list 21, nos. 1–38). As they are restricted to the Pazyryk realm they are mainly found in the Altai. From Nilka, Xinjiang, a bone dagger sheath with depictions in the Pazyryk style was found. Its exact date, however, is unknown (Wieczorek/Lind 2007, 295). Some of them were just miniature models, not real dagger sheaths, which were also found once in the Tashtyk culture in Minusinsk Basin (List 21, nos. 40–41; Bateni stage, first and second century CE).

During the second century BCE no daggers, models or depictions are known but from the first century BCE onwards four-lobed dagger sheaths were widely distributed between Afghanistan, West-Siberia, and the northern Black sea area (Fig. 8, red dots; list 21). The splendid pieces of Tillia Tepe in Afghanistan and Dachi at the lower Don and their close similarity are widely recognized and known[56]. Both are executed in gold with inlays of colored semi-precious stones but more simply executed specimens are also known, such as the one from Novyi[57].

In Central Asia and in the Near East such daggers are represented on frescoes and statues but were never found as such[58]. This may reflect different customs of depositions, a hypothesis that can only be tested against completely excavated cemeteries of the respective period which are currently missing. The earliest depictions of four-lobed dagger sheaths in the Parthian realm are known from the kingdom of Commagene, Nemrut Dağı (Fig. 8.73) and Arsameia, from the first

[55] The earliest compilation of four-lobed dagger sheaths can be found in Kubarev 1981 and in Brentjes 1995; followed by a collocation on the occasion of an exhibition on the Sarmatians (L'or des Sarmates 1995), Pogodin 1998b; Schiltz 2002; Winkelmann 2003; 2009; Treister 2010b; Francfort 2011 and 2012; Olbrycht 2013, and Olbrycht, in this volume.

[56] E.g., Schiltz 2002, 859; Mordvintseva/Treister 2005, 73; Treister 2010b, 517.

[57] List 21, no. 47. Connected with this is also the similarity in the use of the gold-turquoise style between both sites and areas, see Mordvintseva 2003; against these stylistic similarities argues Zasetskaia 2006, esp. 121–122.

[58] Additionally to the ones mentioned depictions of such dagger sheaths are also known from petroglyphs in the Karakorum/Hindukush area: H. Hauptmann, Felsbilder und Inschriften am Karakorum Highway. Jahrbuch der Heidelberger Akademie der Wissenschaften für 2012 (Heidelberg 2013) 236. I thank Nikolaus Boroffka, Berlin, for pointing this out and for confirming that the images show four-lobed dagger sheaths.

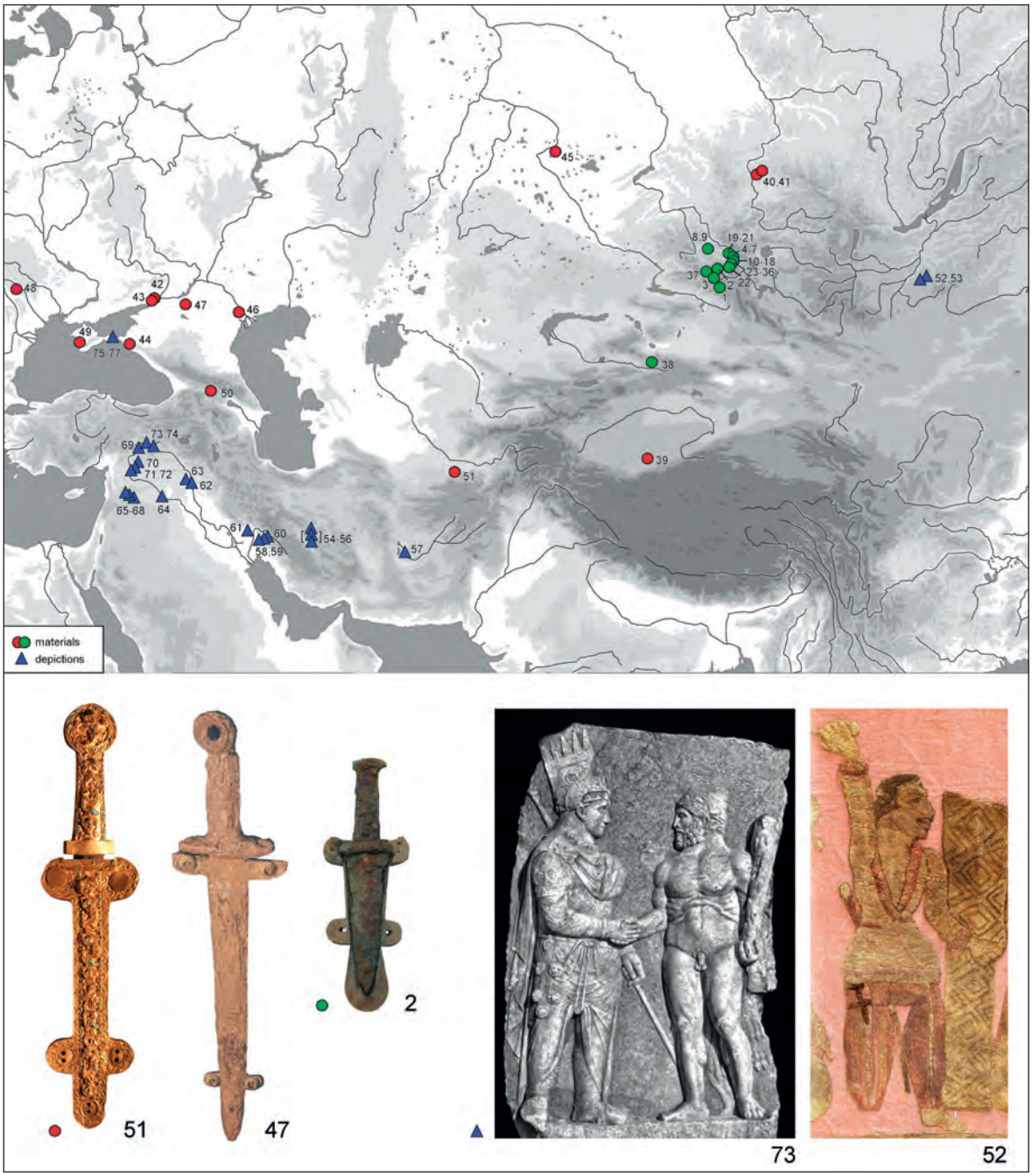

Fig. 8. Distribution of four-lobed dagger sheaths and their depictions in Eurasia. Green dot: dagger sheaths and their models of the third century BCE in context of the Pazyryk culture (list 21, nos. 1–38); red dot: four-lobed dagger sheaths between the first century BCE and second century CE (list 21, nos. 39–51); blue triangle: depictions of four-lobed dagger sheaths of the first century BCE to the first century CE (list 21, nos. 52–77).

century BCE (Winkelmann 2003, 55). They are clearly splendid pieces which are very similar to the dagger of Tillia Tepe (Fig. 8.51). Winkelmann showed that several types of daggers with four-lobed dagger sheaths were depicted during the Parthian time (Winkelmann 2003, 54–58; 2006, 143–144). On the statue of the prince of Shami a different type of dagger sheath is shown. Shami

carries two daggers with elongated lobes, one on each side (list 21, no. 60; Ellerbrock/Winkelmann 2012, 192 Fig. 36; Olbrycht 2013, 87). Similar to this dagger are depictions of daggers from Susa (list 21, no. 61) and Assur (list 21, no. 62). These are also depicted on Central Asian textiles found in Noyon Uul in Mongolia that probably belong to the first century CE (Fig. 8.52).

During the late Parthian time, in the second and third century CE such daggers were depicted on statues in Palmyra (list 21, nos. 65–69), and Dura Europos (list 21, no. 64) as well as in Masjed Soleyman (list 21, nos. 58–59). Parthian coins also display different types of daggers and four-lobed dagger sheaths, from the late second century BCE (Phraates II, 138–127 BCE) until the beginning of the first century CE[59]. In Kerch, in the Bosporan kingdom, daggers from the second century CE are depicted on grave stelae (list 21, nos. 75–77). But such dagger sheaths were also found as artifacts in graves of this later period, such as in Mtskheta in present-day Georgia[60]. In the Parthian realm such daggers were clearly a status symbol of kings and the nobility, which later were replaced by the long-sword (Winkelmann 2003, 62). In contrast to other distribution maps it is evident that daggers with four-lobed sheaths are not known from the Xiongnu realm, except for depictions of such daggers on tapestries of elite tombs from Noyon Uul that are of Central Asian origin (Fig. 8; Eregzen 2011, 259 Fig. 386; Francfort 2012, 93 Fig. 11). Such daggers are also absent in Yuezhi or Kushan archaeological contexts (Francfort 2012, 93).

In order to approach the question of what is the cause of the lack of such dagger sheaths in Inner Asia we need to take a look at the attack weaponry and the source filter in the Xiongnu realm. A general problem is the fact that almost all graves of the Xiongnu period were disturbed and re-opened which leaves us with uncertainties regarding the completeness of assemblages. With this in mind we can ascertain that bows and arrows constitute the overall dominating weapon type, swords and daggers are rarely found in graves (Brosseder/Miller 2012). Their fragmentary state of preservation moreover makes a clear differentiation between both weapon types difficult and was done for this study based on the blade width[61]. Thus five daggers[62] and four swords[63] were identified in the Xiongnu period graves of Transbaikalia and Mongolia (see

[59] See Posch 1995, 140 fn. 199; Winkelmann 2006, 143–144; Francfort 2012, 93 Fig. 9.

[60] The latest four-lobed dagger sheaths are depicted on Sasanian silver, for example on the one found in the Perm region, depicting king Shapur-III (Perses 2006, 90–91 cat. 30)

[61] A two-edged blade with a width of more than 3.6 cm was attributed to a sword and a blade measuring 2.7 to 3 cm wide to a dagger.

[62] Daggers of the Xiongnu period are known from the following sites: 1 Khökh Khad, Delgertsogt sum, Dundgov' aimag, Mongolia, gr. 1, fragment, 20cm long, 2.7 cm wide with an oval ring-shaped pommel (cf. Eregzen 2011, 242–243 cat. 368), where it is attributed to the wrong site. The authors interpret this fragment to be a sword, see Amartüvshin/Honeychurch 2010, 252–253; 288 Fig.). A second dagger of similar size belongs to this grave. 2 Chandman' Uul, Delgertsogt sum, Dundgov' aimag, Mongolia, gr. 2, fragment approx. 20 cm long, 2 cm wide with ring pommel (Amartüvshin/Honeychurch 2010, 291 Fig.). From Ivolga, Ivolginskii raion, Rep. Buriatiia, Russian Federation, three more daggers are known: 3 gr. 35 (Davydova 1996, Pl. 9.5) a dagger with long tang, 19.5 cm long; ca. 2 cm wide. 4 gr. 54 (Davydova 1996, Pl. 14.25) dagger with ring-shaped pommel, 27 cm long, ca. 3 cm wide. 5 gr. 98 (Davydova 1996, Pl. 27.7), dagger fragment, 24 cm long, ca. 2 cm wide.

[63] Swords of the Xiongnu period are known form the following sites in Mongolia and Transbaikalia: 1 Baruun Khairkhan, Altanbulag sum, gr. 1 (Tseveendorzh 2000, 41–43 with Figs. 9 and 10), excavations 1990, tanged two edged sword, 70 cm long (length of the blade without tang 58 cm), 5.2 cm wide (Eregzen 2011, cat. 366). It was found in its sheath and was hung by means of two small rectangular loops in the upper part of the sword. This is probably the same piece that was attributed to "Khaikhan, Arkhangai aimag" on the occasion of an exhibition (Desroches/Amon 2000, 150 cat. 133). 2 Ulaandeel, Zuungov' sum, Uvs aimag, Mongolia (Eregzen 2011, 242–243 cat. 367), to my knowledge unknown context, two-edged sword, 87.3 cm length, ca. 3.6 cm wide in the upper part, with sword-guard and a vertical disk-shaped pommel (Fig. 9.4); due to corrosion it is not discernible whether the blade is characterized by a midrib. 3 Il'movaia Pad', Kiakhtinskii raion, Rep. Buriatiia, Russian Federation, k. 4, terrace tomb, sword fragment, ca. 18 cm in length, ca. 3.8 cm wide, with nephrite sword-guard and remains of a red lacquered sheath with rhomb ornament, blade seems to be rhomboid in cross-section (Fig. 23.3; Tal'ko-Gryntsevich 1999b, 35–36). 4 Dyrestui, Dzhidinskii raion, Rep. Buriatiia, gr. 48 (Miniaev 1998, Pl. 30.13), ca. 30 cm preserved piece of a blade fragment with rhomboid cross-section, ca. 5 cm wide. Possibly also

Fig. 9. Daggers and swords from Xiongnu period tombs in Mongolia (after Eregzen 2011, 242–243).

Fig. 9). The differentiation between dagger and knife is also difficult to determine due to the fragmentary and/or bad state of corrosion as well as meager descriptions in older reports, which do not distinguish between a two-edged blade (dagger) and a one-edged blade (knife) with the latter being abundant and common in the graves of males as well as females. Thus, we can assume that the number of daggers is probably higher than what can be retrieved from the reports. Daggers were found in Baga Gazryn Chuluu and in Ivolga, one has an oval/ring-shaped pommel, the other one a long tang that constitutes the remains of the hilt. All of them were found in standard graves and we have no information on the kind of sheaths and how these daggers were worn[64]. Therefore, although it is evident that daggers did play a role in the burial custom of Xiongnu period societies, they seem not to have played the same role as symbols of noble status as in Central Asia.

This leads then to the question which regime of value and status symbols we can identify among the communities of Inner Asia[65]. For this we take a look at the terrace tombs which were built with a tremendous effort of human labor and are lavishly equipped with foreign goods from South and West. In these graves we find ostentatious horse gear, plaques which depict different motifs of steppe animals as well as fantastical beasts or a combination of both that are restricted to the highest echelon (Brosseder 2009; Miller/Brosseder 2013). These terrace tombs are a rather late phenomenon of Xiongnu period graves of Mongolia and Transbaikalia – built only from the end of the first century BCE onwards and are heavily destroyed. But because of the presence of highly valuable goods such as the horse plaques, I think it is significant that blade weaponry is absent in this group[66].

In summary and based on the current knowledge, we can conclude that daggers played a central role for displaying royal status and rank in Central Asia and in the western parts of Eurasia while it seems that the communities in the eastern steppes do not participate in this shared value system. And this status symbol is roughly shared in the same area as the western interaction sphere shown in Figure 5, indicated by the distribution of the framed belt plaques.

Composite bow and arrows

The first composite bows with reinforced knocks were a technological invention of the Xiongnu that enabled them to gain military superiority not only over the neighboring steppe people but also, at least temporarily, over Han China. This military technology soon spread across Eurasia

the sword fragments from Takhiltyn khotgor, Mankhan sum, Khovd aimag, Mongolia, gr. 1 (Navaan 1999a, Fig. 18) can be attributed to this group, however it is hard to tell on the basis of the publication as it seems to be one-edged.

64 Taking into account that numerous of the daggers with four-lobed sheaths bear a ring-pommel a brief look at the occurrence of daggers with ring-pommels is necessary. They are known in the Black Sea region between the third century BCE to the second century CE (Khazanov 1971, 9–12; Treister 2010b, 498–500). The earliest depictions belong to the early Parthian realm of the first century BCE (Winkelmann 2003, 77) which are seen in connection with ring-pommel daggers and knifes of the Minusinsk Basin in Siberia dating as early as the Early Iron Age (Khazanov 1971; Winkelmann 2003, 77). Many of those early "ring-pommels" are more shaped like ovals, which is also the case for the knives in Xiongnu period graves of Transbaikalia and Mongolia where true ring-pommels are rare. In Central Asia ring-pommel daggers also seldom occur (Khazanov 1971, 9; Obel'chenko 1992, 150).

65 A comprehensive evaluation of Xiongnu period depiction in metalwork and rock art would be necessary and cannot be presented here. Depictions of sword carriers are rare, see for example Tėngėriĭn ild 2011, 390 cat. 382.

66 However, a thorough evaluation is yet missing. The same is the case if we look at Pazyryk tombs, where we are also lacking a comprehensive analysis of status symbols in male graves and the role of weaponry in them.

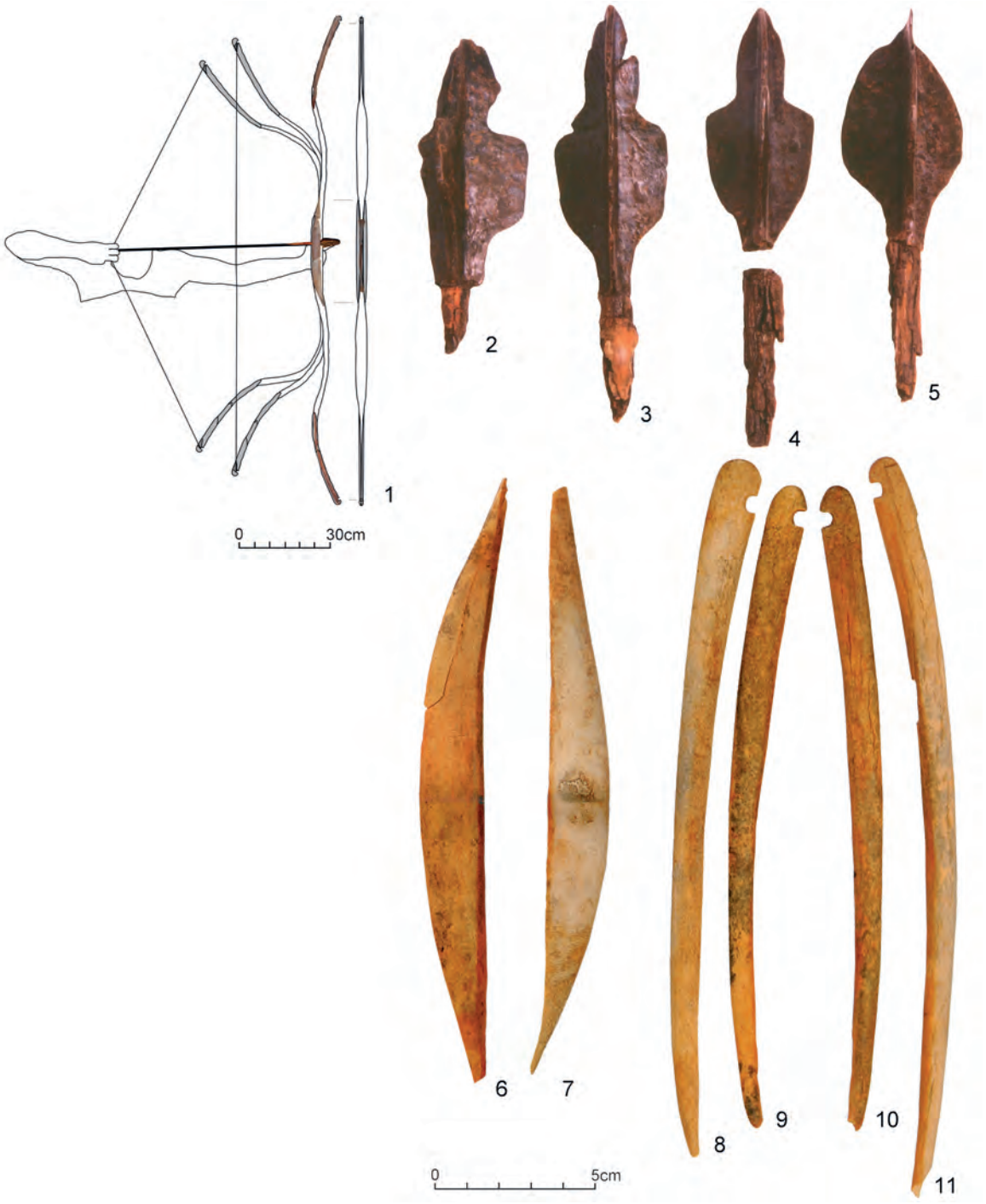

Fig. 10. Xiongnu bow strengtheners and arrowheads (after Eregzen 2011, 234–235; 239; Reisinger 2010, 58 Fig. 36).

and is evidenced in graves of the middle Sarmatian period of the first two centuries CE (Khazanov 1971)[67].

[67] On the depiction of the complex bow and the tube quivers on Bosporan stele reflecting the adoption of this new weaponry, see Treister 2010b with earlier literature.

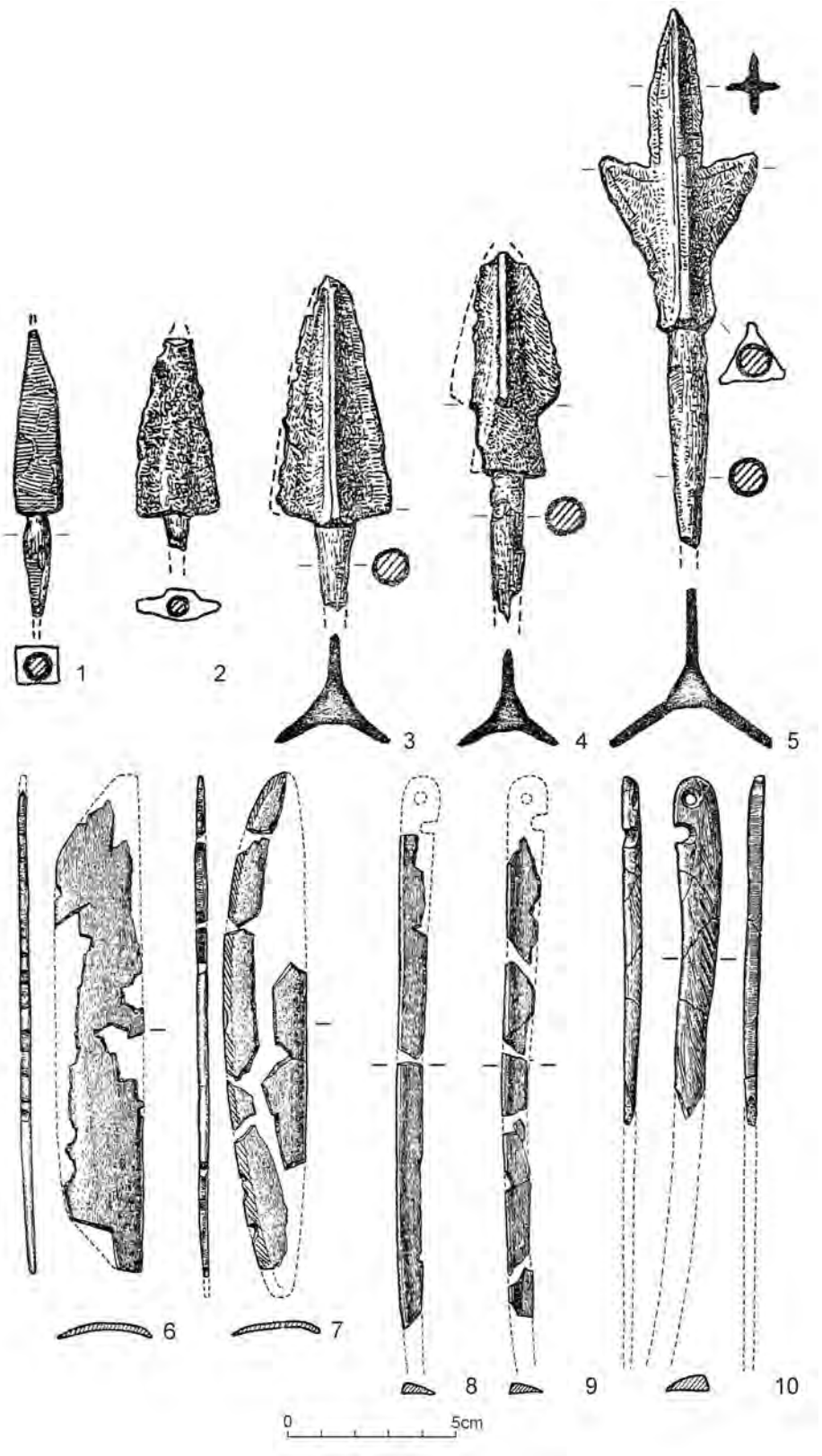

Fig. 11. Porogi, Ukraine. Bow strengtheners and arrowheads (after Simonenko/Lobai 1991).

However, this spread of technology did not mean the actual transfer of Xiongnu weapons into more western regions of the Eurasian steppes[68]. This can clearly be illustrated when taking a detailed look at Xiongnu bows (see Brosseder/Miller 2012, 121 Fig. 8). What mostly remains of the composite bow are the characteristic bone strengtheners that reinforce the wooden core of the Xiongnu bow. While the reinforcement of the middle part of the bow is not always necessary, the pair of the end pieces for each of the nocks is obligatory. These end pieces of the Xiongnu bows have a very specific curving (Fig. 10. 8–11). They were glued to the wooden bow which is often why hatched carving is found on their back side reinforcing the glue. Extremely rare are incidences when these bone strengtheners have a hole indicating its fixation to the wood by means of a rivet or lace. In Inner Asia during the course of time the bows, but also the strengtheners changed their form. In the Turkic period the strengtheners became shorter and had a different curve (e.g., Kubarev 2005, 82 Fig. 24; Bemmann 2012, 248 cat. I.9). Outside of Inner Asia, in Central Asia and in the western steppes most of the bone strengtheners are more angular, only few show a similar curving as the ones from Xiongnu period contexts in Inner Asia[69]. The same is true for those bone plates that were found even further to the West in Roman contexts[70]. The wide spread circulation of such a weaponry indicates the adoption of a tactical weapon. For Khorezm the local production seems evident.

There is, however, one set of bow strengtheners and arrows that look like an exact specimen of a weapon set from Inner Asia. It was found in Porogi in the northern Black Sea area in a richly furnished grave of the late first or first half of the second century CE (Simonenko/Lobai 1991; cf. Brosseder 2011, 400–401). Together with the end bone plates with the characteristic curving of the end plates middle grip plates were also found in that grave (Fig. 11). In addition iron arrowheads with tapered ends, which are so typical for Xiongnu period graves in Transbaikalia and Mongolia came with this bow. This all indicates that a complete set of bow and arrows from the Inner Asian steppes came into the possession of the man of Porogi. The short overview over the bone strengtheners from Central Asia and the western Eurasian Steppes show that the new technology of the composite bow reached the Black Sea area only in the late first century CE[71], at a time period when it had already long been in use in Inner Asia.

[68] In Russian literature this kind of bow is called "Hunnic bow", "Гуннский лук", in contrast to the bows of the Scythian type associated with a goryt as quiver (Khazanov 1971, 30–35).

[69] See Khazanov 1971, Pl. 17. In the Dzhety-Asar culture, in cemetery Altyn Asar 4, numerous bone plates were found. However, most of the end pieces are more angular, and only one piece – in a set of several others – can be closely related to the typical pieces from Mongolia and Transbaikalia (Levina 1996, 243 Fig. 125.8). In Khorezm comparable end pieces but produced locally are known from the Kaparas fortification (Itina 1991, 188 Fig. 69.1; 187 with fn. 19). A complete compound bow, locally manufactured but very similar in its components except for the middle pieces has been found during the excavations of Toprak Kale (Rapoport/Nerazik 1984, 216–220 Figs. 88–89). The bone plates from the late Sarmatian burial in Kalinovka in the lower Volga region are similar (Shilov 1959, 495 Fig. 61). The bow of Yrzi looks similar but is not identical (Brown 1937, esp. Pl. 3a). In Oman, in ed-Dur, gr. G3831, area N, bone strengtheners were found (De Waele 2005, 157–158 Figs. 5–6) that resemble very closely the curving of the strengtheners from Mongolia and Transbaikalia and Central Asia, like in Khorezm, a place where trilobite arrowheads were also found as well as glass beads (De Waele 2007) which taken together illustrate that these regions participated in the same networks.

[70] Bone strengtheners in Roman contexts were compiled by Coulston 1985 and Zanier 1988; see also Fischer 2012, 201. Without a complete account most similar are the ones from Bar Hill, England (Stade 1933, 112 Fig. 2; Bishop/Coulston 2006, 136 Fig. 81.1); Carnuntum, Austria (Werner 1932, 35 Fig. 2); Oberaden (Stade 1933, 112 Fig. 3); and Straubing (Fischer 2012, 201 Fig. 294), Germany.

[71] Simonenko (2008b, 249) mentions two more finds of bone strengtheners from Sarmatian burials from the first century CE.

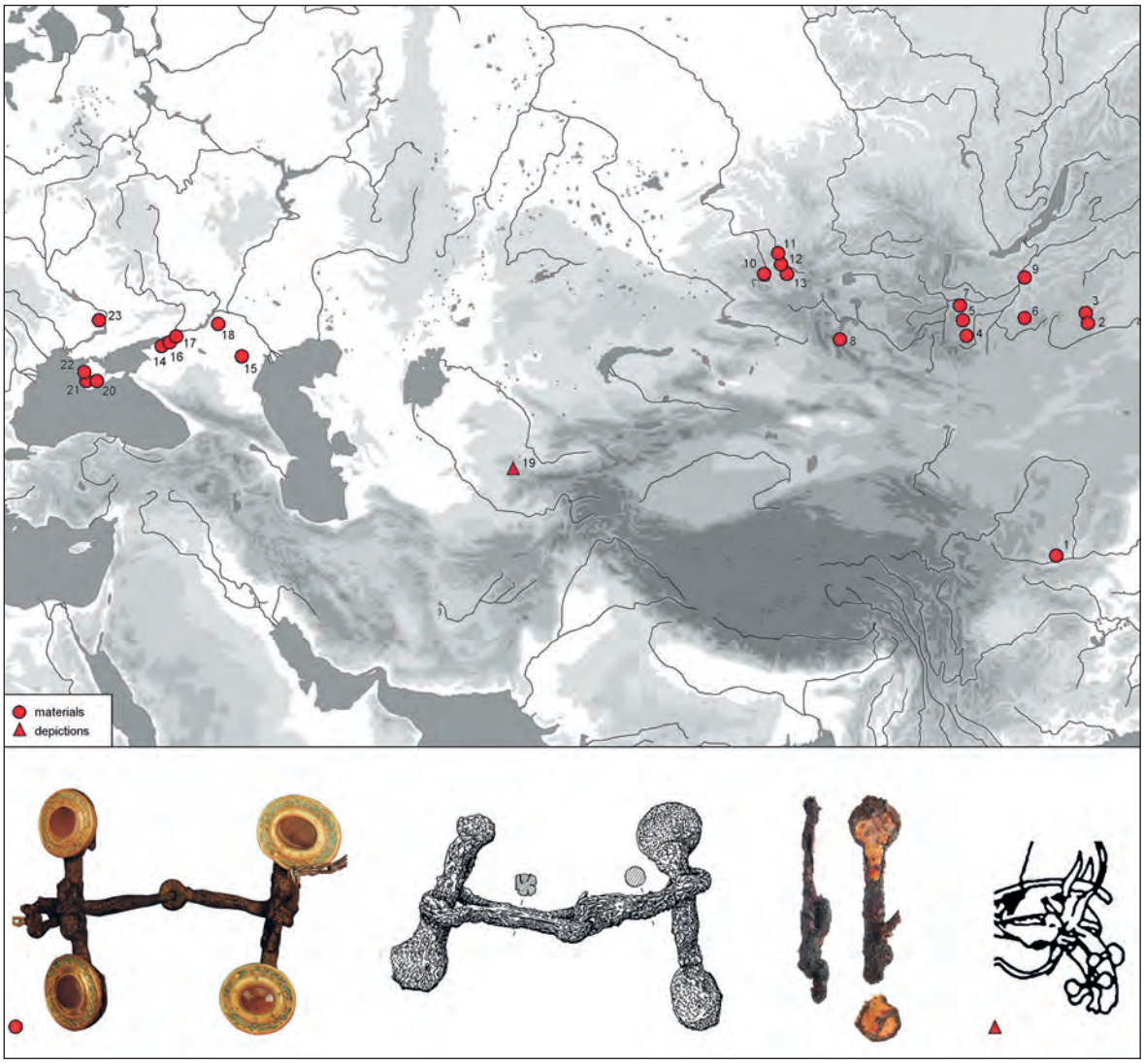

Fig. 12. Distribution of cheek-pieces with disk-shaped ends (numbers refer to list 20).

Horse gear

Mongolia/Transbaikalia, the Altai and the Black Sea area yield similar cheek-pieces of horse-gear (Fig. 12; list 20). M. Ochir-Goriaeva presented a first collocation on the occasion of the publication of the richly equipped warrior grave of Iashkul' that belongs to the later first century CE[72]. She identified different variants of the cheek-pieces and rightfully saw that the earliest findings of cheek-pieces with disk-shaped ends are found in the Pazyryk culture of the Altai of the fourth and beginning third century BCE. But they were also found later in the Altai, at the end of the first century BCE or the first century CE as kurgan 51 of Ialoman-II

[72] Otchir-Goriaeva 2002, 376–379. I find her attribution of the cheek-pieces with ring-shaped ends from Oktiabr'skii-5 and Ust'-Labinskaia (Otchir-Goriaeva 2002, 377 Fig. 13. 5–7) to this group not convincing as the ends are shaped as rings instead of disks and thus they are not included in list 20.

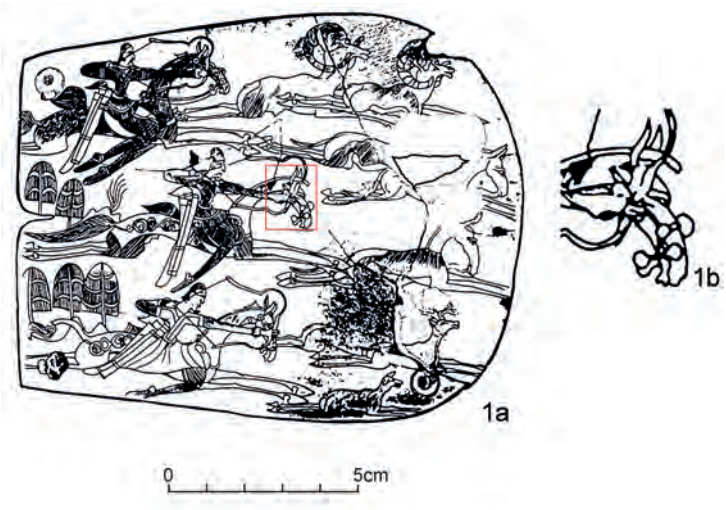

Fig. 13. Orlat, Uzbekistan. Depiction on the belt plaque (after Ilyasov/Rusanov 1997/98, Pl. 4).

shows (Tishkin 2011, 557 Fig. 16). This find is contemporaneous with cheek-pieces from Xiongnu graves in Mongolia/Transbaikalia, where they were predominantly found in terrace tombs and thus date at the earliest to the end of the first century BCE but mostly to the first century CE[73]. Here one can distinguish between more delicate ones with small circular ends[74] opposed to ones with bigger and more massive disk-shaped ends (see list 20, nos. 3–5; 9). In Xiongnu period graves a wide variety of cheek-pieces is ascertained but the ones with disk-shaped ends are rare which may be the reason why they generally have been overlooked[75]. I also attribute an iron piece with silver foil and the depiction of a rolled-up dragon from kurgan 20 of Noyon Uul to this group, which is not devious when taking a look at the western group of cheek-pieces between the Black Sea and the Caspian Sea. In Zhutovo, for example, an iron psalia with disk-ends covered with gold foil was found. On it a rolled-up beast of prey is depicted (Tesori 2005, 170 Fig. 150). The kurgan is contemporaneous to the burials of the Xiongnu period as it is dated to the first half of the first century CE (Treister 2005, 234). Just insignificantly younger, to the second half of the first century CE, belong the other graves with cheek-pieces with disk-shaped ends from the Black Sea area[76]. Even though they share disk-shaped ends as a similar trait and they all display the same kind of side holes which point to similar bridling techniques, the way of manufacturing and execution, for example, with large semi-precious stone inlays in the case of Dachi, point to the sharing of a similar fashion or bridling technique but are of more localized manufacturing.

[73] See list 20, nos. 2–3; 6; 8–9. For the dating of terrace tombs see (Brosseder 2009). The iron disks with loop of grave 46 in Il'movaia Pad' (Konovalov 1976, Pl. 15.1,2) or the ones from Dyrestui (Konovalov 1976, Pl. 15.5–9) are possibly also fragments of such disk-shaped ends which however cannot be decided on the published literature. In the Minusinsk Basin, in the southern burial complex of Novye Mochagi, grave 1, an iron object with one disk-shaped end was found, which might also represent such a cheek-piece (Kuz'min 2011, Pl. 73.1).

[74] List 20, no. 2. Possibly the iron object from k. 50 (Konovalov 1976, Pl. 15.11) and from kurgan 54 (Konovalov 2008, Pl. 33.3), or the iron piece from grave 5 in Baruun Khairkhan (Xiongnu Tombs 2008, 195 Fig.) have to be added here to this delicate type but cannot be decided for sure on the basis of the publication.

[75] For a first compilation of cheek-pieces from Xiongnu period contexts see André et al. 2011, esp. 114–115 chart 2, who does not list this kind of psaliae.

[76] Dachi is dated to the last quarter of the 1st century CE (Treister 2004, 163), Kobiakovo also belongs to the late first century, possibly even the beginning of the second century CE (Treister 2004, 172).

In Central Asia such cheek-pieces are missing, which is caused by the fact that horse gear in this part of the Eurasian steppes was generally not deposited in the graves. That such cheek-pieces were known nevertheless, is indicated by a depiction of a hunting scene on the belt plaques of Orlat in Uzbekistan, which is dated to the first to second century CE where such cheek-pieces are shown (Fig. 13; Ilyasov/Rusanov 1997/98, 130; Otchir-Goriaeva 2002, 379). Turning to the contextual inclusion we see that in the eastern steppes, such psaliae are often found in richly equipped elite terrace tombs, but they also occur in standard graves. The grave of Orlat in Central Asia belongs to the best furnished male graves of that time period in that area and in the western steppes such horse-gear belongs to the furnishing of ostentatious burials of the elite. Thus, all share similar bridling techniques and a similar fashion or status symbol associated with the horse across this vast area.

Spoon-shaped strap ends

A last category of objects that originates in the eastern steppes where it dates to the last century BCE and spreads to the western steppes and is found in graves of the first century CE are so-called spoon-shaped pendants[77]. In Inner Asia these spoon-shaped pendants are numerous and are found regularly in graves of the Xiongnu period in Mongolia and Transbaikalia, and from the Minusinsk Basin, where they are devoid of a contextual inclusion. But even from known grave contexts their function is unclear as they are found in various locations in those graves, predominantly at the thigh but also close to the head or at the feet[78]. In Mongolia these pendants, mostly made of bronze or sometimes of iron or bone, belong to the time span between the first century BCE and the first century CE and occur predominantly in standard graves. In few graves in Khorezm such spoon-shaped strap ends occur[79]. Further north at the Irtysh River such strap ends were found in Sidorovka (Matiushchenko/Tataurova 1997, 170 Fig. 53.6). In the Wolga-Don area these objects become part of the belt attire, or are possibly connected with horse gear (Otchir-Goriaeva 2002, 372) and are manufactured in a gold-turquoise style, found in the graves of the upper echelon that belong predominantly to the first century CE or later. Thus, the pattern of contextual inclusion as well as the geographical distribution of spoon-shaped pendants shows a familiar picture: more simple objects are known from Inner Asian steppes, in the Minusinsk Basin, in Central Asia, respectively, in Bactria while in the Wolga-Don region these strap ends belong to the highest echelon.

Summarizing patterns of dissemination and adoption of Inner Asian fashioning

The preceding overview over various categories of objects shows different patterns of dissemination. In the beginning, in the earlier time period between the end of the second and first cen-

[77] A first compilation of the western spoon-shaped pendants is provided by Otchir-Goriaeva 2002, 372–374 Fig. 11. More simple spoon-shaped strap ends are typically found in Xiongnu graves but are also known abundantly from the Minusinsk Basin.

[78] At the thigh: Dyrestui, gr. 99 (Miniaev 1998, Pl. 80), gr. 100 (Miniaev 1998, Pl. 81), gr. 109 (Miniaev 1998, Pl. 93), gr. 117 (Miniaev 1998, Pl. 10), gr. 118 (Miniaev 1998, Pl. 104); at the waist: gr. 101 (Miniaev 1998, Pl. 82); at the head: gr. 102 (Miniav 1998, Pl. 83); from Ivolga where most graves were disrupted the following positions were determined: at the thigh: gr. 52 (Davydova 1996, Pl. 13.1, gr. 88 (Davydova 1996, Pl. 23 I), gr. 175 (Davydova 1996, 66), gr. 189 (Davydova 1996, 69); at the lower leg: gr. 59 (Davydova 1996, 45); at the head: gr. 185 (Davydova 1996, Pl. 51.1); gr. 195 (Davydova 1996, Pl. 51); at the lower arm: gr. 155 (Davydova 1996, 61).

[79] Tuz-Gyr, bone spoon-shaped strap end (Lokhovits/Khazanov 1979, Pl. 6.8); Tumek-kichidzhik, bone spoon-shaped strap end (Lokhovits 1979, Pl. 4.12).

turies BCE, the geometric ornament belt plaque as well as the camel motif came from more or less contemporaneous graves of the vast lands stretching from eastern Eurasia to Central Asia and western Eurasia. These belt plaques were found mostly in warrior graves, the best furnished graves at that time. Since the belt plaques show a considerable internal diversity and were included in localized contexts we grasp the sharing of a status symbol among a certain group of people.

In the later time period a different pattern of dissemination can be found: horse gear, weaponry, and spoon-shaped strap ends all have a longer history within Inner Asia where most of them can be dated as early as the second century BCE. But their arrival in Central Asia is later and in western Eurasia, in the larger Black sea area, these artifacts belong to the second half of the first century CE at the earliest and thus are found in considerably younger contexts. This pattern could, at first glance, be interpreted as a time lag, but the objects, bridling gear, Xiongnu bows, and spoon-shaped pendants appear to have simply had a longer history in the East and are merely brought to the West later, in the first century CE. In this context also the use of similar tamgha signs found on Rock Art and small finds in Mongolia/Transbaikalia and in the Black Sea area needs to be mentioned (Vainberg/Novgorodova 1976; Voroniatov 2013). The similarity of a possibly shared symbol system is striking and has to be seen in the context of all other Inner Asian elements that appear in the western steppes.

In the case of the Xiongnu bow I showed that at least in one case actually an Inner Asian bow and quiver set was moved before more localized production imitated this weapon. However, the bridling gear and the spoon-shaped pendants show the sharing of the same kind of idea as the objects were at least either produced in Central Asia or in the Black Sea area. This is the same pattern of dissemination that has been observed for the earlier belt plaques found across the Eurasian steppes. Furthermore, we see that while these objects in Inner Asia belong to male or female burials and can be found in burials of differing status, in Central Asia and in the West, these artifacts were restricted to burials of the highest echelon and belong to the male sphere alone! Furthermore, the case of the four-lobed dagger sheaths show that a similar system of value is shared in the area between Central Asia to the Black Sea. This shared symbol of status speaks for a high connectivity in this area that already has its roots in the preceding period, at the end of the second century BCE. Turning now to the second group of objects, Chinese artifacts, I seek to identify patterns of distribution for this other category of goods that occur throughout Eurasia at the same time.

Flows of Han Chinese goods in Eurasia

Silk

The most famous export from ancient China was silk, lending its name to the Silk Road. Although important for studying exchange processes, the comprehensive evaluation of silk in its full dimension, not only from an archaeological but also from a historical perspective, especially when it comes down to the question of its importance in the Roman Empire, is difficult (Hildebrandt 2009b). The standard narrative of the beginning of exchanges along the Silk Roads roughly reads like this: Chinese silk that has already been found outside of China in Europe in sixth century BCE is the most important trade good that was brought to Rome, or the Roman Empire through several relay stations. Because of its commercial value the Parthians inhibited

direct contact between China and Rome, and Rome's economy suffered from the high demand of its nobility for silk. Because Chinese silk was heavily woven, Near Eastern factories unraveled these heavy textiles and re-wove thin gauze-silk textiles which the Chinese re-imported back[80]. Currently, B. Hildebrandt is working on a comprehensive re-evaluation of silk in the Mediterranean world and beyond and proves that this narrative is unsustainable (Hildebrandt 2009b; 2012a; 2012b).

The written records tell us that silk was a prestigious and luxurious good for the elites in Rome. Horaz mentions silk around 30 BCE but the first definite literary evidence for the widespread use of Chinese silk among the elites dates to the mid-first century CE (56–64 CE). A passage in which Seneca complains about the transparency of silk clothings and the moral decadence of the women who wear them indicates the amount of silk and its demand from the western side (Hildebrandt 2009b, 183; 190). Thus, after its first mention within a century silk must have gained tremendous popularity. Thorley dates the climax of the silk trade between 90 and 130 CE (Thorley 1971). In any case, the written record shows a demand by the Roman elites from the late first century BCE onwards and a widespread use of silk among the elites in the middle of the first century CE. While the Roman records shed light on the "pull-factor", demand of silks, the written records of China allow for insights into the production environment of silks, which differs depending on the quality of the fabric. Monochrome silks were not only produced in thousands of households but also in state factories. In Western Han, Eastern and Western Han special offices were established to supervise silk workshops but a substantial private silk industry for wealthy clients was also developing (Wenying 2012, 116). Valuable silk, such as polychrome textiles with inscriptions were manufactured in imperial workshops (von Falkenhausen 2000, 58–59). In China the possession of such prestigious silks was regulated and restricted to a few priviledged, to the imperial household, and they were used as prestigious gifts (von Falkenhausen 2000, 59). Different kinds of silks are mentioned as gifts to the Xiongnu chanyu and are probably also sent with the dowry of princesses (see p. 216). But also the significance of the gifting of clothes is mentioned in the texts. In later steppe polities the giving of clothes was "an essential element of nomadic statecraft"[81].

Because of the preservation conditions it is impossible to estimate archaeologically the volume of silk transfer, moreover, to assess the silk quality that would allow for a comprehensive evaluation of the social context of the production and consumption. Archaeologically, in Mongolia silk has abundantly been excavated from the site of Noyon Uul where exceptional favorable preservation conditions allowed thousands of pieces to survive and even give insights into the qualities of silks that were transferred to the north[82]. The most technically outstanding silks are the *jin* fabrics (Wenying 2012, 120), and one of the most excellent warp weaves is a polychrome fabric from Noyon Uul that was manufactured between 50 and 25 BCE[83]. Such true polychrome *jin* silks are rare from the Western Han dynasty while brightly colored embroidery has been discovered frequently and is also attested in Noyon Uul with numerous fragments (e.g., Rudenko 1969, Pl. 47).

[80] For this narrative see e.g. Thorley 1969; Thorley 1971; Good 1995; for a critical overview see Raschke 1978, 622–637.

[81] Allsen 1997, 55. Allsen (1997, 85 p.) sees the complex practices of robing, belting and investiture already well established during this early period.

[82] See Trever 1932; Umehara 1960; Rudenko 1962; 1969; Lubo-Lesnichenko 1994, 43–44; Eregzen 2011, 246–267. Thousands of more silk fragments of different size and fabric are yet unpublished but are currently being reviewed for publication. They are housed in the Oriental Collection of the State Hermitage, St. Petersburg. I thank Dr. Iuliia Elikhina for kindly showing me this rich collection.

[83] Noyon Uul, kurgan 6, State Hermitage, St. Petersburg, inv. no. MR 1330: Lubo-Lesnichenko 1994, 61 Fig. 45; Wenying 2012, 120 p Fig. 3.3.

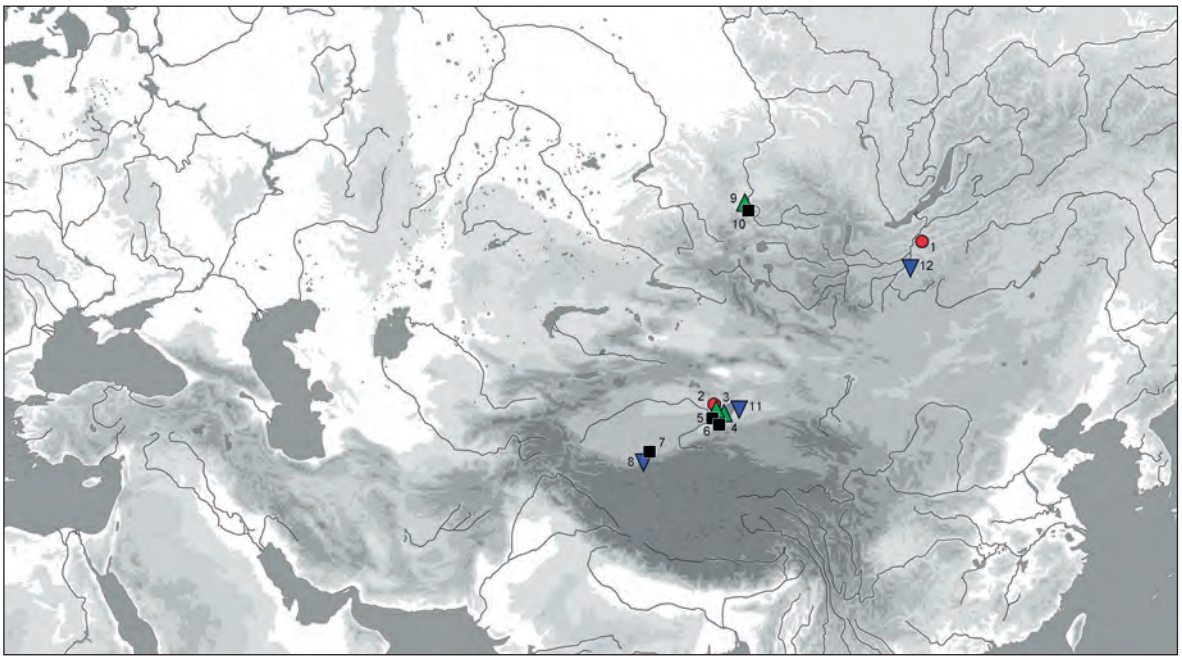

Fig. 14. Dispersal of prestigious silk with inscription that belong to the same fabric but were found in different locations. 1 Il'movaia Pad'; 2–6 Loulan; 7–8 Niya; 9–10 Oglakhty; 11 Lopnor; 12 Noyon Uul (after von Falkenhausen 2000).

Almost all different types of silk fabrics that had been produced during the Han dynasty have been also found in Noyon Uul (Lubo-Lesnichenko 1994, 43). Of exceptional quality and imperial manufacture are also silk fragments with inscriptions. Silks with woven inscriptions are known from the Western Han period onwards (cf. von Falkenhausen 2000, 60). Just as is the case with imperially manufactured lacquerware, such silks are not known from the core area of Han civilization but only from outside[84]. They are attested to the north of China in Noyon Uul, Mongolia, in Il'movaia Pad' (Transbaikalia) and in Oglakhty (Minusinsk Basin)[85] as well as to the west in the oases of Loulan and Niya in Xinjiang and further to the west in Palmyra (von Falkenhausen 2000). Especially fascinating is the occurrence of fragments in various sites that belong to the same cloth (Fig. 14; von Falkenhausen 2000, 61). A piece that was unearthed in Il'movaia Pad' belongs to the same fabric as one piece from Loulan (Riboud 1972/73, 15–16; von Falkenhausen 2000, 72 cat. B7) and the fragments from Oglakhty in the Minusinsk Basin belong to a textile of which parts were unearthed in Loulan and in Niya (Riboud 1972/73, 20; von Falkenhausen 2000, 76 cat. B26). Also one of the pieces from Noyon Uul matches fragments from Lopnor and Niya (von Falkenhausen 2000, 73 cat. B11). Of course, the ways how these silks were distributed remain uncertain as it is unclear whether the Han Chinese sent this cloth in two directions or whether the distribution resulted from the contact among the elites outside of China.

[84] Cf. Lubo-Lesnichenko 1994; von Falkenhausen 2000, 60; an exception are silks from Mawangdui.

[85] Silk with inscriptions from Mongolia and Siberia: Noyon Uul: von Falkenhausen 2000, cat. B6; B10; B11a; B23; Il'movaia Pad': Sosnovskii 1946; Lubo-Lesnichenko 1994, 60 Fig. 44; Oglakhty: Lubo-Lesnichenko 1994, 44; 61 Fig. 46; von Falkenhausen 2000, cat. B8c; B26d.

In other terrace tombs from Inner Asia, but also in standard graves where the conditions for the survival of organic materials are less favorable, the occurrence must have been abundant nevertheless, as is indicated by finds of either small pieces of silk itself or traces of mineralized silks on numerous iron artifacts[86]. Silk has been used in Xiongnu period graves for all sorts of objects and its abundance in grave contexts testify that almost everything was probably wrapped or draped with silk. But the problematic preservation conditions do not only inhibit the assessment of the amount but also the appreciation of the quality of the silks. West of the heartland of China, in Xinjiang, numerous silk fragments have been unearthed, mainly of the Eastern Han dynasty or is even later (see Lubo-Lesnichenko 1994, 38–71).

In Central Asia findings of silk fragments are rare (Lubo-Lesnichenko 1994, 71–73; von Falkenhausen 2000, 59). Several fragments, not well published belong to the second to fourth centuries CE[87]. In Iran the oldest excavated piece of silk is a cord that was unearthed in a context of the first half of the first century BCE (Kawami 1992, 14–15 Fig. 2). By far the most silk fragments west of present day China are known from Palmyra date to the Eastern Han period (25–220 CE) (cf. Lubo-Lesnichenko 1994, 72–73; von Falkenhausen 2000). Although simple monochrome pieces of silk were found in Palmyra as well, the two silk fragments with inscriptions were already prestigious in China, and must have had an extremely high value in Palmyra. The one fragment from the tower grave of Kitot that is dated to 40 CE is possibly the earliest of these silk fragments west of China as in Xinjiang similar silks are generally dated to the middle Eastern Han period between 50 and 150 CE[88]. In the Black Sea region silk textiles are known from Kerch (Granger-Taylor/Wild 1981) and from Sokolova mogila, an ostentatious female burial of the late first century CE in which also lacquerware was found[89].

This overview shows that the earliest luxury silks of the Han period are found outside of China in Noyon Uul where also all different types and qualities of silks are attested. To the west, in Central Asia, one silk cord belongs to the first century BCE and silk fragments of the first century CE are known from Palmyra and the Black Sea region. More numerous are silks known in Central Asia in the second and third centuries CE.

Chinese mirrors of the Han period

Much better preserved and thus easier to evaluate are Han mirrors. Despite the fact that Chinese mirrors are such a desired collectable good, as they are relatively small, and are found in several

[86] In cases where preservation conditions are better, silken pieces are mentioned in the reports and found even in children's graves (Miller et al. 2009) and because of the abundance of silk in Xiongnu period graves of Mongolia once these conditions are favorable it is safe to assume that the mineralized traces point to silk, even though no scientific/conservatory identification of these delicate textile imprints have been conducted yet.

[87] Findings of silk in Central Asia: Kyrgysztan: in Kenkol, silk fragments were found in kurgans 3 and 5 (Lubo-Lesnichenko 1994, 71–72); in the cemetery of Torkent in the Ketmen-Tiube Valley (Lubo-Lesnichenko 1994, 72); Tajikistan: Takhti-sangin, fragments that belong to a context of the second century CE (Lubo-Lesnichenko 1994, 72); Uzbekistan: Toprak-kala, in the palace complex of the second to fourth centuries CE (Lubo-Lesnichenko 1994, 72); Khalchaian, fragments found in the palace complex of the first to second centuries CE (Lubo-Lesnichenko 1994, 72).

[88] Later are fragments from Dura-Europos which belong to the first half of the third century CE (Lubo-Lesnichenko 1994, 73 with further literature) and the silk fragments from Halabie-Zenobia of the second and third centuries CE (Toll 1937).

[89] Lubo-Lesnichenko 1994, 73–74; Kovpanenko 1986; Elkina 1986. – All prehistoric silks reported from Europe mentioned in Good 1995 and 2011 do not stand up to scrutiny (see Bender Jørgensen 2013). In case of the often cited Early Iron Age sites of Hochdorf and Hohmichele as proof of an early occurrence in the 6th century BCE (e.g., Good 1995) it has been shown that the material of this grave most probably is not silk (Banck-Burgess et al. 1999, 235).

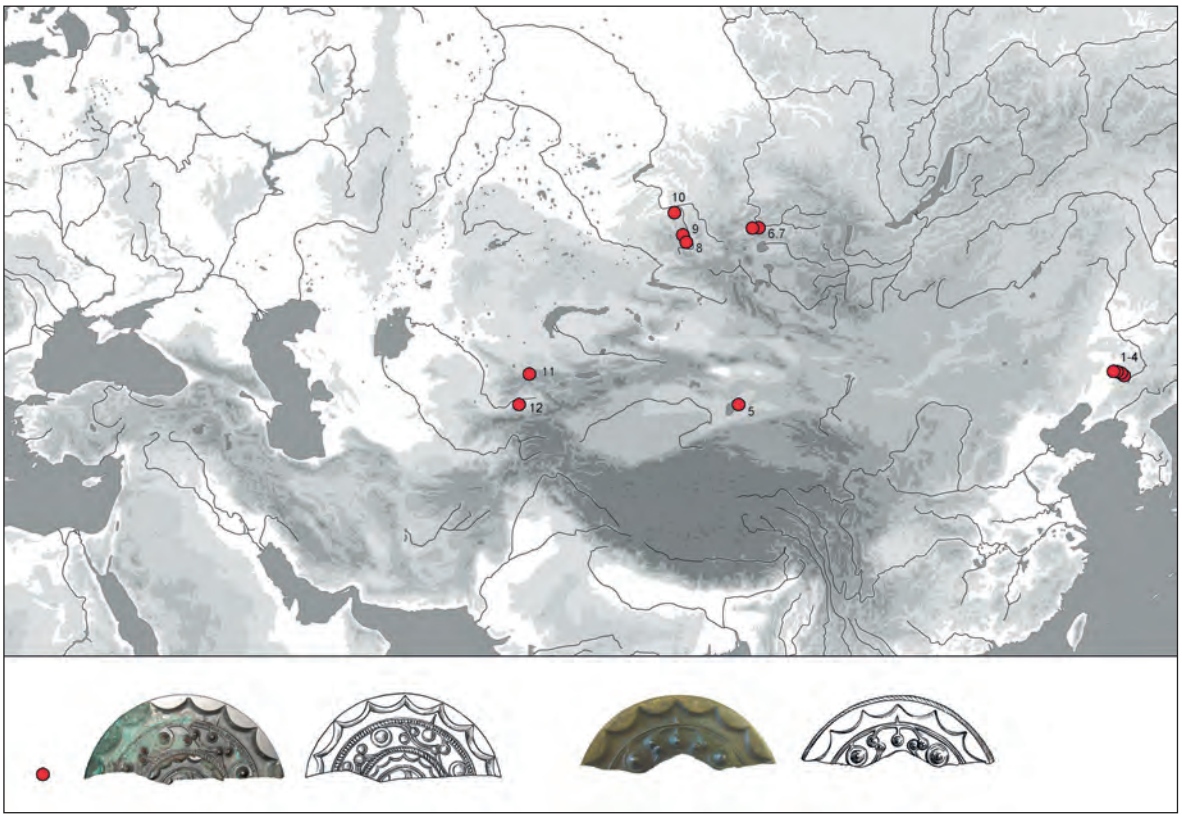

Fig. 15. Distribution of mirrors with cloud and nebula design (numbers refer to list 7).

collections that have been well published (e.g., Nakano et al. 1994; Chou 2000; von Falkenhausen 2012a), so far no fine overall typological and chronological analysis has been established for Han mirrors[90]. Without these analyses that allow for detailed insights into the production environment and time frame of the production and deposition of the mirrors in Han China proper for each mirror type, it is more difficult to evaluate their arrival in distant areas. In China mirrors were also produced in state workshops but they are not mentioned as imperial gifts in the chronicles[91].

In order to evaluate the circumstances of Han mirrors in the Eurasian steppes several difficulties have to be discussed beforehand. First of all, the distinction between original Chinese mirrors and their replicas cannot be made easily (von Falkenhausen 2012b, 11–12; Scott 2012, 199) and only a scientific metal composition analysis allows for an accurate differentiation between both groups (Scott 2012, 19). Such analyses are available for several mirrors from the Altai and Tuva (Khavrin 2011; Tishkin/Seregin 2011). The superb local copy of a Han mirror found in Terezin, Tuva, shows that the manufacturer was able to copy the silvery shine of the Chinese bronze using local means (Khavrin 2011).

[90] But we see an exception in Jaang 2012; Mackenzie 2012.

[91] Werning 2009, 204. During the Han period mirrors were first luxury goods and only after the turn of the era became a general grave good. The function of mirrors in Han China is discussed by Loewe 1979b. Brashier suggests that they symbolize longevity (Brashier 1995).

Another difficulty is that copies of the mirrors were made during later, historical time periods, possibly as archaizing recreations of earlier mirrors[92]. It is even more complicated and based on literature alone impossible to distinguish between an original Han mirror and an imitation or "forgery". Keeping this in mind, it is impossible, having at hand only the publication, to decide whether the Han mirror fragment found in a Turk period grave (list 9, no. 4) speaks for heir-looming or is a later copy. The quality of publications poses yet another problem. While numerous mirrors from Mongolia have been published in a fairly good quality (e.g., Törbat 2011), most Chinese mirrors from the western part of Eurasia are only known through low or medium quality drawings, which makes a more thorough evaluation of the piece impossible. The type of mirror, however, can mostly be identified. The problem of not being able to distinguish between a local copy and a Chinese original affects the different groups of mirrors to a different degree as will be shown in the detailed discussion of each mirror type. However, this distinction is not central to our study since both original but also the imitation does show the impact of these Chinese mirrors on local societies. The possession of an imitated mirror reflects nevertheless that a participation in wider networks was aimed at. Thus, one receives information about the spread of the original Chinese mirror type and its influence on local groups.

Mirrors with a cloud and nebula design[93] are found in many parts of China, mostly from graves of the mid and late Western Han period (Chou 2000, 34). Outside of China such mirrors are found in Tuva, the Altai and in Central Asia (Fig. 15; list 7). Two quite similar mirrors with nebula and a continuous arc design are known from graves in Ialoman-II in the Altai and Terezin in Tuva. While the first one was found in a grave context, the latter one was a chance find at the shore of a water reservoir, near by the Xiongnu period cemetery (Leus 2011, 536 Fig. 20.5). However, in grave 12 of Terezin a locally cast copy that was already cast as a fragment clearly resembles the same type but this local copy was not cast from the original Chinese fragment of Terezin. It can better be compared to the complete mirror of Ialoman-II which is a local copy as well[94], which might also be the case for the mirror from Ust'-Edigan. According to Masumoto, the single find from Biisk is a medieval copy (Masumoto 1993, 251). Summarizing the evidence for Siberia: the only imported mirror is the one from Terezin in Tuva while the ones from the Altai are all local copies. Grave 57 of Ialoman-II and grave 12 from Terezin bear a radiocarbon date with a *terminus postquem* first century BCE and indicate the earliest possible deposition of such mirrors in Siberia[95]. For the mirrors from Central Asia it is impossible to know from their publication alone whether they are of Han Chinese origin or local copies.

A large group of mirrors are comprised with concentric circles and linked arcs. They can be divided according to their inscription, which is often used to classify them into types, such as

[92] von Falkenhausen 2012a, 14 with fn. 5; 32; Lubo-Lesnichenko 1975, 33–36; Scott 2012, 220–221. Lubo-Lesnichenko (1975, 33) writes that Han mirrors were copied in later periods especially between the 9th and 15th centuries CE.

[93] The naming of these mirrors and thus the meaning of its décor is debated, cf. Chou 2000 and Nakano et al. 1994.

[94] This copy, of which the casting process left a hole in the mirror, had a silvery appearance and thus had a surface color very similar to Han Chinese originals, but was obtained through a high content of arsenic, as the x-ray fluorescence analysis showed (Tishkin/Seregin 2011, 77).

[95] Kurgan 57 from Ialoman-II bears a calibrated date, sample of wooden artifact of BCE 171–23 CE, GU-14918, 2060±35 (Tishkin 2007b, 272) and from grave 12 in Terezin in Tuva the date falls also into the 1st century BCE, Ua-38547, 2044±31, however the $\delta^{13}C$-value is around -13.8 ‰ (Leus 2011, 519 Tab. 1) and might indicate a reservoir effect in the date, unless the value is caused by a diet including C4 plants.

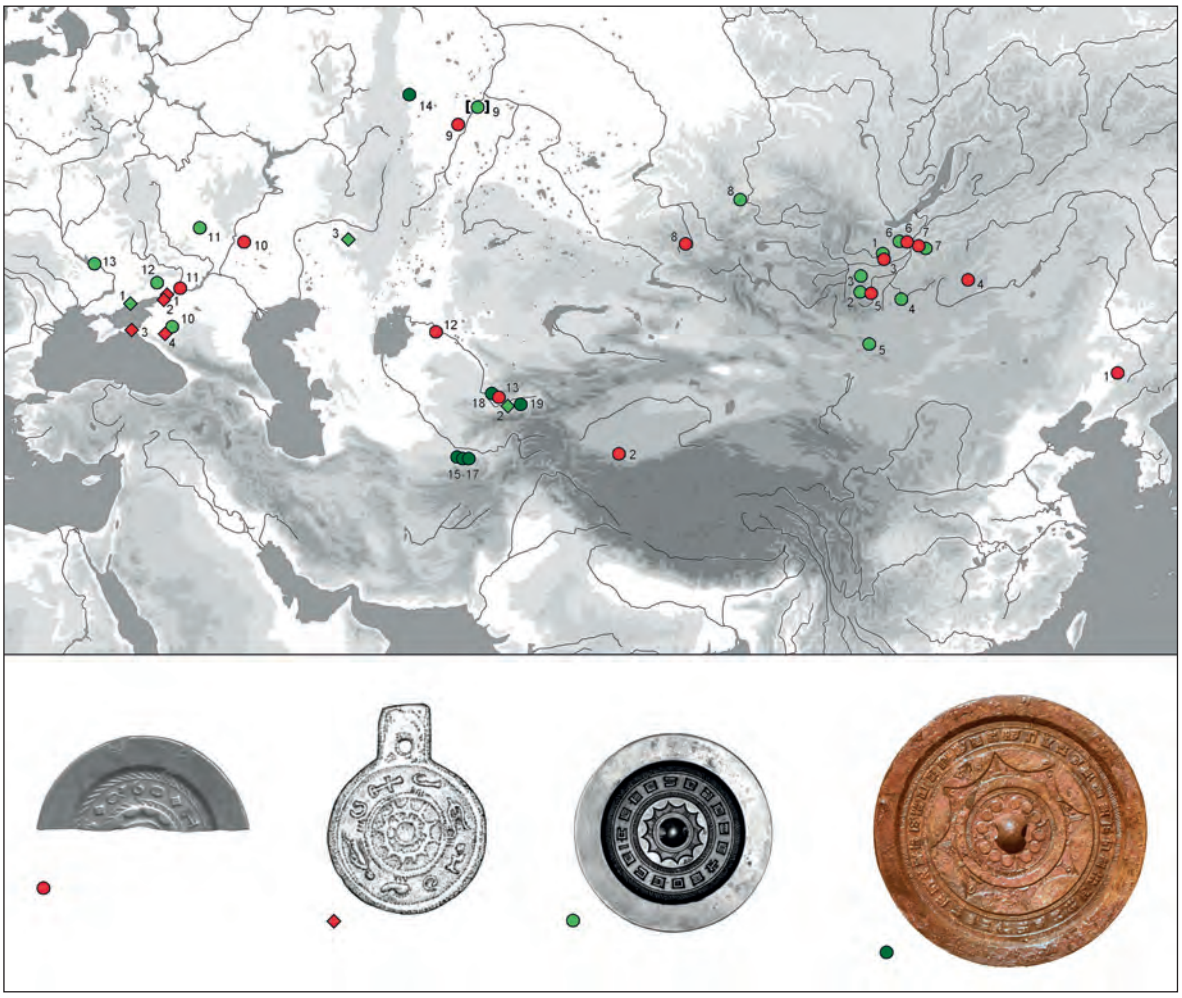

Fig. 16. Distribution of different Han mirrors in Eurasia. Red dot: riguang mirrors (list 8); red lozenge: imitation of riguang (list 16); green dot: zhaoming mirrors (list 9); green lozenge: imitations of zhaoming mirrors (list 17); dark green dot: a variant of an inscription mirror with 12 knobs in the center (list 10).

riguang, *zhaoming*, *tonghua* or *qingming*. Chou (2000, 35) criticizes this approach since most appellations for mirror types are design-based. Therefore, the group will be taken together in this study and only divided into variants according to their inscription and design[96]. Within the series of mirrors with concentric circles and linked arcs, it was suggested that we assume that *riguang* mirrors because of their simplicity, are probably the earliest to appear and *zhaoming* mirrors, after their introduction, "began to overshadow the older type" (Chou 2000, 35–36). A total of 13 *riguang* mirrors were collected (Fig. 16, red dot; list 8) from Northern China to the Lower Don region, five were found in a closed context, but in Chendek, in the Altai region, the mirror was the only find in the grave, so only four graves provide information about the context in which such mirrors were found. They were found in the graves of men and women alike, both in the

[96] Due to the small size of some of the fragments or the poor quality from the publication a proper identification and reading of the inscription is sometimes not possible. Therefore some fragments cannot be attributed to one of the variants with certainty but only to the group as a whole.

East and in the West. Radiocarbon dating suggests that these mirrors belong in Mongolia and Siberia in graves of the late second and first centuries BCE[97]. In the West, no scientific date is known which determines its deposition independently from the archaeological sources. In Vinogradnyi, in the Lower Don region, besides the *riguang* mirror a Roman bronze jar of the Idria type was found and this combination makes is most probable that the grave dates to the second half of the first century BCE[98]. Thus, we can note an earlier appearance in graves of Inner Asia.

Thirteen mirrors in Eurasia bear a *zhaoming*/*tonghua* inscription (Fig. 16, green dots; list 9). Such mirrors are found across China and are typical for the Western Han period. Outside the core region of the Han Empire these mirrors were concentrated in Mongolia, especially in Central Mongolia, but were also found in Central Asia, and the Black Sea area. No independent scientific date exists for contexts with such mirrors in Mongolia or Transbaikalia. Moreover, the accompanying grave goods, such as bone strengtheners, glass beads and pottery do not allow for a finer dating within the general classical period of the first century BCE until the first century CE[99].

In Central Asia three mirrors of this group are known from the women graves 2, 3 and 6 in Tillia Tepe and belong to the first century CE. There are two more mirrors from Central Asia, one from Munchak Tepe and one from Vrevskaia[100] that share typological features. This sets these six mirrors apart from the other *zhaoming* mirrors found in Mongolia or in the Black Sea area (Fig. 16, dark green dot; list 10). Firstly, they are relatively large with diameters around 17.5 and 18 cm in comparison to the other mirrors whose diameters range between 9 to 10 cm. Moreover, the central loop is surrounded by twelve circles that are never attested for *zhaoming* mirrors in Mongolia, Siberia or the Black Sea region. For a very similar mirror of the Carter collection Chou dates this variant "toward the last phase of the Western Han period" (Chou 2000, 37).

97 For Chepkul-9, burial 2 a radiocarbon date was generated yielding a very broad time range: SOAN-6713, 2170±80 on a wood sample, which in the 2 Sigma range dates between 396 and 40 cal. BCE (Zakh/Glushkova 2009, 60). Such a high date to the 4th and early 3rd centuries BCE, which is the result of the large standard deviation of 80 years, is impossible for this type of mirror as it was never attested in Warring State period contexts in China proper. A date to the 2nd and 1st century BCE is much more probable. This is attested for such a mirror from Mongolia, from grave 6 in Tamiryn Ulaan Khoshuu. The wooden sample from this grave yields a small standard deviation, of only 40 years and thus dates the grave more accurately between cal. BCE 195–16 CE, 2 Sigma (Beta-280398, 2070±40 BP). I would like to thank Tsagaan Turbat, Ulaanbaatar, for providing the sample. Another radiocarbon date from 1998 is known from Burkhan Tolgoi, grave 71 (Törbat et al. 2003, 136), PA1755 that is said to fall between 1 and 133 CE. It is hard to judge the quality of this date as the BP dates and the δ^{13}C-values are not published. For the difficulties with the radiocarbon dates from Burkhan Tolgoi see Törbat 2011 and Brosseder/Yeruul-Erdene 2011.

98 Despite the methodological deficiency that results from dating through Roman imports this is still the only way to at least receive a *terminus postquem* for the context in question. Bronze jars of the Idria type were produced in Italy. In the Black Sea area and the Kuban area, four jars are known (Marčenko/Limberis 2008, 285). In Elitnyi the jar was found together with an Aylesford pan, a combination which can also be observed in Ornavasso in Italy, and that in the opinion of Marchenko and Limberis it speaks for only a small time delay of the imports (Marčenko/Limberis 2008, 285). In Zubovskii, among other findings, a fibula of the Alesia group was found together with the Idria jar. The fibula from Zubovskii is characterized by a simple, undecorated band-like triangular bow that can be best compared with Variant Alesia Ic after Demetz (1999). The group of Alesia fibulae is generally dated to the second half of the first century BCE, in Augustean time in military contexts (Fischer 2012, 136). Marčenko and Limberis (2008, 310) would like to connect the appearance of Alesia fibulae in Sarmatian graves with the historically attested military campaign of Parnakes in the years 48–46 BCE.

99 Again the older date for grave 33a from Burkhan Tolgoi (Törbat et al. 2003, 136) does not help in this situation as the original BP dates are yet unpublished as well as the δ^{13}C-values. It is therefore impossible to evaluate the given date of 113–3 BCE. An exception is the grave from Nainde-sume that brought to light a fragment of a *zhaoming* mirror in a grave of the Old Turkic period (list 9, no. 4). The question arises if this piece was an heirloom over such a long period of time or if the piece was a copy of that very period. What speaks for a date of this mirror into the Xiongnu period is the fact that only a small fragment is known from this grave, which is in line with the normal treatment of mirrors in Xiongnu period burials in Mongolia and Transbaikalia.

100 The mirror from Munchak-Tepe shown by Seipel (1996, 310 Fig. 172) is the same that is listed by Litvinskii 1964 from the eastern necropolis of Farkhadstroi in the Ferghana Valley.

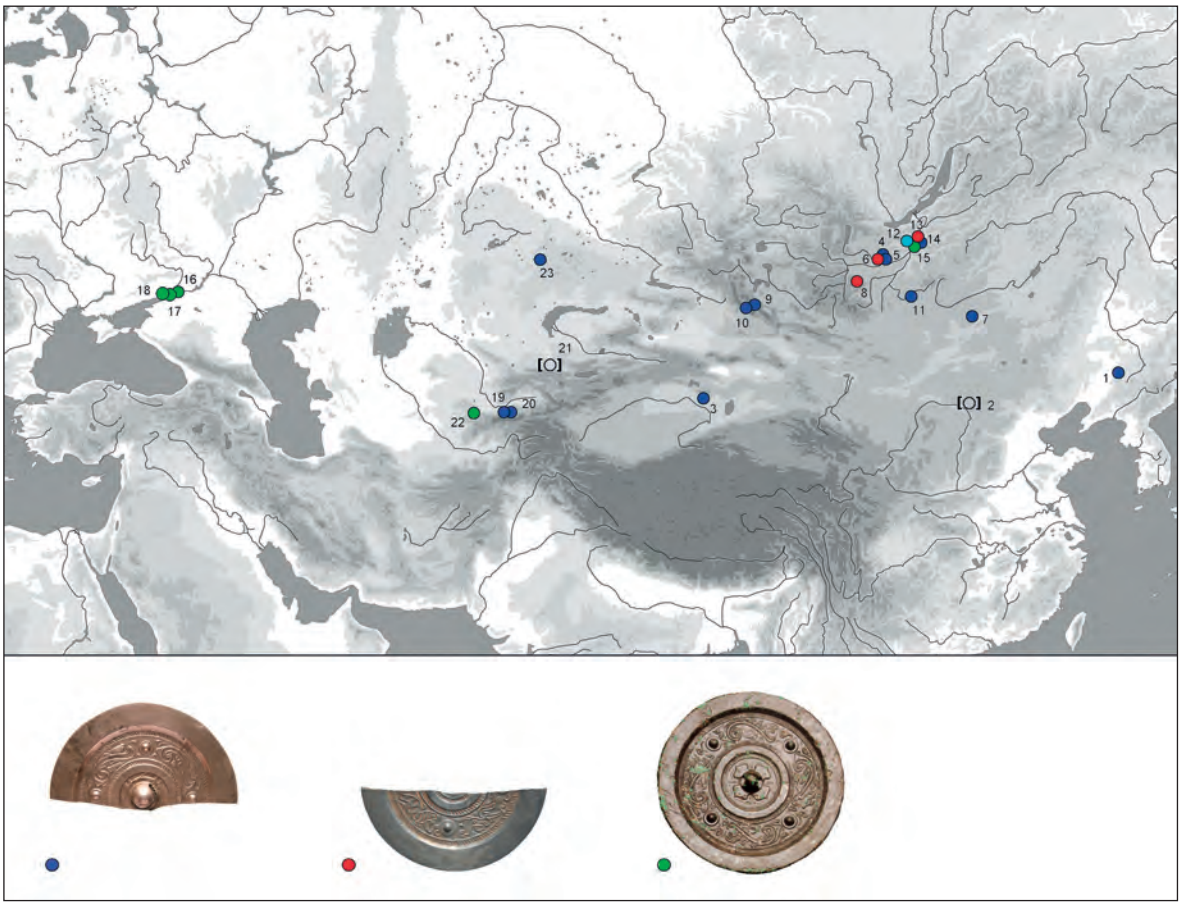

Fig. 17. Distribution of siru mirror variants in Eurasia (numbers refer to list 11). Light blue dot: mirror with four nipples and eight birds; red dot: décor with depiction of animal; blue dot: variant with scrolls as main motif; green dot: scroll as main motif with more filling ornament; open circle: individual variants.

In the Black Sea area four *zhaoming* mirrors are known, three coming from grave contexts with Roman imports. For the grave of Tretiaki and Kazanskaia imports can be dated to the first half of the first century CE and thus provide a *terminus post quem* for both graves[101]. Considerably younger, probably to the end of the first century CE or the beginning of the second century CE, belongs the complex of Chuhuno-Krepynka in Ukraine, the most western context in which a *zhaoming* mirror has been found so far[102].

101 In Tretiaki the *zhaoming* mirror was associated with a Roman casserole, type Eggers (1951) 140 or type V,1 after Petrovszky for which a production date is between 5/10 CE to the end of the Tiberian time (30/35 CE) (Petrovszky 1993, 53). In Kazanskaia/Tiflisskaia, kurgan 43 a hemispherical silver bowl with bird handles was found. Such a bowl is known also from Zhutovo, kurgan 28 that dates to the first half of the first century CE (Mordvintseva 2000; Treister 2005, 234; Marčenko/Limberis 2008, 273).

102 Found in grave 1 of the second kurgan at Chuhuno-Krepynka were a Chinese mirror and Roman bronze vessels, including one casserole of type Gödåker (Eggers type 144) and a bronze bowl of Eggers type 100 (Petrovszky 1993, type XV 1a). The beginning of production is set after ca. 25/35 CE, although most of the basins come from contexts of the late 1st century or beginning of the 2nd century CE (Petrovszky 1993, 115 pp.). Petrovszky has the time of production ending at the latest around 115/130 CE, whereby he refers to graves of the 2nd century, above all to those in the area between the northern Black Sea and the Caucasus (Petrovszky 1993, 117), which should be dated here. This information needs to be excluded, not only to avoid circuitous conclusions, but also because of the unclear local fine chronology in the northern Black Sea area. A bronze sieve can be assigned to Eggers type 160. It has a round base which resembles older forms such as Eggers (1951) type 159 and

Looking at the gender distribution it becomes evident that *zhaoming* mirrors in the East, i.e., in Mongolia and Transbaikalia, were found in male and female burials, while in the west, i.e., in Tillia Tepe and in the Black Sea area, they belong exclusively to the female world. In sum, these mirrors appear earlier in Inner Asia than in Central Asia and in the western steppes, where, at the earliest, they belong to contexts of the first century CE.

There are 23 mirrors that can be subsumed under the name *siru* (i.e., four nipples) (Fig. 17; list 11). According to their decoration several variants can be identified, of which interestingly only one appears also in the West, in the Black Sea area, while all of the others are restricted in their distribution to the eastern part of Eurasia. The first variant is a mirror with four nipples and eight birds (Chou 2000, 39 cat. 19), which has only been attested once in Enkhor, Transbaikalia (Fig. 17, light blue dot; list 11, no. 12). This type belongs to the Western Han period, probably the first century BCE, and is known in China from Jilin as the most northeastern find (Chou 2000, 39). Three *siru* mirrors depict animals in the main decoration field (Fig. 17, red dots; list 11), tigers in the case of Burkhan Tolgoi 93 and Il'movaia Pad' 123, and probably a dragon on the mirror from grave 30 of Gol Mod 2. The latter can be dated to the first century CE[103].

Numerous mirrors display scrolls as the main motif, which are often interpreted as dragon-like creatures (Fig. 17, blue dots; list 11). These mirrors are found in Han China in graves of the first century BCE (Chou 2000, 39–40). Just as is the case of the preceding type there is no independent date for the contexts in which they were found in Mongolia or Transbaikalia. From an archaeological point of view the graves probably belong to "classical phase" of the Xiongnu period, the first century BCE, possibly also later. The graves in which this variant was found are well equipped. The mirrors mostly are found in graves of women but are attested for male burials as well[104] in the eastern part of their distribution, while in the Black Sea area they are exclusively found in women's graves.

The last variant also depicts scrolls but with more additions so that the dragon-like creatures display heads and there are more filling ornaments in the décor (Fig. 17, green dots; list 11). In those cases where the diameter can be established[105] it ranges between 13 and 18 cm, in contrast to the more simply decorated mirrors described before whose diameters range between 8 and 10 cm. The mirror of Tsaram stands with its 13 cm diameter and its decoration in between both variants, and dates to the first century CE. The same date is also probable for the western complexes,

159a (Petrovszky 1993, 55 pp.), but the flat, paddle-shaped hilt is also characteristic for Eggers type 161 (Petrovszky 1993, 98). Petrovszky defines the time of production between 35/45 and 140/160 CE (Petrovszky 1993, 98–101). I do not know of any exact comparisons for the small bronze fibulae with strongly molded profile ("kräftig profiliert"), as the bow is strongly bent and the spheres are relatively close together. Larger iron fibulae with strongly molded profile can be compared with type 7b according to Cociş (2004, Pl. 5.61), for which he limits the dating to the end of the 1st century CE, especially in combination with fibulae of his type 6 (Cociş 2004, 44). It should be further noted that the combination of metal vessels, that is, the cauldron, basin, pitcher and silver beaker, in Chuhuno-Krepynka and Łeg Piekarski II, dated to the third quarter of the 1st century CE (J. Andrzejowski, Łęg Piekarski, Ldkr. Turek, Woiw. Wielkopolskie. In: Chr. Leiber/N. Berndt/A. Kokowski [eds.], Die Vandalen. Die Könige, die Eliten, die Krieger, die Handwerker. Ausstellung im Weserrenaissance Schloss Bevern vom 29. Marz bis 26. Oktober 2003 [Nordstemmen 2003] 468–469) are well comparable. Thereby parts of the assemblages were complemented with local forms. Simonenko dates the grave not later than the third quarter of the second century CE, i.e., not later than 150–175 CE (Simonenko 2008a, 18). On the contrary M. Treister dates this grave earlier, to the first century CE (Treister 2004, 172).

103 Although there is no direct date for this grave, it belongs to the terrace tomb 1 grave complex in Gol Mod II, which already indicates that it dates not earlier than the terrace tomb itself (Brosseder 2009). Moreover associated with the mirror was a Roman glass bowl, see Erdenebaatar et al. 2011.

104 Graves of females are Shombuuzyn-belchir, graves 8 and 19, and Yingpang 95BYYM7, clear male graves, as weaponry is known from this grave is grave 3 from Il'movaia Pad'.

105 List 11, no. 22: Koktepe; list 11, no. 17: Kobiakovo, kurgan 10; list 11, no. 15: Tsaram, kurgan 7.

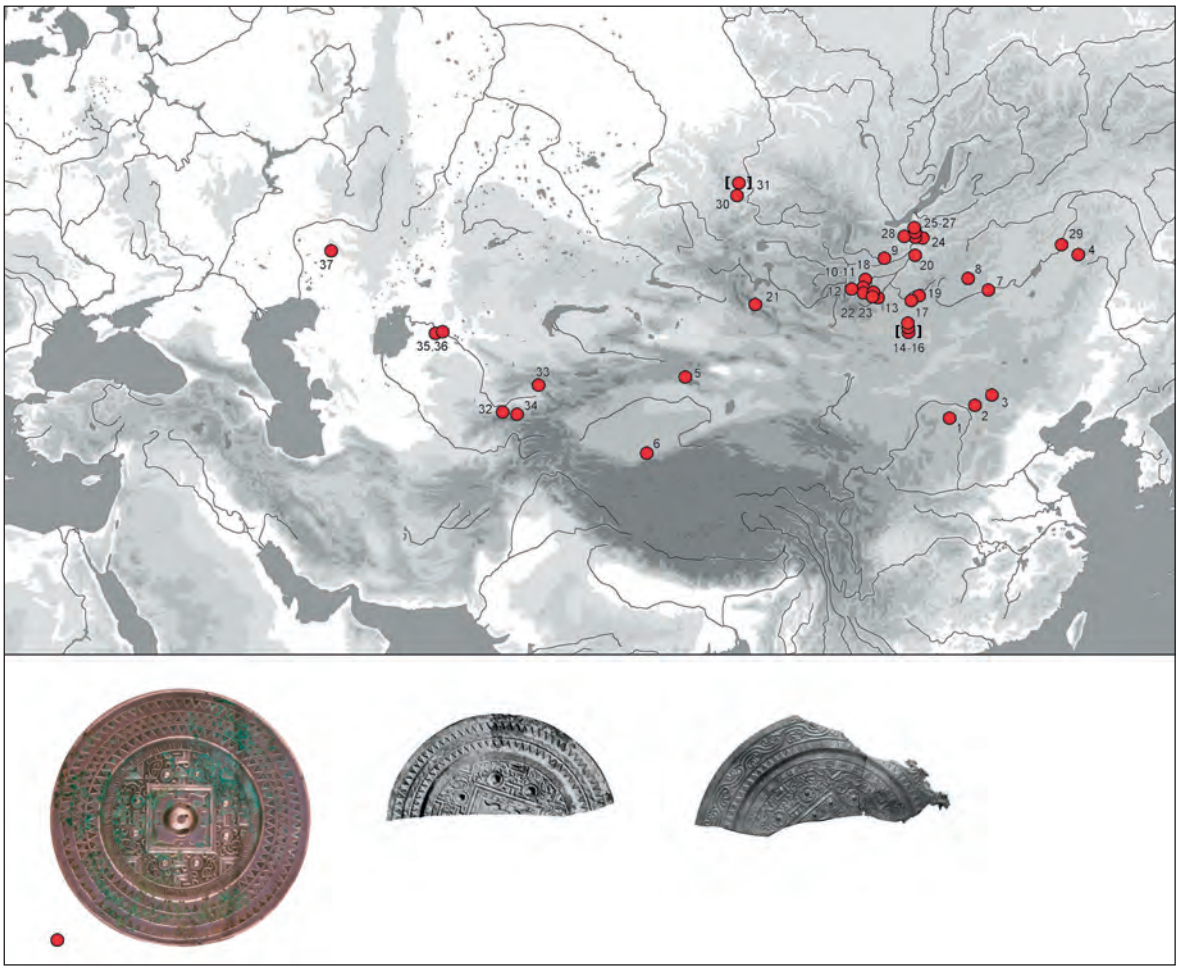

Fig. 18. Distribution of TLV mirrors in Eurasia (numbers refer to list 12).

possibly they belong to the late first century, or even the beginning of the second century CE[106]. Regarding the contexts in which mirrors of the third variant were found, it is interesting to note that they are attested in Tsaram, a terrace tomb in Transbaikalia, in Central Asia in Koktepe, an extremely well furnished grave and the same accounts for Kobiakovo, kurgan 10, which was one of the richest women buried in the Black Sea area at that time. It is safe to say that this mirror variant is attested especially in graves of the upper echelon of each respective society. Like the mirrors *riguang* and *zhaoming*, not a single *siru* specimen is known from the High Altai.

[106] The dating of Tsaram is discussed in Brosseder 2009; kurgan 10 from Kobiakovo yields a tulip-shaped glass tumbler, a red-glazed vessel in the shape of a ram and handles for a bronze casserole. The Kobiakovo ensemble can be well compared to the grave from Olăneşti (Kurchatov/Bubulich 2003; Popa 2010) where an Eggers 100 casserole was associated with a ram-shaped vessel, a bronze jug and a unique fibula. Its different traits are discussed in detail by V. Bârcă, who assigns this grave complex to the first half of the second century CE (Bârcă 2011, 23). M. Treister (2004, 172) dates this context to the late 1st century and the early 2nd century CE and thus arrives at a similar conclusion. In Kobiakovo kurgan 1 a casserole of the Gödåker type was found (Eggers 1951, type 144; Petrovszky 1993, type V,5). According to Petrovszky (1993, 79 pp.) the casserole from Kobiakovo belongs to his group c, whose production began ca. 60/70 CE and ended in the first decades of the 2nd century CE. In Berezhnovskii an alabaster binocular shape is associated with a fragment of such a mirror that Guguev dates to the late 1st/2nd century CE (Guguev et al. 1991, 35–36).

Mirrors of the TLV type are the most numerous found in Mongolia and Transbaikalia (Fig. 18; list 12). Lai Guolong reviewed the existing internal chronology of this mirror type, which was corroborated by recent excavations (Lai 2006). According to the typological division of Japanese scholar Fujimaro Shôhachirô, mirrors of his group A, characterized by four nipples "are always decorated with plain rim with oblique comb-tooth between the rim and the main decorative zone" (Lai 2006, 42). Mirrors of group B always have eight nipples and various rim decorations. He also showed that group A mirrors are of Western Han date and group B mirrors belong to the Wang Mang and the Eastern Han period (Lai 2006, 42). It is obvious that most TLV mirrors from Mongolia and Transbaikalia belong to the second group of mirrors, only the specimen from grave 2 in Burdun' found by Iu. Tal'ko-Gryntsevich and the one from Izykhskii Chaatas have a plain rim with an oblique comb-tooth pattern and could be attributed to the older group (Tal'ko-Gryntsevich 1999b, Pl. 2). A single radiocarbon date is known for a TLV mirror found in Nariiny Am, which falls between 166 and 41 cal. BCE and thus does not fit into the scheme[107]. And the mirror from tomb 20 in Gol Mod comes from a context that can hardly be dated earlier than the first century CE (Brosseder 2009). While numerous TLV mirrors are found in Mongolia, none are reported from the Altai region and only very few are known in the West; the most western example comes from the Southern Urals and belongs to a grave that Moshkova dates to the second and third centuries CE (Moshkova 1994). They do not reach the Black Sea area. Werning reports that these mirrors were often imitated in the Ferghana Valley (Werning 2009, 203).

Contextual inclusion of Han mirrors in the Eurasian steppes

Because mirrors are objects that are much better preserved and more abundant than other Chinese artifacts a closer look at this group of artifacts is taken as they allow for a better understanding of the dissemination and consumption of Chinese items in the Eurasian steppes. In numerous Eurasian societies from Late Bronze Age onwards mirrors were used in the burial ritual[108]. This probably is one of several reasons that explain why during the last two centuries BCE and the first century CE mirrors that were produced in Han China proper were widely accepted in the Eurasian steppes. The distribution of Chinese mirrors has to be evaluated, however, against the background of typical mirrors in each region.

The highest concentration of Chinese mirrors in the last century BCE and the first century CE can be noted in present-day Mongolia and Transbaikalia. Almost exclusively Han mirrors are being found in the graves there. No local mirror type was known. In a few graves another mirror type, a disk-shaped mirror with a small protrusion and either loops or holes at the rim, was noted (Miller et al. 2006, 13; 16 Fig. 1). Such mirrors are also known from graves in Tuva and the Altai as well as from graves in Xinjiang[109], where, however, this type is rare as well. In the Xiongnu realm, as a rule, only fragments of Han mirrors were deposited, not complete mir-

[107] The date refers to the 2 sigma range, dated material: animal bone, laboratory number: KIA 40052, 2070±20 BP. The date is quite early for a mirror of group B, to which this mirror fragment should be attributed as it has not a plain but a decorated rim. This contradiction currently can only be stated but not be resolved.

[108] Filippova 2005, 105; Rubinson 2002; see also Parzinger 2006.

[109] Without striving for completeness, the closest analogies known to me are from the Altai: Iustyd XII, gr. 13 (Kubarev 1991, Pl. 34.4); Ulandryk II, k. 9 (Kubarev 1987, Pl. 51.7); Tytkesken'-VI, gr. 27 (Kiriushin et al. 2003, 200 Fig. 32.13); from Tuva: Suglug-Khem I, log-chamber 28 (Semenov 2003, Pl. 32.19); from Xinjiang: Zhongyangchang, Yili (Mei 2006, 140 Fig. 9.9); Aidinghu, Turfan (Mei 2006, 140 Fig. 9.10).

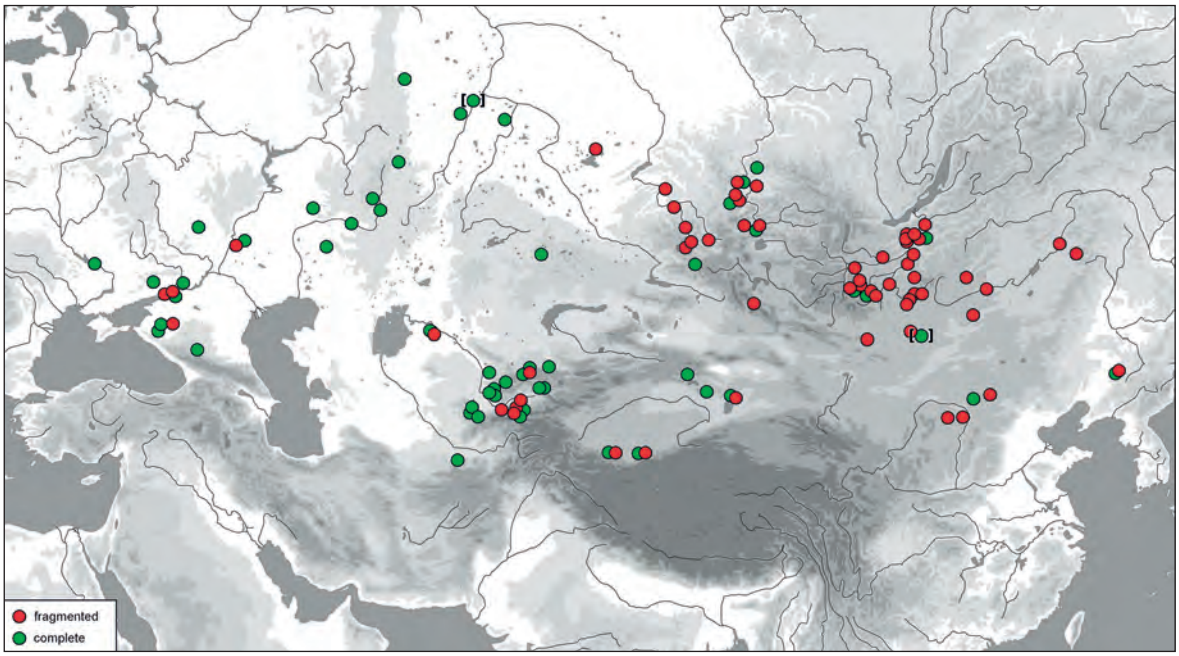

Fig. 19. Distribution of mirrors deposited complete versus deposition of fragments of mirrors.

rors, as in Han China proper (Fig. 19). The exact context that led to the fragmentation is of course unknown, but S. Miniaev's careful observation of the mirror deposition in the dromos of Tsaram's terrace tomb suggests that heating and cooling was involved in the breakage of the mirror (Miniaev/Sakharovskaia 2006). The mirror from T20 in Gol Mod shows traces of melting on one side (Törbat 2011, 319 Fig. 3.17), which is not the case for most other fragments found in Mongolia or Transbaikalia. The intentional breakage is part of the burial ritual (Filippova 2005, 105–106). In one instance, in the enclosure of Baian Under, the broken and incomplete mirror was found with a knife stuck in its center. Together with mirror fragments found in the settlement of Ivolga, this may indicate that fragmentation is not merely part of the burial ritual.

While fragmentation is the standard treatment for mirror depositions in Mongolia and Transbaikalia, in the western steppes Chinese mirrors were in most cases deposited intact (Fig. 19). There are, however, several exceptions to this rule. In Mongolia three mirrors were deposited intact; these come from sites located in the Tamir Valley in Central Mongolia[110]. Remarkably sites with broken mirrors, clearly displaying a Steppe-style treatment, are known from graves in Buddonggou and Dafanpu, both located in Inner Mongolia (see Miller, this volume). While Chinese mirrors in the western steppes were predominatly deposited intact, there were also other instances, for example from Kobiakovo, grave 1, Kazanskaia and Vostochnoe where fragments of mirrors were deposited. The fragmentation of Chinese mirrors in the western steppes parallels the treatment of local, Sarmatian mirrors. These were, as a rule, deposited in fragments showing signs of deliberate damage (Khazanov 1964).

[110] Complete mirrors are known from Khudgiin Tolgoi (Törbat 2011, 317 Fig. 1.12), Tamiryn Ulaan Khoshuu, gr. 6 (Törbat 2011, 317 Fig. 1) 100 (Törbat 2011, 319 Fig. 3.24), and 160 (Lai 2006, 38 Fig. 5); one more complete mirror is reported by Tseveendorzh/Tserendagva 1999.

Chinese mirrors were not the only foreign mirrors available to the inhabitants of the Black Sea area; Roman and Central Asian mirrors were also being used at the same time. Roman mirrors also occur rarely in the western steppes and were deposited in graves of the same time period[111]. Chinese and Roman mirrors overlap regionally in their distribution in the Lower Don to the Lower Volga region (Niezabitowska-Wiśniewska 2012, 305 Map 12). However, Chinese mirrors are never found in the same graves as Roman mirrors.

The third category of mirrors found in graves in the Black Sea area are so-called Bactrian mirrors, which are widely distributed in Central Asia[112]. In the northern Pontic steppes of the first century CE they have been found in ostentatious burials, such as that of Sokolova Mogila or the Nogaichik kurgan. In the lavishly furnished kurgan 10 of Kobiakovo, or Chuhuno-Krepynka, we find Chinese mirrors. In all of these cases the mirrors were deposited intact, not in fragments. We can also note the absence of Roman mirrors in the richest graves. Chinese and Roman mirrors were, however, also found in more simply furnished graves. With regard to gender it is worth noting that "Sarmatians'" mirrors have been found in the graves of women and children as well as men. Chinese and Central Asian mirrors were only deposited in the graves of women and, as a rule, Chinese mirrors are only found in the West in contexts of the "nobility" (Guguev et al. 1991, 40; Guguev/Treister 1995, 151).

Looking at the distribution map of Chinese mirrors in the Eurasian steppes, it is also noteworthy that no such mirrors were found on Crimea. It is not logical to argue that Chinese mirrors were not available to people inhabiting Crimea, since several prestigious and expensive Han lacquer boxes were found in the graves of noble women in the cemetery of Ust'-Al'ma. On Crimea, Roman and Central Asian mirrors were instead found. This must have resulted from deliberate decisions. In sum, in the Black Sea area Chinese mirrors were treated differently than local mirrors in the burial rite; they were found only in the graves of noble women. Their different treatment in the burial suggests in particular that they were regarded less as mirrors but more as prestigious or exotic objects from afar.

For rounding up the part on mirrors, a brief look on Central Asia needs to be taken, where several mirror types occur[113]. Of special interest are the so-called Bactrian mirrors, as they spread from India, to Southeast Asia, to Central Asia and to the Sarmatians. In the first century CE, such mirrors also belonged to the highest-level elites, as graves 3 and 6 of Tillia Tepe show: both women were given a Bactrian mirror together with a Chinese mirror, whereas in grave 5 a single Bactrian mirror was found[114]. All Chinese and Bactrian mirrors were deposited intact, which is most often the case for this category in Central Asia[115]. In the Ferghana Valley, however, the situation is different, as often Chinese mirrors – or their imitations – were broken or damaged and mostly fragments were deposited. This treatment of the mirrors can also be seen in the southern fringe of the Taklamakan. In Central Asia local mirrors were regularly found broken or damaged (Litvinskii 1964, Pls. 15–25).

111 For a detailed account of each Roman mirror type found in the Black Sea area see the recent study Niezabitowska-Wiśniewska 2012, 184–188 with older literature; for the dating of the Roman mirrors on Crimea see ibid. 229–236 Annex 2 and for Sarmatian contexts in the Black Sea area ibid 250–254 Annex 5.

112 These mirrors, characterized by a thick rim and a pointed tang for the handle, have caught already early the attention of researchers and undergone a lengthy discussion about naming and their origin, see for example Khazanov 1963, 64–65 type VIII; Litvinskii 1964, 81–86 mirrors of group I type 3; Skripkin 1990, 95 type 6.7; Gorbunova 1998; Simonenko 2003, 48–49; and Mineeva/Skripkin 2005.

113 See Litvinskii 1964, 73–98; Skripkin 1990; Gorbunova 1990; 1998.

114 Sarianidi 1985. In grave 2 also only one mirror, although a Chinese mirror, accompanied the deceased.

115 See for example also the specimen from Koktepe, see list 11, no. 22 (Rapin et al. 2001, 49 Fig. 10.14; 51 Fig. 11.2).

Thus, in the first century CE, in the ostentatious burials of the Black Sea area and most parts of Central Asia, Chinese mirrors were left complete, and thus were treated differently than most other mirrors. It is interesting to note that in the Ferghana Valley the situation is different, as fragmented mirrors are often found there, the reason for which will be discussed below. The various treatments of mirrors across the steppes clearly show that we cannot assume the mirrors have one single meaning within the different communities (Rubinson 2002, 72).

Imitations of Han mirrors

As has been shown, the cloud and nebula mirrors occur mostly in the Altai and are, with the exception of one piece from Tuva, imitations (see above). These mirrors date to the mid and late Western Han period in China, and the one original piece from Tuva also belongs to the first century BCE. This is a time period in which no other Chinese mirrors occur in the Altai, where only earlier variants of original Chinese mirrors were found in graves. The imitations, however, were good imitations, displaying a strong knowledge of the original pieces, since the ornamentation is not distorted. The fragment of such a mirror found in Tuva is also a well made local copy[116]. There are, however, two other centers with local imitations of Han mirrors: in the lower Don to Kuban region (Guguev et al. 1991, 7–38; Guguev/Treister 1995, 150) and in South Korea (Horlyck 2011), where, as a rule, these local productions are not so much exact copies, as are the Altai or the Tuva copies, but more distantly resemble the original. In the following, these local productions in the western steppes shall be more closely examined.

I agree with Li Dzhin Yn (2010, 127) that we can speak of a local imitation when the original mirror type can be identified and several well copied elements make such an identification possible. In other cases, when only one or a few elements resemble Han mirror design, it is better to subsume these under mirrors with elements of Han mirror design (list 18). Thus, four locally produced mirror pendants found to the east and northeast of the Azov Sea can be called true imitations, as they are identifiable copies of Han *riguang* mirror design (list 16)[117]. According to Guguev, Ravich and Treister, the graves with such local mirror imitations date to the second half of the first century CE (Guguev et al. 1991, 37–38; Guguev/Treister 1995, 150). The grave of Vinogradnyi at the lower Don with a *riguang* mirror (Fig. 20) is at least half a century older, thus the imitations belong to graves of a later time, when other Han mirror types were already in use *(zhaoming, siru)*[118]. In my opinion, *zhaoming* mirrors were being copied as well (list 17), and again they date later than their Chinese original foreign imports.

The fact that mirrors of the *riguang* type were copied is explained by the similarity of the chinese symbols to the so-called "tamgha" signs used in the "Sarmatian" culture (Guguev et al.

[116] Identified by means of x-ray fluorescence (Khavrin 2011).

[117] Gugev, Ravich and Treister (Guguev et al. 1991; Guguev/Treister 1995) as well as Yao (2012) do not distinguish between different types of mirrors being imitated. Especially Yao lumps together original Han mirrors and local mirror pendants as she sees Han mirrors and Sarmatian amulets as equivalents (Yao 2012, 64) without basing her analysis on all available mirror groups (Roman, Central Asian), which need to be included in the reference group.

[118] As became evident in the discussion of every single mirror I slightly deviate from the dating proposed by Guguev and Treister (Guguev et al. 1991; Guguev/Treister 1995).

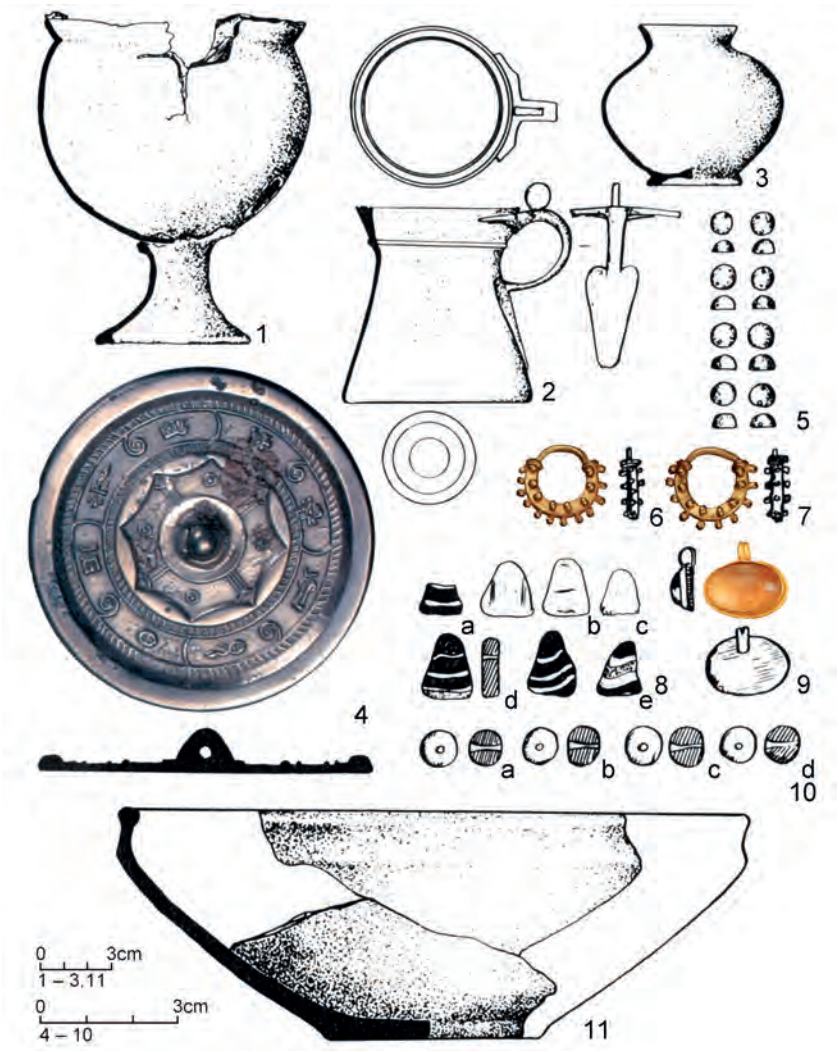

Fig. 20. Vinogradnyi, Rostovskaia obl., Russian Federation. Grave inventory (after Kosianenko/Maksimenko 1989; L'or 2001 des Amazones, No. 134–137).

1991, 39; Guguev/Treister 1995, 151)[119]. It is remarkable that the design of *riguang* mirrors was, despite its wide geographic distribution, not locally imitated in any other place in the Eurasian steppes[120]. In Central Asia, and especially in the Ferghana Valley and in the Southern Urals, the case is somewhat different, as there mostly *qingbai* mirrors were being copied.

[119] Yao suggeests that "the predominance of 'linked-arc' [i.e. *riguang/zhaoming/tonghua*, U.B.]" mirrors in kurgan burials also suggests that these forms were ritually significant for the Sarmatians" (Yao 2012, 63). This view misses to see that additionally, also *siru* mirrors are found in the Black Sea area in the first century CE and thus the same of mirror types that are found everywhere else in the Eurasian steppes, such as in Central Asia or in Inner Asia, are also found in the West. It may simply suggest that only these mirrors were available and may have nothing to do with their ritual significance. The fact that also in South Korea exactly the same Han mirror types as in the Black sea area were imitated may corroborate this point (Horlyck 2011). Yao furthermore ignores any chronological implications, as later mirrors, such as TLV and *qingbai* mirrors did not reach the Lower Don. Thus what may seem to her to be ritually significant might simply reflect a choice of the transmitter and/or has chronological reasons.

[120] With the exception of South Korea (Horlyck 2011, 127 Fig. 10).

Summarizing evaluation of Han mirrors in the Eurasian steppes

The Han Chinese mirrors cannot be treated as a single group if we want to advance beyond stating the obvious fact that they are being found in the western steppes in richly equipped tombs later than their date of production in the East.

The detailed analysis of more precisely defined Chinese mirror types indicates different patterns of distribution, treatment and contextual inclusion. Several types of Chinese mirrors are being found in Central Asia, the Southern Urals and the Black Sea area. While all mirrors can be found in China and also in the northern steppes earlier than in locations further to the West, the exact time of their dissemination to the West, i.e. to Central Asia and further into the Black Sea region, is far from being clear. An exception to this rule is illustrated by the example of *riguang* mirrors found in contexts probably contemporaneous both in the eastern and western steppes. The rule in terms of the time sequence however is that Han mirrors are being found in the West in graves of the late first century or the early second century CE.

The graves in Central Asia and in the western steppes in which such mirrors are found are generally lavishly furnished and belong to the highest echelon of the respective communities. Chinese mirrors in the West belong only to the female sphere, which is not the case in Inner Asia where graves of both genders can contain mirrors. The above presented study of Chinese mirrors also illustrated that they were often treated as foreign exotica in the Black Sea area, unlike local mirrors, and since Chinese mirrors were not the only prestigious mirrors from afar, we can assume that choices of mirror type, from China or from Central Asia were probably deliberate. A choice that the women of Tillia Tepe did not want to or have to make since both kinds were found in their graves together. The patterns of elite consumption seem also to account for shifts in the flow of Chinese mirrors: in the second or even the beginning of the third century CE, at a time when Chinese mirrors are not being deposited in graves in the Black Sea area, they are found in richly equipped graves in the Southern Urals. Thus, we can observe a shift. How this shift is connected to political changes in the Black Sea area and the Southern Urals cannot be answered at this point. While most Chinese mirror types are found in the Xiongnu realm as well as Central Asia and the western steppes, there are, however a few mirror types (cloud and nebula, Fig. 15; variant of *zhaoming* Fig. 16, dark green dots) that have not been found in Xiongnu territory, an issue we will return to in the final discussion.

Lacquer outside of China[121]

Lacquer is another category that has been found throughout all Eurasia at the same time as the Chinese mirrors (Fig. 21; list 19). In the Altai region, lacquer flakes were found in the kurgan of Shibe and in grave 57 of Ialoman-II. Despite the fact that only small fragments of lacquer were found, their band and dot decoration is almost identical (Barkova 1978; Tishkin et al. 2008). Such décor has been seen on pieces from the Zhangguo period of the fourth and third centuries BCE (Barkova 1978, 43), and can be found on ear-cup handles as well as on early Western Han boxes[122]. Since the first discoveries of the Shibe lacquers much more lacquerware has been un-

[121] I would like to thank Margarete Prüch for her discussion and invaluable judgement about some lacquer objects from the Eurasian Steppes.

[122] I thank Margarete Prüch for pointing this out to me.

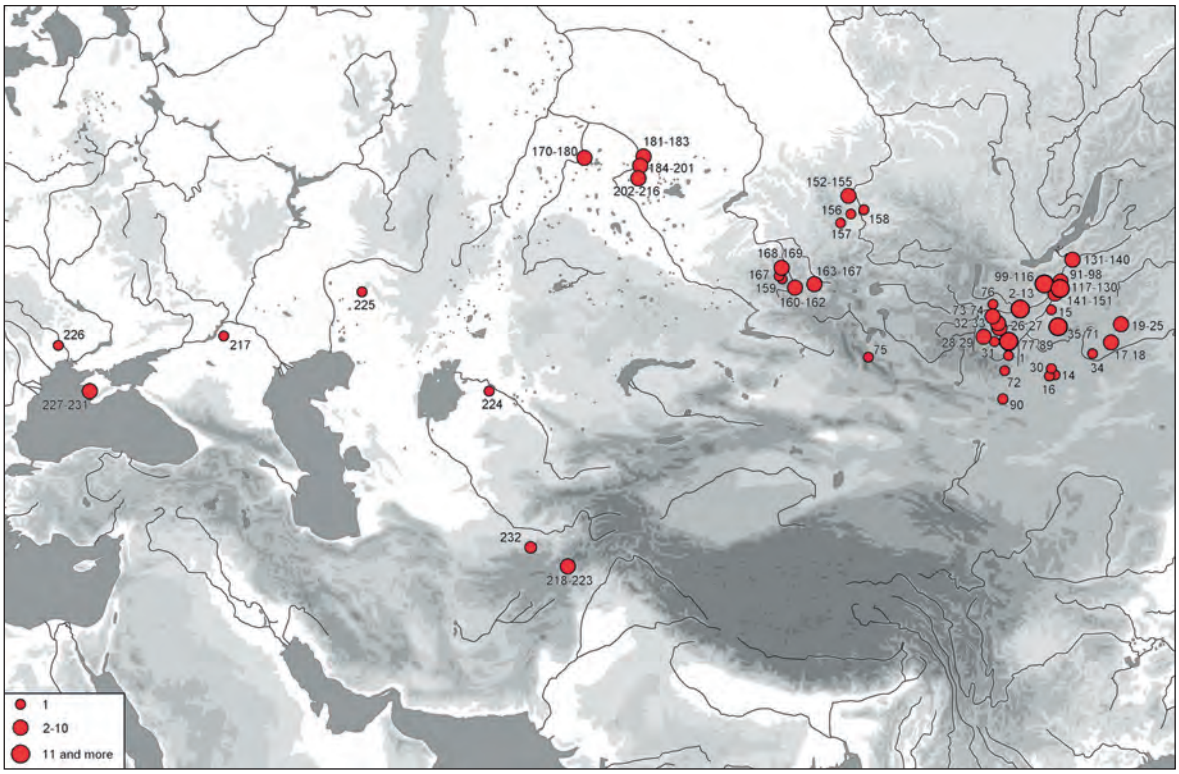

Fig. 21. Distribution of lacquered objects in Eurasia (numbers refer to list 19).

earthed in China and such ornamentation is popular on lacquer works from Hubei and Hunan province of Early Western Han[123]. The Shibe stage is dated between second century BCE to first century CE (Parzinger 2006, 742), kurgan 57 of Ialoman-II has been dated to the same time period[124].

The scientific material analyses of lacquer from the earlier Pazyryk graves and from the Shibe kurgan show that the Altai lacquers, despite their different dating are similar in their composition and they are distinct from the younger lacquer artifacts from the Xiongnu necropolis of Noyon Uul (Barkova 1978, 42; Tishkin et al. 2008, 180). Not only chemical differences between those two groups of lacquer objects are noticeable, but the depictions on the lacquer cups are also different. Phoenixes mostly decorate cups from Xiongnu period graves.

Lacquers in Xiongnu period graves – the great variety of lacquered objects in the steppes

Generally when Chinese lacquered objects in the Xiongnu realm are treated, researchers focus mostly on Chinese chariots and ear-cups, while the wide variety of lacquered artifacts is being overlooked (Fig. 22). Besides lacquered vessels and containers (Fig. 22.2,4–6), which are most numerous, lacquered furniture (Fig. 22.3), elements of weaponry, lacquered coffins (Figs. 22.1; 23), a staff, various small artifacts and even a wooden board in shape of a fish were found. The

[123] The exact date between 86 and 48 BCE that Griaznov (1992, 170) provides cannot withstand modern analysis. I thank Margarete Prüch for evaluating these finds.

[124] The radiocarbon date was taken from wood of an artifact (a gold-covered sheath) GU-14918, 2060±35 BP, 2 sigma range: 171 BCE to 23 CE (Tishkin 2007b, 272).

lacquer cups, especially those with inscriptions, have rightfully received the most attention, and some of the most important objects were found during the old excavations in Noyon Uul[125]. In the following, the lacquerware with respect to their contextual inclusion is going to be analyzed.

The greatest variety of lacquered objects can be found in terrace tombs, and some of them are clearly restricted to these elite contexts[126]. Most importantly, the Chinese chariots are exclusive to larger terrace tombs. Even though they are in their own category they are mentioned here since the canopy and other parts of these chariots are lacquered. Chariots were deposited disassembled above the grave chamber. There are three different types[127]. In the Chinese sources chariots are mentioned as gifts to Xiongnu rulers (*Hanshu* 94A, 3754; 94B, 3798; 3823; Miller forthcoming).

Lacquered vessels and containers that were produced in state workshops are also known mostly from terrace tombs[128]. Most famous are the ear-cups from Noyon Uul, of which the one from the unnumbered kurgan excavated by D. Simukov in 1927 is decorated in the ornate *Shu* style and was produced in the western workshop in Sichuan (list 19, no. 40; Barbieri-Low 2001, 212–234; Pirazzoli-t'Serstevens 2009, 36). The other two ear-cups from terrace tomb 20 of Noyon Uul were produced in the workshop of Kaogong, in Chang'an (list 19, nos. 55–56; Polos'mak et al. 2011b, 329; Chistiakova 2009). The lacquer box found in kurgan 7 of Tsaram (list 19, no. 142; Pirazzoli-t'Serstevens 2007) and the lacquer platter with bronze rim from terrace tomb 20 in Gol Mod 1 were also attributed to the same workshop (list 19, no. 27; Mönkhbaiar/Erööl-Erdene 2011). All of these lacquer objects were dated according to their inscriptions, either to the last decade BCE or to the first years CE. Aside from these vessels and containers produced in imperial workshops, terrace tombs also yielded the lacquerware of commercial workshops, such as the four ear-cups from kurgan 23 in Noyon Uul (list 19, no. 63) or the toilet box that was excavated at this site in tomb 24/12 (list 19, no. 68; Louis 2006/07, 51; Pirazzoli-t'Serstevens 2009, 37–38).

Furniture elements like the lacquered wooden legs that were found in Noyon Uul are only known from terrace tomb contexts (Rudenko 1962, Pl. 6.2–4; 1969, Pl. 6.2–4). The same accounts for a lacquered wooden staff unearthed from the exceptional terrace tomb 7 of Tsaram (list 19, no. 151; Miniaev/Sakharovskaia 2007b, 53; Miniaev 2010, 139 Fig. 18). The exact length of the staff is not provided but judging from the image it is about 1.8 m to 2 m long. As I am not aware of a similar object from China, I wonder whether this object possibly represents a "staff of authority" *(jie)* of 1.8 m in length that gave special status in addition to their rank to government officials when sent out (de Crespigny 2007, 1227–1228). Such a staff was also used where the "local situation was too distant and complex for the normal procedure of submitting reports and receiving instructions" (de Crespigny 2007, 1228). Accounts of lacquered weaponry are

[125] For the collection that is housed in the State Hermitage Iu. Elikhina and S. Miniaev are currently preparing a new publication (Miniaev/Elikhina 2009, 22). Additionally to the problem, that the exact inventory number was difficult to identify in the literature (see Louis 2006/07, 49–50) the cups were also attributed to the wrong contexts, for a correction see list 19 and Miniaev/Elikhina 2009.

[126] Of course we cannot rule out that different preservation conditions for standard tombs and terrace tombs in Central Mongolia prevent us from identifying correctly some prestigious objects, as till today best preservation conditions and thus most information is obtained from the site Noyon Uul or from sites in the Altai, like Shombuuzyn belchir whose organic material has yet to be analyzed.

[127] André 2007, 75; Erööl-Erdene/Gantulga 2007; Polos'mak et al. 2011a, 77–89; Erdenebaatar 2012, 163. The chariot from T1 in Gol Mod 1 belongs to the covered type but it is unclear whether it was lacquered (André 2003).

[128] See list 19, nos. 27, 40, 55–56, 142, 220–221; the cup from Noyon Uul, k. 6 (list 19, no. 45) has recently been suggested to come possibly from a private production (Pirazzoli-t'Serstevens 2009, 37).

Fig. 22. Noyon Uul. A variety of lacquered objects: 1 Lacquered coffin board, 2 vessel in shape of a horse, 3 furniture leg, 4–5 ear cups, 6 box (after Rudenko 1969, Pl. 6.1,2; 71.3; Umehara 1960, 33 Fig. 1; Eregzen 2011, 135 Fig. 247; Polos'mak et al. 2011b, 328 Fig. 1.1).

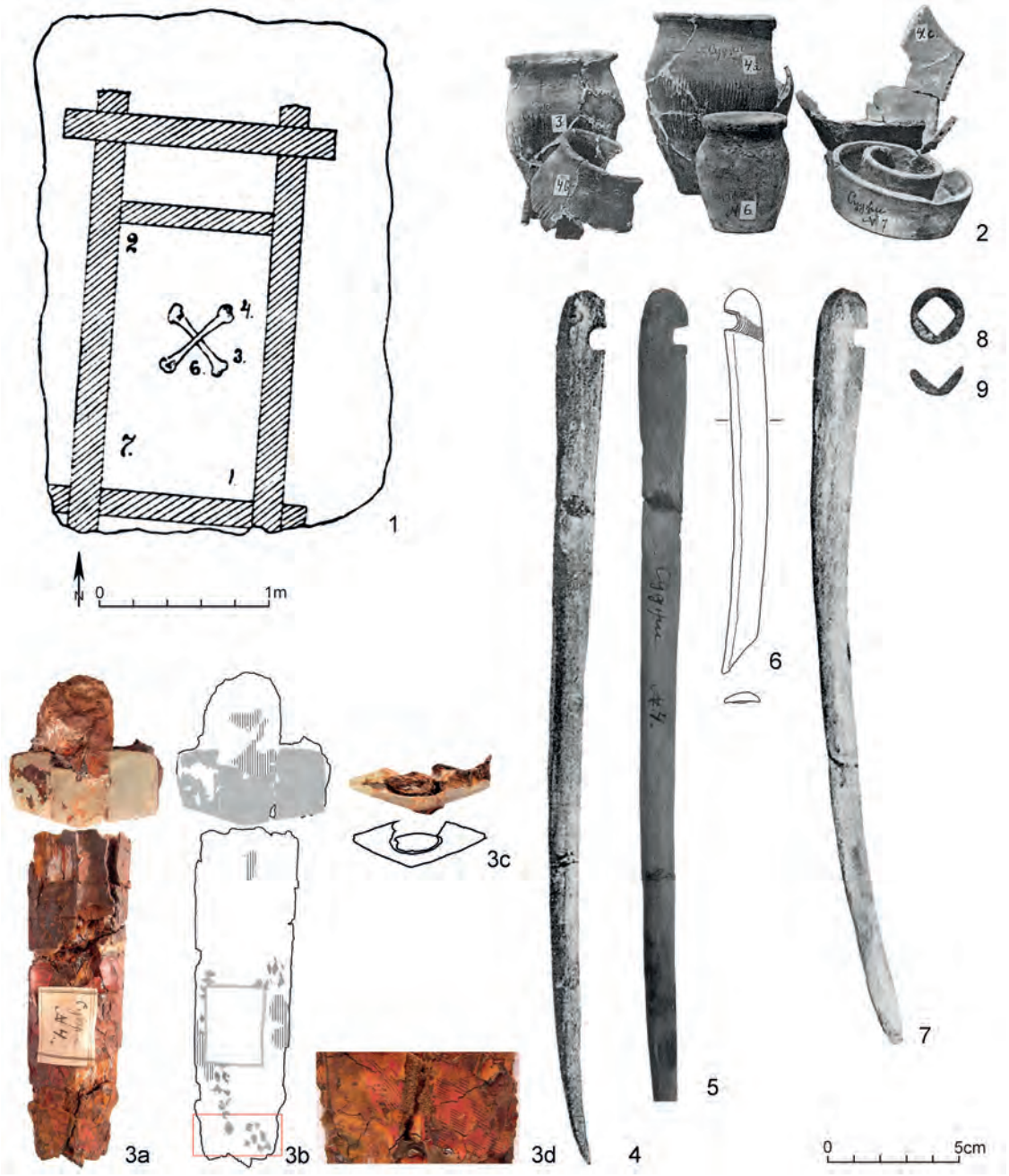

Fig. 23. Sudzha, Il'movaia Pad', Rep. Buriatiia, Russian Federation, k. 4 (after Tal'ko-Gryntsevich 1999, Pl. 19 and photo U. Brosseder).

rare, but a wooden quiver from Tsaram is mentioned[129]. The lacquered sword sheath from Sudzha (Il'movaia Pad') that was excavated in the nineteenth century has not received any attention, but clearly shows that lacquer was also used for weaponry (Fig. 23; Tal'ko-Gryntsevich 1999b, Pl. 19.4).

[129] List 19, no. 144. Miniaev/Sakharovskaia 2007b, 53; also Yun/Chang 2011, 269 describe a lacquered quiver in Duurlig Nars, tomb 2 (list 19, no. 20).

The superb preservation conditions of the recently excavated terrace tomb 20 of Noyon Uul provide insight into unique lacquered goods (Polos'mak et al. 2011a, 119–129). Three lacquer cups, fragments of a toilet box and of a platter, a lacquered fastener, a casing/jacket for hair braids, and a lacquered wooden board in form of a fish covered with fish-leather were found here[130]. A lacquer fragment with nephrite incrustation (Lubo-Lesnichenko 1969, 269) and a zoomorphic vessel in "form of a horse" were found in the early excavations of Noyon Uul (Rudenko 1962; 1969, Pl. 6.1). In one instance, lacquer seem to even been used on pottery (Rudenko 1969, 114). None of these objects were interred before the late or end of the first century BCE or the first century CE, since they were found in terrace tombs which can only be dated to this time period (Brosseder 2009).

Numerous lacquer objects and fragments have been found in Xiongnu period graves of the ring type (list 19). The frequently poor conditions in these graves do not preserve the artifacts well, and therefore only in few cases can the object's form and function be identified. Ear-cups are also known from graves of the ring type (list 19, nos. 8, 79, 88). The ones from Tamiryn Ulaan khoshuu, grave 201, just like the bowl from grave 97 of the same site, were produced in commercial workshops and date to around the mid first century CE (Louis 2006/07, 52). The ear-cup handle from gr. 33 in Burkhan Tolgoi, is decorated in the same ornate style as the one from the unnumbered kurgan (Simukov) in Noyon Uul, which may indicate that this cup also originated from an imperial workshop, possibly from Kaogong or Gonggon in Changsha[131]. Furthermore, cups, bowls, platters and trays were found (list 19), as well as lacquered knife handles[132] and lacquered belt elements[133].

Radiocarbon dates for grave 119 in Ivolga and grave 20 in Tevsh Uul show that lacquered ear-cups already served as grave goods in the second half of the first century BCE (Brosseder/Yeruul-Erdene 2011). The objects in grave 15 in Shombuuzyn belchir, located in the Altai, display ornamentation similar to that of the box from Ust'-Al'ma; however, the form cannot be determined with certainty. These contexts show that lacquerware is also found in graves of the second century CE (Brosseder/Yeruul-Erdene 2011). Thus, ear-cups appear from the first century BCE onwards, but other, unidentifiable lacquered objects might belong to graves of the second century BCE.

Lacquered coffins that have known about since Kozlov's expedition in Noyon Uul were also found at the same site during the recent Russian-Mongolian expedition[134]. On the small board from the coffin of kurgan 1 in Noyon Uul a flying goose is depicted (Fig. 22.1), the coffin in kurgan 20 in Noyon Uul was covered with a thin layer of red lacquer (Polos'mak et al. 2011, 71 Fig. 2.46). Erööl-Erdene also mentions lacquered coffins in satellite and standard graves (Erööl-Erdene 2004, 87; 104 Fig. 8). The coffin from grave 21C (satellite) in Gol Mod and the one from Duulga Uul (standard) show a similar cloud pattern executed in white, brown and red (Fig. 24.1–3)[135].

[130] The last two objects are unique; fish leather in context with finds from the Inner Asian steppes has only once been mentioned before for a leather bag of the Türkic period (Bemmann 2012, 276–278).

[131] See also Zhang 2011, 21. I thank Margarete Prüch for her determination.

[132] Tamiryn Ulaan Khoshuu, gr. 109 (Purcell/Spurr 2006, 26 Fig. 12) and Ar Bulan, gr. 2 (unpublished excavation of Ch. Erööl-Erdene, U. Brosseder and Zh. Gantulga 2012).

[133] Gagat belt piece (plaque) from Dyrestui, gr. 49, which, according to S. Miniaev, was covered with lacquer and gold foil: Miniaev 1998, 91 (list 19, no. 107). In grave 61 of Dyrestui some lacquer was found on an iron buckle (Miniaev 1998, 92; Pl. 46.2; list 19, no. 108).

[134] Noyon Uul, kurgan 1 (Rudenko 1962, 16; 1969, 16; Pl. 48.2), kurgan 6 (Rudenko 1962, 18; 1969, 17), kurgan 20 (Polos'mak et al. 2011a, 71 Fig. 2.46; 73).

[135] Erööl-Erdene 2004, 79; Eregzen 2011, 65 Figs. 44–45. One more lacquered coffin from Tamiryn Ulaan Khoshuu is listed by (Erööl-Erdene 2004, 87; 104 Fig. 8g); Batsaikhan 2002, 281 Fig. 16), which shows a quite different ornament. Erööl-Erdene, pers. communication, points out that the lacquer of the coffin from Gol Mod burial 21C was very thin, thus fits to the description of Polos'mak (Polos'mak et al. 2011a, 73). In two

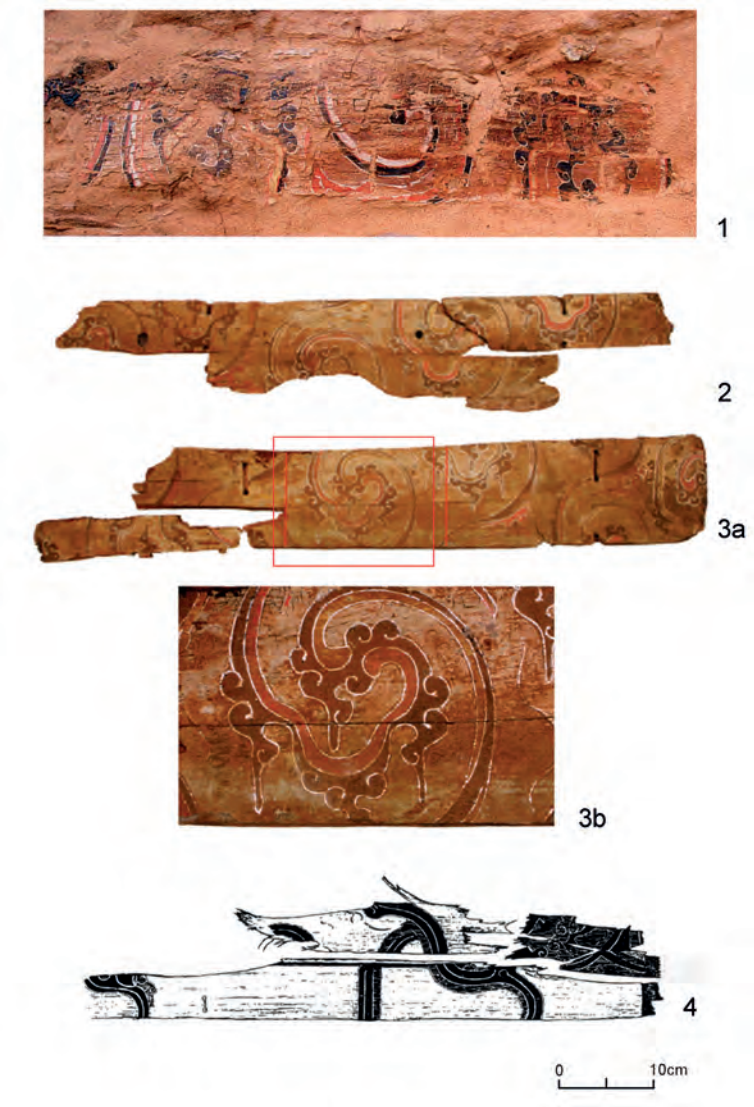

Fig. 24. Remains of lacquered coffin lids from Mongolia. 1 Gol Mod, gr. 21C (after Erööl-Erdene 2004, 104 Fig. 8); 2–3 Duulga Uul, gr. 2 (after Eregzen 2011, 65 No. 45); 4 Duulga Uul, gr. 9 (after Eregzen 2011, 65 Fig. 43).

A wide variety of lacquered objects were found in Xiongnu period graves, probably dating from as early as the second century BCE till the second century CE, but mostly from the first century BCE and the first century CE. Imperially manufactured ear-cups are known exclusively from terrace tomb contexts and have been dated only to the very end of the first century BCE

other incidents, lacquered coffins are mentioned in an English translation, but not in the original Mongolian reports. This is the case for Takhiltyn khotgor (cf. Navaan 1999b, 98 with Navaan 1999a) and for the reports for Duurlig nars, gr. 2 (cf. Yun/Chang 2011, 267 with Duurlig Nars 2011, 40). Especially this category of objects raises the question about the possible transfer of such coffins (or wooden boards?). – In contrast to lacquered coffins, those painted with other coloring substances are quite numerous, see Tevsh Uul, grave 1 with a red painted coffin (Tseveendorzh 1985, 62), in grave 7 the coffin was painted yellow and white (Tseveendorzh 1985, 55), in grave 8 red color was observed as coffin decoration (Tseveendorzh 1985, 57). The best preserved painted coffin was excavated in Shombuuzyn belchir which shows a typical lattice work design and by no means a "Chinese" cloud pattern (Miller et al. 2009, 11 Fig. 6).

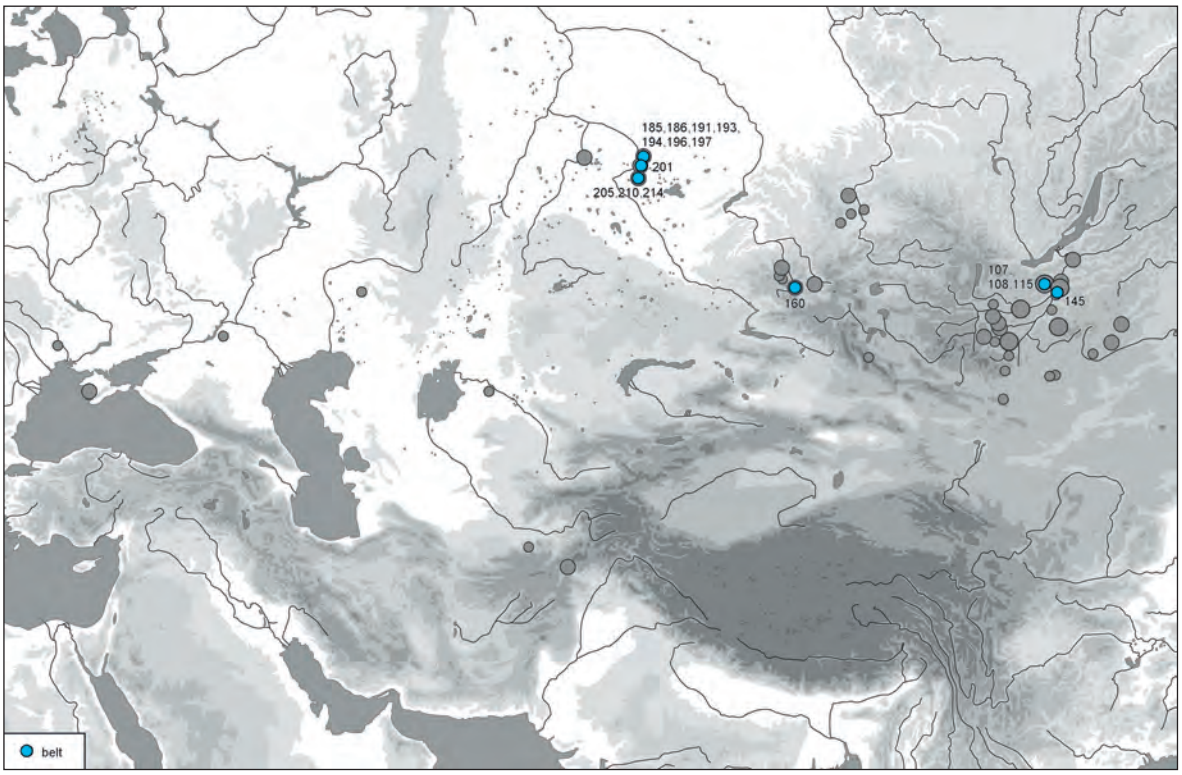

Fig. 25. Distribution of lacquered belts in Siberia (numbers refer to list 19).

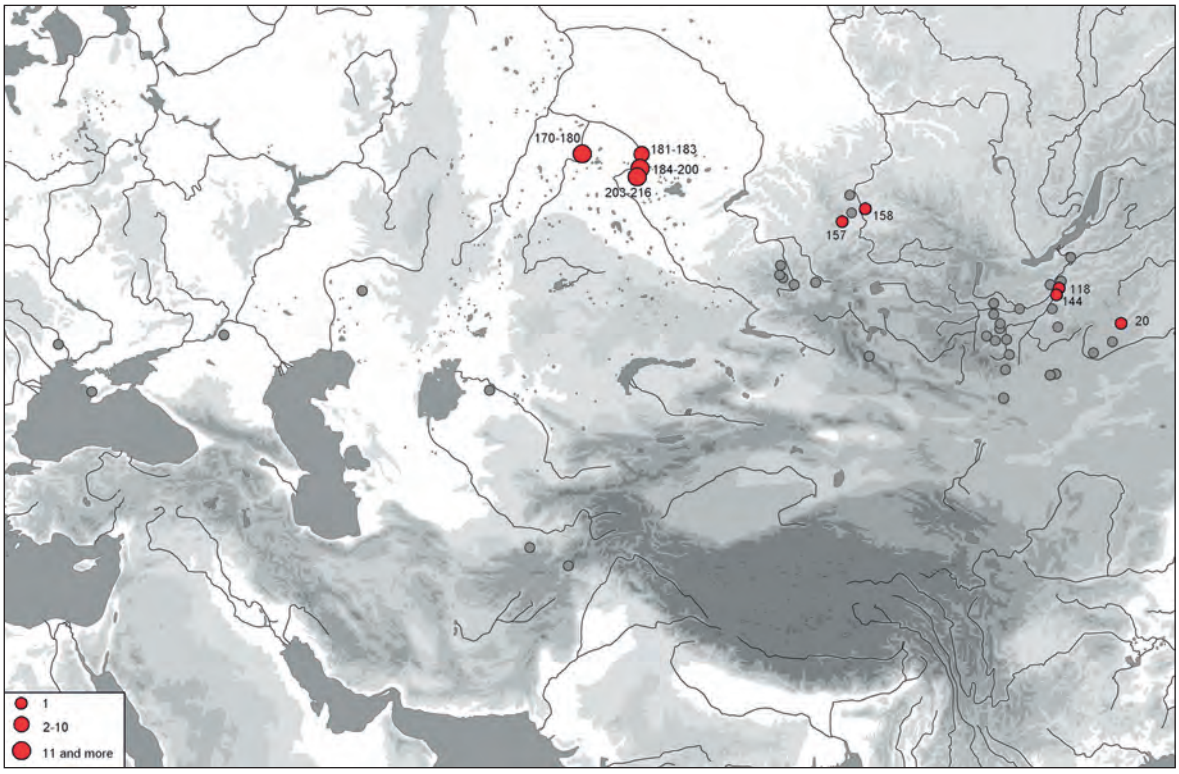

Fig. 26. Distribution of lacquered weaponry (numbers refer to list 19).

and the first century CE. Currently, no considerable time gap between their production and their inclusion in terrace tombs is discernable. Others are well known from standard tombs, some of them having been produced in commercial workshops.

Numerous lacquered belts have been found in the Irtysh-Ishim region, but there has been no full publication with images of these findings, which makes them difficult to evaluate (Fig. 25; Pogodin 1998a). Another lacquered or painted (?) belt has been found in the Altai (Tishkin 2011, 546 Fig. 7f)[136]. Thus it seems likely that other references of lacquer at the waist may represent the remains of lacquered belts[137]. There are hints that also elements of weaponry were lacquered (Fig. 26). One Chinese lacquered cuirass plaque made of paper-maché has been excavated in Uibat, in the Minusinsk Basin (list 19, no. 157; Kiselev 1951, 433). In the Irtysh-Ishim region several lacquered arrow shafts have been discovered (list 19, nos. 174, 179, 180, 184).

The variety of lacquered goods found in very different contexts across Siberia and Mongolia shows also that we cannot safely assume that one mode of transfer from Han China to its northern neighbors accounts for this variety. While Chinese chariots definitely have to be seen in terms of marital alliances or tribute gifting or payments of the Han to the Xiongnu elites, lacquered coffins or lacquered wooden panels were most probably transferred differently.

Lacquer in the West, from Central Asia to the Black Sea

Lacquer findings in the western part of the Eurasian steppes are rare. This is not only due to the exquisite nature of such goods, but also because in order to identify the material experience with lacquer findings is required. Thus, reported remains of red leather or red paint leave the reader uncertain as to whether or not these traces might be identified as the remains of lacquer. Therefore it could very well be that lacquer findings are more numerous in Central Asia and in the western steppes[138]. In Central Asia as well as the western steppes only lacquer boxes are known (Fig. 27; list 19).

An important site of lacquer findings in Central Asia is Begram, where several vessel types, an ear-cup, a platter, a box and a toilet-box were found in two sealed rooms of a larger building complex (list 19, nos. 218–223; Elisséeff 1954; Zhang 2011)[139], and despite the fact that the objects were not recovered from a burial site, the finds of lacquer are discussed here in order to paint the complete picture of what kinds of lacquers were available in this area. These lacquer objects were produced around the turn of the era/early first century CE[140]. While Pirazzoli-t'Serstevens

136 In context with the grave doll no. 2 in the eastern corridor of kurgan 7 in Tsaram, Miniaev mentions a leather belt (Miniaev/Sakharovskaia 2007b, 51).

137 For example in Dyrestui, gr. 117 (Miniaev 1998, 100).

138 This was the case with the lacquer remains of Oktiabrskii-V from the Black Sea, which were originally regarded as leather remains (Mordvintseva/Mys'kov 2005, 315). Also D. Tal'ko-Gryntsevich in the late 19th century regarded some lacquer remains as red leather (Tal'ko-Gryntsevich 1999b, 35). The same probably accounts for a square "leather" box with quadrefoil application on the lid from Altyn Asar o, either from grave 282 or 292 as its grave attribution is contradicting in text and figure caption (cf. Levina 1996, 204–205; 253): the quadrefoil application is a typical ornament for chinese lacquer boxes (e.g., Mongolie 2003, 174; 175). In sum mentions of red color or red and black leather remains, such as in Kobiakovo, gr. 10 (Prokhorovka/Guguev 1992, 152) or from Sidorovka (Matiushchenko/Tataurova 1997, 13; 146 Fig. 24) may indicate lacquer instead of leather objects. Also Khazanov (1971, 24–25) describes that the sheaths of blade weapons were mostly colored red; once white color was observed and sometimes very thin leather covered the wooden sheath. These mentions may refer to remains of lacquer as well, to name but a few examples.

139 With the discovery of the two sealed rooms it was first assumed that they represent a royal treasure of a residence while more recently Begram is seen as an important trading and manufacturing center strategically located along established trade routes und thus the contents of rooms are interpreted as commercial depot (Mehendale 2009, 142–143).

140 Elisséeff 1954; Pirazzoli-t'Serstevens 2003; Zhang 2011.

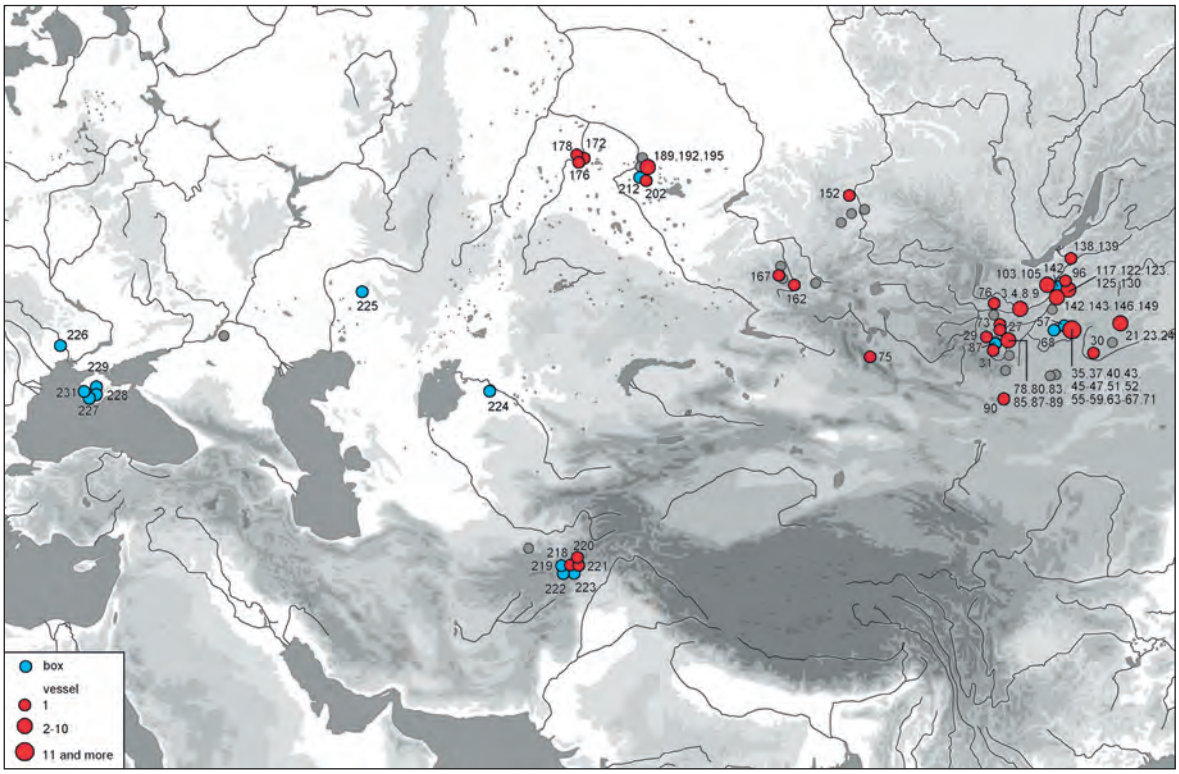

Fig. 27. Distribution of lacquer boxes and other lacquer vessels (cups, bowls or platter) (numbers refer to list 19).

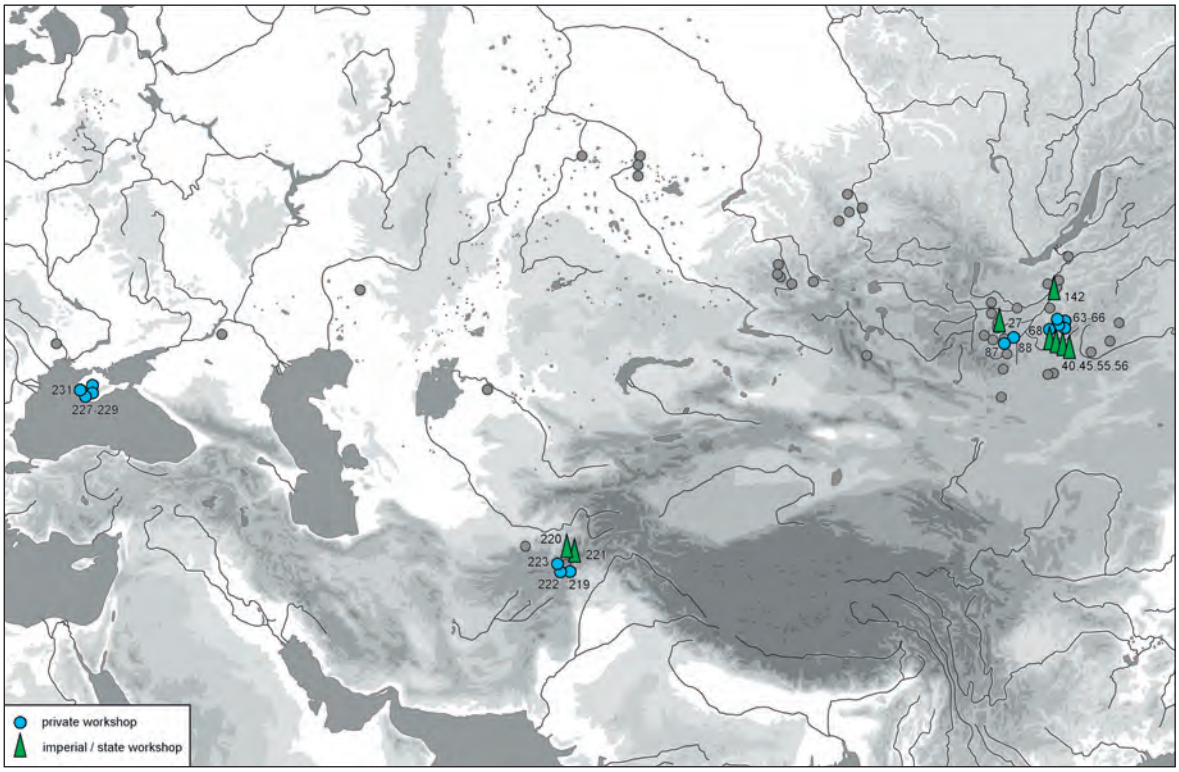

Fig. 28. Distribution of lacquer goods from imperial and from private workshops in Eurasia (numbers refer to list 19).

(2001, 479) believes that all of the lacquer objects were produced in the state workshops of Sichuan, Zhang argues convincingly that only the ear-cup and platter were produced in state workshops, while the boxes were produced in private workshops in the Guangling area, which also M. Prüch believes (Zhang 2011, 10–11; Prüch 2013, 151). To my knowledge, there has been one more fragment of a toilet box found in Central Asia, in Altyn Asar close to the Aral lake. This square, red "leather" box has a quadrefoil decoration on the lid, which is typical for lacquer boxes (see fn. 138).

In western Eurasian steppes, lacquerwares have been found in kurgans of the Black Sea area and in the Urals. Chinese toilet boxes from Crimea were most likely produced in private workshops in the Guangling area (Prüch 2013, 151; Krim 2013). The lacquer fragments that were found furthest to the West come from the lavish female grave of Sokolova Mogila of the first half or middle of the first century CE (Kovpanenko 1986; Treister 2004, 147). These pieces display ornamentation similar to that of the little box in Ust'-Al'ma (Krim 2013, 120 Fig.). In Lebedevka, in the Southern Urals, a lacquered box was placed close to the deceased person with a Chinese mirror nearby. The grave dates to the second half of the second century CE, and the lacquered box thus represents the latest lacquer object in this study[141].

It is remarkable that in Central Asia and in the western steppes – as far as one can see – mostly lacquer boxes were found, rather than drinking or serving vessels (Fig. 27). Moreover, all of these lacquer objects belong to the Eastern Han period and were probably produced in private workshops in the Guangling area (Fig. 28). They are found in the western Eurasian steppes in exclusively lavishly furnished burials dating to the first century CE and in the Southern Urals dating to the second century CE. Just with the distribution of mirrors we can observe the same shift from the Black Sea to the Southern Urals in the second and third centuries CE. Just as only a few of the great variety of Chinese mirrors arrive in the West, lacquer findings there are also limited to a few kinds of goods.

Summarizing the flow of Chinese goods in Eurasia

The consumption of and demand for silk among the Roman elites can be regarded as one major factor driving the acquisition of silk in the West. However, this process did not take effect before the late first century BCE. Comparing the distribution of different groups of Chinese artifacts, we see the following pattern: a great number of these goods occur in the Inner Asian steppes earlier, more numerous and in a greater variety than anywhere else outside of China. While Chinese goods dating from the second century BCE onwards have been found in the Inner Asian steppes, in Central Asia the oldest findings date to the beginning of the first century CE and in the Black Sea region they belong at the earliest to the second half of the first century CE. The same phenomenon can equally be seen when looking at the transfer of motifs, such as the dragon motif. Originating from China, this motif has been found in the eastern steppes in graves dating to the second and first century BCE, whereas in the western steppes it appears only in the first century CE (Brosseder 2011, 379). Unlike the previously mentioned Inner Asian goods that were found in Sogdiana, Chinese goods cluster in Central Asia especially in Ferghana which speaks for a direct contact from Xinjiang via Kara Darya and Tar.

[141] Moshkova 2009, 104. I thank Mikhail Treister, Bonn, for pointing out this report to me.

Most of the Chinese mirrors that are known from Central Asia have also been found further east in Inner Asia. However, there are two mirror types that do not follow this pattern. One is the mirror with cloud and nebula design (Fig. 15) the other is one variant of the inscriptions mirrors (Fig. 16, dark green dots). Both mirror types are unknown to the steppe people in Mongolia and Transbaikalia, but they occur in Ferghana and also in Bactria which resembles the dispersal of imperially made lacquers (Fig. 28). From Bactria the routes might have run to Xinjiang either through Ferghana or directly along Vakhsh and Surkhob.

Comparing the flow of Inner Asian goods and fashioning with that of Chinese goods, we see that the former indicates trans-Eurasian connections earlier than the Chinese goods. Between the first century BCE and in the first century CE both categories were distributed in a similar pattern: these goods have in Inner Asia a longer history than in Central Asia and the western steppes where all these goods were only found in graves of the first and second centuries CE. Furthermore, we see different consumption preferences in the western steppes. For example, while the communities on Crimea did not choose to use Chinese mirrors and preferred other mirror types, the received Chinese lacquer boxes did indeed accommodate the tastes and needs of Crimean elites. Since interaction and exchange is a two-way process, we now need to identify which western goods were transferred from the western Eurasian steppes to the East and when this occurred.

Objects from the West in the East

We know from the early written Chinese records that by the end of the second century BCE, beginning with the mission of Zhang Qian, Central Asian goods were being brought to the Han court, among them grapes and alfalfa[142]. A group of silver vessels inspired by an Achaemenid tradition but locally produced has been discussed as an example for the adoption of western design by Chinese elites of the third and second century BCE (Nickel 2012).

From the historical records we cannot derive any information about the Xiongnu's acquisition and consumption of western goods. Material culture indicating West to East transfers is, however, more abundant than is currently acknowledged. Well known are those textiles of Central Asian origin that have been unearthed in Noyon Uul, not only during the early Kozlov expedition but also during the latest Russian-Mongolian excavations. Large pieces of textile are currently exclusively known from aristocratic tombs at this site that belong to the first century CE[143].

Apart from textiles also horse gear illustrates an adoption of western elements. Large phalera as decoration of the breast straps of the horse gear are found rarely in Xiongnu period graves, but are seen often in graves of the Sarmatian period the Black Sea area[144]. In this larger group of phalerae the special type of Graeco-Bactrian style has been found between Volga and Irtysh in graves, roughly located at the same latitude on an east-west line (Treister 2012, 53 Fig. 1; 2013a). Treister suggests that their origin of production may be the elusive Graeco-Bactrian kingdom

[142] Sima Qian/Watson 1961, 244–245; whether or not the mentioning of grapes in China point to the production of wine seems to be a matter of debate: cf. Trombert 2005, 261–262 and Liu 2005; see Jiang et al. 2009 for scientific evidence for early grapevines in Xinjiang.

[143] Borovka 1925; 1926; Rudenko 1969; Polos'mak et al. 2011a. Similarly favorable preservation conditions were given for Shombuuzyn belchir. In how far also prestigious textiles such as from Noyon Uul were found there can only reveal a thorough analysis of the textiles.

[144] Mordvintseva 1999; 2001; Treister 2012; Miller/Brosseder 2013.

and proposes that they were acquired as military booty in the late second century BCE (Treister 2012, 95). In Mongolia, phalerae are known from several elite terrace tombs of the Xiongnu, where in each case a single large phalera was combined with pear-shaped plaques depicting fantastical beasts[145]. One piece is outstanding in that it is a re-used silver medaillon of Hellenistic toreutics, a piece that probably has been made in the late second to mid-first century BCE in a Pontic workshop (Fig. 29.1; Treister 2014, 144). Since the silver medaillon with greek motif from Noyon Uul was originally not designed to be a phalera and only in its last usage became part of the horse gear, it is not astonishing that the backside does not show any of the metal stripe leashes to fasten and sort the straps (strap distributor), instead the rim is pierced in regular intervals which may point to a different fastening manner.

All contexts do not date earlier than the first century CE, and we know almost nothing about the use of phalerae in Mongolia. Possibly, such phalerae are also depicted on horses of the Central Asian tapestry found recently in Noyon Uul (Fig. 29.3; Eregzen 2011, 256 Fig. 386). There is a considerable time lag between the date of contexts in the western steppes with such phalera in the late second century BCE and the date of contexts in the Mongolian steppes that date to the first century CE. This considerable time lag may find its explanation in the last use of such a phalera having been re-worked in various ways in order to meet the requirements to function as a proper object in the Xiongnu realm and possibly, in the adoption of a fashion. In any case the Inner Asian contexts are contemporaneous to the graves in the western steppes that yielded eastern goods.

Additional items found in Asia that point to the Black Sea area are a key-hole shaped belt buckle found in Xinjiang (Fig. 30.1) that is similar to Sarmatian fashioning (cf. Puzdrovskii 2007, 370 Fig. 96.3–14). Its date is unknown but it clearly belongs to this time horizon. A bronze bowl kept in the Freer and Sackler Gallery and now mounted on a modern wooden stand has a handle with a horse figure on top looking towards the bowl (Fig. 30.2). Such horse and animal figurines mounted on handles are characteristic for Sarmatian period burials in the Black Sea area. They occur both on ceramics and on metal vessels.

Glass, also in other time periods, is a material that was highly treasured in the East[146]. In Mongolia, an almost complete Roman ribbed glass bowl was unearthed in an elite burial associated with the largest terrace tomb complex of Mongolia (Fig. 29.2; Erdenebaatar et al. 2011, 312 Fig. 11.1). This bowl belongs to the type of a "zarte Rippenschale", type E184, Isings form 17, which most likely was produced in the first half or in the second third of the first century CE (Whitehouse 2001, 202–203; von Saldern 2004, 227–228). The date of the tomb cannot be confined to this narrow time period; it could very well date to the second half of the first century CE. Such glass bowls are widely distributed in the Roman Empire, between Britain, Libya, and Turkey and they are well known in the Black Sea area. In the eastern Mediterranean they are known from Palmyra (Ployer 2013). Bowls type E184 were probably produced in various parts of the Roman Empire (Whitehouse 2001, 202–203), possibly also in workshops further to the east (von Saldern 2004, 228). In China proper, Western glass was rare during the Western Han period. Fragments of a ribbed bowl made from mosaic glass, also blue in color, were found in the grave

[145] They are known from kurgans 6 and 20 in Noyon Uul, kurgan 1 in Gol Mod 2 and from kurgan 7 in Tsaram (Miller/Brosseder 2013). The other sets of prestigious horse gear are a combination of several smaller round plaques, thus their function is different, and they can be omitted here. On the phalera from Noyon Uul kurgan 20 see the detailed analysis of Treister 2014.

[146] See the collection of articles in Gan et al. 2009 and in Zorn 2010.

Fig. 29. The variety of Western goods from Xiongnu-period tombs in Mongolia (after Eregzen 2011).

1

2

Fig. 30. "Sarmatian" style objects from China. 1 Belt hook from Chahanwusu cemetery, Haermodun township, Xinjiang (Qi/Wang 2008, 137 Fig. 5); 2 Bronze bowl with horse handle (photo credit: Freer Gallery of Art, Smithsonian Institution, Washington, D.C. Purchase, F1946.18a–b).

of Liu Jing, who was buried in 67 CE in Ganquanzhen, Yangzhou, and who was the king of Guangling (Borell 2010, 128 Fig. 1). This region is exactly the proposed area of origin for the lacquerboxes that were unearthed in the Pontic steppe (Prüch 2013, 151). This type of ribbed

bowl (zarte Rippenschale) have not yet been found in sites connected with the maritime silk road but are associated with the land routes[147].

One group of objects that came from the West to the Inner Asian Steppes are glass beads (Fig. 29.5–7). For the correct identification of their glass paste and their origin, it is crucial to identify the chemical composition of the glass[148]. Morphology alone is in any case insufficient to specify glass production areas as J. Lankton showed with triangular beads, a type that also occurred among Xiongnu burials that have different chemical compositions and thus were produced in different areas (Lankton et al. 2012). Although currently only few chemical analyses have been conducted for beads of Inner Asia, the first results indicate that glass beads from Mongolia, Xinjiang and Transbaikalia have various sources[149]. According to older analyses the majority of glass beads from Ivolga was made from a potash glass, i.e. were manufactured according to an eastern recipe (Galibin 1985, 39). From workshops located in the eastern Mediterranean come beads made of soda-lime glass as well as faience beads (Galibin 1985, 44; Liu et al. 2012, 2140; Lankton et al. 2012). In the Mongolian sample, some glass beads probably originate from northwestern Pakistan, including gold glass beads. Other beads are possibly from Iran, or Central Asia (Lankton et al. 2012). It is especially interesting that the gold glass beads from Mongolia were manufactured in a different area (Pakistan) than the gold glass beads from Xinjiang, which were of typical Mediterranean glass composition, and they had been found as far east as Southeast Asia and Korea (Liu et al. 2012, 2140). Where the gold glass beads from Shombuuzyn belchir (Fig. 29.6; Eregzen 2011, 122 Fig. 146) or Nükhtiin am (Eregzen 2011, 122 Fig. 145) and other sites in Mongolia originate, can thus only be established through scientific analysis. Similar beads are known from the Black Sea area as well as Central Europe, where they are typical for the late first through the second centuries CE (Alekseeva 1978, 29 type 1, Pl. 26.4; Tempelmann-Mączyńska 1985, group 29, Pl. 14.387a). The form of the glass bead with silver foil from Ögömöör Uul 1 (Fig. 29.7; Eregzen 2011, 123 Fig. 150) has also analogies in the Black Sea area from the time of the first to the third centuries CE (see Alekseeva 1978, 32, type 22, Pl. 26.24).

Interestingly, in both the Mongolian and Xinjiang sample, glass beads made of lead barium glass, the typical glass recipe of the Warring States and the Early Han dynasty, are either scarce

147 Fragments of other glass bowls, so-called pillar moulded glass bowls that were recovered in Mongolia from the same burial complex, the monumental kurgan 1 of Gol Mod 2. These fragments yet lacking full publication belong most likely to (a?) ribbed bowl(s) that were produced between the second half of the first century BCE to mid-first century CE (Meyer 1992, Pl. 1). According to von Saldern (2004, 190) the peak of their production was reached in the second third of the first century CE. It seems that they have been typically distributed along the maritime route between the Red Sea and India (cf. Meyer 1992, 17–19), from where such ribbed bowls also were transported to Taxila and Begram (see Menninger 1996, 26–29). Such glass bowls, either Roman originals or local imitations thereof, have also been found in Southeast China (von Saldern 2004, 190 fn. 15) which points also from this side to the use of the maritime routes for the distribution of such bowls.

148 This can best be achieved by Laser Ablation High Resolution Inductively Coupled Plasma Mass Spectrometry (see Lankton et al. 2012); for problems with X-ray fluorescence (XRF) analyses see Liu et al. 2012 and Lankton et al. 2012.

149 In recent years 28 glass beads from Baga Gazryn Chuluu, Mongolia (Lankton et al. 2012) employing XRF as well as 65 glass beads from Xinjiang (Liu et al. 2012) have been analyzed. The pioneering work on chemical glass analysis from Xiongnu tombs in Transbaikalia by V. Galibin (1985; 1993) is difficult to connect to the modern glass analyses that have shed light on glass compositions from Europe to Asia (e.g., Gan et al. 2009; Zorn 2010; Liu et al. 2012). Galibin who had analyzed glass beads from Ivolga, Dyrestui and other Siberian cemeteries suggested that besides glass of western provenance, which he believed to come from the Mediterranean (Galibin 1985, 44), glass from India (Galibin 1993) is also among the beads found there. This glass which he characterizes as glass with a potassium (potash) and low calcium content, however cannot be pinned down to such a specific place of manufacture on the basis of the current understanding of glass compositional types (Lankton et al. 2012). Lankton adds that Galibin's data possibly shows Mediterranean glass present in grave 100 of Ivolga and grave 33 from Il'movaia Pad'. Unfortunately there is also no clear correlation possible between the glass beads analyzed and the exact bead published by Davydova (1996).

or completely absent. However, such a composition characterizes beads further north in Tuva, from Dogee-Baary-II, and from Ialoman-II in the Altai (Khavrin 2009; Tishkin et al. 2007). While the latter dates to the late first century BCE and to the first century CE (Tishkin 2011, 557 Fig. 16) the yet unpublished kurgans from Dogee-Baary-II are likely to be dated to the second and first centuries BCE (Khavrin 2009). Remarkably, other Chinese objects, such as a mirror and lacquer fragments, are also mentioned among the findings at this site. This again shows that we have to reckon with a complex web of contacts and connectivities.

Pendants made of Egyptian faience have been unearthed in the Altai, Mongolia and China. The earliest faience pendants coming from a Xiongnu period grave have been excavated in the northern Gobi, in Ikheriin Am, gr. 1 which dates most probably to the first century BCE (Fig. 29.10,11)[150]. Faience pendants are also known from the Altai and from Qinghai province (Fig. 29.9)[151]. One of the Altai pendants, from Kuraika, belongs, according to radiocarbon dates, to the second half of the second to the middle of the third centuries CE (Bogdanov/Sljusarenko 2007, 80), long after the collapse of the political Xiongnu Empire, and shows that we probably have to reckon with heirloom or changing connectivities over time. Imported faience beads and pendants are known from numerous sites in Central Asia (Sherkova 1991, 24 Map 2) where all the types known from Inner Asia are attested as well. Moreover, they occur regularly in graves of the Sarmatian period in the Black Sea area and the lower Volga between the late first century BCE and the second century CE (Alekseeva 1972, 9 Fig. 3.15; 10; 1975, 47; Mosheeva 2010, 161). All faience pendant types are therefore known from the three cluster regions (Black Sea, Central Asia, Inner Asia) where other, previously discussed materials occur.

Although for the early western beads the routes led overland, in the (later) first century CE with the beginning of the flourishing exchanges between India and Mediterranean Rome also the maritime route provided a possible avenue for the dispersal of such goods[152]. Amber beads are also numerous in elite Xiongnu period graves of Mongolia and could be regarded as of western provenance (Fig. 29.4,8). So far no scientific analysis of such amber beads from Mongolia or Transbaikalia has been undertaken, thus, a hypothetical designation as Baltic amber has yet to be verified scientifically. Especially, as amber sources are known in China and from Lake Aral[153]. In this respect it is interesting to learn that the chemical designation "Baltic Amber" does not necessarily indicate a Baltic provenance for this kind of amber which can come from places as varied as Kamchatka, Siberia, Romania and Northern Germany (Boroffka 2009, esp. 123 Tab. 1; cf. Bliujienė 2011, 9–11).

[150] Ikheriin Am, Ex05.02 (Amartüvshin/Honeychurch 2010, 287 Fig.). One faience bead resembles the Egyptian god Bes type 35 of Alekseeva (1975, 38–39) or, since the head is missing it could belong to type 37 (cf. Alekseeva 1975, 39 Pl. 6.32). The other is a pendant in form of a hand that belongs to type 89 (Alekseeva 1975, 47; Pl. 7.21–27). A sample from the grave yielded a radiocarbon date of 2040±30 BP (Amartüvshin/Honeychurch 2010, 232), calibrated with OxCal 4.2 in the 2 sigma range: 162 BCE – 46 CE; with 88% probability: 118 BCE – 26 CE.

[151] Not striving at completeness, the following faience beads are known which all belong to the same type 90 after Alekseeva 1975: Mongolian Altai: Shombuuzyn Belchir, gr. 19 (Miller 2011, 572 Fig. 10.1), Russian Altai: Kuraika, gr. 39 (Bogdanov/Sljusarenko 2007, 79 Fig. 5) and from Shan Sunjiazhai, Qinghai prov., China, gr. 9 (Qinghai 1993).

[152] The same faience and agate beads as from Xiongnu period graves of Inner Asia have also been found in ed-Dur, Oman, a site dating to the late first century BCE to the early second century CE (De Waele 2007) which shows that this site participated in the exchange networks of that time. See also fn. 69.

[153] For sources in China see Bunker 1999, 153–160; for a local source at Lake Aral which Itina describes as amber being yellowish in color see Itina 1998. Most amber beads from Mongolia and Transbaikalia I am aware of are red in color, but yellow amber does occur as the beads recovered from Shombuuzyn Belchir show (Eregzen 2011, 120 Figs. 139; 141).

At the Chinese court amber was treasured early on, mostly for its medical qualities and fragrance when heated: the consort of Emperor Cheng of the Western Han dynasty for example used an amber pillow (Bunker 1999, 153). In the 10th and 11th centuries CE amber was presented as tribute to the Chinese court from Uyghurs in Turfan and from the king of Khotan (Bunker 1999, 153) underlining its importance.

Archaeologically, although little attention has been paid to amber, it is known in China early on. This material did not seem to play a role in Western Han tombs, but small amber feline figures were found in tombs of the Eastern Han and Tang dynasty (Bunker 1999, 154). During the latter amber was also used as inlay for adornment. Amber was highly valued during the Liao dynasty. Especially in elite tombs of the Khitan in the northern Liao territory magnificently carved pieces were found (Bunker 1999; cf. Shen 2006; Xiaodong 2009). The only two amber figures of the Liao period that have been analyzed so far were were made of "Baltic amber"[154].

In Xiongnu period graves no raw amber, only finished amber beads occur. So far four types are known[155]. For the barrel to cylindrical beads (Fig. 29.4) similar amber beads can be named in the West but no exact analogies[156]. Comparative pieces from the West can be named for the two ring-shaped beads (Fig. 29.8)[157]. No specific investigation on the manufacturing of these beads have been undertaken so far, and although no brush-marks are visible, but given their very regular shape they may have been produced on a lathe[158]. In general amber beads are typical in the Black Sea area in the first and second centuries CE (Alekseeva 1978, 22). Taking all these scanty informations together, type, production technology and considering the ways it was used in China proper as well as results from analyses it is probable that amber beads originated in Western Eurasia, possibly in the Black Sea area. In the steppes, the most prestigious goods from the West are found in terrace tombs and thus only appear later in Mongolia, between the end of

[154] Beck/Stout 1999. The pieces were examined by infrared spectroscopy. The determination as Baltic amber is especially noteworthy as local amber deposits exist in Liaoning but were not used for these pieces.

[155] Spherical beads, yellowish, 0.9cm in diameter, are known vom Shombuuzyn belchir, gr. 14 (Eregzen 2011, 120, 141). – Shombuuzyn belchir, gr. 14, diameter 0.9cm yielded small yellowish amber rings with a diameter of 0.4cm (Eregzen 2011, 120 Fig. 139). For these types no exact analogy are known to me. Since these both types also used yellowish amber and not reddish amber like the types described in the following footnotes it would be highly interesting to obtain a scientific determination.

[156] Cylindric to barrel-shaped beads 2–3cm in length were found in Gol Mod 2, gr. 30 (Fig. 29.4; Erdenebaatar et al. 2011, 312 Fig. 11.2), Burkhan Tolgoi, gr. 9 (Törbat et al. 2003, 183 Figs. 1–10; Eregzen 2011, 121 Fig. 142); Ögömöör Uul, gr. 2 (Eregzen 2011, 119 Fig. 138); smaller ones, measuring 1cm in length are known from Duurlig nars, gr. 2 (Duurlig nars 2011, 209, nos. 257, 258). Since only for the beads from Burkhan Tolgoi profile drawings were provided which show that they are mostly oval in profile, the search for analogies is limited. Similar are beads of type 44 after Alekseeva (1978, Pls. 23.42,43; 24.31–44) some of which have a similar shape but are flat in profile (Alekseeva 1978, Pl. 24.44). Alekseeva (1978, 26) notes that such amber beads are typical for the first and second centuries CE in the Black Sea area. Possibly also a bead in a necklace from Kara-Bulak in the Ferghana Valley is similar to the ones from Mongolia (Gorbunova 1986, Pl. 52).

[157] Ring-shaped beads, diameter 1.6cm were found in Duurlig Nars, gr. 2 (Eregzen 2011, 123 Fig. 149); Ar Bulan Khunnu, gr. 2, diameter 2cm, unpublished excavation, Ch. Yeruul-Erdene, J.-O. Gantulga, U. Brosseder. Besides their similarity in form and color they also were treated in the same way in that they were pierced horizontally, indicating a similar way of usage.

[158] These beads are roughly comparable in the northern Black Sea to Alekseeva 1978, 24; Pl. 24.23,27, type 11 and Gopkalo 2008, 68–69; 130 Pl. 8 Subgroup 4, assuming that they were produced on the lathe; the author sees such beads appearing in the early Cherniakhov culture (Gopkalo 2008, 69); in general, in the West, the central hole is smaller than from the pieces in Mongolia. Comparable in form and shape are amber beads/rings from a Late Latène period hoard in Moravia (Ptení) (Čižmářová 1996, 180 Figs. 5.6,8,10). Amber beads from Lake Aral are much more irregular (cf. Levina 1996, 340 Fig. 145.45–63). There, the form of the chalcedon bead (ibid. Fig. 145.65) is better comparable to the Mongolian amber specimen. In Central Europe the turning lathe was used to manufacture amber beads already in the Iron Age and in the middle Imperial period of Eastern Europe (cf. Wielowiejski 1996, 254–255). Given the tradition of stone and jade carving in China, Bunker (1999, 153) suggests that the Liao ambers were probably manufactured by Chinese craftsmen.

the first century BCE through the first century CE while smaller goods, such as beads probably have been brought to Inner Asia also earlier.

The last Episode – Times of Change

The flows of goods was at its height from the late first century BCE to the first century CE and as we have already seen, by the second century CE, the recipient area had shifted from a wider Black Sea area to a more restricted area in the Southern Urals. This can be perfectly illustrated by the most recent group of mirrors generally attributed to Eastern Han period. These are mirrors with concentric circles and linked arcs, with a quadrefoil around the knob, sometimes also known as *qingbai* mirrors (Chou 2000, 37). Unlike most of the previous Western Han period mirrors – with the exception of the TLV mirrors – this Eastern Han type is rarely found in Mongolia (Fig. 31; list 13). Two such mirrors come from elite terrace tombs that can be reliably dated, at the earliest, to the beginning of the first century CE[159]. This mirror type occurs widely throughout Central Asia and in the Urals, both regions in which the original Chinese mirrors were often copied. Even though it is impossible to distinguish with certainty between a Chinese original and an imitation based only on drawings published in scholarly studies, for illustrative reasons this attempt was made to provide a map of possible distributions. In the Isfara region of the Ferghana Valley in Central Asia, the large number of imitations suggest that this kind of mirror enjoyed great popularity[160].

This is also in the Ural region the case. But, because of their later dates, tomb inventories in the Southern Urals differ greatly from those that include earlier Chinese mirror types. Bow-shaped fibula with wire wraps around the bows were found both in Gorodskoi and in Lebedevka-V, kurgan 23. In Gorodskoi these fibula were combined with enamel fibula, and the combination of both types indicate a date in the late second or early third century CE[161]. The graves in which these late mirrors, and particularly their replicas, are found, are exclusively those of women in the West. In sum there are three impressive changes with regard to their distribution: first, this mirror type can only rarely be found in Inner Asia; second, they are much more imitated than any previous mirror type and third, such mirrors are known from

159 List 13. The mirrors come from T1 in Gol Mod (Mongolie 2003) and from the largest known terrace tomb 1 in Gol Mod 2 (Erdenebaatar 2012). The context for the mirror from Övgönt is unknown.

160 Even though it is hard to judge from the drawings of these mirror fragments in Litvinskii's publication, it is most probable that these mirrors were copies (Litvinskii 1964).

161 An identical fibula with wire wrap, executed in gold, was found in Gorgippia, dated around 150–170 CE (Treister 2003, 74). Similarly, Kosianenko believes that these fibulae, her type III of group III on the necropolis of Kobiakovo, belong to the second and beginning of the third centuries CE (Kosianenko 2008, 100 with Pl. 10). In Gorodskoi this type was combined with a disk-shaped and a rhombic-shaped Roman enamel fibula (Ettlinger 1973, type 44.4; Marčenko/Limberis 2008, 315–316). In Augst, enamel fibulae belong in general to the second but also the first half of the third century CE (Riha 1994, 172; 166). Ambroz (1966, 33) dates the rhombic-shaped fibulae only generally to the second and third centuries CE. In the Kobiakovo necropolis these fibula type belongs to Kosianenko's group VI, which she dates to the second half of the third century CE (Kosianenko 2008, 102). Interestingly, the same combination of a disk-shaped enamel fibula in association with fibula with wire wrap as in Gorodskoi, was found in grave 15/1959 of Kobiakovo (Kosianenko 2008, 397 Fig. 72). – The same date, late second century or even early third century CE is probable for kurgan 24 of the Pokrovka-10 graveyard, since it contained two fibulae with intricate head-plate and a hook for the clasp (Malashev/Yablonsky 2004, 286). The date is supported by the Roman rhomb-shaped enamel fibula that could be dated similarly to the one from Gorodskoi.

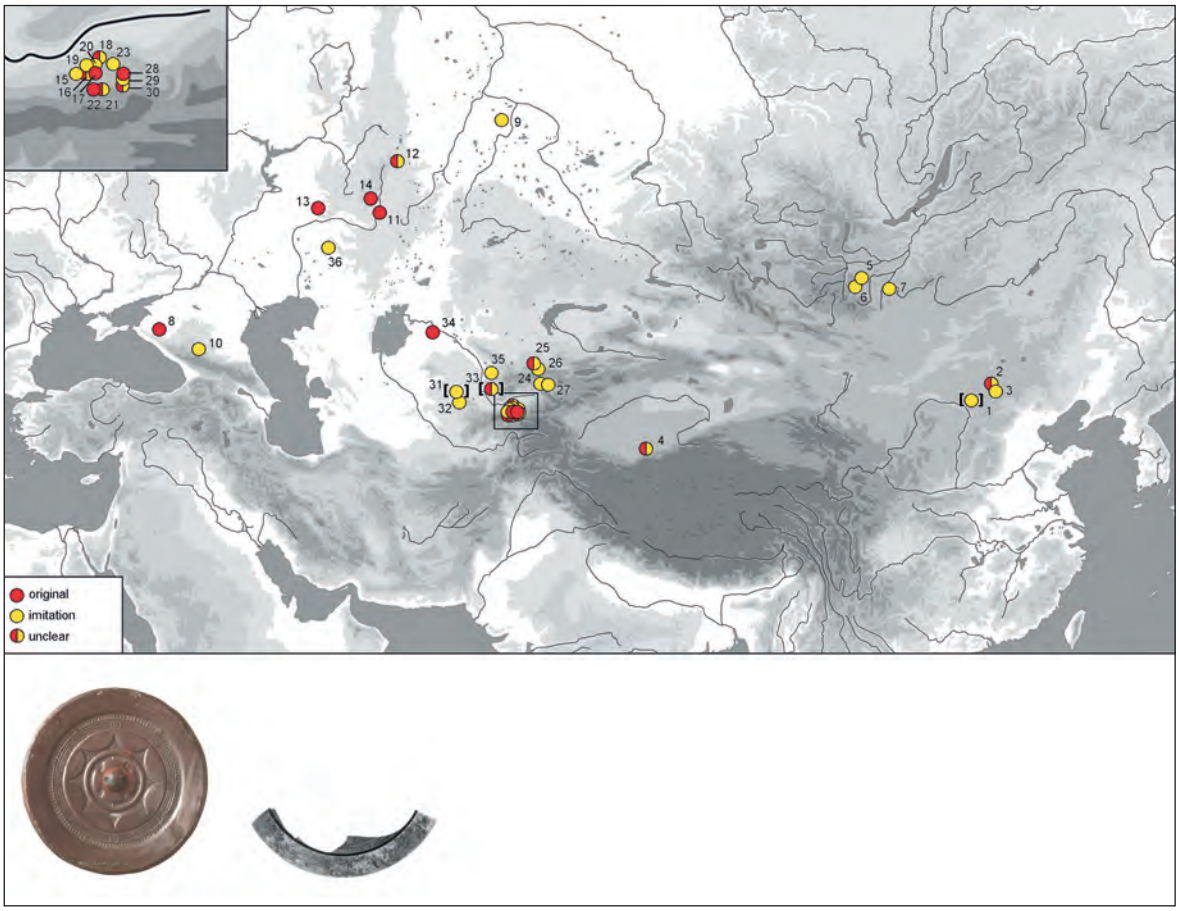

Fig. 31. Distribution of qingbai mirrors in Eurasia (numbers refer to list 13).

the Urals and the northern Caucasus but are otherwise unknown from the larger Black Sea area.

This shift of regions can also been observed in the distribution of nephrite sword guards and scabbard slides of the second century CE (Fig. 32; list 23). Scabbard slides and sword guards made of nephrite comprise another Chinese category of goods that appear in the Black Sea area. The oldest context of a nephrite sword guard outside of present-day China is known from the Sudzhinsk cemetery of Il'movaia Pad' in Transbaikalia, which dates to the first century CE (Fig. 23)[162]. To the same time belongs a scabbard slide from Bulgaria, found in the tomb Roshava Dragana, which was that of an aristocrat[163].

More often we know of contexts with nephrite scabbard slides and sword guards that belong to the second or third century CE. In Central Asia the grave of Orlat contains a sword with nephrite sword guards and a scabbard slide which may be dated to the first to second centuries CE (Ilyasov/Rusanov 1997/98, 107 pp. 123 pp.). The burial in kurgan 19 of Sladkovskii, located

[162] Another rhombic sword-guard, albeit made of bronze, is known from the Han fortress of Baian Bulag, Mongolia thus appears in a Han context (Kovalev et al. 2011, 501 Fig. 20.1).

[163] Werner 1994; possibly also the graves from Sidorovka and Isakovka belong to the first century CE as Simonenko (2008b, 248) suggests but a thorough evaluation can only be given after a full publication of the context.

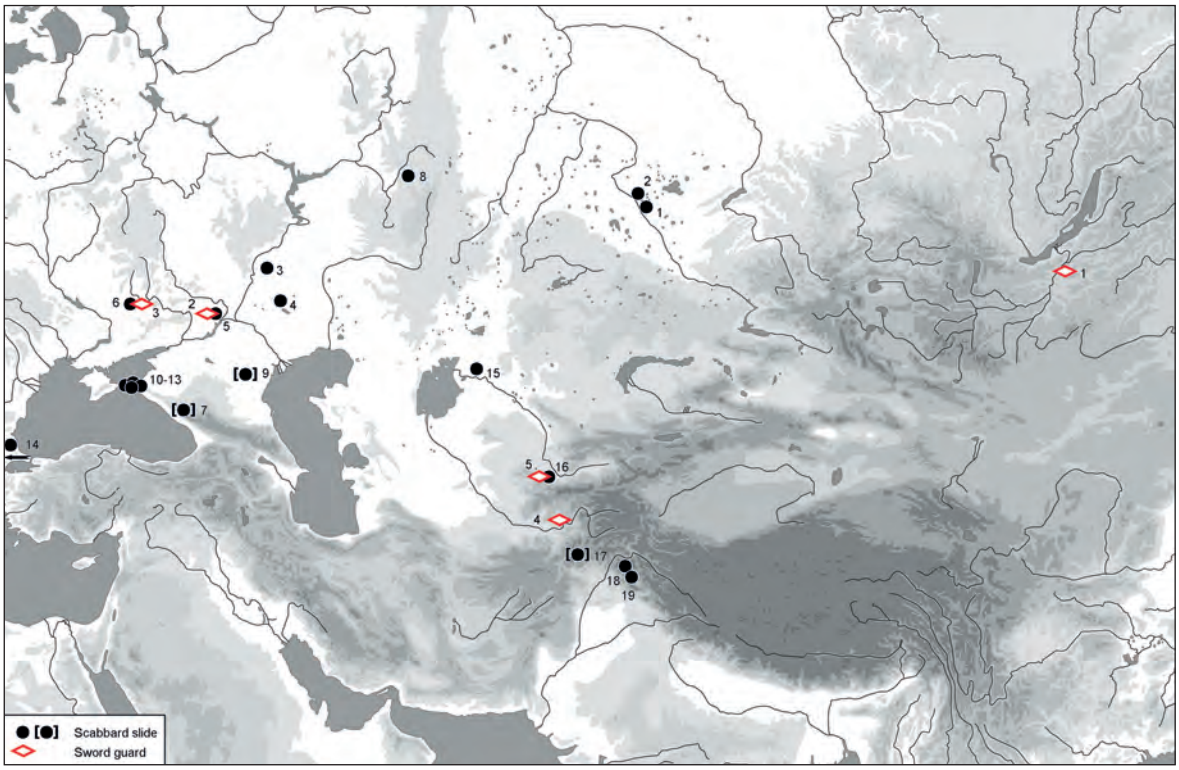

Fig. 32. Distribution of nephrite sword guards (numbers refer to list 23) and scabbard slides (numbers refer to list 22) in Eurasia.

in the northern Pontic is dated by the excavators to the end of the second, beginning of the third century CE (Maksimenko/Bezuglov 1987). Besides a long-sword with a nephrite sword-guard and scabbard slide, this site also yields numerous arrowheads and strap ends which display close analogies in the burial of Orlat[164]. The other kurgan burial of that area, from Kamyshevskii, has produced a long-sword, sword-guard, and scabbard slide, as well as a bow fibula with wire wrap (Li Dzhin Yn 2010, Pl. 36). These objects resemble specimens of the late second century CE from the same contexts that yield the late Chinese mirrors. Moreover, from the Perm district, other single finds appear, although they are dated to a later period of the third or fourth century CE (Trousdale 1975, 234–236). In the Parthian realm, depictions show that during the later Parthian period, the long-sword replaced the dagger as status symbol of sovereigns and nobility (Winkelmann 2003, 62). Some may very well resemble swords with cross-guards made of nephrite.

Again, just as it is the case of the daggers, it is striking that the Xiongnu realm is almost devoid of these sword elements. The four identified swords and sword fragments (see fn. 63) of Xiongnu period burials do not represent one single type but belong to different types: one is a tanged

[164] See Brosseder 2011, 396 Fig. 45.29; In Sladkovskii in addition to two iron disk-shaped objects covered with gold foil with a "dot pattern", according to the authors, pendants were found (Maksimenko/Bezuglov 1987, 184). Similar objects are found in Il'movaia Pad' (Konovalov 1976, Pl. 15.1–8). The description of the dot pattern on the gold foil is reminiscent of pricked gold foil among the Xiongnu (Konovalov 2008, Pl. 35.20; Miller et al. 2009, 11 Fig. 8; Brosseder 2011, 394 Fig. 43.2). Arrowheads and strap ends connect the mentioned burials with the rich grave of Porogi, where they also occur (Brosseder 2011, 402 Fig. 49.10–15; 403 Fig. 50.25–26).

sword with a broad blade and another one is a long-sword with an iron sword guard. Only one sword with a nephrite sword guard is known: it was found in 1899 in Il'movaia Pad' in Transbaikalia and remained unnoticed in the literature (Fig. 23). Its fragments were found in a red lacquered sheath with lozenge ornament and thus I assume the complete set of sword and sword-sheath are imported from China[165]. Another sword found in Mongolia is a long-sword with a disk-shaped pommel that finds its closest parallels in Central Asian contexts and thus seems to be also an imported piece (Fig. 9.4)[166]. In terms of their contexts, twice, in Takhiltyn Khotgor and in Il'movaia Pad', swords were found in terrace tombs but the other were found in "circular" graves, or graves demarcated by a simple stone clustering on the surface (Dyrestui 48 and Baruun Khairkhan 5). The rare occurrence of swords in graves of the Xiongnu leads us to the conclusion that they do not play a significant role as status object, and this may be reflected also in the passage of the *Shiji*: "Their long-range weapons are bows and arrows, their short-range weapons are the dagger and a short, all-metal pike"[167]. Because of the high percentage of disturbed graves, some uncertainty remains regarding this point.

Summarizing the evidence of Chinese objects in the Eurasian steppes from the late first and second century CE, we see a dramatic change in the distribution pattern. While in the western part of Eurasia the distribution is still similar to most of the maps shown before, the change is impressive in the eastern steppes whose "global player" drops out of the picture and leaves the stage. We have to take into account, however, that from the second century CE onwards we know currently only of very few burials of the Inner Asian steppes, but this should reflect the demise of the Xiongnu Empire nevertheless. And the distribution in the West is strikingly similar to the very early western interaction sphere that is reflected by the distribution of the framed belt plaques by the late second century BCE as well as the four-lobed dagger sheaths underlining the earlier stated connectivity of the area between Iran and the Black Sea.

Discussion: Between Gift Exchange and Economic Exchange

Economic exchange and coins

Before fully discussing the types of exchanges we can identify, where they took place, and who were the possible agents, we must first address the topic of money and coins as signifiers of contacts and exchange through the Eurasian steppes. A money-based trade may happen without coins being involved (Howgego 2011, 101; 106). Since money, especially in the case of organic forms (textiles, grain) is often perishable, it is far easier, and perhaps deceptive, to identify money only with coin, or to highlight coins in the archaeological record simply because they are a durable good that is easy to identify (Wang 2004, 9–10). Additionally, it is questionable whether isolated finds of single coins from afar can be understood as indicators of economic exchange and its routes.

[165] However, we cannot rule out the possibility that only elements of such a set were re-used, for example, the nephrite sword guard and the sheath for a local blade is a known example from the Merovingian period (Quast 1999, 716).

[166] A similar sword is known from Liavandak, Uzbekistan, kurgan (Obel'chenko 1961, 101; 102 Fig. 2; 131 Fig. 8).

[167] *Shiji* 110: 2879; Giele 2010, 241; Brosseder/Miller 2012.

For our study we have to take a brief look at coinage and money in the Han, the Parthian, and the Roman Empire. The Roman-Byzantine and the Chinese monetary systems were very different in that silver and gold dominated the monetary economy of the Roman Empire, while bronze coins (cash) dominated that of the Chinese empires, supplemented at times by precious-metal bullion (Alram 2002, 272–273; Scheidel 2009). Chinese bronze coins, due to their low value, hence considerable weight in bulk, were not useful for large transactions and predominantly played a role only in the inner market (Scheidel 2009). Loewe thinks that it is likely that silk bales took the place of coins in large transactions[168].

Nevertheless it is interesting to see where outside of Han China *wuzhu* coins are found and in what contexts. The currency situation in eastern Central Asia, today's Xinjiang, was unclear during the Western Han period (Wang 2004, xiii; Alram 2005). In fact, the standard *wuzhu* coins pose a major problem, as it is often not possible to identify the mint and in this respect they contribute little to the dating of a site[169]. The majority of *wuzhu* coins found in eastern Central Asia are Eastern Han issues, while Western Han *wuzhu* coins were only found in batches along with later coins (Wang 2004, 27). Therefore, for most of the time period of interest (2nd century BCE – 1st century CE), coins played no role for the internal market in the larger stage of eastern Central Asia. Apart from Xinjiang, *wuzhu* coins also occur to the north in Mongolia, Transbaikalia, and in the west in the Ferghana Valley. In Mongolia and Transbaikalia, they are found mostly as single coins or as ornaments of belt attire, predominantly of female burials[170]. The largest number of *wuzhu* coins in Central Asia is found in the Ferghana Valley; they only rarely appear elsewhere[171]. Dating the coins is difficult, the larger part possibly dates to the Eastern Han period, i.e., the first or second century CE (Gorbunova/Ivochkina 1988). As in Mongolia and Transbaikalia these coins were found singly in graves as parts of attire, hence used only as ornamentation or to conspicuously display something exotic on the body.

Alram considers Parthian drachm as a medium of "international" trade outside the borders of Parthia in Transcaucasia, Gandhara, Bactria and Xinjiang, but he rightly points out that they are found only in small quantities, unlike later Kushan and Sasanian coins that are known in great numbers from Xinjiang (Alram 2004, 176; Schwinghammer/Szaivert 2010; Skaff 1998). Roman coins are found in considerable numbers in the Parthian Empire and in India, but not in China[172]. Single Roman coins of the first century CE have been found only in the northern part of Central Asia (Mielczarek 1997, 133), and this limited dispersion of coins do not suggest a large-scale economic exchange.

168 Loewe 1971, 168. In the former Han period gold is frequently mentioned but was never used as currency, except under Wang Mang. Nishijima points out that gold was used for the purpose of valuation and as a means for conserving wealth rather than for purposes of economic exchange (Nishijima 1986, 589–590). Under Wang Mang, a currency system, which proved impractical was introduced, with the gold, silver, tortoise shell and cowries as currency (Nishijima 1986, 588–589). According to H. Wang (2004, 14) silk, grain and gold circulated officially as money. For the usage of silk in later time periods see also Journal of the Royal Asiatic Society 23, issue 2, 2013. Special issue: textiles as money on the Silk Road.

169 Wang 2004, 10. For different types of coins see Thierry 2003. Moreover, dating only provides a *terminus postquem*, with possible large time lags.

170 Furthermore, I know of an unpublished coin hoard, today housed in the Museum of Kharkhorin, found in the site Aral, approximately three km south of the centre of Ögiinuur sum. I thank Tsagaan Turbat for this valuable information.

171 On coins in Ferghana see Gorbunova/Ivochkina 1988, who list 42 *wuzhu* coins in that area. In Semirech'e *wuzhu* coins were found rarely, where they also occur in archaeological contexts or hoards of the 9th and 10th centuries CE; see Kamyshev 2002; 2008, 56. For coins in Tadjikistan, see Zeimal' 1983.

172 Single western coins do occurr in China, albeit later. In the literature a hoard with coins from the Bosporan kingdom is mentioned which is reported to come from Dzhungaria (Diehl 1923; Werner 1933). However, Mielczarek (1997) believes that the reports cannot be trusted.

This is also in direct contrast to the case of numerous Roman coins and coin hoards found in India, for which commercial trade seems to be the only reasonable explanation (Howgego 2011, 119). Apart from coin hoards, other archaeological materials, like transport vessels and pottery are found in India that directly indicate economic dealings (Tomber 2008). Additionally, the written sources speak of exchanges between the Roman Empire and India and its effects on the economy: Pliny reports that luxury goods from India, China and Arabia annually cost the empire 100 Million Sesterzes, and that India received half of the sum (Plinius, historia Naturalis XII 41 [84]; VI 26; Howgego 2011, 119–120). The Periplus stresses the number of coins brought to Indian markets (Casson 1989, 29–31; Bukharin 2007). Gold and silver were probably transported as bullion and it is assumed that they were used for the local production of coinage. Interestingly, coin hoards show that Roman coins started to come to India during the Flavian period (69–96 CE), a trend that lasted until the second century CE. This may indicate the transfer of precious metal more than commercial exchange on the maritime route (Howgego 2011, 120).

Thus in the case of India with large coin hoards, transport vessels, pottery, and the written sources the evidence points to commercial exchange. In contrast single Chinese and Roman coins in Central or Inner Asia from the second century BCE through the first century CE produce little information about commercial exchange with China. Other currencies of exchange with China, either gold or silk, cannot be evaluated archaeologically as they are perishable and affected by conditions of preservation. Gifting, on the other hand, continued unbroken from the time of the Warring States period, and during the Western Han utilized fine silks and gold. During the Qin and Han, gold was widely used for imperial gifts and for exchange among the nobility (Wang 2004, 14), but it was clearly not used as medium of trade (Hulsewé 1979, 134 fn. 333). This changed in Eastern Han when textiles replaced gold as the main item of gifting, and lengths of silk began to be used as payments again (Wang 2004, 14). Still, it was only later, between the Han and Tang, that textiles played a major role as money[173]. In conclusion the current material evidence does not allow speaking of economic exchanges across the landmass between China/Inner Asia to Central Asia, or even beyond.

Dynamics of interaction and exchange

The study of how goods and fashioning moved throughout the Eurasian steppes has revealed a dynamic network of social and geographical avenues. The main four stages can be summarized as follows:

1. The distribution patterns of foreign goods in the fourth century BCE display small selected areas in which exchange moves along north-south axes (Fig. 4). Elites from the Southern Urals were in contact with the Achaemenid Empire and the ones in the Altai received goods from China and India. While in both geographically small areas the upper echelon participated in exchange networks these eastern and western elites were not connected to each other.
2. By the end of the second century BCE two geographically larger interaction spheres emerge (Fig. 5). An eastern and a western area of intensified interregional interaction can be identified

[173] Wang 2004, 14, and see the contributions in the Journal of the Royal Asiatic Society 23, issue 2, 2013. Special issue: textiles as money on the Silk Road.

where similar status symbols are recognized. These two spheres were connected through a few elite warriors who shared among them one status symbol common to both areas: belt plaques with geometric ornament. The data to this point suggests that Central Asia, especially the region of Sogdiana, served as a connecting point during this time. Currently there is not sufficient evidence to establish a direct East-West connection further to the north that would run from Transbaikalia to the Volga-Don-Interfluve through the steppes of Siberia.

3. From the first century BCE through the first century CE, we witness a peak of connectivity, interaction and exchanges that is established by a coherent pattern of dissemination and reception of three kinds: shared fashioning (Figs. 8; 10; 11; 12), Chinese objects (Figs. 16; 17; 18; 21), and western goods (Fig. 29). What transferred between groups can be divided into the following categories, each of which affects a different social group: containers, textiles, horse gear, weapon techniques, personal accoutrements and motifs[174].
4. In the last phase, probably at the end of the first century CE, the earlier chief Inner Asian agent, the Xiongnu, drop out of the picture, but Chinese goods continue to be distributed to Central Asia and the Black Sea area along already firmly-established routes (Figs. 31; 32). In the second and third centuries CE, Chinese lacquer and mirrors are found in elite graves in the Southern Urals as they simultaneously disappear from the graves of the Black Sea area. Since other Chinese products, such as elements of the sword, are still being found in the Pontic steppe, this could caused by the deflection of routes but may as well point to a change in deposition customs. This paradox calls for a comprehensive analysis of social and cultural changes in the Black Sea area to further clarify how these goods were passed and used, something that lies beyond the scope of this contribution. Such a shift of power centers, however, had been witnessed before when Chinese imports were recorded first in the Altai region before they appear in graves in Transbaikalia and Mongolia. These shifts in the flow of exotic goods may indicate that the consumption needs of the elites in a prestige goods economy were one driving force for interaction and exchange. This growing network of connections shows how a web of earlier predominantly North-South axial contact routes changed over time into mainly East-West connectivities. It also shows that the earlier North-South oriented contacts were instrumental in configuring later East-West exchanges across Eurasia.

The flows of goods can be summarized schematically (Figs. 33–35). Turning to the East-West transfer of Chinese goods (Fig. 33) we observe that most of the objects we encounter in the graves were regarded as prestige goods in the receiving societies, and many, such as Chinese lacquer boxes, were seen as valuables in the producing society as well. For the majority of Chinese objects we see the same time pattern of dissemination. Because of the long-lasting entanglement of the empires of the Han and the Xiongnu Chinese goods appear earlier in greater quantity and variety in Xiongnu contexts of the Inner Asian Steppes than elsewhere.

These artifacts are only found west of the Inner Asian mountain ranges (Altai, Tien-shan, Pamir) in the first century CE. From there it seems they were disseminated to the lake Aral area and beyond to the Black Sea region, where they are found in graves of the later first or early second centuries CE. As it is expected the further away we move from China the rarer these objects become, and the more prestige these goods acquire. In Xiongnu graves for example in

[174] Here also the West-East transfer of the lion-head motif (Borovka 1930) that has not been pursued here needs to be mentioned as well as the griffin motif (Hayashi 2012).

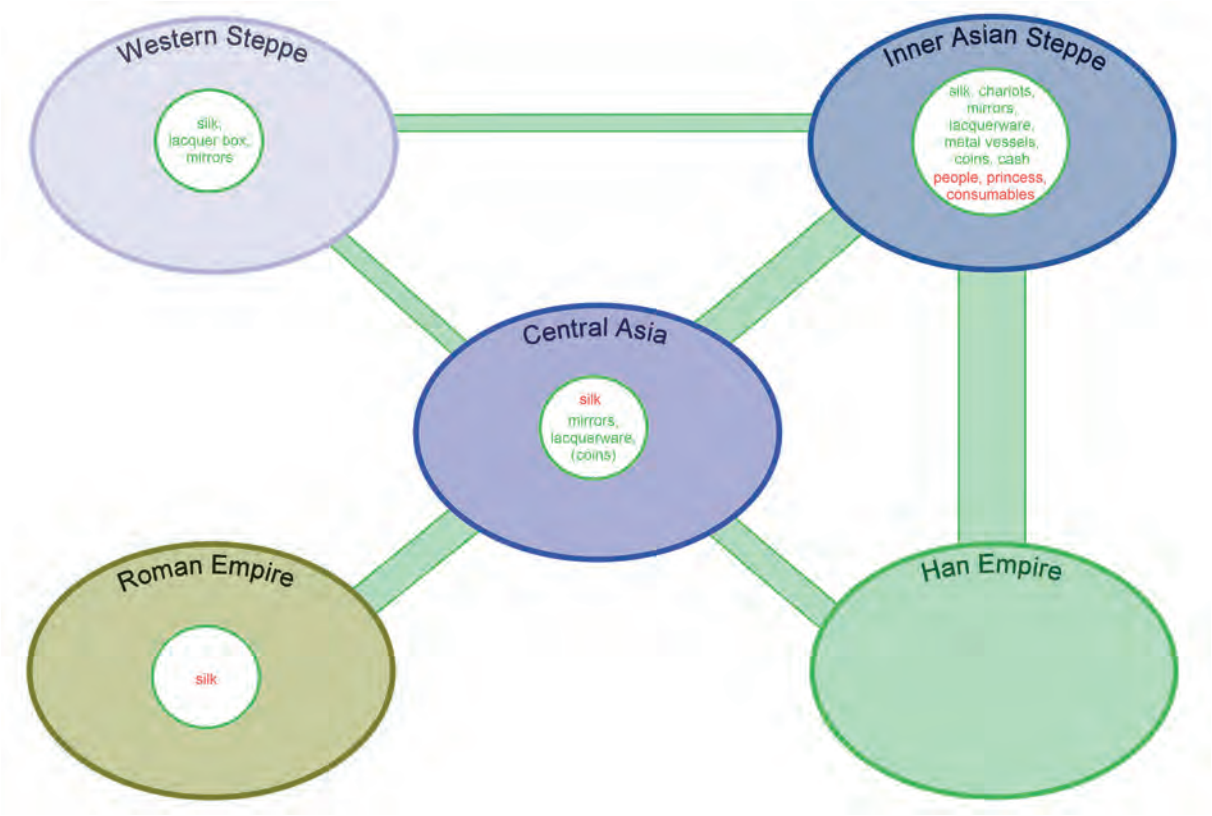

Fig. 33. Schematic of the flow of Chinese goods from East to West. Green script denotes actual archaeological artifacts, red script denotes goods mentioned in the written sources.

the first century CE we find imperial gifts from imperial workshops in exceptionally wealthy graves while in the West, lacquer boxes from probably private workshops are found in similarly wealthy graves. Although we cannot evaluate the contextual inclusion of silk, we see that Chinese mirrors and Chinese lacquerware belong in the West exclusively to the female sphere while in the eastern steppes these goods are typical for both genders. Such a crossing of gender borders has also been observed for belt plaques (Brosseder 2011, 409–411).

Goods from the West (Fig. 34) include faience and glass beads, probably amber beads as well as Central Asian textiles and unique exotica like a phalera and Roman glass bowls. When exactly beads of various materials were brought at the earliest to Inner Asia cannot be established for certainty, at the latest in the first century BCE. Somewhat later prestige goods, such as the Central Asian textiles and the Roman glass bowls treated as exotica are part of the extremely wealthy grave furnishings of the first century CE in the Xiongnu realms. The case of a silver medaillon re-worked to a phalera shows how exotica were adapted to accustom local tastes. The dissemination in time shows a similar pattern to the East-West flow of goods. Only in the first century CE western exotica were found in wealthy tombs, just as eastern exotica were found in western tombs in the same time period. Again, Central Asia plays a vital role for the dissemination of objects while the evaluation of direct northern links through the Siberian steppes remains sketchy. Some maps seem to show this route, possibly indicated by the spread of the dragon motif (Brosseder 2011, 379 Fig. 28) and some mirrors. A thorough evaluation of this route will rely on extensive publication of the graves from the Irtysh-Ishim area around Sidorovka and Isakovka.

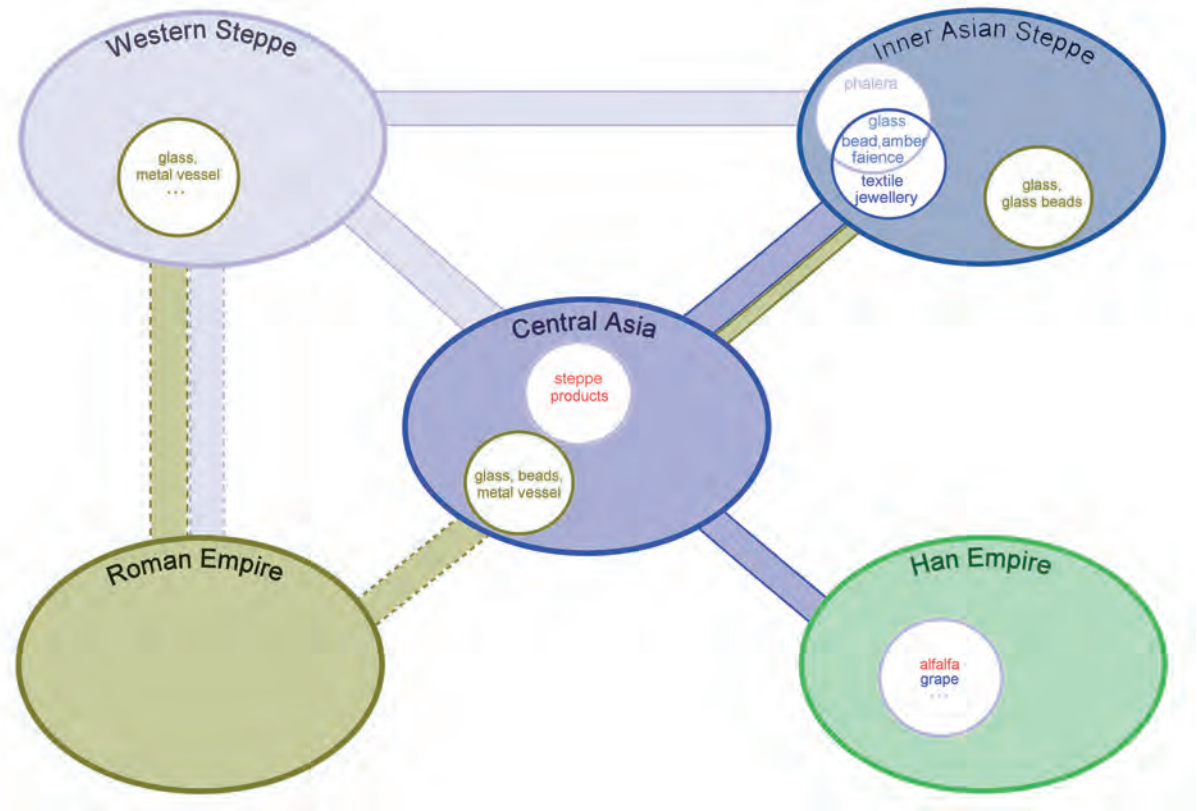

Fig. 34. Schematic of the flow of western goods to the East. Green and blue script signifies actual archaeological artifacts, red script signifies goods mentioned in the written sources.

From what we know from current publications of the rich Sidorovka graves, we can identify connections to all directions, mainly to the south to Central Asia, where for example the ceramic flask originates. The abundance of lacquerware in these same graves as well as other Chinese objects, may point to a transmission via the Xiongnu realm. The gold belt plaque from Sidorovka with a dragon motif executed in gold-turquoise style demonstrates the multiplicity of influences in one object (see Brosseder 2011, 372–380). Because of the lack of extensive publication of other graves, like Isakovka, we can hardly evaluate the influence from the Xiongnu realm.

A summary of all flows of goods through proposed channels, now including the Xiongnu-Han exchanges allows for a more complete picture (Fig. 35). Several goods that cannot be traced archaeologically but are mentioned in the written records are indicated in the graphics by red letters[175].

In the interactions and the contexts of exchange that took place across Eurasia we observe not only the spread of prestigious goods from the West to East and vice-versa, but we also trace the transmission of ideas resulting in the sharing of status symbols over long distances (Fig. 36). In the late second and early first century BCE warriors of the Xiongnu realm, Central Asia and at the Don-Volga-Interfluve wear the same belts and in each region this social group represented the upper echelon of each respective society. While the eastern and western interaction spheres

[175] The exchanges between the Roman Empire and Central Asia as well as between the Black Sea area and the Roman Empire were not target of our study here, thus remain incomplete.

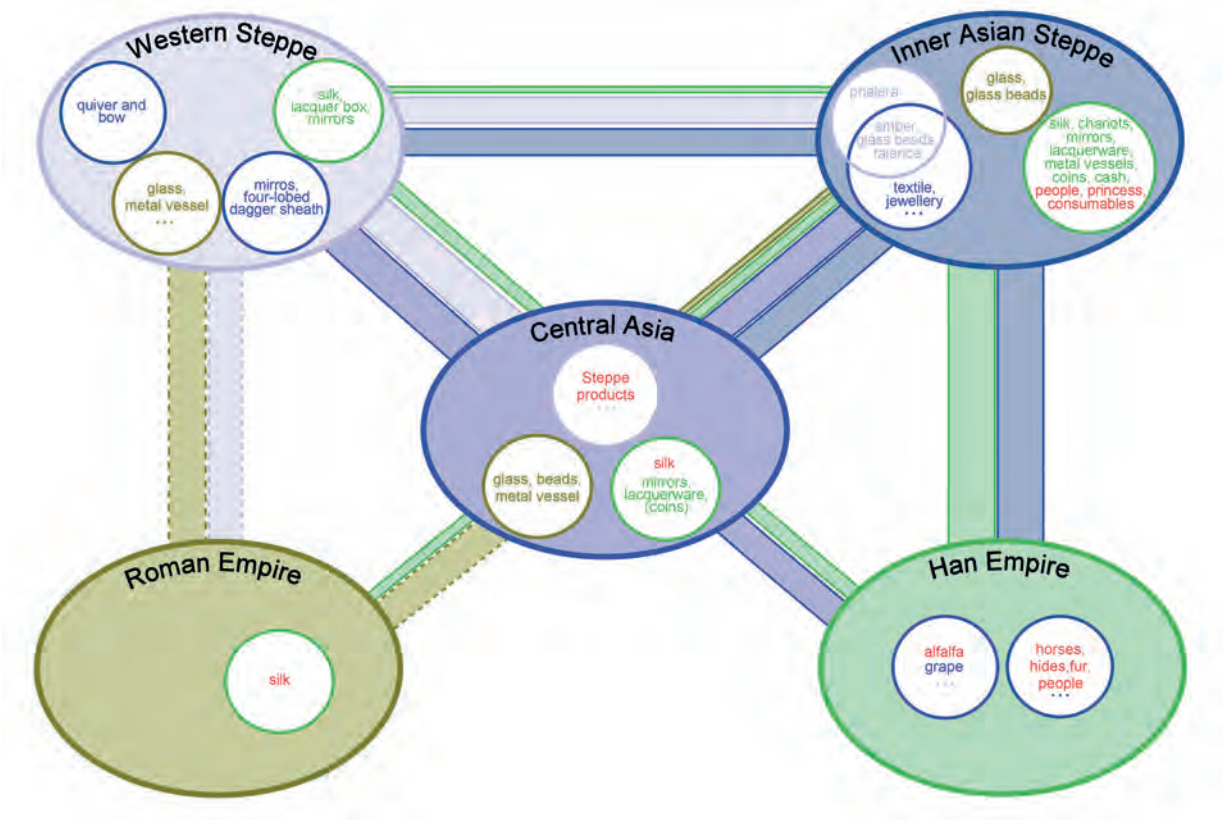

Fig. 35. Schematic of channels and East-West flow of goods as well as exchanges between the Xiongnu and Han realm. Green and blue script signifies actual archaeological artifacts, red script denotes goods mentioned in the written sources.

remain largely separate the sharing of representational means by one group across such a geographically and culturally diverse area, points to this group of elite warriors as agents who structured and shaped the forms and meanings of these interactions.

In the first century CE the sharing of "symbols of excellence" (Clark 1986) is attested in elite tombs across a vast space: four-lobed dagger sheaths and later the long-sword with a nephrite scabbard slide were used as symbols of kingship, or at least of nobility and leadership not only in Central Asia but also in the Black Sea area[176]. The Xiongnu realm did not participate fully in this particular system of symbols and values but in others they do. The ubiquity of cheek pieces with disk-shaped ends in the Xiongnu realm, Central Asia and the Black Sea area, however, does show that the elites therein all shared a similar type of bridling. And while such bridles appear earlier and also in more moderate graves in the eastern part of Eurasia, in the West in particular, such bridles were executed in an elaborate style and technique that suggests they functioned as symbols of status and power there as well while the highest echelon in the Xiongnu realm used different horse gear as symbol of excellence (Brosseder 2009; Miller/Brosseder 2013). The same accounts for spoon-shaped strap ends that are crafted with precious materials while they resemble fairly ordinary goods in the Xiongnu realm.

[176] In Iran we can assume kingship and nobility, for the other areas we do not know exactly the local terminology of the leaders.

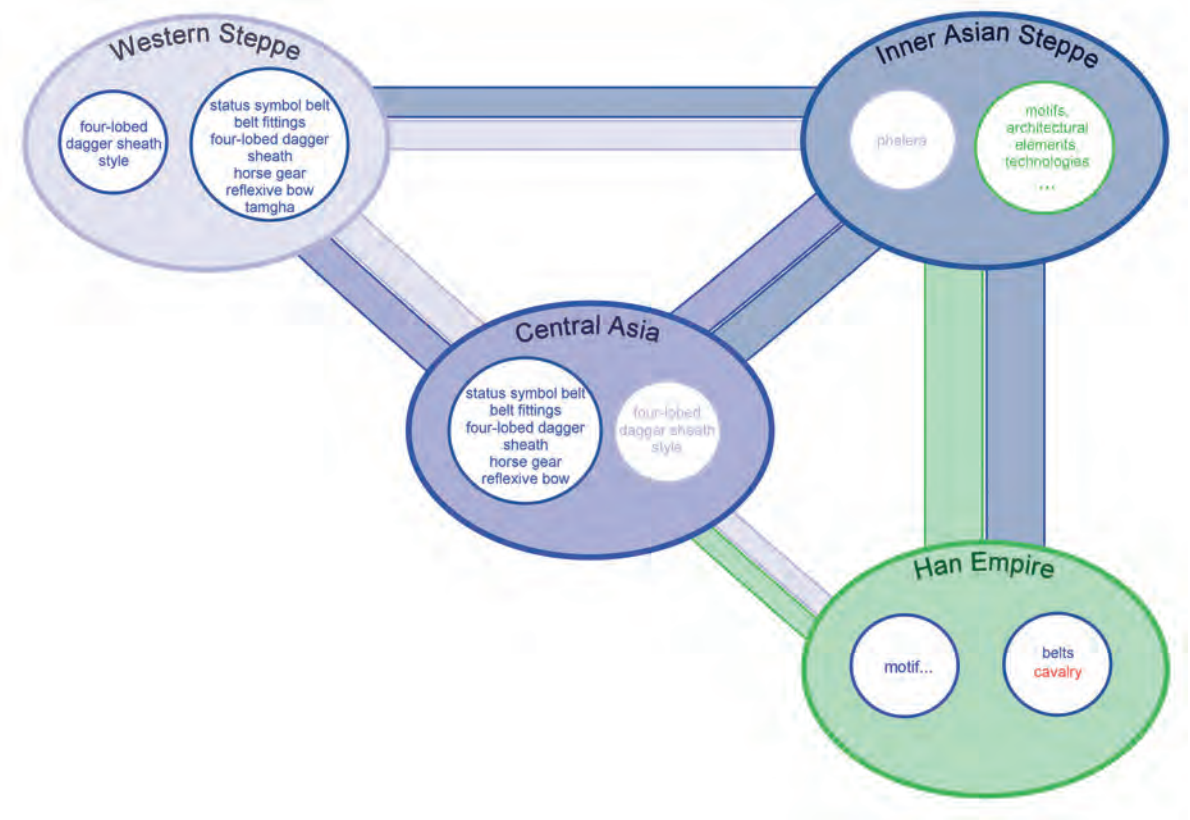

Fig. 36. Schematic of shared fashioning across the Eurasian steppes and with Han China.

In the following, I want to explore how we can identify the role of the Xiongnu and the role of the Han in these exchanges as we see that both strands (Inner Asian goods and fashioning versus Chinese goods) are closely intertwined and that they generally follow the same distribution pattern. There are two facts that speak for the Xiongnu as the one driving force in the distribution of both categories. First, the temporal sequence of events shows that already at the end of the second century and in the first century BCE, the steppe elites had established a network across all Eurasia while Chinese goods came into the play only later. Second, goods from the West are attested in larger quantities in elite tombs of the Xiongnu realm and are rarely attested in Han China of the early first century CE[177]. Western goods are known in Han China proper mostly later. It is more complex than Werning (2009, 204) suggested, that we find silk, lacquer and mirrors in those neighboring regions of China whose leaders were bestowed with political gifts. For, as one can explain the distribution of Chinese goods through the involvement of the steppe people, one cannot explain the distribution of Inner Asian fashioning through Han channels. The elite contexts in which the goods, but also the sharing of representational means is embedded, alludes to the social and geographical avenues that the goods have been passed along. Once the major player of the Inner Asian steppes, the empire of the Xiongnu leaves the stage, however, the Han involvement stays, as the case of the nephrite sword guards and scabbard slides show.

[177] With the earlier exception of few silver vessels inspired by Central Asian design (Nickel 2012) and fragments of one Roman glass bowl (Borell 2010).

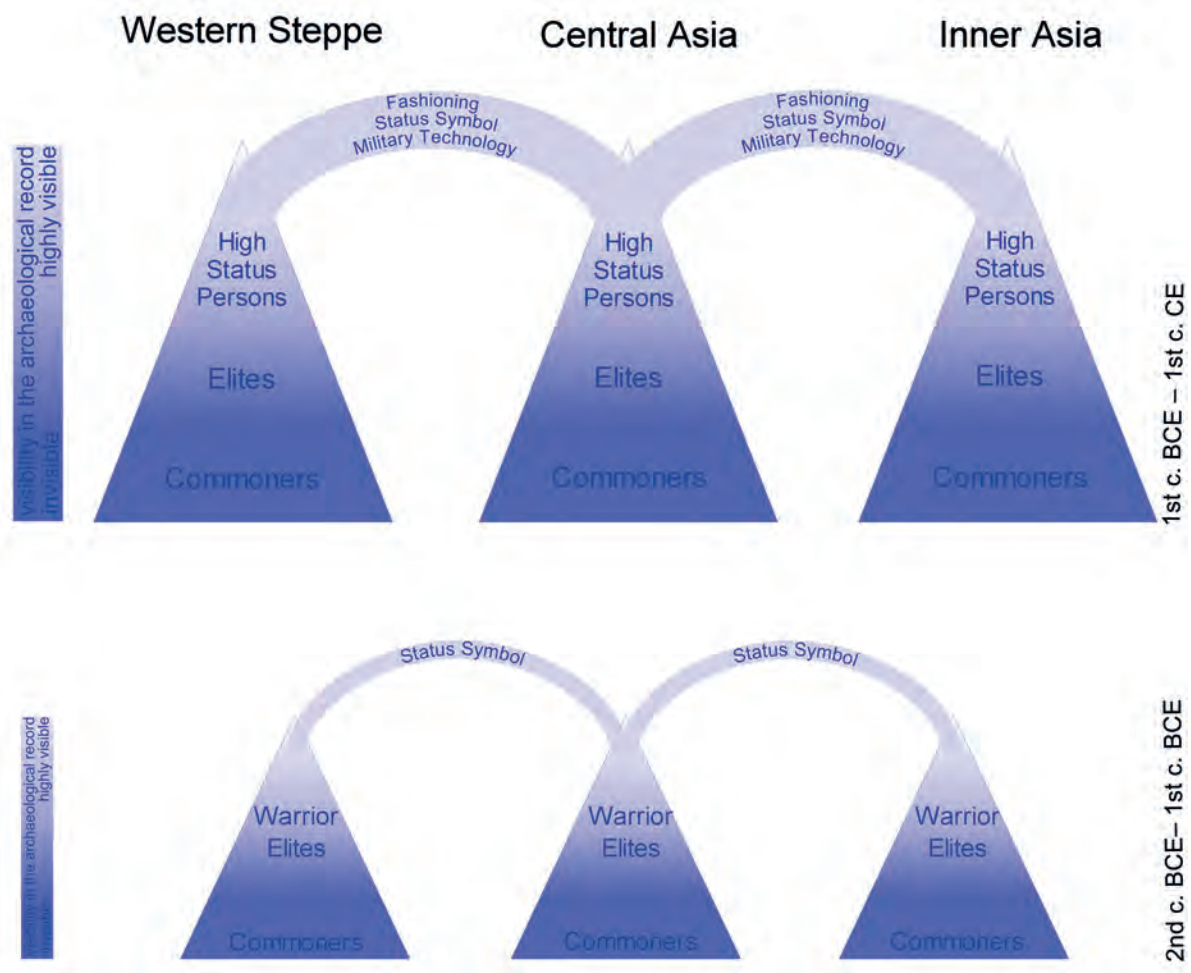

Fig. 37. Scheme of elite communication in Eurasia with changes in the network over time.

Highlighting the mechanisms of this steppe network I proposed in the introductory part the adoption of a salient affiliation model to explain long-distance interaction and exchanges. This case even identifies the dynamics in the salient affiliations network over time which are connected to the social phenomenon of the emergence of ostentatious graves in Mongolia, Central Asia, and in the Black Sea area and I propose they result lastly in the dynamics of a prestige goods or wealth based economy (Fig. 37). In the earlier time period, roughly the second and first centuries BCE, we see the sharing of a status symbol among a warrior elite from Inner Asia to the western steppes. At that time the members of the warrior elites are the highest visible social group that can be identified in the steppes.

In the younger period between the late first century BCE and the first century CE the expression and display of wealth and status literally explodes and we observe the phenomenon of the ostentatious graves for high status persons. The monumental tomb construction, the elaborate rituals as well as the assemblage put less emphasis on the warrior elite but stress the far-reaching contacts of the high status persons by displaying foreign goods from afar. Although this phenomenon has to be explained within each local community, it falls together with the time period of intensified inter-societal contact of the first century CE with shared fashioning, shared status symbols and goods being exchanged. Both phenomena are probably linked to each

other. While elites in Central Asia and the Black Sea, as well as in the Xiongnu realm, shared many common traits with each other, each of these individual groups show a yawning gap between the graves of the rich and the more common. As much as shared status symbols, this disparity of wealth also underlines the commonalities among these Eurasian elites. These highly visible social groups participated in a wider network of relationships at the same social level. Despite the vast geographical distances covered, stretching the salient affiliation model beyond its originally conceived boundaries, these factors bear the characteristics of an affiliation network.

In this later period the transfer of weapon technology occurs at the same time and same pace as the affiliation networks among high status persons grows. But this transfer is visible among disparate groups of warriors and not necessarily in the realm of ostentatious burials. Weapons transfers, because they are fundamentally instrumental, force us to ask more general questions: was it universally a transfer of a military technology? Or did the symbolic exchange of weapons among elites at the level of gifting stir a broader demand? Is it military or political needs that are satisfied by these exchanges? Archaeologically we have evidence for both: in one instance we can trace the movement of an original quiver with bow and arrow from Inner Asia to the western steppes, which suggests gifting; in another we see localized reproduction of the technology in Khorezm which indeed argues for the adoption of a superior tactical weapon.

Tying the Xiongnu Empire into the organization scheme of state and internal commercialization by M. Smith, it is clear that we face an empire with a low degree of commercialization which within the current state of the sources, cannot be identified more clearly. By emphasizing a low degree of commercialization I do not mean to rule out that economic activities or markets existed. Even in more intensively studied empires with a better data base, such as the Inca Empire, with a low degree of commercialization, markets and commerce did exist to some extent (Hirth/Pillsbury 2013). However, the driving factors for exchange in such a system are not commercial institutions but the elites and their demands and needs that direct consumption in a prestige goods economy. It is the dynamics of such an economy that creates a growing demand for goods from afar, which bears characteristics of a feedback loop. In this respect, it takes no wonder that not only prestigious Chinese goods previously unseen, such as chariots, were demanded in the later stage of the Xiongnu history, but that we find exotica from the far West in the terrace tombs in the first century CE at a time when internal competition of the elites was growing (Brosseder 2009; Miller forthcoming).

In this last part I want to compare the information conveyed by the archaeological sources with the information in the historical records with a focus on the temporal sequence of contact and the social context they take place in.

The *heqin* treaty that structured the relations between Han and Xiongnu during most of the second century BCE included marital alliance and tribute payments of silk, cloth, grain and consumables (Di Cosmo 2002, 193–195; Yü 1990, 122–125). These yearly tribute sendings came to an end when Han changed its politics and turned to war with the Xiongnu under the reign of eEmperor Wu in 133 BCE (Di Cosmo 2002, 236–247). After the civil war period between 57 and 55 BCE among the Xiongnu, Huhanye sought the Chinese for support and accepted a filial status. In return he was bestowed with gifts. The amounts that were given to chanyu missions in the second half of the first century BCE seem to have increased in comparison with the gifts bestowed during the earlier *heqin* treaty (Miller 2009, 135–137). In the early first century CE then during the reign of Huduershi the Xiongnu regained much of their power and the chanyu

suggested to the Han court that it was time to reverse the tributary system of the Chinese and that the emperor should pay homage to the chanyu (Yü 1990, 142; Miller 2009, 148). The crisis after Huduershi's death in 46 CE led to a formal split into the Southern and the Northern Xiongnu (Miller 2009, 149–152) and while the former are well represented in the written accounts (see Miller, this volume) the latter remain oblivious.

The temporal sequence of gifting and marital alliances of the written records seems not congruent with the appearance of Chinese goods and imperial gifts in Xiongnu period graves in Inner Asia. During the second century BCE few graves can be identified and although we know of some Chineses goods of that time period, the mass of Chinese artifacts was unearthed from graves of the first century BCE to the first century CE. Moreover, the largest diversity of artifacts, including objects from imperial manufacture and Chinese chariots are only known from monumental terrace tombs of the last decade of the first century BCE to the first century CE. With regard to the social context, however, the written and material sources refer to the same social group, the highest echelon of Xiongnu society in the context of political gifting or tribute payments as reason for the transfer of Chinese goods. And although we know about the importance of frontier trade it is especially the payments to the chanyu court that finds mention in the written sources. Moreover, since the Xiongnu show repeatedly interest in returning to a *heqin* treaty securing the annual influx of Chinese goods, may be taken as an indicator of a prestige goods economy in the Xiongnu realm (cf. Di Cosmo 1999).

Turning to Han's involvement in the Western Regions and in Central Asia the historical sources report that several diplomatic missions were dispatched at the end of the second century BCE. In the late second century a marital alliance between the Han court and the Wusun was established, and then in 101 BCE the Han army subdued Dayuan (Ferghana) in order to obtain the blood-sweating horses and to demonstrate military strength. Later, for most of the first century BCE Han controlled the Western Regions.

This early presence and involvement of the Han in Central Asia left few material imprints. Possibly two mirror types (Figs. 15; 16, dark green dots) that are unknown in the Xiongnu realm but are found in elite tombs of Central Asia, and imperial lacquerware from Begram, some of them, again, unknown to the Xiongnu realm may echo this presence[178]. But while the nebula and cloud mirrors may date to the first century BCE, the most Chinese artifacts found in Central Asia date to the first century CE and thus are later than the reported early diplomatic missions or military presence. With regard to the social context in which magnificent Chinese prestige goods were found both written and archaeological sources point to the elites, also in this later period.

The Ferghana Valley holds a special place in the studies of exchanges and is in some ways comparable to Inner Asia. In both areas similar Chinese artifacts occur and the treatment of these was alike, in that Chinese mirrors – or imitations thereof – were mostly found fragmented in the graves. Moreover, Chinese coins are only attested in these two areas where they were treated as ornaments. In Ferghana we do not find imperially produced Chinese objects and chariots which we know well from the elite terrace tombs in Mongolia and Transbaikalia. However, currently no such ostentatious graves have been excavated in Ferghana. Other categories of objects that could shed light in this question, such as the quality of silk, cannot be judged

[178] When seeking to carve out Han's involvement in Central Asia or the West archaeologically, one cannot revert to the evidence that silk was a much desired luxury good of the Roman elite or to the diplomatic missions to the Western Regions, without causing a mixed argumentation.

due to the differing preservation conditions for the graves of Noyon Uul and the graves from Ferghana. Possibly, the mentioned similarities between Mongolia/Transbaikalia and Ferghana, especially the influx of cash coins, reflect Han's political interest in both areas.

Material imprints of contacts between Central Asia and China in the other direction, namely reflections of western-style imported goods, such as the silver bowls in elite graves (Nickel 2012) or the import of grapes are attested already earlier, in the late second and early first centuries BCE. This is exactly the time when Zhang Qian returned from his assignment in Central Asia and when first diplomatic missions were sent from the Han court to the Western Regions and beyond. With respect to the temporal sequence therefore we (currently) do not see material traces of the diplomatic missions to Central Asia, but we see a reaction to such contacts in the material among the highest elites in China. Considering the social contexts of contact and interaction both the archaeological record and the written records point to same social group, the elites and political leaders.

The economic aspects of the exchanges can archaeologically only be deduced from the wealth accumulated in the tombs but other than that it remains currently archaeologically elusive in this case. In the period of interest (second century BCE to first century CE) there is no archaeological evidence for an existing economic exchange network functioning over long-distances in the Eurasian steppes. None of the possible criteria necessary to identify such an economic exchange network can be found in the archaeological evidence: no physical markets that evidence exchange, no abundance of transport vessels that may indicate such an exchange, no traces of a currency, which however is an archaeological problem as it most probably was perishable material. While we cannot build up an argument on the silence of the archaeological sources, I think it is nevertheless significant that they are silent.

The economic aspect of dealings with Central Asia is alluded to in the written records of the Chinese court when Han envoys need to finance what they require by selling goods their caravan carried (see above pp. 217; Hulsewé 1979, 137; 222). Also for the exchanges between Central Asia and the Pontic steppes, the economic aspect of trade can best be traced in the historical sources (Olbrycht 2001, 92–102) while the archaeological sources tell a story of an elite network and political gifting. Also between Central Asia and the Pontic we witness archaeologically political gifting than commercial exchanges.

The question of scale needs to be raised in context of long-distance interaction and exchanges. It is clear that goods and ideas were passed over long distances but the contacts are not long-distance contacts, in that there are no grounds to assume direct contacts between the elites of the East with the elites of the West. A minimum of few, may be one or two intermediate steps seems required, but not many more, as the abundance and impact of these contacts lead us to assume that the elites across Eurasia lived in a small world. Whether these contacts have to be called more intermediate than long-distance is a matter of perception. In this respect one needs to be reminded that the Eurasian steppe world often times works on a larger-scale than the agrarian world, of let's say Europe or China. Although we do not have any clues about how many intermediate steps lie between the elites of the Black Sea and the ones of Inner Asia, but we can assume that there are not many. We know of the involvement of Xiongnu military groups in Central Asia and their dealings with the so-called Western Regions and beyond in Central Asia (e.g., Hulsewé 1979, 47) and we also learn about contacts between Central Asia and the wider Black Sea area from the written records (Olbrycht 1998, 28–29; 2001). Therefore the perceived long-distance transfers may be caused by a chain of few personal contacts. This again, speaks for the adoption of a salient affiliation network, a network of interconnected elites. While

larger areas in Eurasia were also connected in the early second century BCE the perceived sudden explosion of East-West transfers in the late first century BCE and in the beginning of the first century CE bear characteristics of disjunct networks that were connected by a few weak ties (cf. Brosseder/Miller forthcoming).

So far I have not talked about migration, despite the fact that this is one of the major narratives to account for the influx of eastern objects and cultural traits (Symonenko 2012). Setting aside that Soviet and post-Soviet scholarship tends to overemphasize the role of migrations in accounting for cultural changes (Frachetti 2011) the dynamics shown above do not speak in favor of migration as we mostly identify similar behavior in terms of status representation within local communities. Despite the fact that not all aspects and materials of west exchange were studied here in the same detail all points to similar patterns of dissemination. I am not disclaiming overall the mobility of people, which has happened and to some extent a re-location of smaller groups may have taken place, but I do not think that we can identify a large-scale migration in the archaeological record. For that the archaeological contexts compared are too distant. On the contrary the exchange of ideas, the assimilation of representational means among the highly visible social elites speaks for a salient affiliation network.

To elucidate this aspect further a comparative study of trans-Eurasian exchanges in later time periods for which we have more substantial evidence for economical exchanges in the written records, can provide better insights into this problem. But that is already another study. The complexity and dynamics of the interaction and exchanges show the steppe people's participation in these processes and go far beyond what is usually subsumed and sold under the eye- and mind-catching concept of the Silk Roads.

Acknowledgment

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Lists

In these lists the data that was provided in publications was assembled: site name, district, province, country, context and publication of the object image. If no context is provided, it is considered as a single find. Only in few cases the museum or archive where the objects are stored today and their inventory number were provided in the literature. In several cases the excavated materials have been divided among several museums or have shifted locations. Therefore it often

remains uncertain through the publication where a specific object is housed today. If no information is given in the list it was not available in the published literature consulted.

Mirrors and their imitations in Eurasia (list 1–18)[179]

Warring States mirrors[180]

List 1. Mirrors with four T, Karlgren C45 (Karlgren 1941)

1. Vostochnoe, Krasnoturanskiĭ or Minusinskiĭ raĭon, Krasnoiarskiĭ kraĭ, RU (Lubo-Lesnichenko 1975, cat. 2, 37 Fig. 1; Lubo-Lesnichenko 1973, 35 Fig. 1), Minusinskiĭ Muzeĭ, Minusinsk, inv.nos. 5112; 5113. – 2. Firsovo-XIV, Pervomaiskiĭ raĭon, Altaĭskiĭ kraĭ, RU (Tishkin/Seregin 2011, 42 Pl. 17), MAĖA Alt. GU, Barnaul, inv.no. 74/369. – 3. Pazyryk, Ulaganskiĭ raĭon, Rep. Altaĭ, RU, k. 6 (Rudenko 1953, Pl. 29.6; 1970, Pl. 70c), State Hermitage, St. Petersburg. – 4. Western Foothills Altaĭ, KZ (Rudenko 1957, Pl. 1.2; Lubo-Lesnichenko 1975, 37 cat. 3), Archiv Institut Arkheologii AN SSSR.

List 2. Feather décor, roughly similar to C16 after Karlgren 1941

1. Ekaterinovka, Idrinskiĭ raĭon, Krasnoiarskiĭ kraĭ, RU (Lubo-Lesnichenko 1975, cat. 4 Fig. 2; 1973, 35 Fig. 2), State Hermitage, St. Petersburg, inv.no. LM-967.

List 3. Textile background, square with bird, elements similar to D35/39 after Karlgren 1941

1. Ivolga settlement, Ivolginskiĭ raĭon, Rep. Buriatiia, RU, pit 57 (Davydova 1995, Pl. 130.2; Otani 2014, cat. 41), State Hermitage, St. Petersburg[181].

List 4. Continuous arcs against whorl pattern

1. Ivolga settlement, Ivolginskiĭ raĭon, Rep. Buriatiia, RU, building 49 (Davydova 1995, Pl. 103.7; Otani 2014, cat. 39), State Hermitage, St. Petersburg. – 2. Reka Beiĭa, Beiskiĭ raĭon, Rep. Khakasiia, RU (Lubo-Lesnichenko 1975, cat. 5, 38 Fig. 3), State Hermitage, St. Petersburg, inv.no. 325/1. – 3. Ialoman-II, Ongudaiskiĭ raĭon, Rep. Altaĭ, RU, k. 52 (Tishkin/Seregin 2011, 44 Pl. 19), MAĖA AltGU, Barnaul, inv.no. 181/680.

Han mirrors

List 5. Square band and grass leaf motif, category K after Karlgren 1941

1. Xichagou, Xifeng county, Liaoning province, CN, from various graves (Sun 1995, Pls. 1.6,7; 2.1,3). – 2. Ivolga settlement, Ivolginskiĭ raĭon, Rep. Buriatiia, RU, building 41 (Davydova 1995, Pl. 81.10; Otani 2014, cat. 38). – 3. Esinskaia MTS, Askizskiĭ raĭon, Rep. Khakasiia, RU (Lubo-Lesnichenko 1975, cat. 347 Fig. 108; Vadetskaia 1999, Pl. 95; Teterin 1999, Fig. 2.1), Khakasskiĭ natsional'nyĭ kraevedcheskiĭ muzeĭ imeni L. P. Kyzlasova, Abakan. – 4. Chendek, Ust' Koksinskiĭ raĭon, Rep. Altaĭ, RU, k. 28 (Tishkin/Seregin 2011, 96 Fig. 8.2), possibly a late copy. – 5. Markovo 1, Kuybyshevskiĭ raĭon, Novosibirskaia obl., RU, k. 8 (Polos'mak/Solov'ev 1987, 39 Fig. 33.4).

List 6. Mirrors with S-spirals belonging to Karlgren's group J (Karlgren 1941)

1.–5. Xichagou, Xifeng county, Liaoning province, CN (Sun 1995, 79 Fig. 1, Pl. 1.1–4). – 6. Tamiryn Ulaan Khoshuu, Ögiĭ nuur sum, Arkhangaĭ aĭmag, MN, gr. 160 (Lai 2006, 38 Fig. 5; Otani 2014, cat. 30), National University of Mongolia, Ulaanbaatar. – 7. Salkhityn am, Rashaant sum, Khövsgöl aĭmag, MN, gr. 7 (Ölziĭbaiar et al. 2011), Institute of History, MAS, Ulaanbaatar. – 8. Minusinsk Basin, RU (Lubo-Lesnichenko 1975, cat. 6, 38 Fig. 4), State Historical Museum, Moscow.

List 7. Mirrors with clouds and nebulae[182]

1.–4. Xichagou, Xifeng county, Liaoning province, CN (Sun 1995, Pls. 2.2,5,6; 3.1). – 5. Lopnor Lake, Bayinguoleng county, Xinjiang Uyghur Autonomous Region, CN (Qi/Wang 2008, 31 Fig. 10). – 6. Terezin, Chaa-Khol'skiĭ kozhuun, Rep. Tuva, RU (Leus 2011, 536 Fig. 20.5). – 7. Terezin, Chaa-Khol'skiĭ kozhuun, Rep. Tuva, RU, gr. 12

[179] Lists 1–15 are based on several earlier regionally, more restricted compilations, especially Lubo-Lesnichenko 1975; Litvinskii 1978; Guguev et al. 1991; Guguev/ Treister 1995; Filippova 2000; Li Dzhin Yn 2010; Tishkin/ Seregin 2011; Törbat 2011 with numerous own additions; noteworthy is also Botalov/Gutsalov 2000, 172 Fig. 45, but without differentiation between different types of mirrors. The best and most thorough collection for Siberia is Filippova 2005. I thank Irina Filippova, Novosibirsk, for making her PhD dissertation available to me. After this article had been turned in, I. Otani (2014) published the most recent compilation of Chinese bronze mirrors from Transbaikalia and Mongolia. The lists cannot be complete as already Litvinskii 1978, 162 fn. 245 reports that there are numerous other mirrors in the archives of several institutions of Central Asia.

[180] Additionally to the mirrors listed, there is one more Warring States period mirror fragment known from Ialoman-II, Ongudaiskiĭ raion, Rep. Altaĭ, Russian Federation, k. 51 (Tishkin/Seregin 2011, 43 Pl. 18); due to its heavy corrosion and the small size of the fragment its attribution to a certain type is not possible.

[181] The material of Ivolga is housed in several institutions, of which most is in the State Hermitage, St. Petersburg.

[182] This kind of mirror is also known from Korea: Tahori, Ch'angwŏn, South Kyŏngsang prov., South Korea, gr. 1 (Horlyck 2011, 127 Fig. 9) and from Lelang (Ancient Culture 2001, 87 Fig. 74).

(Leus 2011, 534 Fig. 17.2), local imitation (Khavrin 2011). – 8. Ialoman-II, Ongudaiskiĭ raĭon, Rep. Altaĭ, RU, k. 57 (Tishkin/Seregin 2011, 46 Pl. 21), MAÉA AltGU, Barnaul, inv.no. 181/918, local imitation (Tishkin/Seregin 2011, 77). – 9. Ust'-Ėdigan, Chernal'skiĭ raĭon, Rep. Altaĭ, RU, k. 30 (Tishkin/Seregin 2011, 96 Fig. 8.4). – 10. Biĭsk, Biĭsk gorodskoĭ okr., Altaĭskiĭ kraĭ, RU (Masumoto 1993, 250 Fig. 1v), probably medieval copy. – 11. Kenkol', Talas raĭon, Talas obl., KG, k. 18 (Kozhomberdiev 1963, 40 Fig. 6.3). – 12. Farkhadstroĭ, Buvayda tumani, Fargona viloyati, UZ (Litvinskiĭ 1978, 101 no. 18, Pl. 25.3), Institute of Archaeology, Academy of Sciences of Uzbekistan, Samarkand.

List 8. *Riguang* mirrors[183]

1. Xichagou, Xifeng county, Liaoning prov., CN (Sun 1995, 83 Fig. 2). – 2. Sampula, Lop distr., Khotan, Xinjiang, CN, M06 (Xinjiang 2001, 84 Fig. 64). – 3. Burkhan Tolgoĭ, Khutag-Öndör sum, Bulgan aĭmag, MN, gr. 71 (Törbat 2011, 317 Fig. 1.1; Ėrėgzėn 2011, 148 cat. 195; Otani 2014, cat. 16), Institute of Archaeology, MAS. Ulaanbaatar. – 4. Duurlig Nars, Baian-Adarga, Khėntiĭ aĭmag, MN, k.1, satellite gr. 4 (Ėrėgzėn 2011, 145 Fig. 190; Otani 2014, cat. 4). – 5. Tamiryn Ulaan Khoshuu, Ögiĭ nuur sum, Arkhangaĭ aĭmag, MN, gr. 6 (Törbat 2003, 20 Fig. 5.12; 2011, 317 Fig. 1.3; Otani 2014, cat. 27), National University of Education, Ulaanbaatar. – 6. Baian Undėr, Dzhidinskiĭ raĭon, Rep. Buriatiia, RU, building (Filippova 2000, Fig. 1.3; 2005, 190 Fig. 3.3; Kradin 2013, 789 Fig. 2; Otani 2014, cat. 45). – 7. Il'movaia Pad', Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, gr. 3 (Tal'ko-Gryntsevich 1999b, Pl. 12.3b; Filippova 2000 Fig. 1.1; Otani 2014, cat. 51.2), Kiakhtinskiĭ kraevedcheskiĭ muzeĭ imeni akademika V. A. Obrucheva, Kiakhta. – 8. Chendek, Ust'Koksinskiĭ, Rep. Altaĭ, RU, gr. 6 (Kireev 2008, 52 Fig. 1.2,3; Tishkin/Seregin 2011, 96 Fig. 8.1), Natsional'nyĭ Muzeĭ Respubliki Altaĭ imena A. V. Anokhina, Gorno-Altaĭsk. 9. Chepkul-9, Tiumenskiĭ raĭon, Tiumenskaia obl., RU, gr. 2, skeleton 2 (Zakh/Glushkova 2009, 60 Fig. 4.14). – 10. Staraia Poltavka, Staropoltavskiĭ raĭon, Volgogradskaia obl., RU, k. E25, gr. 19 (Sinitsyn 1946, 92 Fig. 29). – 11. Vinogradnyĭ, Ust'-Donetskiĭ raĭon, Rostovskaia obl., RU (Kosianenko/Maksimenko 1989, 265 Fig. 1.4; 266 Fig. 2; L'or des Amazones 2001, 144 cat. 134; 145 Fig.), Rostovskiĭ oblastnoĭ muzeĭ kraevedeniia, Rostov-na-Donu, inv. no. KP 4441/4. – 12. Altyn Asar, Karmakshy audany (Karmakshinskiĭ raĭon), Qızılorda obl. (Kyzylordinskaia obl.), KZ, 4o, gr. 321/2 (Levina 1996, 355 Fig. 160.1). – 13. Piskent (Pskent), Piskent tuman, Toshkent viyolati, UZ, k. B-1 (Litvinskiĭ 1978, 101 Pl. 24.3), State Museum of History of the Academy of Sciences of the Republic of Uzbekistan, Tashkent, inv.no. 188/105.

List 9. *Zhaoming* mirrors

1. Burkhan Tolgoĭ, Khutag-Öndör sum, Bulgan aĭmag, MN, gr. 33a (Törbat 2011, 317 Fig. 1.10; Desroches/Amon 2000 157 Fig. 144bis; Otani 2014, cat. 13), Institute of Archaeology, MAS, Ulaanbaatar. – 2. Khudgiĭn Tolgoĭ, Battsėngėl sum, Arkhangaĭ aĭmag, MN, gr. 2 (Törbat 2011, 317 Fig. 1.12; Ėrėgzėn 2011, 148 Fig. 194; Otani 2014, cat. 26), Institute of Archaeology, MAS, Ulaanbaatar. – 3. Naĭmaa Tolgoĭ, Ėrdėnėmandal sum, Arkhangaĭ aĭmag, MN, gr. 20 (Törbat 2011, 317 Fig. 1.13; Otani 2014, cat. 23). – 4. Naindė-sumė, Töv aĭmag, MN, horse burial of a Turk period burial (Borovka 1927, Pl. 4.1; Otani 2014, cat. 35). – 5. Tėvsh Uul, Bogd sum, Övörkhangaĭ aĭmag, MN, gr. 7 (Tsėvėėndorzh 1985, 56 Fig. 3.18; Törbat 2011, 317 Fig. 1.13; Otani 2014, cat. 31), Institute of Archaeology, MAS, Ulaanbaatar. – 6. Enkhor, Dzhidinskiĭ raĭon, Rep. Buriatiia, RU, gr. 19 (Filippova 2005, 192 Fig. 5.2; Otani 2014, cat. 47), Buriatskiĭ nauchnyĭ tsentr SO-RAN, Ulaan-Udė. – 7. Il'movaia Pad', Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, gr. 51 (Konovalov 1976, 55 Fig. 28; 203 Pl. 22.1; Filippova 2000, Fig. 1.6; Otani 2014, cat. 53). – 8. Beiskoe (Beia), Beiskiĭ raĭon, Rep. Khakasiia, RU (Lubo-Lesnichenko 1975, cat. 7, 35 Fig. 5; 1973, 35 Fig. 3), Minusinskiĭ regional'nyĭ kraevecheskiĭ muzeĭ imena N. M. Mart'ianova, Minusinsk, inv.no. 5233. – 9. West-Siberia, RU, with garbled inscription, found between rivers "Irbyht" and "Toboll" (von Strahlenberg 1730, 398 Pl. 20B; Yang 1953, 336 Fig. B). – 10. Kazanskaia, Kavkazskiĭ raĭon, Krasnodarskiĭ kraĭ, Iuzhniĭ Federal'nyi okr., RU, k. 43 (Marčenko/Limberis 2008, Pl. 68.10; Gushchina/Zasetskaia 1994, Pl. 12.117), State Historical Museum, Moscow. – 11. Tretiaki, Borisoglebsk raĭon, Voronezhskaia obl., RU, k. 16 (Medvedev/Yefimov 1986, Pl. 77.1). – 12. Chuhuno-Krepynka (Chuguno-Krepinka), Shakhtar'skyi raĭon, Donets'ka obl., UA, k. 2, gr. 1 (Simonenko 2008a, cat. 70, Pl. 62.5; 2013, 421 Fig. 4), Muzeĭ istoricheskikh dragotsennosteĭ Ukrainy, Kiev. – 13. Hradyz'k (Gradezhsk), Hlobyne (Globino) raĭon, Poltavs'ka obl., UA, gr. (Simonenko 2001, 54; 2003, 58 Fig. 1.2).

List 10. Variant with twelve circles in the center

14. Verkhotur'e, Verkhoturskiĭ gorodskoĭ okr., Sverdlovskaia obl., RU (Yang 1953, 337 Fig.). – 15. Tillia Tepe, Shibirghan wuleswali, Jowzjan wilayah, AF, gr. 2 (Sarianidi 1985, cat. 2,34; 203 Fig. 145), National Museum, Kabul. – 16. Tillia Tepe, Shibirghan wuleswali, Jowzjan wilayah, AF, gr. 3 (Sarianidi 1985, cat. 3,70; 245 Fig. 70), National Museum, Kabul. – 17. Tillia Tepe, Shibirghan wuleswali, Jowzjan wilayah, AF, gr. 6 (Sarianidi 1985, 258 Fig. 31), National Museum, Kabul. – 18. Vrevskaia, Yangiyo'l tumani, Toshkent viyolati, UZ (Litvinskiĭ 1978, 101 Pl. 24.4), State Museum of History of the Academy of Sciences of the Republic of Uzbekistan, Tashkent. – 19. Munchak-Tepe, eastern necropolis, Buvyada tuman, Fargona viloyati, UZ (Seipel 1996, 310 cat. 172), State Hermitage St. Petersburg, inv.no. CA-7779.

List 11. *Siru* mirrors[184]

1. Xichagou, Xifeng county, Liaoning province, CN (Sun 1995, Pl. 2.4). – 2. Hohhot, Inner Mongolia Autonomous region, CN (Li 1995, 33 Fig. 1.3). – 3. Yingpan, Yuli county, Xinjiang Uyghur Autonomous Region, CN, 95BYYM7:5 (Selbitschka 2010, 204–205; 552 Fig. 3, Pl. 9.1). – 4. Burkhan Tolgoĭ, Khutag-Öndör sum, Bulgan aĭmag, MN, gr. 1 (Törbat et al. 2003, 173 Fig. 11; Xiongnu Tombs 2008, 130 with Fig.;

[183] To my knowledge two more mirrors are known from South Korea: Ŏŭndong, Taegu, North Kyŏngsang prov. (Horlyck 2011, 127 Fig. 10.2,3).

[184] From South Korea, the following example is known to me: Ŏŭndong, Taegu, North Kyŏngsang prov. (Horlyck 2012, 127 Fig. 10.1).

Otani 2014, cat. 11), Institute of Archaeology, MAS, Ulaanbaatar. – 5. Burkhan Tolgoĭ, Khutag-Öndör sum, Bulgan aĭmag, MN, gr. 19 (Törbat 2011, 317 Fig. 1.5; Desroches/Amon 2000, 156 Fig. 140; Otani 2014, cat. 12), Institute of Archaeology, MAS, Ulaanbaatar. – 6. Burkhan Tolgoĭ, Khutag-Öndör sum, Bulgan aĭmag, MN, gr. 93 (Törbat 2011, 317 Fig. 1.4; Otani 2014, cat. 18), Institute of Archaeology, MAS, Ulaanbaatar. – 7. Ėngeriĭn buuts, Tüvshinshirėė sum, Sükhbaatar aĭmag, MN, gr. 103 (Xiongnu Tombs 2008, 193 Fig.; Otani 2014, cat. 33). – 8. Gol Mod 2, Öndör Ulaan sum, Arkhangaĭ aĭmag, MN, gr. 30 (Erdenebaatar et al. 2011, 312 Fig. 11.3; Ėrėgzėn 2011, 148 cat. 197; Otani 2014, cat. 25). – 9. Shombuuzyn belchir, Mönkhkhaĭrkhan sum, Khovd aĭmag, MN, gr. 19 (Miller 2011, 572 Fig. 10.4; Otani 2014, cat. 34.2), National Museum of Mongolia, Ulaanbaatar. – 10. Shombuuzyn belchir, Mönkhkhaĭrkhan sum, Khovd aĭmag, MN, gr. 8 (Ėrėgzėn 2011, 148 Fig. 196; Otani 2014, cat. 34.1), National Museum of Mongolia, Ulaanbaatar. – 11. Tariat, Altanbulag sum, Töv aĭmag, MN, gr. 16 (Törbat 2011, 317 Fig. 1.7; Ėrėgzėn 2011, 150 cat. 202), Institute of Archaeology, MAS, Ulaanbaatar. – 12. Enkhor, Dzhidinskiĭ raĭon, Rep. Buriatiia, RU, gr. 51 (Filippova 2000 Fig. 2.1; 2005, 193 Fig. 6.1; Otani 2014, cat. 48), Muzeĭ Buriatskogo nauchnogo tsentra SO-RAN, Ulaan-Udė, inv.no. 397. – 13. Il'movaia Pad', Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, gr. 123 (Sosnovskiĭ 1946, 62 Fig. 12), State Hermitage, St. Petersburg. – 14. Il'movaia Pad', Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, gr. 3 (Tal'ko-Gryntsevich 1999b, Pl. 12.3c), Kiakhtinskiĭ kraevedcheskiĭ muzeĭ imeni akademika V. A. Obrucheva, Kiakhta. – 15. Tsaram, Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, k. 7 (Miniaev/Sakharovskaia 2006, 81 Fig. 2; 2007a 162 Fig. 3.7; Otani 2014, cat. 50). – 16. Kobiakovo, Rostov-na-Donu gorodskoi okr., Rostovskaia obl., RU, k. 1 (Guguev 1986, Pl. 46.4). – 17. Kobiakovo, Rostov-na-Donu gorodskoi okr., Rostovskaia obl., RU, k. 10 (Prokhorovka/Guguev 1992, 153 Fig. 11; L'or des Amazones 2001, 231 cat. 248), Taganrogskiĭ kraevecheskiĭ muzeĭ, Taganrog, inv.no. KP-12117/107. – 18. Tanais, Miasnikovskiĭ raĭon, Rostovskaia obl., RU, k. 10, gr. 2 (Kazakova/Kamenetskiĭ 1970, 87; Li Dzhin Yn 2010, Pl. 4.1). – 19. Karabulak, Batken raĭon, Batken obl., KG (Zadneprovskii/Lubo-Lesnichenko 1995, 21 Fig. 3; 1998, 88 Fig. 52)[185]. – 20. Karabulak, Batken raĭon, Batken obl., KG, k. 20 (Litvinskiĭ 1978, 99 no. 11, Pl. 25.6; Baruzdin 1957, 27 Fig. 5.2), National Historical and Archaeological Museum Complex Sulayman, Osh, inv.no. 271. – 21. Petrovka-Kalininskoe, Jaiyl raĭon, Chui obl., KG (Bernshtam 1950, 101; Litvinskiĭ 1978, 101). – 22. Koktepe, Samarkand viloyat, UZ, tomb (Rapin et al. 2001, 49 Fig. 10.14; 51 Fig. 11.2; Werning 2009, 203 Fig. 2). – 23. Tasmola 1, Bukhar-Zhyrau audany (Bukhar-Shyrauskiĭ raĭon), Qaraghandy obl. (Karagandinskaia obl.), KZ (Arbore Popescu et al. 1998, 200, cat. 380), Archaeology Museum at the Institute of Archaeology of the Academy of science of the Kazakh SSR, CKAE-61/82.

List 12. TLV mirrors

1. Budonggou, Dongsheng distr., Inner Mongolia Autonomous region, CN, gr. 2 (Yikezhaomeng/Nei Menggu 1980, 32 Fig. 6.2). – 2. Hohhot, Inner Mongolia Autonomous region, CN (Li 1995, 33 Fig. 1.2). – 3. Labudalin, Ergun, Hulun Buir distr., Inner Mongolia Autonomous region, CN, gr. 6 (Nei Menggu et al. 1994, 393 Fig. 11.1). – 4. Sandaowan, Qahar Right Rear Banner, Ulanqab, Inner Mongolia Autonomous region, CN, gr. 2 (Wulanchabu 1994, 422 Fig. 16.9). – 5. Chawuhu, Hejing, Bayingol, Xinjiang Uyghur Autonomous Region, CN, cemetery No. 3, gr. 7 (Zhongguo/Xinjiang 1990, 887 Fig. 9). – 6. Niya, Hetian distr., Xinjiang Uyghur Autonomous Region, CN, 95MN1M8:54 (Qi/Wang 2008, 53 Fig. 7; Selbitschka 2010, 473; 553 Fig. 5). – 7. Baian Uul, Khölönbuir sum, Dornod aĭmag, MN, gr. 8, unpublished Report 2004 (Dornod 2004), National University of Mongolia, Ulaanbaatar. – 8. Burkhan Tolgoĭ, Khutag-Öndör sum, Bulgan aĭmag, MN, gr. 36 (Törbat 2011, 319 Fig. 3.21), Institute of Archaeology, MAS, Ulaanbaatar. – 9. Duurlig Nars, Baian-Adarga, Khėntiĭ aĭmag, MN, gr. 2 (Duurlig Nars 2009, 78; Törbat 2011, 319 Fig. 3.20; Ėrėgzėn 2011, 151 cat. 203; Otani 2014, cat. 5). – 10. Gol Mod, Khaĭrkhan sum, Arkhangaĭ aĭmag, MN, T20 (Törbat 2011, 319 Fig. 3.17; Ėrėgzėn 2011, 147 cat. 193; Otani 2014, cat. 21), Institute of Archaeology, MAS, Ulaanbaatar. – 11. Gol Mod, Khaĭrkhan sum, Arkhangaĭ aĭmag, MN, T25 (Törbat 2011, 319 Fig. 3.18; Otani 2014, cat. 19), Institute of Archaeology, MAS, Ulaanbaatar. – 12. Gol Mod 2, Öndör Ulaan sum, Arkhangaĭ aĭmag, MN, gr. 20 (Miller et al. 2006, 16 Fig. 9.2; Törbat 2011, 317 Fig. 3.19; Otani 2014, cat. 24). – 13. Khuutag Uul, Khashaat sum, Arkhangaĭ aĭmag, MN, gr. 59 (Samashev 2009), Institute of Archaeology, MAS, Ulaanbaatar. – 14. Mongolia, on display in Sükhbaatar Museum, provenience and inventory number unknown to author[186]. – 15. Mongolia, unknown site (Ėrėgzėn 2011, 149 Fig. 199), National University of Mongolia, Ulaanbaatar. – 16. Mongolia, unknown site (Tsėvėėndorzh/Tsėrėndagva 1999, Pl. 2.2; Otani 2014, cat. 37), Institute of History/Archaeology, MAS, Ulaanbaatar. – 17. Morin Tolgoĭ, Altanbulag sum, Töv aĭmag, MN, gr. 1 (Törbat 2011, 319 Fig. 3.23; Otani 2014, cat. 3). – 18. Naĭmaa Tolgoĭ, Ėrdėnėmandal sum, Arkhangaĭ aĭmag, MN, gr. 1 (Erdélyi 2000, 148 Fig. 31; Törbat 2011, 317 Fig 3.22; Otani 2014, cat. 22). – 19. Nariĭny Am, Songino Khaĭrkhan sum, Ulaanbaatar Metropolitan area, MN, gr. 36 (Odbaatar et al. 2008, 110 Fig.; Törbat 2011, 319 Fig. 3.26; Otani 2014, cat. 7), National Museum of Mongolia, Ulaanbaatar. – 20. Ögöömör Uul, Sant sum, Sėlėngė aĭmag, MN, gr. 2 (Ėrėgzėn 2011, 150 Fig. 201; Otani 2014, cat. 8), National University of Mongolia, Ulaanbaatar. – 21. Shombuuzyn belchir, Mönkhkhaĭrkhan sum, Khovd aĭmag, MN, gr. 19, two fragments (Miller 2011, 572 Fig. 1.5,6; Otani 2014, cat. 34.3,4), National Museum of Mongolia, Ulaanbaatar. – 22. Tamiryn Ulaan Khoshuu, Ögiĭ nuur sum, Arkhangaĭ aĭmag, MN, gr. 100 (Lai 2006, 36 Fig. 1; Ėrėgzėn 2011, 149 Fig. 198; Törbat 2011, 319 Fig. 3.24, Otani 2014, cat. 28), National University of Mongolia, Ulaanbaatar. – 23. Tamiryn Ulaan Khoshuu, Ögiĭ nuur sum, Arkhangaĭ aĭmag, MN, gr. 109 (Lai 2006, 37 Fig. 3; Törbat 2011, 319 Fig. 3.25; Ėrėgzėn 2011, 149 cat. 200 showing one part of the mirror; Otani 2014, cat. 29), National University of Mongolia, Ulaanbaatar. – 24. Burdun' I, Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, gr. 2 (Tal'ko-Gryntsevich 1999a, 111 Pl. 2n), Kiakhtinskiĭ kraevedcheskiĭ muzeĭ

[185] On the basis of the publications it cannot be decided whether nos. 19 and 20 are the same piece.

[186] Otani 2014, cat. 9 mentions one TLV mirror from Khongor, Darkhan city, Sėlėngė aĭmag, which could be the same piece.

imeni akademika V. A. Obrucheva, Kiakhta. – 25. Cheremukhovaia Pad', Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, gr. 15 (Konovalov 1976, 93 Fig. 61, Pl. 22.4; Filippova 2000 Fig. 1.4; Otani 2014, cat. 55). – 26. Cheremukhovaia Pad', Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, gr. 2 (Konovalov 1976, 204 Pl. 22.3; Filippova 2000, Fig. 1.2; Otani 2014, cat. 54); R. F. Tugutov reports three fragments of different mirrors, which are kept in the Kiakhtinskiĭ kraevedcheskiĭ muzeĭ imeni akademika V. A. Obrucheva, Kiakhta (Konovalov 1976, 204). – 27. Cheremukhovaia Pad', Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, gr. 38 (Konovalov 1976, Pl. 22.2; Otani 2014, cat. 56). – 28. Enkhor, Dzhidinskiĭ raĭon, Rep. Buriatiia, RU, gr. 1 (Filippova 2000, Fig. 1.5; 2005, 191 Fig. 4.4; Otani 2014, cat. 46), Muzeĭ Buriatskogo nauchnogo tsentra, Ulan-Udė, inv.no. 88. – 29. Zorgol-I, Priargunskiĭ raĭon, Chitinskaia obl., RU, gr. 37 (Iaremchuk 2005, 291 Fig. 115.1). – 30. Izykhskii Chaatas, Ackizskiĭ raĭon, Rep. Khakasiia, RU, sklep 2 (Kyzlasov 1960, 85 Fig. 30.1). – 31. Minusinsk Basin, RU (Lubo-Lesnichenko 1975, cat. 8 Fig. 6), Krasnoiarskiĭ Kraevecheskiĭ Muzeĭ Krasnoiarsk, inv.no. 164-6; in Lubo-Lesnichenko 1973, 35 Fig. 4, this mirror is reported to come from Isim. – 32. Kairagach, exclave, Sughd viyolati, TJ, k. 27 (Gorbunova 1986, 356 Pl. 76.31)[187]. – 33. Kara-Tektir, Toktogul raĭon, Jalabad obl., KG (Werning 2009, 203). – 34. Karabulak, Batken raĭon, Batken obl., KG (Zadneprovskii/Lubo-Lesnichenko 1995, 21 Fig. 6a; 1998, 88 Fig. 4.2). – 35. Altyn Asar 4l, Karmakshy audany (Karmakshinskiĭ raĭon), Qızılorda obl. (Kyzylordinskaia obl.), KZ, gr. 233 (Levina/Ravich 1995, 177 Fig. 16.4). – 36. Kosasar 2, Karmakshy audany (Karmakshinskiĭ raĭon), Qızılorda obl. (Kyzylordinskaia obl.), KZ, gr. 75 (Levina/Ravich 1995, 177 Fig. 16.4). – 37. Lebedevka VI, Shynghyrlau audany (Chingirlauskiĭ raĭon), Batys Qazaqstan obl. (Zapadno-Kazakhstanskaia obl.), KZ, k. 39 (Moshkova 1994, 84; 1982, 85 Fig. 2.3).

List 13. *Qingbai* mirrors[188]

1. Hohhot, Inner Mongolia Autonomous region, CN (Li 1995, 33 Fig. 1.5). – 2. Sandaowan, Qahar Right Rear Banner, Ulanqab, Inner Mongolia, CN, gr. 104 (Wulanchabu 1994, 422 Fig. 16.8). – 3. Sandaowan, Qahar Right Rear Banner, Ulanqab, Inner Mongolia, CN, gr. 15 (Wulanchabu 1994, 422 Fig. 16.2). – 4. Niya, Hetian distr., Xinjiang Uyghur Autonomous Region, CN (Xinjiang 1961, 121 Fig. 4). – 5. Gol Mod, Khaĭrkhan sum, Arkhangaĭ aĭmag, MN, T1 (Dschingis Khan 2005, cat. 41; Törbat 2011, 318 Fig. 2.15; Ėrėgzėn 2011, 151 cat. 206; Otani 2014, cat. 20), Institute of Archaeology, MAS, Ulaanbaatar, inv.no. X-476. – 6. Gol Mod 2, Öndör Ulaan sum, Arkhangaĭ aĭmag, MN, k. 1 (Ėrdėnėbaatar 2012, 165 Fig. 4), Ulaanbaatar University, Ulaanbaatar. – 7. Övgönt, Bürėgkhangaĭ sum, Bulgan aĭmag, MN, gr. 2 (Törbat 2011, 318 Fig. 2.16; Ėrėgzėn 2011, 151 cat. 205; Otani 2014, cat. 10), Institute of Archaeology, MAS, Ulaanbaatar. – 8. Gorodskoĭ, Teuchezhskiĭ, raĭon, Rep. Adygeia, RU, gr. 2 (Marčenko/Limberis 2008, Pl. 200.7), Natsional'nyĭ muzeĭ Respublika Adygeia, Krasnodar. – 9. Istietsk, Tiumenskaia obl., RU, depot (Heikel 1894, Pl. 17.6; Chernetsov 1953, 166 Pl. 19). – 10. Klin Iar III, Kislovodsk raĭon, Stavropol'skiĭ kraĭ, RU (Savenko 1989, 96; Minami 1991, 86, cat. 88; Li Dzhin Yn 2010, Pl. 5.4), Stavropol' Museum, Stavropol', inv.no. KP 2607. – 11. Komsomol, Baimakskiĭ raĭon, Rep. Bashkortostan, RU, k. 3 (Pshenichniuk 1983, Pl. 54.6). – 12. Malkovo, Chebarkul'skiĭ raĭon, Cheliabinskaia obl., RU, k. 1 (Botalov/Gutsalov 2000, 56 Fig. 16.1). – 13. Pokrovka 10, Sochoronskiĭ raĭon, Orenburgskaia obl., RU, k. 24 (Malashev/Yablonsky 2004, 281 Fig. 18.6). – 14. Temiasovo, Baimakskiĭ raĭon, Rep. Bashkortostan, RU, k. 3, burial 1 (Pshenichniuk/Riazanov 1976, 136 Fig. 3.1). – 15. Chorku, Nohiya-i Isfara, Sughd viyolat, TJ, k. 1-28 (Litvinskiĭ 1978, 99 no. 9; Pl. 23.4). – 16. Chorku, Nohiya-i Isfara, Sughd viyolat, TJ, k. 1-30 (Litvinskiĭ 1978, 99 no. 7; Pl. 23.7). – 17. Chorku, Nohiya-i Isfara, Sughd viyolat, TJ, k.1-4 (Litvinskiĭ 1978, 98–99 no. 2; Pl. 23.5). – 18. Karabag, Nohiya-i Isfara, Sughd viyolat, TJ, k. 37 (Litvinskiĭ 1978, 99 no. 6; Pl. 23.6). – 19. Surkh, Nohiya-i Isfara, Sughd viyolat, TJ, k. 2, gr. 8 (Litvinskiĭ 1978, 99 no. 3; Pl. 23.1). – 20. Surkh, Nohiya-i Isfara, Sughd viyolat, TJ (Zadneprovskii/Lubo-Lesnichenko 1995, 23 Fig. 11; 1998, 90 Fig. 7.4). – 21. Vorukh, Nohiya-i Isfara, Sughd viyolat, TJ, 51 (Litvinskiĭ 1978, 99 no. 5; Pl. 23.8). – 22. Vorukh, Nohiya-i Isfara, Sughd viyolat, TJ, KV-3 (Litvinskiĭ 1978, 98 no. 1; Pl. 23.2). – 23. Karabulak, Batken raĭon, Batken obl., KG, k. 26 (Zadneprovskii/Lubo-Lesnichenko 1995, 22 Fig. 9; 1998, 89 Fig. 6.3; Baruzdin 1957, 27 Fig. 5.1). – 24. Kara Tektir, Toktogul raĭon, Jalabad obl., KG (Zadneprovskii/Lubo-Lesnichenko 1995, 22 Fig. 9b; 1998, 89 Fig. 6.4). – 25. Kenkol', Talas raĭon, Talas obl., KG, k. 24 (Kozhomberdiev 1963, 40 Fig. 6.3). – 26. Kenkol', Talas raĭon, Talas obl., KG, k. 5 (Kozhomberdiev 1963, 40 Fig. 6.1). – 27. Torkent, Toktogul raĭon, Jalabad obl., KG (Zadneprovskii/Lubo-Lesnichenko 1995, 23 Fig. 10a; 1998, 89 Fig. 6.6). – 28. Tura-Tash, Batken raĭon, Batken obl., KG, k. 15 (Baruzdin/Brykina 1962, 85 Pl. 15.6); (Litvinskiĭ 1978, 100 no. 17; Zadneprovskii/Lubo-Lesnichenko 1995, 22 Fig. 9a; 1998, 89 Fig. 6.2). – 29. Tura-Tash, Batken raĭon, Batken obl., KG, k. 32 (Baruzdin/Brykina 1962, Pl. 15.5; they identify this mirror as a chinese original: ibid., 38). – 30. Tura-Tash, Batken raĭon, Batken obl., KG, k. 7 (Baruzdin/Brykina 1962, Pl. 15.4; small rim fragment, with a hole: ibid., 15). – 31. Davljat, Samarqand viloyat, UZ (Werning 2009, 203). – 32. Sanazara, Samarqand viloyat, UZ (Al'baum 1955, 59 Fig. 3). – 33. UZ, State Museum of History of the Academy of Sciences of the Republic of Uzbekistan, Tashkent (Litvinskiĭ 1978, Pls. 24.2; 25.2). – 34. Kosasar 1, Karmakshy audany (Karmakshinskiĭ raĭon), Qızılorda obl. (Kyzylordinskaia obl.), KZ, gr. 2 (Levina 1996, 355 Fig. 160.2). – 35. Kultöbe, Ordabasy audany (Ordabasinskiĭ raĭon), Oñtüstik Qazaqstan obl. (Iuzhno-Kazakhstanskaia obl.), KZ, k. 12 (Podushkin 2011, 365 Figs. 1–3; 2013, 802 Fig. 7.5). – 36. Lebedevka V, Shynghyrlau audany (Chingirlauskiĭ raĭon), Batys Qazaqstan obl. (Zapadno-Kazakhstanskaia obl.), KZ, k. 23 main grave (Moshkova 1982, 83 Fig. 1.4).

List 14. Mirror with vertical inscription between two dragons

1. Toktogul, Toktogul raĭon, Jalabad obl., KG, gr. (Zadneprovskii/Lubo-Lesnichenko 1998, 89 Fig. 6.1; 1995, 22 Fig. 9; Werning 2009, 204).

[187] Possibly this mirror is mentioned by Werning to come from Kairakum (Werning 2009, 203; 209 fn. 34).

[188] From North Korea, the following mirror came to my attention: Sŏkamni, Pyŏnyang, Pyŏngyang prov., gr. 218 (Horlyck 2012, 124 Fig. 6).

List 15. Single mirror types, mirror fragments or imitations that cannot be attributed to a certain type

China
1. Dafanpu, Junggar distr., Inner Mongolia Autonomous region, three fragments (Nei Menggu/Yikezhaomeng 1990, 9 Fig. 13.1–3). – 2. Loulan, Ruoqiang distr., Xinjiang Uyghur Autonomous Region (Qi/Wang 2008, 31 Fig. 11). – 3. Niya, Hetian distr., Xinjiang Uyghur Autonomous Region, 95MN1M3, inv.no. 95MN1M3:12:8, coiling dragons, Eastern Han (Selbitschka 2010, 552 Fig. 4; Qi/Wang 2008, 53 Fig. 7). – 4. Niya, Hetian distr., Xinjiang Uyghur Autonomous Region, cemetery 1, tomb 5, with tiger, bear and vermillion bird decoration, outer band ornamented with cloud pattern (eastern Han) (Mair 2010, 204 No. 87). – 5. Sampula, Lop distr., Khotan, Xinjiang Uyghur Autonomous Region, M02:68, inscribed with "yiia changui" (Xinjiang 2001, 84 Fig. 63). – 6. Sandaowan, Qahar Right Rear Banner, Ulanqab, Inner Mongolia Autonomous region, gr. 113 (Wulanchabu 1994, 422 Fig. 16.6). – 7. Sandaowan, Qahar Right Rear Banner, Ulanqab, Inner Mongolia, gr. 16 (Wulanchabu 1994, 422 Fig. 16.5). – 8. Sandaowan, Qahar Right Rear Banner, Ulanqab, Inner Mongolia, gr. 22 (Wulanchabu 1994, 422 Fig. 16.10).

Mongolia
9. Burkhan Tolgoĭ, Khutag-Öndör sum, Bulgan aĭmag, gr. 39 (Törbat 2011, 317 Fig. 1.1; Otani 2014, cat. 15), Institute of Archaeology, MAS, Ulaanbaatar. – 10. Burkhan Tolgoĭ, Khutag-Öndör sum, Bulgan aĭmag, gr. 60 (Törbat et al. 2003, 81), Institute of Archaeology, MAS, Ulaanbaatar. – 11. Burkhan Tolgoĭ, Khutag-Öndör sum, Bulgan aĭmag, gr. 75 (Törbat 2011, 317 Fig. 1.2; Otani 2014, cat. 17), Institute of Archaeology, MAS, Ulaanbaatar. – 12. Duurlig Nars, Baian-Adarga sum, Khėntiĭ aĭmag, gr. 3 (Törbat 2011, 317 Fig. 1.8; Ėrėgzėn 2011, 151 cat. 204; Otani 2014, cat. 6). – 13. Noyon Uul, Batsümbėr sum, Töv aĭmag, gr. 25 (Filippova 2000, Fig. 2.4; Werning 2009, 205 Fig. 5; Miniaev/Elikhina 2009, 26 Fig. 5; Törbat 2011, 317 Fig. 1.9; Otani 2014, cat. 1), State Hermitage, St. Petersburg inv.no. MR-0810. – 14. Tėvsh Uul, Bogd sum, Övörkhangaĭ aĭmag, gr. 8 (Tsėvėėndorzh 1985, 56 Fig. 3.17; Törbat 2011, 317 Fig. 1.6; Otani 2014, cat. 32), Institute of Archaeology, MAS, Ulaanbaatar.

Russian Federation
15a. Ėdui, Bichurinskiĭ raĭon, Rep. Buriatiia (Miniaev 1998, 74), Kiakhtinskiĭ kraevedcheskiĭ muzeĭ imeni akademika V. A. Obrucheva, Kiakhta, inv.no. 3216/1–7. – 15b–c. Dureny, Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, surface material, 2 fragments (Davydova/Miniaev 2003, Pl. 14.2,21; Otani 2014, cat. 58; 59), Kiakhtinskiĭ kraevedcheskiĭ muzeĭ imeni akademika V. A. Obrucheva, Kiakhta, inv.no. 248; 2514. – 16a. Ivolga settlement, Ivolginskiĭ raĭon, Rep. Buriatiia, pit 10 (Davydova 1995, Pl. 123.1; Otani 2014, cat. 40). – 16b. Ivolga settlement, Ivolginskiĭ raĭon, Rep. Buriatiia, pit 87 (Davydova 1995, Pl. 134.2; Otani 2014, cat. 42). – 16c. Ivolga settlement, Ivolginskiĭ raĭon, Rep. Buriatiia, cultural layer (Davydova 1995, Pl. 14.4; Otani 2014, cat. 43). – 16d. Ivolga settlement, Ivolginskiĭ raĭon, Rep. Buriatiia, surface material (Davydova 1995, Pl. 4.14; Otani 2014, cat. 44). – 17. Il'movaia Pad', Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, gr. 38 (Rudenko 1969, Fig, 65b; Filippova 2000, Fig. 2.3; Otani 2014, cat. 52. – 18. Ialoman-II, Ongudaiskiĭ raĭon, Rep. Altaĭ, k. 51 (Tishkin/Seregin 2011, 43 Pl. 18), MAĖA, AltGU, Barnaul, inv.no. 181/663. – 19. Ialoman-II, Ongudaiskiĭ raĭon, Rep. Altaĭ, k. 56 (Tishkin/Seregin 2011, 45 Pl. 20), MAĖA, AltGU, Barnaul, inv.no. 181/916. – 20. Aimyrlyg, Chaa-Khol'skiĭ kozhuun, Rep. Tuva, several rim fragments of mirrors of "far-eastern origin" (Stambul'nik 1983, 38). – 21. Kokel', Süt-Khöl kozhuun, Rep. Tuva, k. 32 V (Kenk 1984, 115 Fig. 26B3). – 22. Beiskoe (Beia), Beiskiĭ raĭon, Rep. Khakasiia, type Karlgren G-7 (Lubo-Lesnichenko 1975, cat. 5, Fig. 3), State Hermitage, St. Petersburg, inv.no. 325/1. – 23. Beiskoe (Beia), Beiskiĭ raĭon, Rep. Khakasiia (Lubo-Lesnichenko 1975, cat. 10, Fig. 8), Minusinsk Museum, Minusinsk inv.no. 5247. – 24. Berezhnovka II, Nikolaevskiĭ raĭon, Volgogradskaia obl., k. 33 (Sinitsyn 1960, 46 Fig. 17.7). – 25. Krasnogor, Saraktashskiĭ raĭon, Orenburgskaia obl., k. (Botalov/Gutsalov 2000, 47). – 26. Prikuban, Krasnodarskiĭ kraĭ, probably *siru* mirror (Botalov/Gutsalov 2000, 147; Li Dzhin Yn 2010, Pl. 5.2), State Hermitage, St. Petersburg.

Kyrgysztan
27. Karabulak, Batken raĭon, Batken obl., k. 14 (Litvinskiĭ 1978, 100 no. 12, Pl. 25.4), the National Historical and Archaeological Museum Complex Sulayman, Osh, inv.no. 270[189]. – 28. Kyzyl-Sai, Talas raĭon, Talas obl., k. 3 (Kozhomberdiev 1963, 40 Fig. 6.4).

Uzbekistan
29. Gurmiron, Bostonliq tumani, Toshkent viyolati (Litvinskiĭ 1978, 100 No. 15). – 30. Piskent (Pskent), Piskent tumani, Toshkent viyolati, A-1 (Litvinskiĭ 1978, 101; Pl. 25.5), State Museum of History of the Academy of Sciences of the Republic of Uzbekistan, Tashkent, inv.no. 188/106.

Tajikistan
31. Usto-Mullo (Navgilem), Nohiya-i Isfara, Sughd viyolatho, gr. 7 (Litvinskiĭ 1978, Pl. 23.3). – 32. Vorukh, Nohiya-i Isfara, Sughd viyolatho, k. 11 (Litvinskiĭ 1978, 99 Pl. 23.9). – 33. Zerafshan, Sughd viyolatho (Litvinskiĭ 1978, 100).

Kazakhstan
34. Altyn Asar 4o, Karmakshy audany (Karmakshinskiĭ raĭon), Qızılorda obl. (Kyzylordinskaia obl.), gr. 321/2 (Levina 1996, 355 Fig. 160.1).

Imitations of Han mirrors or mirrors with Han elements

List 16. Mirror pendants imitating *riguang* mirror design (after Guguev et al. 1991, 37; Guguev/Treister 1995, 150)

1. Kobiakovo, Rostov-na-Donu gorodskoĭ okr., Rostovskaia obl., RU, gr. 26/1985. – 2. Nizhne-Gnilovo, Rostov-na-Donu gorodskoĭ okr., Rostovskaia obl., RU, k. 12. – 3. Tiramba, Temriukskiĭ raĭon, Krasnodarskiĭ kraĭ, RU, gr. 54. – 4. Khutor Chernyshev, Shovgenovskiĭ raĭon, Rep. Adygeia, RU, k. 5, gr. 4.

[189] Several other pieces are mentioned by Litvinskii 1978, 100 to come from Karabulak that were housed in the collections of the Institute of history AN KirgSSR and one more in the State Hermitage, St. Petersburg. Inventory numbers are not provided.

List 17. Mirrors probably imitating *zhaoming* mirrors

1. Shevchenko, Volodars'kiĭ raĭon, Donets'ka obl., UA, k. 5 (Shepko 1987, 163 Fig. 4.20). – 2. Uriuksor, Fergana viloyat, UZ, k. II (Gorbunova 1975, Fig. 4.22). – 3. Tselinnyi I, Martuk audany (Martukskiĭ raĭon), Aqtöbe obl. (Aktiubinskaia obl.), KZ, k. 81 (Botalov/Gutsalov 2000, 112 Fig. 36.11).

List 18. Mirrors from the western steppes and Central Asia with Chinese elements (after Li Dzhin Yn 2010, Pls. 20; 24 with additions)[190]

1. Baranovka, Kamyshinskiĭ raĭon, Vologradskaia obl., RU, k. 1 (Sergatskov 1993, 76 Fig. 4.3). – 2.–8. Kobiakovo, Rostov-na-Donu gorodskoĭ okr., Rostovskaia obl., RU, gr. 38/1957; 78/1957; 23/1962; 65/1957; 20/1961; 25/1962; 38/1961 (Kosianenko 2008, 114–117 Fig. 17.1–7). – 9. Mozhary, gr. 34/1990, RU (Khazanov 1963, 68 Fig. 5.6). – 10. Krepinskiĭ mogil'nik, Aksaiskiĭ raĭon, Rostovskaia obl., RU, k. 19, gr. 1 (Maksimenko 1998, 249 Fig. 66.1). – 11. Alikonovskiĭ I, Karachaevo-Cherkesskaia Rep., RU, gr. (Kovalevskaia 1977, 102 Fig.). – 12.–15. Alinkonovskiĭ II, Karachaevo-Cherkesskaia Rep., RU, k.19, gr. 1; gr. 1/1976; gr. 5/1976; gr. 10/1976 (Li Dzhin Yn 2010, Pl. 24.6,8,9). – 16. Tanais, Miasnikovskiĭ raĭon, Rostovskaia obl., RU, gr. 34/1990 (Arsen'eva et al. 2001, Pl. 90.1123). – 17. Nagaevska II, Kotel'nikovskiĭ raĭon, Volgogradskaia obl., RU, gr. 11 (Mys'kov/Sergatskov 1994, 180 Fig. 1.16). – 18. Podkumskii, Predgoriĭ raĭon, Stavropol'skiĭ kraĭ, RU, gr. 42; 43 (Abramova 1987, 82 Fig. 43.1,15). – 19. Krepostniĭ gorodishche, gorodskoĭ okrug Azov, Rostovskaia obl., RU, cultural layer (Kosianenko/Maslovskiĭ 2006, 65 Fig. 4.1). – 20. Staritsa, Chernoiarskiĭ raĭon, Astrakhanskaia obl., RU, k. 59 (Krivosheev 2005, 65 Fig. 1.5). – 21. Vysochino-VII, Azovskiĭ raĭon, Rostovskaia obl., RU, k. 17, gr. 1 (Bespalyĭ 1990, 214 Fig. 1.23). – 22. Karabulak, Batken raĭon, Batken obl., KG (Litvinskiĭ 1978, Pl. 25.4), the National Historical and Archaeological Museum Complex Sulayman, Osh, inv.no. 270. – 23. Piskent (Pskent), Piskent tuman, Toshkent viyolati, UZ, A-1 (Litvinskiĭ 1978, 101 Pl. 25.5).

Lacquered objects in the Eurasian Steppes (list 19)[191]

List 19a. Mongolia

1. Ar Bulan Khunnu, Khudzhirt sum, Övörkhangaĭ aĭmag, gr. 2, knife handle, unpublished, Institute of Archaeology, MAS, Ulaanbaatar. – 2. –13. Burkhan Tolgoĭ, Khutag-Öndör sum, Bulgan aĭmag, Istitute of Archaeology, MAS, Ulaanbaatar: 2. gr. 1, unknown (Törbat et al. 2003, 54); 3. gr. 9, vessel with bronze rim (Törbat et al. 2003, 58; 181 Fig. 8); 4. gr. 18, fragments of a vessel, plate (Törbat et al. 2003, 561); 5. gr. 25, unknown (Törbat et al. 2003, 63); 6. gr. 26, unknown, circular fragment, wooden fragment (Törbat et al. 2003, 64); 7. gr. 28, unknown (Törbat et al. 2003, 65); 8. gr. 33a, ear cup (Törbat et al. 2003, 203 Fig. 4; Xiongnu Tombs 2008, 136), wrongly attributed to grave 27 in Mongolie 2003, 223; 9. gr. 35, bowl or ear-cup (Törbat et al. 2003, 71); 10. gr. 51, unknown (Törbat et al. 2003, 78); 11. gr. 59, unknown (Törbat et al. 2003, 81); 12. gr. 68, unknown (Törbat et al. 2003, 84); 13. gr. 71, unknown (Törbat et al. 2003, 86). – 14. Chandman' Uul, Dėlgėrtsogt sum, Dundgov' aĭmag, gr. 2, unknown (Amartüvshin/Honeychurch 2010, 258), Institute of Archaeology, MAS, Ulaanbaatar. – 15. Darkhan, Darkhan sum, Darkhan-Uul aĭmag, gr. 4, unknown (Grishin 1978, 99). – 16. Duraal, Dėlgėrtsogt sum, Dundgov' aĭmag, gr. 1, unknown (Amartüvshin/Honeychurch 2010). – 17. Duulga Uul, Zhargaltkhaan sum, Khėntiĭ aĭmag, gr. 7, unknown (Erdélyi 2000, 53), with stirrup fragment, Turkish period? – 18. Duulga Uul, Zhargaltkhaan sum, Khėntiĭ aĭmag, gr. 15, unknown, fragments, possibly of a lacquer cup (Erdélyi 2000, 56; Xiongnu Tombs 2008, 273 Fig.). 19. –25. Duurlig Nars, Baian-Adarga sum, Khėntiĭ aĭmag: 19. gr. 2, chariot box, axle, wheel-spokes (Yun/Chang 2011, 266 Fig. 6; 7; Duurlig nars 2011, 40; 171 Fig. 21); 20. gr. 2, quiver (Yun/Chang 2011, 269; Duurlig nars 2011, 41–42); 21. gr. 2, two vessels (Yun/Chang 2011, 270; Duurlig nars 2011, 42); 22. gr. 2, fragments (Duurlig nars 2011, 42); 23. gr. 3, plate (Duurlig nars 2011, 107); 24. gr. 4, plate (Duurlig nars 2011, 120); 25. gr. 4, unknown (Yun/Chang 2011, 274). – 26.–27. Gol Mod, Khaĭrkhan sum, Arkhangaĭ aĭmag, T20, Institute of Archaeology, MAS, Ulaanbaatar: 26. chariot with wheels, chariot box (André 2003, 75 Fig.); 27. Platter with bronze rim, inscription, dated to 16 BCE, produced in Kaogong workshop (Ėrėgzėn 2011, 184 Fig. 261; Mönkhbaiar/Eröol-Ėrdėnė 2011, 132 Fig. 1; 132 Fig. 2). – 28. Gol Mod 2, Öndör Ulaan sum, Arkhangaĭ aĭmag, k. 1, chariot (Ėrdėnėbaatar 2012, 163; 164 Fig. 3). – 29. Gol Mod 2, Öndör Ulaan sum, Arkhangaĭ aĭmag, gr. 30, plate (Erdenebaatar et al. 2011, 306 Fig. 4.1; 5). – 30. Ikheriĭn Am, Dėlgėrtsogt sum, Dundgov' aĭmag, gr. 1, ear-cup (Amartüvshin/Honeychurch 2010, 248), Institute of Archaeology, MAS, Ulaanbaatar. – 31. Khudgiĭn Tolgoĭ, Battsėngėl sum, Arkhangaĭ aĭmag, gr. 1, ear-cup, non-imperial workshop (Mon-sol 2003, 198–199, Vol. 1: Fig. 26; Vol. 2: Figs. 32; 85.3; 86). – 32. Naĭmaa Tolgoĭ, Ėrdėnėmandal sum, Arkhangaĭ aĭmag, gr. 3, unknown, possibly from a lacquered coffin (Erdélyi et al. 1967, 342). – 33. Naĭ-

[190] I leave out the mirror pendants Nos. 17–22 (Li Dzhin Yn 2010, Pl. 24) with spiral décor as in my opinion they might simply resemble tamgha signs depicted in the round and thus be local.

[191] Although strived at, it is impossible to give a full account of lacquered objects in all Eurasian Steppes caused by the state of publication, the identification of lacquered objects and the accessibility of reports from excavations in Inner and Central Asia, Siberia, and the western steppes. The collected data of 231 entries is at least representative and forms a first compilation to present an overview. Most of the lacquered objects from Noyon Uul are housed in the State Hermitage, St. Petersburg, unless the publication provided different information. – Addendum to list 19: 232 Tillia Tepe, Shibirghan wuleswali, Jowzjan wilayah, AF, gr. 6 (Sarianidi 1985, 117).

maa Tolgoĭ, Ėrdėnėmandal sum, Arkhangaĭ aĭmag, gr. 7, vessel (Tsėvėėndorzh 1985, 21). – 34. Nariĭny Am 2, Dėlgėrkhaan sum, Khėntiĭ aĭmag, gr. 1, unknown (Tsėvėėndorzh et al. 2003, 13). – 35.–71. Noyon Uul, Batsümbėr sum, Töv aĭmag: 35.–36. Andreev kurgan: 35. wooden vessel with gilded rim (Rudenko 1962, 123); 36. pottery, grey ware and black ware (Rudenko 1962, 123); 37.–38. Ballod kurgan: 37. ear-cup (Ivanov 2011, 286 Fig. 1.9); 38. unknown (Rudenko 1962, 123); 39. Kondrat'ev kurgan, wooden sticks, wooden table (?) leg, unknown (Rudenko 1962, 123–124; Filippova 2005, 181 Tab. 1); 40. unnumbered kurgan from Simukov's excavations: ear-cup with tamgha, dated 2 BCE, National Museum of Mongolia, Ulaanbaatar, inv.no. A-242 (Ėrėgzėn 2011, 185 Fig. 263; Pirazzoli-t'Serstevens 2009, 33–34 Figs. A9–A12; Umehara 1960, Pl. 61; Simukov 2008, 45; Dorzhsürėn 2003, 78–79; Miniaev/Elikhina 2009, 24; Polos'mak et al. 2011a, 49 with fn. 36), decorated in the Ornate *Shu* style of the Western Workshop in Sichuan (Barbieri-Low 2001, 212–234; Pirazzoli-t'Serstevens 2009, 36). This ear-cup is often erroneously attributed either to kurgan 5 (Louis 2006/07, 50; Ėrėgzėn 2011, 185 Fig. 263), or, in western catalogues, to kurgan 6 (Desroches/Amon 2000, 147 cat. 128; Mongolie 2003, 223; Dschingis Khan 2005, cat. 16–17); 41.–43. k. 1: 41. board of coffin floor with depiction of flying goose (Rudenko 1962, 16 Pls. 48.2; 71.3; 1969, 16 Pls. 48.2; 71.3); 42. unknown (Rudenko 1962, 117; Filippova 2005, 180 Tab. 1); 43. cup (Dorzhsürėn 2003, 18); 44.–49. k. 6: 44. coffin (Rudenko 1962, 18; 1969, 17); 45. ear-cup, 2 BCE, State Hermitage, St. Petersburg, inv.no. MR-2301 (Umehara 1960, Pl. 59–60 [here two cups]; Pirazzoli-t'Serstevens 2009, 31–32 Figs. A1–A8); possibly private production (Pirazzoli-t'Serstevens 2009, 37); 46. vessel with nephrite incrustation (Lubo-Lesnichenko 1969, 269 Fig. 1; 274 Fig. 9); 47. zoomorphic vessel "in form of a horse" (Rudenko 1962, Pl. 6.1; Lubo-Lesnichenko 1969, 271 Fig. 3); 48. table legs (Rudenko 1962, Pl. 6,2–4; 1969, Pl. 6.2–4; Lubo-Lesnichenko 1969, 271 Fig. 2); 49. sticks, bronze vessel, copper fragment, unknown, awl, wooden quadrefoil, wooden board (Rudenko 1962, 118–121; Pirazzoli-t'Serstevens 2009, 36–37; 31–32 Figs. A1–A8); 50. gr. 8, fragments (Dorzhsürėn 2003, 21); 51. gr. 9, cup (Dorzhsürėn 2003, 22); 52. plate or platter (Dorzhsürėn 2003, 22); 53.–62. k. 20: 53. chariot elements (Polos'mak et al. 2008; Polos'mak et al. 2011a, 77–89); 54. coffin (Polos'mak et al. 2011a, 73; 71 Fig. 2.46); 55. ear-cup 1, tamgha (Polos'mak et al. 2011a, 121 Fig. 5.6–7; Polos'mak et al. 2011b, 328 Fig. 1; Chistiakova 2009), with inscription, restored in Kaogong workshop, Chang'an; 56. ear-cup 2, tamgha (Polos'mak et al. 2011a, 121 Fig. 5.8; Polos'mak et al. 2011b, 329 Fig. 2); 57. ear-cup 3, tamgha (Polos'mak et al. 2011b, 330 Fig. 3); 58. box (Polos'mak et al. 2011a, 122 Fig. 5.9); 59. vessel, plate? (Polos'mak et al. 2011a, 119 Fig. 5.1; 120 Fig. 5.5); 60. tube/case for hair (Polos'mak et al. 2011a, 128 Fig. 5.21); 61. fastener (Polos'mak et al. 2011a, 129 Fig. 5.25); 62. wooden fish with lacquered fish-skin (Polos'mak et al. 2011a, 128 Figs. 5.23–24); 63.–66. k. 23: 63. ear-cup, State Hermitage, St. Petersburg, inv.no. MR-2303 (Rudenko 1962, 121; Miniaev/Elikhina 2009, 24; 25 Fig. 4.1), "cups north of the coffin" (Rudenko 1962, 121), location not indicated (Miniaev/Elikhina 2009, 24); three identical cups (Lubo-Lesnichenko 1969, 272); without inscription, lesser quality, 1st century CE, commercial type of ware (Louis 2006/07, 51); 64. ear-cup, State Hermitage, St. Petersburg, inv.no. MR-2304 (Rudenko 1969, 121; Miniaev/Elikhina 2009, 25 Fig. 4.4); 65. ear-cup, National Museum Ulaanbaatar (Rudenko 1969, 121; Miniaev/Elikhina 2009, 25 Fig. 4.3,5; Desroches/Amon 2000, 146 cat. 127; Umehara 1960, Pls. 62–63); 66. ear-cup, tamgha, State Hermitage, St. Petersburg, inv.no. MR-2302 (Rudenko 1962, 121; Miniaev/Elikhina 2009, 25 Fig. 4.2; Lubo-Lesnichenko 1969, 271 Fig. 5; Umehara 1960, Pl. 63 middle and bottom right); 67.–69. Kurgan 24/12: 67. cup, State Hermitage, St. Petersburg (Rudenko 1969, 121); 68. toilet box, State Hermitage, St. Petersburg, inv.no. KP-14150, produced end of 1st century BCE (Pirazzoli-t'Sterstevens 2009, 37; Rudenko 1962, 121–122; Umehara 1960, 35 Fig 18, Pl. 64; Pirazzoli-t'Serstevens 2009, 35 Figs. A13–A14; Lubo-Lesnichenko 1969, 273 Fig. 8), toilet box *lian* is decorated in *pingtuo* technique; this expensive kind of lacquerware is a special product of private workshops in the Jiangsu-Anhui region (Pirazzoli-t'Serstevens 2009, 37–38), possibly in Guangling or Sishui kingdom; 69. wooden sticks, wooden stick with bronze, unknown, State Hermitage, St. Petersburg (Rudenko 1969, 121); 70. gr. 25, unknown (Rudenko 1962, 122–123); 71. k. 31, two ear-cups (Polos'mak et al. 2011b, 328), yet to be published. – 72. On'tolt, Uianga sum, Övörkhangaĭ aĭmag, gr. 1, unknown (Tsėvėėndorzh 1989), Institute of Archaeology, MAS, Ulaanbaatar. – 73.–74. Salkhityn am, Rashaant sum, Khövsgöl aĭmag, gr. 7; 73. vessel (Ölziĭbaiar et al. 2011), Institute of History, MAS, Ulaanbaatar; 74. fragments at the waist (Ölziĭbaiar et al. 2011); 75. Shombuuzyn belchir, Mönkhkhaĭrkhan sum, Khovd aĭmag, gr. 15, possibly box? (Miller et al. 2009, 12 Fig. 9), National Museum of Mongolia, Ulaanbaatar. – 76. Sul Tolgoĭ, Ikh Uul sum, Khövsgöl aĭmag, gr. unknown, vessel? (Aseev et al. 1987, 134 Fig. 4). – 77.–89. Tamiryn Ulaan Khoshuu, Ögiĭ nuur sum, Arkhangaĭ aĭmag: 77. gr. 6, unknown (Törbat 2003, 8; 17 Fig. 2); 78.–81. gr. 97, contained at least four lacquerware objects (Waugh 2006, 33); 78. bowl with bronze rim, first century CE (Waugh 2006, 33–34 Fig. 6–9; Ėrėgzėn 2011, 183 Fig. 259; 260; Louis 2006/07, 52), with Chinese inscription, commercial workshop; 79. ear-cup (Waugh 2006, 33 Fig. 4); 80. vessel (Waugh 2006, 33 Fig. 5); 81. unknown (Waugh 2006, 33 Fig. 3); 82.–84. gr. 109: 82. unknown (Waugh 2006, 34), located at the waist of the deceased; 83. vessel (Waugh 2006, 34 Fig. 10); 84. wooden knife handle (Purcell/Spurr 2006, 26 Fig. 12), Purcell and Spurr (2006, 25) believe the knife belongs to the actual grave goods, Waugh (2006, 33–34) suggests that this knife was dropped when the looting occurred as it was found above the actual burial; 85.–86. gr. 160: 85. bowl (Waugh 2006, 34–35 Fig. 13); 86. unknown (Waugh 2006, 35 Fig. 14); 87.–89. gr. 201: 87. box (Waugh 2006, 34), approximately at the center of the tomb, contained a string of *wuzhu* coins; 88. ear-cup, mid-first century CE, commercial ware (Louis 2006/07, 52; Waugh 2006, 34 Fig. 12); 89. vessel (Waugh 2006, 34 Fig. 11). – 90. Tėvsh Uul, Bogd sum, Övörkhangaĭ aĭmag, gr. 20, cup (Tsėvėėndorzh 1985, 56 Fig. 3.10), Institute of Archaeology, MAS, Ulaanbaatar.

List 19b. Russian Federation – Rep. Buriatiia

91.–98. Cheremukhovaia Pad', Kiakhtinskiĭ raĭon: 91. gr. 7, unknown, on iron fragment (Konovalov 1976, 84); 92. gr. 13, unknown (Konovalov 1976, 90); 93. gr. 39, unknown (Konovalov 1976, 101); 94. gr. 40, unknown (Konovalov 1976, 107); 95. gr. 48, unknown (Konovalov 1976, 108); 96. gr. 51, cup (Konovalov 1976, 116); 97. gr. 59, unknown (Konovalov 1976,

125); 98. gr. 60, unknown (Konovalov 1976, 126). – 99.–116. Dyrestuĭ, Dzhidinskiĭ raĭon: 99. gr. 28, unknown (Konovalov 1976, 137; Miniaev 1998, 86); 100. gr. 31, unknown (Konovalov 1976, 142; Miniaev 1998, 87); 101. gr. 33, unknown (Konovalov 1976, 148; Miniaev 1998, 87); 102. gr. 36, unknown, wooden fragment with lacquer remains (Miniaev 1998, 88); 103. gr. 39, cup (Miniaev 1998, 89); 104. gr. 42, unknown (Miniaev 1998, 89); 105. gr. 43, cup (Miniaev 1998, 89); 106. gr. 48, unknown (Miniaev 1998, 90); 107. gr. 49, circular gagat plaque of belt with gold foil and lacquer; in the area of the belt lacquer remains (Miniaev 1998, 91); 108. gr. 61, lacquered buckle (Miniaev 1998, 92 Pl. 46.2); 109. gr. 64, wooden object (Miniaev 1998, 93); 110. gr. 86, unknown (Miniaev 1998, 95); 111. gr. 90, unknown (Miniaev 1998, 96); 112. gr. 98, unknown (Miniaev 1998, 97); 113. gr. 113, unknown (Miniaev 1998, 99); 114. gr. 116, unknown, in the area of the hip (Miniaev 1998, 100); 115. gr. 117, close to the plaque remains of red lacquer, lacquered belt? (Miniaev 1998, 100); 116. gr. 129, unknown, leather and lacquer, close to the head (Miniaev 1998, 103). – 117.–130. Il'movaia Pad', Kiakhtinskiĭ raĭon: 117. gr., cup (Sosnovskiĭ 1946, 59) and lacquer flakes from several other graves of Sosnovskiĭs excavation; 118. gr. 4, lacquered sword sheath (Tal'ko-Gryntsevich 1999b, 35 Pl. 19.4); 119. gr. 27, unknown (Tal'ko-Gryntsevich 1999b, 53); 120. gr. 32, unknown (Tal'ko- Gryntsevich 1999b, 60); 121. gr. 45, unknown (Konovalov 1976, 32); 122. gr. 46, cup (Konovalov 1976, 2); 123. gr. 47, cup? (Konovalov 1976, 38); 124. gr. 49, unknown (Konovalov 1976, 45); 125. gr. 50, two ear cups (Konovalov 1976, 47; 49 Fig. 22); 126. gr. 51, unknown (Konovalov 1976, 54); 127. gr. 52, unknown (Konovalov 1976, 57); 128. gr. 53, cup (Konovalov 1976, 61); 129. gr. 55a, unknown (Konovalov 1976, 70); 130. gr. 58, cup (Konovalov 1976, 79). – 131.–140. Ivolga cemetery, Ivolginskiĭ raĭon, Rep. Buriatiia, State Hermitage, St. Petersburg: 131. gr. 25, unknown (Davydova 1996, 39); 132. gr. 30, unknown (Davydova 1996, 40); 133. gr. 35, unknown (Davydova 1996, 41); 134. gr. 76, unknown (Davydova 1996, 47); 135. gr. 108, unknown (Davydova 1996, 53); 136. gr. 113, unknown (Davydova 1996, 54); 137. gr. 115, unknown (Davydova 1996, 54); 138. gr. 119, ear cup (Davydova 1996, 55); 139. gr. 120, cup (Davydova 1996, 55); 140. gr. 197, unknown (Davydova 1996, 72). – 141.–151. Tsaram, Kiakhtinskiĭ raĭon, k. 7: 141. chariot (Miniaev/ Sakharovskaia 2007c); 142. box with inscription, produced in imperial workshop Kaogong, Chang'an, 8 BCE–4 CE (Miniaev/Sakharovskaia 2007a, 164 Fig. 5.12; Pirazzoli-t'Serstevens 2007); 143. two ear cups (Miniaev/ Sakharovskaia 2007a, 165); 144. quiver (Miniaev/Sakharovskaia 2007b, 53); 145. lacquered belt of doll no. 2 in eastern korridor (Miniaev/Sakharovskaia 2007a, 165); 146. casing with doll no. 2 in eastern corridor (Miniaev/ Sakharovskaia 2007a, 165); 147. lacquered iron sheet (Miniaev/Sakharovskaia 2007a, 164 Fig. 5.25); 148. lacquered wooden stick with doll no. 1, western corridor, wooden sticks, lacquered sheath with doll no. 3 (Miniaev/Sakharovskaia 2007a, 164–165 Fig. 5.22); 149. vessel with doll no. 2 in eastern korridor (Miniaev/ Sakharovskaia 2007a, 165); 150. wooden pendants (Miniaev/ Sakharovskaia 2007a, 165); 151. wooden staff (Miniaev/ Sakharovskaia 2007b, 53; Miniaev 2010, 139 Fig. 18).

List 19c. Russian Federation – Minusinsk Basin

152.–155. Kopi, Bogdorskiĭ raĭon, Rep. Khakasiia: 152. gr. 13, cup (Kyzlasov 1960, 107–108 with fn. 1); 153. gr. 14 (new 3), unknown, State Hermitage, St. Petersburg, inv.no. 4379-14 (Kyzlasov 1960, 108 Fn. 1; 3; Vadetskaia 1999, 228); 154. gr. 31 (new 7), unknown (Vadetskaia 1999, 228); 155. gr. 32, birchbark, unknown, State Hermitage, St Petersburg, inv.no. 4887-37.38 (Kyzlasov 1960, 108 with fn. 3; Vadetskaia 1999, 228). – 156. Salbyk, Ust'-Abakanskiĭ raĭon, Rep. Khakasiia, gr. 10, unknown (Vadetskaia 1999, 235). – 157. Uibat I, Ust'-Abakanskiĭ raĭon, Rep. Khakasiia, Zemlianoi k. 1, armor suit plaque made of paper mâché, GIM, inv.no. 79956/289 (Kiselev 1951, 240; Vadetskaia 1999, 255). – 158. Tepsei VII, Krasnoturanskiĭ raĭon, Krasnoiarskiĭ kraĭ, gr. 3, dagger sheath (Griaznov 1980, 76 Fig. 50.27).

List 19d. Russian Federation – Altaĭ

159. Bashadar, Ongudaiskiĭ raĭon, kurgan 1, lacquer flakes, State Hermitage, St. Petersburg, inv.no. 2066/24 (Rudenko 1960, 37) found close to the head, Rudenko thinks it belongs to the headdress (Rudenko 1960, 37); horse gear with traces of red and black lacquer (Rudenko 1960, 38), saddle bows probably also decorated with lacquer (Rudenko 1960, 44). – 160.–162. Ialoman-II, Ongudaiskiĭ raĭon: 160. k. 51, belt (Tishkin 2007a, 179; 2011, 546 Fig. 7.1f), MAĖA Alt. GU, Barnaul; 161. k. 51, horse gear strap (Tishkin 2007a, 179); 162. k. 57, ear cup (Tishkin 2007a, 177–178 Figs. 1.2; 2; Tishkin et al. 2008, 196–198), MAĖA Alt. GU, Barnaul. – 163.–166. Pazyryk, Ulaganskiĭ raĭon: 163. k. 3, lacquer flakes for headdress, State Hermitage, St. Petersburg, inv.no. 1695-16 (Polos'mak/Barkova 2005, 89 Fig. 2.59a); 164. k. 5, saddle bow, State Hermitage, St. Petersburg, inv.no. 1678/153 (Rudenko 1953, 374); 165. k. 6, lacquer flake, State Hermitage, St. Petersburg, inv.no. 2064/7 (Rudenko 1953, 375; 40 Fig. 14); 166. k. 7, lacquered leather strip, State Hermitage, St. Petersburg, inv.no. 2067/5-6 (Rudenko 1953, 118 Pl. 98.4). – 167. Shibe, Ongudaiskiĭ raĭon, Bolshoi k., ear cup, handle, State Hermitage, St. Petersburg, inv. no. 4888/54 (Barkova 1978, 42 Fig. 5), further lacquer material, inv.no. 4888/101, 162. – 168. Tuėkta I, Ongudaiskiĭ raĭon, k., flakes, State Hermitage, St. Petersburg, inv.no. 2179/916, 2179/918 (Barkova 1978, 44 fn. 29). – 169. Tuėkta II, Ongudaiskiĭ raĭon, k., flakes, State Hermitage, St. Petersburg, inv.no. 2180/84 (Barkova 1978, 42 Fig. 29).

List 19e. Russian Federation – West-Siberia

170. –171. Abatskii I, Abatskiĭ raĭon, Tiumenskaia obl., k. 5, gr. 6: 170. dagger sheath (Pogodin 1998a, 35 Tab. 3); 171. lacquered sword sheath (Pogodin 1998a, 35 Tab. 3). – 172.–180. Abatskiĭ III, Abatskiĭ raĭon, Tiumenskaia obl.: 172. k. 1, gr. 4, vessel, unknown form (Pogodin 1998a, 28 Tab. 1); 173. k. 1, gr. 4, lacquered dagger sheath (Pogodin 1998a, 35 Tab. 3); 174. k. 1, gr. 9, arrow shaft (Pogodin 1998a, 36); 175. k. 1, gr. 9, lacquered sword sheath (Pogodin 1998a, 35 Tab. 3); 176. k. 1, gr. 9, vessel, unknown form (Pogodin 1998a, 28 Tab. 1); 177. k. 2, gr. 13, lacquered dagger sheath (Pogodin 1998a, 35 Tab. 2); 178. k. 2, gr. 17, vessel, unknown form (Pogodin 1998a, 28 Tab. 1); 179. k. 4, gr. 3, arrow shaft (Pogodin 1998a, 36); 180. k. 4, gr. 4, arrow shaft (Pogodin 1998a, 36). – 181.–182. Beshchaul III, Nizhneomskiĭ raĭon, Omskaia obl.: 181. k. 1, gr. 3, lacquered dagger handle (Pogodin 1998a, 35 Tab. 3); 182. k. 1, gr. 4, lacquered dagger sheath (Pogodin 1998a, 35 Tab. 3). – 183. Beshchaul IV, Nizhneomskiĭ raĭon, Omskaia obl., k. 2, gr. 1A, lacquered dagger sheath (Pogodin 1998a, 35 Tab. 3). – 184.–198.

Isakovka I, Gor'kovskiĭ raĭon, Omskaia obl.: 184. k. 12, gr. 4, arrow shaft (Pogodin 1998a, 36); 185. k. 3, gr. 3, lacquered belt (Pogodin 1998a, 32 Tab. 2); 186. k. 3, gr. 4, lacquered belt (Pogodin 1998a, 32 Tab. 2); 187. k. 3, gr. 6, lacquered wooden dagger sheath, gold turquoise (Pogodin 1998b, Fig. 4); 188. k. 3, gr. 6, lacquered sword sheath (Pogodin 1998a, 35 Tab. 3); 189. k. 3, gr. 6, vessel (box?), cylindric with round flat bottom, well preserved, possibly with ramie base (Pogodin 1998a, 27 Tab. 1); 190. k. 3, gr. 6, earring with incrustation (Pogodin 1998a, 36); 191. k. 3, gr. 6, two lacquered belts (Pogodin 1998a, 32 Tab. 2); 192. k. 4, gr. 2, vessel, unknown form (Pogodin 1998a, 28 Tab. 1); 193. k. 4, gr. 1, lacquered belt (Pogodin 1998a, 32 Tab. 2); 194. k. 4, gr. 2, lacquered belt (Pogodin 1998a, 32 Tab. 2); 195. k. 5, gr. 2, vessel, unknown form (Pogodin 1998a, 28 Tab. 1); 196. k. 6, gr. 9, lacquered belt (Pogodin 1998a, 32 Tab. 2); 197. k. 8, gr. 4, lacquered belt (Pogodin 1998a, 32 Tab. 2); 198. k. 2, gr. 1, lacquered dagger sheath (Pogodin 1998a, 35 Tab. 3). – 199.–201. Isakovka III, Gor'kovskiĭ raĭon, Omskaia obl.: 199. k. 3, gr. 1, lacquered dagger sheath (Pogodin 1998a, 35 Tab. 3); 200. k. 3, gr. 4, lacquered dagger sheath (Pogodin 1998a, 35 Tab. 3); 201. k. 5, gr. 1, lacquered belt (Pogodin 1998a, 32 Tab. 2). – 202.–216. Sidorovka I, Gor'kovskiĭ raĭon, Omskaia obl.: 202. k. 3, gr. 1, two vessels, unknown form (Pogodin 1998a, 28 Tab. 1); 203. k. 3, gr. 3, arrow shaft (Pogodin 1998a, 36); 204. k. 4, gr. 3, arrow shaft (Pogodin 1998a, 36); 205. k. 4, gr. 3, lacquered belt (Pogodin 1998a, 32 Tab 2); 206. k. 4, gr. 3, lacquered dagger sheath (Pogodin 1998a, 35 Tab. 3); 207. k. 4, gr. 3, lacquered sword sheath (Pogodin 1998a, 35 Tab. 3); 208. k. 4, gr. 3, lacquered sword sheath (Pogodin 1998a, 35 Tab. 3); 209. k. 4, gr. 4, lacquered dagger sheath (Pogodin 1998a, 35 Tab. 3); 210. k. 5, gr. 1, lacquered belt (Pogodin 1998a, 32 Tab. 2); 211. k. 5, gr. 2, arrow shaft (Pogodin 1998a, 36); 212. k. 1, gr. 2. rectangular box (Matiushchenko/Tataurova 1997, 55; 146 Fig. 24a); 213. k. 1, gr. 2, two vessels (Pogodin 1998a, 27 Tab. 1); 214. k. 1, gr. 2, lacquered belt (Pogodin 1998a, 32 Tab. 2); 215. k. 1, gr. 2, lacquered dagger sheath (Pogodin 1998a, 35 Tab. 3); 216. k. 1, gr. 2, lacquered sword sheath (Pogodin 1998a, 35 Tab. 3).

List 19f. West-Russia

217. Oktiabr'skiĭ-V, Oktiabr'skiĭ raĭon, Volgogradskaia obl., k. 3, vessel (Mordvintseva/Mys'kov 2005, 316 Fig. 1II).

List 19g. Central Asia – Afghanistan

218.–223. Begram, Bagram wuləswāləi, Parwan wilāyat, palace: 218. bowl no. 92, severely damaged (Elisséeff 1954, 152 no. 92; Zhang 2011, 7); 219. box, no. 186 (Elisséeff 1954, 152–153 no. 186 Fig. 246), produced probably in Guangling, closes analogy from Xin dynasty (Zhang 2011, 11; 24 Fig. 9.1); 220. ear cup, no. 229 (Elisséeff 1954, 154 no. 229 Fig. 249); 2 BCE – 13 CE, produced at state workshop (Zhang 2011, 8–9; 21 Fig. 7.1); 221. platter, no. 215; 20–50 CE (Elisséeff 1954, 153 no. 215 Fig. 247); 16 BCE–14 CE, produced probably at state workshops (Zhang 2011, 7–9; 20 Fig. 6.1); 222. toilet box no. 216 (Elisséeff 1954, 153 no. 216 Fig. 248), late Western Han, private workshop, Guangling (Zhang 2011, 9–11; 22 Fig. 8.1); 223. toilet box, no. 219 (Elisséeff 1954, 153–154 no. 219 Fig. 248), produced in Guangling (Zhang 2011, 9–11; 22 Fig. 8.2).

List 19h. Kazakhstan

224. Altyn Asar, Karmakshy audany (Karmakhinskiĭ raĭon), Qızılorda obl. (Kyzylordinskaia obl.), gr. 282 (or 292), toilet box (Levina 1996, 300 Fig. 105.1); the attribution to grave 282 or 292 is contradicting in text and figure caption (cf. Levina 1996, 204; 253). – 225. Lebedevka, Shynghyrlau audany (Chingirlauskiĭ raĭon), Batys Qazaqstan obl. (Zapadno-Kazakhstanskaia obl.), k. 2, box (Moshkova 2009, 104).

List 19i. Ukraine

226. Sokolova Mogila, Mykolayivs'kyi raĭon, Mykolayivs'ka obl., k. 1, possibly box (Kovpanenko 1986, 106 Fig. 112). – 227.–231. Ust'-Al'ma, Bakhchisaraiskiĭ raĭon, Rep. Krym: 227. catacomb 603, box (Zaitsev 2013, 104 Fig. 1); 228. catacomb 612, box (Zaitsev 2013, 104 Fig. 1); 229. catacomb 620, burial 1, toilet box (Loboda et al. 2002, 328 Fig. 18; 336 Fig. 23; Prüch 2013; Zaitsev 2013, 103–104 Figs. 2–4), possibly produced in Guangling area (Prüch 2013); 230. catacomb 642, unknown (Zaitsev 2013, 104 Fig. 1); 231 catacomb 720, toilet box (Loboda et al. 2002; Prüch 2013; Zaitsev 2013).

Cheek-pieces with disk-shaped ends (List 20)[192]

1. Xianyang, Weicheng distr., Shaanxi prov, CN, Han Yangling Mausoleum, gilded bronze (Wereld volgens 2006, cat. 84). – 2. Xichagou, Xifeng county, Liaoning province, CN (Sun 1960, Fig. 18). – 3a. Duurlig Nars, Baian-Adarga sum, Khėntiĭ aĭmag, MN, gr. 2 (Duurlig Nars 2011, 194 Fig. 95). – 3b. Duurlig Nars, Baian-Adarga sum, Khėntiĭ aĭmag, MN, gr. 3 (Duurlig Nars 2011, 224 Figs. 282–284). – 4. Gurvan Modot Uul, Battsėngėl sum, Arkhangaĭ aĭmag, MN, gr. 83-5 (Xiongnu Tombs 2008, 82 Fig.). – 5. Naĭmaa Tolgoĭ, Ėrdėnėmandal sum, Arkhangaĭ aĭmag, MN, gr. 5 (Tsėvėėndorzh 1985, 68–69 Fig. 15.2,3; Erdélyi 2000, 44 Fig. 33; Xiongnu Tombs 2008, 90 Fig.). – 6. Noyon Uul, Batsümbėr sum, Töv aĭmag, MN, k. 20 (Polos'mak et al. 2011a, 102 Fig. 4.26). – 7. Salkhityn am, Rashaant sum, Khövsgöl aĭmag, MN, gr. 7 (Ölziĭbaiar et al. 2011), Institute of History, MAS, Ulaanbaatar. – 8. Takhiltyn khotgor, Mankhan sum, Khovd aĭmag, MN, gr. 1 (new 83)

[192] It can be discussed if also the cheek-piece from Pazyryk context of Berel' needs to be added to the list, as the ends were shaped as circular muflon heads, thus do not exactly form a disk (Francfort et al. 2006, 118 Fig. 6). Another piece that may belong to this group is known from the Shaushumskii cemetery at the Syr-Darya, UZ (Maksimova et al. 1968, 226 Pl. 22.3). It looks similar to a piece from Oktiabr'skii (Otchir-Goriaeva 2002, 377 Fig. 13.5).

(Navaan 1999a, Fig. 17; 1999b, 109 Fig. 8). – 9. Il'movaia Pad', Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, k. 54 (Konovalov 2008, Pl. 33.3,5,8,9,13). – 10. Ialoman-II, Ongudaiskiĭ raĭon, Rep. Altaĭ, RU, k. 51 (Tishkin 2011, 544 Fig. 5.3,4), MAĖA, AltGU, Barnaul. – 11. Pazyryk, Ulaganskiĭ raĭon, Rep. Altaĭ, RU, k. 1 (Rudenko 1970, Pl. 91; 1953, Pl. 43), State Hermitage, St. Petersburg. – 12. Pazyryk, Ulaganskiĭ raĭon, Rep. Altaĭ, RU, k. 3 (Rudenko 1970, Pl. 97c; 1953, Pl. 49.3), State Hermitage, St. Petersburg. – 13. Pazyryk, Ulaganskiĭ raĭon, Rep. Altaĭ, RU, k. 5 (Rudenko 1970, Pl. 114; 1953, Pl. 66), State Hermitage, St. Petersburg. – 14. Dachi, Azov gorodskoĭ okr., Rostovskaia obl., RU, k. 1, niche (Bespalyĭ 1992, 179 Fig. 4; L'or des Amazones 2001, 206 cat. 231), Azovskiĭ Istoriko-Arkheologicheskiĭ i Paleontologicheskiĭ Muzeĭ-Zapovednik, Azov, inv. no. KP-23458/34–40. – 15. Iashkul', Iashkul'skiĭ raĭon, Rep. Kalmykiia, RU, gr. 1 (Otchir-Goriaeva 2002, 359 Fig. 6.2; 364 Fig. 9.1,2). – 16. Kobiakovo, Rostov-na-Donu gorodskoĭ okr., Rostovskaia obl., RU, k. 10, with shell inlay (Prokhorovka/Guguev 1992; L'or des Amazones 2001, 234 cat. 256–258), Taganrogskiĭ kraevecheskiĭ muzeĭ, Taganrog, inv.no. N/V-5724/169,1–3; N/V-5724/171,1–5; N/V-5724/172. – 17. Sadovyĭ, Oktiabr'skiĭ raĭon, Rostovskaia obl., RU, k. (L'or des Amazones 2001, 200 cat. 225), Rostovskiĭ oblastnoĭ muzeĭ kraevedeniia, Rostov-na-Donu, inv.no. KP 2533/26; 2534/27; 2535/28; 2536/29. – 18. Zhutovo, Oktiabr'skiĭ raĭon, Volgogradskaia obl., RU, k. 28 (Mordvintseva 1999; Tesori 2005, 170 cat. 150), Astrakhanskiĭ kraevedcheskiĭ muzeĭ, Astrakhan', inv. no. 12304, 12305. – 19. Orlat, Samarkand viyolati, UZ, gr. 2, depiction (Brosseder 2011, 397 Fig. 46.35). – 20. Neapol'-Skifskiĭ, Simferopol'ska mis'krada, Rep. Krym, UA, warrior grave (Puzdrovskiĭ 2007, 382 Fig. 108.I; Zaitsev 2004, 198 Fig. 152). – 21. Pavlo-Kachkass, Zaporizh'ia obl., Zaporozhskiĭ k. (Mantsevich 1982, Pl. 58, Fig. 7–9). – 22. Ust'-Al'ma, Bakhchisaraiskiĭ raĭon, Rep. Krym, UA, catacomb 850 (Puzdrovskiĭ 2007, 381 Fig. 107.V). – 23. Ust'-Al'ma, Bakhchisaraiskiĭ raĭon, Rep. Krym, UA, horse grave 2, 1997 (Puzdrovskiĭ 2007, 378 Fig. 104.II).

Four-lobed dagger-sheaths, their models and depictions (list 21)[193]

List 21a. Four-lobed dagger sheaths of Pazyryk culture

Mongolia

1. Baga Türgen Gol-1, Tsėngėl sum, Baian Ölgiĭ aĭmag, k. 8 (Törbat et al. 2009, 228 Fig. 12), Institute of Archaeology, MAS, Ulaanbaatar. – 2. Olon-Güüriĭn-Gol 10, Ulaankhus sum, Baian-Ölgiĭ aĭmag, k. 1 (Parzinger et al. 2009, 216 Fig. 22), Institute of Archaeology, MAS, Ulaanbaatar.

Russian Federation, Kosh-Agachskiĭ raĭon, if not mentioned otherwise, Rep. Altaĭ[194]

3. Ak-Alakha-1, k. 2 (Polos'mak 2001a, 60 Figs. 38a; 40v). – 4. Barburgazy I, k. 15 (Kubarev 1992, 161 Pl. 20.12). – 5. Barburgazy I, k. 18 (Kubarev 1992, 165 Pl. 23.18). – 6. Barburgazy I, k. 22 (Kubarev 1992, 169 Pl. 25.8). – 7. Barburgazy I, k. 25 (Kubarev 1992, 175 Pl. 30.17). – 8. Borotal, Ulaganskiĭ raĭon, k. 4, gr. 2 (Mogil'nikov/Surazakov 1980, 187 Fig. 6.6). – 9. Borotal, Ulaganskiĭ raĭon, k. 82 (Kubarev 1981, 36 Fig. 5.1). – 10. Iustyd I, k. 2 (Kubarev 1991 Pl. 5.8). – 11. Iustyd I, k. 3 (Kubarev 1991, Pl. 7.9). – 12. Iustyd I, k. 4 (Kubarev 1991 Pl. 9.7). – 13. Iustyd I, k. 10 (Kubarev 1991, Pl. 14.8). – 14. Iustyd XII, k. 3 (Kubarev 1991, Pl. 19.9). – 15. Iustyd XII k. 8 (Kubarev 1991, Pl. 27.26). – 16. Iustyd XII k.20 (Kubarev 1991, Pl. 47.28). – 17. Iustyd XII, k. 23 (Kubarev 1991, Pl. 52.34). – 18. Iustyd XII, k. 26 (Kubarev 1991, Pl. 57.27). – 19. Maltalu IV, k. 18 (Kubarev 1992, 209 Pl. 61.14). – 20. Maltalu IV, k. 21 (Kubarev 1992, 213 Pl. 65.4). – 21. Maltalu IV, k. 25 (Kubarev 1992, 218 Pl. 70.3). – 22. Tashanta I, k. 1 (Kubarev 1987, 287 Pl. 86.15). – 23. Ulandryk I, k. 1 (Kubarev 1987, 205 Pl. 4.8). – 24. Ulandryk I, k. 7 (Kubarev 1987, 217 Pl. 16.13). – 25. Ulandryk I, k. 9 (Kubarev 1981, 36 Fig. 5.3; 1987, 223 Pl. 22.6). – 26. Ulandryk I, k. 12 (Kubarev 1987, 229 Pl. 28.19). – 27. Ulandryk II, k. 7 (Kubarev 1987, 249 Pl. 48.9). – 28. Ulandryk III, k. 1 (Kubarev 1987, 259 Pl. 58.9). – 29. Ulandryk III, k. 3 (Kubarev 1987, 261 Pl. 60.16,18). – 30. Ulandryk III, k. 4 (Kubarev 1987, 263 Pl. 62.3). – 31. Ulandryk III, k. 6 (Kubarev 1987, 265 Pl. 64.8). – 32. Ulandryk III, k. 7 (Kubarev 1987, 267 Pl. 66.6). – 33. Ulandryk IV, k. 1 (Kubarev 1987, 271 Pl. 70.17). – 34. Ulandryk IV, k. 2 (Kubarev 1987, 277 Pl. 75.36). – 35. Ulandryk IV, k. 3 (Kubarev 1987, 279 Pl. 78.12). – 36. Ulandryk V, k. 1 (Kubarev 1987, 282 Pl. 81.9). – 37. Verkh-Kaldzhin II, k. 3 (Derevianko/Molodin 2000, 110 Fig. 136).

China

38. Nilka, Autonomous distr. Ili-Kazak, Xinjiang Uyghur Autonomous Region, gr. 6 (Wieczorek/Lind 2007, 295 Fig. 178), Archaeological Institute, Xinjiang, Urumqi, inv.no. 03YNJ2M6:1.

List 21b. Four-lobed dagger sheaths in graves of the first century BCE to second century CE

China

39. Niya, Hetian distr., Xinjiang Uyghur Autonomous Region, CN, gr. 95MN1M3 (Selbitschka 2010, 727 Pl. 59.10).

Russian Federation

40. Oglakhty I, Bogdarskiĭ raĭon, Rep. Khakasia, gr. 2, model (Vadetskaia 1999, 231 cat. 11 Pl. 52.2). – 41. Oglakhty I, Bogdarskiĭ raĭon, Rep. Khakasia, gr. 7, model (Vadetskaia 1999, 231 Pl. 52.1). – 42. Chaltyr-Valovyĭ-I, Miasnikovskiĭ

[193] According to Schiltz 2002, 870 also the gold-turquoise application from Tuva published by Grach/Grach 1987, 255 Fig. 117 may be added here.

[194] The materials of the excavations by V. Polos'mak and V. Kubarev are housed in the archive of the Institute of Archaeology, Ethnology and Anthropology, Siberian Branch Russian Academy of Sciences, Novosibirsk.

raĭon, Rostovskaia obl., k. 25, gr. 1, two dagger sheaths (L'or des Amazones 2001, 246 cat. 283; Bespalyĭ et al. 2007, 162 Fig. 4a,b), Azovskiĭ Istoriko-Arkheologicheskiĭ i Paleontologicheskiĭ Muzeĭ-Zapovednik, Azov, inv. no. KP-25309/454. – 43. Dachi, gorodskoĭ okr. gorod Azov, Rostovskaia obl., k. 1, niche (L'or des Amazones 2001, 214–218, cat. 238), Azovskiĭ Istoriko-Arkheologicheskiĭ i Paleontologicheskiĭ Muzeĭ-Zapovednik, Azov, inv. no. 23458/29–30. – 44. Gorgippia, gorodskoĭ okr. gorod-kurort Anapa, Krasnodarskiĭ kraĭ, vault 2, sarcophagus 2 (L'or des Amazones 2001, 277–279, cat. 335), Natsional'nyĭ muzeĭ Respublika Adygeia, Krasnodar, inv.no. Md 3311–3312. – 45. Isakovka I, Gor'kovskiĭ raĭon, Omskaia obl., k. 3, gr. 6 (Pogodin 1998b, Fig. 4; Koryakova 2006, 110 Fig. 12). – 46. Kosika, Enotaevskiĭ raĭon, Astrakhanskaia obl., gr. 1 (Dvornichenko/Fedorov-Davydov 1993, 156 Fig. 10.1), Astrakhanskiĭ kraevedcheskiĭ muzeĭ, Astrakhan'. – 47. Novyĭ, Novyĭ-Martynovski raĭon, Rostovskaia obl., k. 5 (L'or des Amazones 2001, 182 cat. 201), Rostovskiĭ oblastnoĭ muzeĭ kraevedeniia, Rostov-na-Donu, inv.no. KP 23320; KP 13673/355.

Ukraine
48. Porohy (Porogi), Iampol'skiĭ raĭon, Vinnyts'ka obl., k.1, gr. 1 (Simonenko/Lobai 1991, Fig. 13.7). – 49. Ust'-Al'ma, Bakhchisaraiskiĭ raĭon, Rep. Krym, catacomb 700 (Puzdrovskiĭ 2007, 361 Fig. 87.5).

Georgia
50. Mtskheta, Mtskheta-Mtianeti mkhare, gr. 1 (Apakidze 1958, Pl. 1 bis; Brosseder 2011, 407 Fig. 54.2).

Afghanistan
51. Tillia Tepe, Shibirghan wuleswali, Jowzjan wilayah, gr. 4 (Sarianidi 1985, 215 Fig. 4.8).

List 21c. Depictions of four-lobed dagger-sheaths

Mongolia
52. Noyon Uul, Batsümbėr sum, Töv aĭmag, k. 31, tapestry fragments with depictions of four-lobed dagger sheaths (Ėrėgzėn 2011, 258–259, cat. 386); whether four-lobed dagger-sheaths are represented on the thighs of three men is hard to tell from publication (Ėrėgzėn 2011, 256–257). – 53. Noyon Uul, Batsümbėr sum, Töv aĭmag, k. 6, tapestry fragment with depiction (Rudenko 1969, Pl. 64; Francfort 2012, 93 Fig. 11), National Museum of Mongolia, Ulaanbaatar.

Iran
54. Site unknown, British Museum, London, inv.no. 1981-11-7.1 (Ghirshman 1979, Pl. 3.1; Winkelmann 2003, 119 Fig. 7 middle). – 55. Site unknown, British Museum, London, inv.no. 1992-1-25 (Winkelmann 2003, 119 Fig. 7 top). – 56. Site unknown, British Museum, London, inv.no. 135684 (Winkelmann 2003, 119 Fig. 7 bottom). – 57. Kuh-e Khwajeh, Zabol shahrestān, Ostān-e Sīstān-o Balūchestān, frescoe in palace (Ghirshman 1962, 42 Fig. 56). – 58. Masjed Soleyman, Masjed Soleyman shahrestān, Khuzestan ostān (Ghirshman et al. 1976, Vol. 2, Pl. 78.1). – 59. Masjed Soleyman, Masjed Soleyman shahrestān, Khuzestan ostān (Ghirshman et al. 1976, Vol. 2, Pl. 79.5). – 60. Mal-e-Mir, Izeh county, Khuzestan ostān (Ghirshman 1962, 88 Fig. 99; Winkelmann 2003, 118 Fig. 6), statue of prince Shami, National Museum of Iran, Teheran. – 61. Susa, Shush shahrestān, Khuzestan ostān, Donjon (Amiet 2001, 283 Pl. 3.25); Winkelmann (2004, 54–55) names another fragment of a man with elymaic dress; however, it is not clearly visible according to the publication (Amiet 2001, 283 Pl. 3.24) and the fragment of a statue of the acropolis (Amiet 2001, Pl. 3.26).

Iraq
62. Assur (Qal'at Scherqat), Al-Shirqat qadha, Salah al-Din muhafadhah (Winkelmann 2003, 127 Fig. 14 below right). – 63. Hatra (al-Ḥaḍr), Al-Hadar qadha, Ninawa muhafadhah, Winkelmann (2004, 193 Fig. 76) shows one depiction of a dagger where four lobes are visible; the other dagger depictions show only two rounded lobes under the hilt as the rest of the dagger is covered by cloth (cf. Winkelmann 2004, 3; 4; 6; 8b; 10d; 13b; 16b; 16b.c; 20b; 21–27; 31; 32a; 33c; 34; 35; 43; 45; 48a; 49; 56–58; 62–64; 68; 70–71; 82; 90–92; 101; 111; 113; 126).

Syria
64. Dura-Europos, Abu Kamal, Dair az-Zur, Mithraeum, smaller Mithraic relief (Downey 1977, Pl. 4.7). – 65.–69. Palmyra, Tadmur, Homs governorate: 65. framed banquet relief (Tanabe 1986, 464 No. 437); 66. Camp of Diocletianus, framed banquet relief (Tanabe 1986, 463 no. 436); 67. Hypogeum of Malku, banquet relief (Tanabe 1986, 441 No. 410); 68. Valley of tombs, found in the white tombs (Tanabe 1986, 466–467 nos. 440–441).

Turkey
69. Arsameia, Adıyaman prov., podest III, depiction of Mithradates I (Young 1963, Pls. 48; 51A); Ghirshman (1962, 66 Fig. 79) attributed Yikezhaomeng/Nei Menggu 1980 this stele wrongly to Nemrud Dag. – 70. Karaköprü, Şanlıurfa prov., gr., relief with banquet scene (Winkelmann 2009, 340 cat. E7; 361 Fig. 16). – 71.–72. Kirk Mağara, Şanlıurfa prov., in an arcosolium, rock grave with banquet scene; 71. Winkelmann 2009, 339 cat. E4; 360 Fig. 14; 72. Winkelmann 2009, 339 cat. E5. – 73.–74. Nemrut Dağı, Adıyaman Prov., sanctuary, several stelae with depictions of king Antiochis I: 73. depiction of dagger with lions (Tanabe et al. 1998, Pls. 115; 118; 120; 124; 166; 169–170); 74. depiction of dagger with rosettes (Ģinters 1928, Pl. 26b).

Ukraine
75.–77. Kerch, Kerchens'ka mis'ka rada, Autonomous Republic of Crimea: 75. Stele of Khrestion, Kerchenskiĭ istoriko-arkheologicheskiĭ muzeĭ, Kerch', KL-170 (Treister 2010b, cat. 1, 487 Fig. 1; Kreuz 2012, cat. 386; 983 Fig. 32); 76. Stele of Stratoneikos, inv.no. Kl-141 (Kreuz 2012, cat. 760, Figs. 74–76; Treister 2010b, cat. 4, 505 Fig. 10.2); 77. Stele, Kerchenskiĭ istoriko-arkheologicheskiĭ muzeĭ, Kerch', inv.no. KL-375 or KL-340 as Treister and Kreuz name different inventory numbers (Treister 2010b, cat. 3, 505 Fig. 10.1; Kreuz 2012, cat. 1018 Fig. 125; Ščukin et al. 2006, 290 Fig. 5).

Nephrite scabbard slides and sword guards (lists 22–23)

List 22. Nephrite scabbard slides[195]

1. Sidorovka I, Gor'kovskiĭ raĭon, Omskaia obl., RU, k. 3, gr. 2 (Pogodin 1998b). – 2. Isakovka, Gor'kovskiĭ raĭon, Omskaia obl., RU, mentioned by Pogodin (Pogodin 1998b); also Simonenko mentions this piece (Simonenko 2008b, 248). – 3. Pokrovsk, today Engel's, Engel'skiĭ raĭon, Saratovskaia obl., RU, two specimen from different sites (Sinitsyn 1936, 74 Fig. 2.2; Trousdale 1975 243–245 cat. V.2. Pl. 22b; Khazanov 1971, Pl. 15.8). – 4. Alt-Veimar, today Staraia Ivantsovka, Pallasovskiĭ raĭon, Volgogradskaia obl., RU, k. D-16 (Rau 1927, 36–40 Fig. 31B; Khazanov 1971, Pl. 14.9; Trousdale 1975, 245 cat. V.1, Pl. 22a). – 5. Kamyshevskaia, Tsimlianskiĭ raĭon, Rostovskaia obl., RU, k. 8 (Zhitnikov 1993, 14–15; Li Dzhin Yn 2010, Pl. 36.3). – 6. Sladkovskiĭ, Tatsinskiĭ raĭon, Rostovskaia obl., RU, k. 19 (Maksimenko/Bezuglov 1987, Fig. 2.7). – 7. Kuban, RU, British Museum, London, inv. no. 1923.7-16.88 (Trousdale 1975, 237 cat. SR.1, Pl. 19c)[196]. – 8. Perm region, Permskiĭ krai, RU, three similar scabbard slides found at various places (Trousdale 1975, 234–236 cat. P1-3, Pls. 17e; 18a,b). – 9. Purchased in South Russia, State Hermitage, St. Petersburg, dept. graeco-Skythian, inv. 102/136 (Trousdale 1975, 240 cat. SR.6; Pl. 20d). – 10. Kerch, Kerchens'ka mis'ka rada, Autonomous Republic of Crimea, UA, chalcedon, found in 1842, State Hermitage, St. Petersburg, inv. no. 408 (Trousdale 1975, 241 cat. SR.7; Pl. 21a), possibly fourth century CE. – 11. Kerch, Kerchens'ka mis'ka rada, Autonomous Republic of Crimea, UA, found in 1918, Musée d'Antiquités Nationales, Saint-Germain-en-Laye, inv. no. 66111 (Trousdale 1975, 238 cat. SR.2; Pl. 20a,b). – 12. Kerch, Kerchens'ka mis'ka rada, Autonomous Republic of Crimea, UA, State Historical Museum Moscow (Trousdale 1975, 240 cat. SR. 4). – 13. Kerch, Kerchens'ka mis'ka rada, Autonomous Republic of Crimea, UA, former coll. Georges Pallis, Paris (Trousdale 1975, 240 cat. SR. 5). – 14. Chatalka, obl. Stara Zagora, BG, k. 1, Roshava Dragana, gr. 2 (Buiukliev 1986; Werner 1994, 275 Fig. 4.2,3). – 15. Altyn Asar, Karmakshy audany (Karmakshinskiĭ raĭon), Qızılorda oblısı (Kyzylordinskaia obl.), KZ, settlement (Bezuglov 2000, 193 Fig. 7). – 16. Orlat, Samarkand viyolati, UZ, gr. 2 (Ilyasov/Rusanov 1997/98; Brosseder 2011, 396 Fig. 45.4). – 17. Afghanistan, site unknown (Trousdale 1988, 26 Fig. 1). – 18. Taxila, Sirkap, Rawalpindi distr., Punjab prov., PK (Trousdale 1975, 230 cat. GP.1, Pl. 17d; Trousdale 1988, 30 Fig. 7); with its hole in the upper part it differs from the other mentioned scabbard slides and Trousdale believes it to be a local imitation. – 19. Taxila, Sirkap, Rawalpindi distr., Punjab prov., PK (Trousdale 1975, 231 cat. GP.2); according to Trousdale also an imitation.

List 23. Nephrite sword guards

1. Il'movaia Pad', Kiakhtinskiĭ raĭon, Rep. Buriatiia, RU, gr. 4 (Fig. 23; Tal'ko-Gryntsevich 1999, Pl. 19 and photograph from the author), Kiakhtinskiĭ kraevedcheskiĭ muzeĭ imeni akademika V. A. Obrucheva, Kiakhta. – 2. Kamyshevskaia, Tsimlianskiĭ raĭon, Rostovskaia obl., RU, k. 8 (Zhitnikov 1993, 14–15; Li Dzhin Yn 2010, Pl. 36). – 3. Sladkovskiĭ, Tatsinksiĭ raĭon, Rostovskaia obl., RU, k. 19 (Maksimenko/Bezuglov 1987, Fig. 2.2). – 4. Ak-Tepe II, Nohiya-i Nosiri Khusrav, Khatlon viloyat, TJ (Sedov 1987, 59–60 Pl. 1.5). – 5. Orlat, Samarkand viyolati, UZ, gr. 2 (Ilyasov/Rusanov 1997/98; Brosseder 2011, 396 Fig. 45.3).

[195] The list includes finds from contexts of the second or third century CE. Without site designation the following scabbard slide is known: State Hermitage, St. Petersburg, inv. no. 102/136 (Trousdale 1975, Pl. 20d). Another scabbard slide is reported from Maikop, Rep. Adygeia, RU, Art Institute of Chicago, inv. 50.833, but it is possibly also dating to the third and fourth centuries CE (Trousdale 1975, 242–243 cat. SR.10; Pl. 21c; 1988, 29 Fig. 5). From later periods also the following nephrite sword guards are known from Dzhurg-Oba, gr. 29, Autonomous Rep. Crimea, UA (Ermolin 2012, 345 Fig. 5.11). Another one has been found in San Vincenzo al Volturno, IT, which is possibly not of Chinese workmanship. It also belongs to a later horizon (Mitchell 2001, 353–354 Fig. 17). I thank Dieter Quast, Mainz, for pointing out these publications to me. A sword bead made of nephrite is mentioned from Verborskiĭ I, Kalachevskiĭ raĭon, Volgogradskaia obl., RU, k. 5 (Li Dzhin Yn 2010, Pl. 30.3). The later nephrite buckle from Iatrus in Bulgaria has to be seen in this context as well (Gomolka-Fuchs 1999).

[196] This piece may also come from Kerch (see Trousdale 1975, 237).

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ferstichen, so die Asiatisch-Scythische Antiquität betreffen. Bey Gelegenheit der schwedischen Kriegs-Gefangenschafft in Rußland aus eigener sorgfältiger Erkundigung, auf denen verstatteten weiten Reisen zusammengebracht und ausgefertigt (Stockholm 1730).

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CONTENTS

PREFACE

This volume combines contributions to a conference of the same title which was held February 9 to 11, 2012, in Bonn. Idea and format of the meeting had been developed through a process of intensive discussions among the editors in close cooperation with Dieter Quast, RGZM Mainz. Our original intention was to organize a conference with a focus on archaeology, bearing in mind questions concerning mobility and communication or – stated differently – exchange patterns in Eurasia. After having recognized that research in Eurasia is still dominated by site centric approaches which makes vast overviews as we imagined them somewhat cumbersome we deviated from our first outline.

As a consequence, we broadened the field for two further aspects which had been nearly neglected thus far. First, there are West–East ranging communications in the Eurasian steppe zone which lie beyond the overarching term "Silk Roads". As written sources rarely throw light on interactions among steppe polities, these interactions are markedly less frequently subject to scientific discussions. This question is best approached via archaeological analyses with a wide focus in geographical terms. North–South contacts are by far more commonly discussed than West–East communications, as they encompass interactions between states with foremost sedentary population and nomads who live north of these territories. As a rule, it is the sedentary viewpoint which is being told, as these cultures opposed to the nomads left numerous written accounts[1]. At the same time we wanted to encourage comparative perspectives. Characteristics often assumed to be typical of the relations between sedentary people and nomads are also true in comparable measures of those between Rome/Byzantium and their "barbaric" neighbors. What they all have in common is at least a distinct mobility in space, even though to varying forms and degrees. Furthermore, questions and themes long discussed in European archaeology and history entered the research of Inner Asia and Central Asia only recently, as, for example, identity, the emergence of new ethnic groups, frontiers, frontier societies, contact zones, elites, economies of prestige goods. We therefore wanted to invite colleagues of different disciplines and regions to join in a scientific dispute. Lively discussions during the conference and positive feedback by attendees show that this idea was appreciated.

The second aspect to be included can be summarized under the term "complexity", which in this context should not be understood as a concept from the social sciences but metaphorically. Over long periods of time simple explanations of cultural phenomena were favored, be it statements on pure and poor nomads, the dependency theory or the bad habit of explaining every cultural change with large-scale migrations. "Complexity" is meant as a signal and reminder that the simplest explanations are not always the best, which is reflected by the contributions in this volume.

[1] Numerous projects within the framework of the Collaborative Research Center (Sonderforschungsbereich) 586 "Difference and Integration" at the University Leipzig and the Martin-Luther University Halle-Wittenberg dealt intensively with interactions between nomads and settled people, a good overview of publications thus far is given by the center's website http://nomadsed.de/home/.

We consciously limited the temporal scope of the papers to the time after the Scyths and before the Mongols, somewhat clumsily described as the "first millennium CE", because these two eras have been traditionally paid enormous attention to and are represented in a corresponding flood of publications[2]. At the same time interactions in the steppe zone witnessed only during the centuries around the turn of the era a hitherto unknown rise in intensity and dynamics.

Not all of the works presented at the conference are included in this volume as they were already noted for publications elsewhere. This applies to the presentations given by Enno Giele, Valentina Mordvintseva, and Matthias Pfisterer. However, other colleagues who could not attend the conference were invited to hand in manuscripts. All contributions were revised and partly expanded, which to our delight resulted in this comprehensive volume. We would have loved to have included a paper on the consequences of climate change and meteorological events on the polities of the Eurasian steppe as such conditions win more and more popularity as *explanans* of significant changes[3], but it did not work out. To our dismay and because of different reasons the western steppes and Central Asia are less represented than we wished for.

We subdivided the contributions into four parts: "Nomadic Empires – Modes of Analysis" encompasses highly different approaches to interpretations and analyses of nomadic empires, ranging from computational agent-based models, over anthropological to historical methodology. Better than any perfect introduction this multi-facetted research shows how exciting it is to deal with this area much neglected in World History. Although the section "Xiongnu, the Han Empire and the Oriental Koine" assembles merely three contributions, it covers more than 260 pages. If nothing else, this certainly echoes the boom of Xiongnu archaeology of the past decades. By taking into account enormous amounts of archaeological, art historical, and written sources the authors surmount traditional and often too static schemes of interpretation. These new analyses detect an astonishing variety of interactions during the centuries around the turn of the era, which broadens our understanding of this epoch and provides new avenues for other regions and periods at the same time. In the third section, "Inner and Central Asia from the Türks to the Mongols", nine contributions exemplify a multicolored and almost continuously changing picture of languages, ethnicities, and political affinities for Inner and Central Asia from the sixth to the twelfth centuries. Political affinities, however, were changing so quickly due to situational demands as to almost refute all efforts to retrace them within the archaeological record. Decision makers were astonishingly well informed about even distant regions and they acted accordingly over vast distances. The studies at hand analyze exchange processes on varying

[2] See for the Scyths for example W. Menghin/H. Parzinger/A. Nagler/M. Nawroth (eds.), Im Zeichen des goldenen Greifen. Königsgräber der Skythen. Begleitband zur gleichnamigen Ausstellung: Berlin, Martin-Gropius-Bau, 6. Juli – 1. Oktober 2007; München, Kunsthalle der Hypo-Kulturstiftung, 26. Oktober 2007 – 20. Januar 2008; Hamburg, Museum für Kunst und Gewerbe Hamburg, 15. Februar – 25. Mai 2008 (München, Berlin 2007); H. Parzinger, Die Skythen. 3rd ed. (München 2009); J. Aruz (ed.), The Golden Deer of Eurasia: Scythian and Sarmatian Treasures from the Russian Steppes (New York, New Haven 2000); J. Aruz/A. Farkas/A. Alekseev/E. Korolkova (eds.), The Golden Deer of Eurasia. Perspectives on the Steppe Nomads of the Ancient World. The Metropolitan Museum of Art Symposia (New Haven 2006). See for the Mongol period Dschingis Khan und seine Erben. Das Weltreich der Mongolen (2005); W. W. Fitzhugh/M. Rossabi/W. Honeychurch (eds.), Genghis Khan and the Mongol Empire (Seattle 2009); see also the website of the European Research Council Grant "Mobility, Empire and Cross Cultural Contacts in Mongol Eurasia" http://mongol.huji.ac.il/, which provides an extensive bibliography.

[3] N. Pederson/A. Hessl/N. Baatarbileg/K. Anchukaitis/N. Di Cosmo, Pluvials, Droughts, the Mongol Empire, and Modern Mongolia. Proceedings of the National Academy of Sciences 111, 2014, 4375–4379; J. Fei/J. Zhou/Y. Hou, Circa A.D. 626 Volcanic Eruption, Climatic Cooling, and the Collapse of the Eastern Turkic Empire. Climatic Change 81, 2007, 469–475.

levels – from language to embassies – as well as aspects of mobility, from the integration of foreign symbols of power to large-scale migrations, or methods of state-building to the strategic destruction of complex states. The last section combines papers that focus on "Nomadic Interaction with the Roman and Byzantine West" traversing the Eurasian steppe zone from east to west. These case studies, either already comparative or suitable for further comparisons, give reason to assume that although there are certain encompassing communalities every conquest and struggle with the empires of the West is historically unique. At the same time it becomes apparent that the knowledge base of the decision makers in the Roman Empire had been greater than hitherto thought.

The variety of studies assembled in this volume leaves no doubt as to how dynamically and diversely the interactions, processes, and transformations developed in the Eurasian steppe zone. These changes cannot be studied under common schemes of interpretation which are more often than not inseparable from overcome clichés.

Chinese names and terms have been transliterated according to the Pinyin system, Russian names and references according to the system of the Library of Congress. Arabic, Persian, and Turkic names and terms appear in the form chosen by the authors of the individual chapters.

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Jan Bemmann, Michael Schmauder March 2015

INDEX OF AUTHORS

Prof. Dr. Jan Bemmann
Prehistory and Early Historical Archaeology
University of Bonn
Regina-Pacis-Weg 7
53113 Bonn, Germany
E-Mail: jan.bemmann@uni-bonn.de

Prof. Dr. Michal Biran
Institute of Asian and African Studies
The Louis Frieberg Center for East Asian Studies
The Hebrew University of Jerusalem
Mt. Scopus
Jerusalem, 91905, Israel
E-Mail: biranm@mail.huji.ac.il

Dr. Ursula B. Brosseder
Prehistory and Early Historical Archaeology
University of Bonn
Regina-Pacis-Weg 7
53113 Bonn, Germany
E-Mail: ursula.brosseder@uni-bonn.de

Prof. Dr. Claudio Cioffi-Revilla
Krasnow Institute for Advanced Study
Computational Social Science, Center for Social Complexity
George Mason University
Research-1 Bldg MS 6B2,
4400 University Drive
Fairfax, VA 22030, USA
E-Mail: ccioffi@gmu.edu

Prof. Dr. Nicola Di Cosmo
Henry Luce Foundation Professor of East Asian Studies
School of Historical Studies
Institute for Advanced Study
Einstein Drive
Princeton, NJ 08540, USA
E-Mail: ndc@ias.edu

Prof. Dr. Michael R. Drompp
Department of History
Rhodes College
2000 North Parkway
Memphis, TN 38112, USA
E-Mail: drompp@rhodes.edu

Prof. Dr. Peter B. Golden
Center for Middle Eastern Studies
Rutgers University
Lucy Stone Hall B-316
54 Joyce Kilmer Avenue
Piscataway, NJ 08854, USA
E-Mail: pgolden@andromeda.rutgers.edu

Prof. Dr. Thomas O. Höllmann
Institute for Chinese Studies
Ludwig-Maximilians-University Munich
Kaulbachstr. 51a
80539 München, Germany
E-Mail: thomas.hoellmann@lrz.uni-muenchen.de

Ass. Prof. Dr. William Honeychurch
Department of Anthropology
Yale University
51 Hillhouse Avenue
New Haven, CN 06511, USA
E-Mail: william.honeychurch@yale.edu

Prof. Dr. Nikolai N. Kradin
Russian Academy of Sciences,
Far Eastern Branch
Institute of History, Archaeology and Ethnography
Pushkinskaia Ul. 10
Vladivostok, 690950, Russia
E-Mail: kradin@mail.ru

Prof. Dr. Étienne de la Vaissière
École des hautes études en sciences sociales (EHESS)
Centre d'Études Turques, Ottomanes, Balkaniques et Centrasiatiques (CETOBaC)
190–198, Avenue de France
75244 Paris Cedex 13, France
E-Mail: vaissier@ens.fr

Prof. Dr. Mischa Meier
Department of History
University of Tübingen
Wilhelmstr. 36
72074 Tübingen, Germany
E-Mail: mischa.meier@uni-tuebingen.de

Dr. Bryan K. Miller
Faculty of History
University of Oxford
George Street
Oxford OX1 2RL, United Kingdom
E-Mail: millerbryank@gmail.com

Prof. Dr. Marek Jan Olbrycht
Institute of History
University of Rzeszów
Ul. Rejtana 16c
35-959 Rzeszów, Poland
E-Mail: marekolbrycht@wp.pl

Prof. Dr. Jürgen Paul
Institute for Oriental Studies
Martin-Luther-University Halle-Wittenberg
Mühlweg 15
06114 Halle/Saale, Germany
E-Mail: juergen.paul@orientphil.uni-halle.de

Prof. Dr. Walter Pohl
Institute for Medieval Research
Austrian Academy of Sciences
Wohllebengasse 12-14
1040 Wien, Austria
E-Mail: walter.pohl@oeaw.ac.at

Dr. J. Daniel Rogers
Smithsonian Institution
National Museum of Natural History
Department of Anthropology, NHB 112
PO Box 37012
Washington, DC 20013, USA
E-Mail: rogersd@si.edu

Prof. Dr. Michael Schmauder
LVR-LandesMuseum Bonn
Colmantstr. 14-16
53115 Bonn, Germany
E-Mail: michael.schmauder@lvr.de

Prof. Dr. Tatiana Skrynnikova
The Department of Central Asian and South Asian Studies
Institute of Oriental Manuscripts
Russian Academy of Sciences
Dvortsovaya Emb. 18
Sankt-Petersburg 191186, Russia
E-Mail: skryta999@mail.ru

Ass. Prof. Dr. Sören Stark
Institute for the Study of the Ancient World
New York University
15 East 84th St.
New York City, NY 10028, USA
E-Mail: soeren.stark@nyu.edu

Prof. Dr. Timo Stickler
Department of Ancient Studies
Friedrich Schiller University Jena
Fürstengraben 1
07743 Jena, Germany
E-Mail: timo.stickler@uni-jena.de

Prof. Dr. Pavel E. Tarasov
Institute of Geological Sciences, Palaeontology
Freie Universität Berlin
Malteserstr. 74-100, Haus D
12249 Berlin, Germany
E-Mail: ptarasov@zedat.fu-berlin.de

Dr. Sergey Aleksandrovich Vasyutin
Department of the History of Civilizations
and Socio-Cultural Communications
Kemerovo State University
Krasnya 6
650043 Kemerovo, Russia
E-Mail: vasutin2012@list.ru

Prof. Dr. Mayke Wagner
Branch office of the Eurasia Department in
Beijing
German Archaeological Institute
Im Dol 2-6, Haus II
14195 Berlin, Germany
E-Mail: mwa@zedat.fu-berlin.de;
mw@eurasien.dainst.de

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