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Ancient interactions: east and west in Eurasia

Edited by Katie Boyle, Colin Renfrew &
Marsha Levine

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Cover illustration: *A comparison between Kuban and Altai art (see p. 202) and a relief map of Eurasia showing the area discussed in the text. (Shaded relief map by Maproom44 Ltd, Peterborough, Ontario, Canada.)*

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Chapter 10

Bronze Age Exploitation and Political Dynamics of the Eastern Eurasian Steppe Zone

Michael Frachetti

Archaeology and changes of *Genre de Vie*

'Nomadism' has become a highly problematic concept which, depending upon one's position, can be understood in terms of some degree of mobility and a productive subsistence economy based on herding (Khazanov 1994, 16), or as a more complex social, economic, and political way of life (cf. Salzman & Galaty 1990; Ginat & Khazanov 1998). The dissatisfaction continues when scholars search for criteria with which to define the 'origins' of nomadism. Concerning prehistoric Eurasian nomadism, are we simply looking for the origins of mobile pastoralism or for the induction of a more holistic *genre de vie* that characterizes the ideology and politics of populations such as those of Bronze Age Inner Asia? Ethnographic studies of peoples of Eurasia and the greater Near East show the variety and diversity that exists among 'nomadic' societies, to the point that one finds difficulty in formulating an approach to the topic without oversimplifying the social and ecological conditions that may have shaped these complex societies in the past. In fact, current research has yet to bring us very close to answering the question: 'how and why did mobile pastoralism and regional interaction come to define the economy and politics of the Eurasian steppe?'

Traditionally, the prehistoric development of pastoral nomadic societies of the eastern Eurasian steppe zone (Fig. 10.1) is presented in terms of stages of culture change, whereby one 'society' or 'culture group' demonstrates a particular set of social and economic traits and subsequently changes in response to either environmental or other pressures. This approach has been replaced by an ecologically- and regionally-focused consideration of the trajectory and development of various groups, viewing social change as more unique and contextual. Yet, even when attention is given to progressively smaller regional zones and shorter-term temporal changes, the cultural approach — by nature — still assumes a similarity of world-view, lifestyle, and ideology among the individuals who comprise the 'culture group'. Archaeologists have discussed the normalizing character of this approach for decades, and current archaeological theory is working toward a more 'peopled past' by addressing agentive decision-making in light of socially-defined power structures. Here I am concerned with a related yet separate issue: broadly stated — how the variability and malleability of individual or group strategies within a wider and more diverse social field is rooted in the development of symbolic and economic discourses of communication.

The decision to change social practices is not an instantaneous event, yet it is an action that must, at some level, be initiated in some way. Accordingly, archaeologists are left with a complicated paradox: how to discuss the conditions that may have motivated a group (or individual) to change their way of life, while not loosing sight of the processual timescale that is inherent in the socialization of behaviour and ideology. By better discerning the factors that might have engendered new social strategies, I hope to understand the link between the motivations of individuals and groups as they are situated in a wider context.

This paper addresses the evidence for the development of regional economic interaction and the changes in geographic distribution of Eneolithic and Bronze Age societies; two contributing factors to the broader political arena of the eastern steppe zone during the third and second millennia BC. As early as the late third millennium BC, developing metallurgical specialization spurred intensification in the regional exchange of copper resources, and by the mid

second millennium BC specific 'corridor regions' such as the Djungarian gate and Semirechye (Tian Shan piedmont valleys) were inhabited for the first time. These foothill steppe areas are well situated for vertical l transhumance, a pastoral form of subsistence economy consisting of seasonal movements to high-altitude pastures (*dzhailau*) during summer months with returns to low-altitude camps in the winter. This pastoral strategy was practised in other upland regions of the steppe at least the early third millennium BC (Kuz'mina 1986).

Yet, as compared with the western regions of the Eurasian steppe, the social and economic developments of pastoral societies during the third and second millennia BC in the regions of the Altai Mountains, Djungaria, and Semirechye have received relatively little attention (but see Mar'yashev *et al.* 1999) beyond the observations that there is a ubiquitous ceramic style and an apparent increase in both metal production (Chernykh 1992) and regional interaction between Xinjiang (Western China), the Altai, Djungaria, and Central Asia (see Chen & Hiebert 1995). Additionally, there are few current synthetic arguments concerning the origins and development of Chalcolithic societies such as the Afanas'ev in the Altai (but see Kuz'mina 1998 for a clear summary of the *out of circum-pontia* hypothesis), which may prove to be a vital link for understanding this region in later periods.

Here, I argue that the increased specialization of transhumant pastoral exploitation of the eastern steppe zone in the third–second millennia BC was a strategic response to changing power dynamics during a period of increasing political complexity within the broader steppe region. Changes in social life ways, such as an increase in mobile pastoral production or relocation to, and exploitation of, new ecological niches can be seen as a form of political strategy, whereby relations of power between groups may be renegotiated. Such strategies are well-documented ethnographically in pastoral nomadic societies whose interactions are organized and motivated by segmented status structures, trade roles or economic participation, and other regional or local dynamics (Barth 1964; Swidler 1973; Irons 1974; Rowton 1981; Harth 1985; Barfield 1993). In his article entitled 'Nomadism as political adaptation', William Irons argues:

> It is certainly reasonable to suggest that some of these groups [Near Eastern, North African, Central Asian nomadic tribes] have maintained a nomadic residence pattern in order to enjoy the political and military advantages of nomadism despite the fact that their economy required only the more limited mobility of a semi-sedentary pattern of subsistence (1974, 635).

I propose that a shift toward more specialized pastoral herding, as well as population movement into new areas in the eastern steppe zone, occurred within the increasingly complicated political arena of the late third and early second millennium BC. This political atmosphere was fuelled both by an increase in regional economic interaction — for example the movement of copper, and by a reorientation in the social value, or power, that was attributed to and was derived from, specialized forms of production (i.e. herd management) (Hastorf 1990, 148–9). Specifically, the shift from a mixed subsistence strategy (hunting and limited animal domestication) to a predominately (agro) pastoral form of production was a way by which social groups could maximize their political or social power within a region of increasing interactive complexity. Accordingly, specialized herd management in the foothill zones of the eastern steppe developed in tandem with negotiations of trade and the political control of the regional corridors that facilitated the transfer of human, animal, and material resources — namely Djungaria and Semirechye.

This model has an apparent concentration on economic factors. The intention of this discussion is not to overemphasize pastoral production, copper trade, or any other economic condition as the driving force behind interactive complexity. On the contrary, I suggest that the development of economic and social status is more a result of a group's ability to control communication and symbolic forms of power and legitimacy. Unfortunately, the current corpus of archaeological material only allows for a synthetic discussion of certain expressions of this power, and increased metallurgical sophistication is a good example of a major factor that contributed to political development in the eastern steppe zone. Future work that focuses on other forms of social discourse is necessary to round out our understanding of the development of steppe exploitation as it is related to concomitant social and political change.

Vainshtein (1980) supplies an ethnographic study of pastoral nomads in Tuva (Southern Siberia) and, using detailed accounts of herd dynamics, suggests that a pastoral nomadic 'economic-culture type' remained stable through historical political changes — an argument which might seem to undermine the model I propose here. Vainshtein, however, discusses political events such as the Mongolian invasion in the Tuva area (Vainshtein 1980, 50–54), when important elements that helped to solidify pastoral exploi-

tation and domestic production on the steppe, such as horse riding or established trade systems across Eurasia, were already dominant factors. Thus, the 'economic-culture type' of pastoral nomadism had already undergone many hundreds of years of reiteration and support, such that it could effectively adapt to new, intruding political forces without a substantial reorganization of the everyday 'life-ways' of pastoral groups. Vainshtein's ethnographic case also diverges from the model presented here in the nature of the political dynamics discussed. His observations refer to political change from outside sources (e.g. Mongols and others) whereas the model proposed here outlines conditions *within* the cultural and economic system of the Early Bronze Age that spurred a distinctive form of political strategy.

Ideal agents for such a change may be small lineage segments within a regionally dispersed social network that could neither mobilize power through the source side or production side of economic relations (Saitta & Keene 1990) nor capitalize on discursive forms of power, such as genealogical status (Bacon 1958) or important loci within the local landscape (Humphrey 1996). In an atmosphere of increased regional trade and interaction, such a group could profit politically and economically by attempting to control the areas between resource and production centres. In such a way, semi-mobile pastoral groups may have focused their pastoral exploitation in previously unsettled areas of the eastern steppe, such as Djungaria and Semirechye, so as to increase the value of the products they controlled (i.e. make their herds a restricted resource: Lees & Bates 1974) as well as increase their political power by controlling and restricting access to trade corridors necessary for the movement of important trade commodities such as copper.[1] Thus, a transition to specialized vertical transhumance (the proposed pastoral technique for these foothill steppe zones) could have been motivated by the desire to gain political power within a broader social arena. At present, sufficient archaeological data has neither been collected nor synthesized from these areas to unquestionably substantiate this model; nevertheless I hope to establish two points that help characterize the conditions of increasing interactive complexity that contributed to the development of Bronze Age pastoral specialization in the eastern steppes.

1. The geographic range of the copper trade and the complexity of material production increased from the third to second millennium BC, setting the stage for changing social roles and increased political complexity.
2. The corridors between copper ore deposits and copper production sites became increasingly occupied during the second millennium BC, suggesting a reorientation of the strategies various social groups (even if part of the same 'cultural' milieu) used to gain power and affect political interaction of the Middle and Late Bronze Age.

Outlining these two factors is the first step towards a more comprehensive discussion of political dynamics of the Chalcolithic and Bronze Age of the eastern steppe zone.[2] This paper is primarily concerned with the changes that fluoresced in the eastern steppe zone during the early and middle Bronze Age (2200–1500 BC). The root of these developments, however, must be set earlier in the late fourth and early third millennia BC. In fact, later Bronze Age societies of the second millennium BC demonstrate certain affinities with those groups that occupied the northeastern steppe and Minusinsk basin during the late Eneolithic and Early Bronze Age, namely the Afanas'ev and Okunev culture groups (Savinov 1997). A brief examination of this earlier data will help to situate changes in steppe exploitation within a broader temporal and regional scale.

The eastern steppe zone: 3500–2000 BC

The eastern steppe region discussed here is bordered by the forest-steppe zone to the north, by the Ishim River to the west, by the Yenisei River and Altai Mountains to the east, and by the Tian Shan Range in the south (Fig. 10.1). From around 3500 BC, the steppe zone east of the Urals was inhabited by Eneolithic societies, namely the Botai-Tersek (Kislenko & Tatarintseva 1999; Brown & Anthony 1998) and Afanas'ev (Vadetskaya 1980; 1986). The economy of Botai-Tersek culture groups was based primarily on hunting and fishing (Kislenko & Tatarintseva 1999), and horse management (Brown & Anthony 1998). Significantly, Botai provides evidence for early horse domestication, though the evidence of horse riding is still debated (Anthony 1998; Levine 1999; Kislenko & Tatarintseva 1999). Of greater interest for the development of the eastern steppe is the reason *why* hunting and fishing groups would have wanted or needed to ride the horse — a question that may lead us to examine the political dynamics of societies in the Altai and Minusinsk Basin, such as the Afanas'ev and Okunev cultures.

The Afanas'ev culture is primarily known from burial data (Kiselev 1937; Vadetskaya 1980; Khlobystina 1972; 1975). Afanas'ev cemeteries normally consist of numerous tumuli (anywhere from 3 to

Figure 10.1 *Eastern Eurasian steppe zone.*

more than 50), circular or rectangular in shape. Usually 2–7 individuals (sometimes more) are interred under the mound in cists sometimes lined with slab stones (Gaul 1943; Vadetskaya 1986). The bodies are frequently oriented toward the southwest, lying in a flexed position, with pointed bottom ceramic vessels and other grave goods. These goods include stone objects such as arrowheads, bone, horn and shell ornaments, and copper ornaments. This array of grave-goods is found in varying degrees and quantities in most Afanas'ev burials. The occurrence of copper objects in the graves has lead many Russian scholars to think that the Afanas'ev were the first metallurgists in the eastern steppe zone (Okladnikov 1959, 22; Chernykh 1992, 182). Furthermore, the metal resources of the Altai may have been an impetus for the early settling of Afanas'ev groups in the Minusinsk basin. However, to date no copper production sites have been found in association with Afanas'ev archaeological contexts.

The Yenisei River valley and the Minusinsk basin are considered to be the central areas of interaction for Afanas'ev groups, though Afanas'ev burials such as Bertek 33 have been located high on the Ukok Plateau (Molodin 1992). Additionally, Afanas'ev type pottery sherds have been found in areas such as Sarazm (Lyonnet 1996), a Chalcolithic site in the Zerefshan valley, some 1000 kilometres to the south of the Minusinsk basin. Without other concrete evidence, however, this connection is dubious. There also appears to be continuity of the Afanas'ev material package reflected in the Ke'ermuqi culture in the Djungar (Zhunge'er) basin in Xinjiang (Chen & Hiebert 1995, 269). The identification of Afanas'ev type burials across the northern steppe (Kiselev 1937; Vadetskaya 1980; Khlobystina 1975) and possibly in the Tobol River drainage such as Ubagan I and Verkhnyaya Alabuga (Mallory 1989, 226 on Potemkhina's finds) excites the possibility of a wider range for the Afanas'evans across the steppe. In addition to their emerging extent of interaction, Afanas'ev groups are typically believed to be of Caucasian physical morphology (Christensen *et al.* 1996, cited in Anthony 1998), which has been the cornerstone of

the argument that they were associated with Yamnaya groups in the Volga region (Kuz'mina 1998). Given the variability and plasticity of human populations, however, (cf. Mays 1998) craniometrics and biological distance studies should not be over validated. In the light of this, the origin of Afanas'ev groups is still a wide open question. Furthermore, recent radiocarbon dates from the Altai suggest that Afanas'ev contexts predate the Yamnaya (Görsdorf *et. al* 1998; Bokovenko & Mitjaev 2000), which further problematizes the claims for western origins of the Afanas'ev groups.

There is little in the way of new synthesis concerning the social organization of the Afanas'ev culture. At this stage, scholars believe that Afanas'ev groups represented the first mobile pastoralists on the steppes (Khazanov 1994, 91). In addition, the Afanas'ev economy is typically considered the first domestically productive economy on the eastern steppes (Okladnikov 1959; Vainshtein 1980; Khazanov 1994, 91). Contemporary societies such as the Botai-Tersek culture are documented as hunter/fishers (Kislenko & Tatarintseva 1999); additionally their diet may have relied heavily on horse- meat (Anthony 1998). Bones of sheep and cattle, horses, and wild game, however, are found in Afanas'ev burials (Vadetskaya's findings, in Chilov 1975). The Afanas'ev subsistence economy might best be characterized as a mix or transition economy between hunting/fishing and semi-mobile pastoralism. This may lend support for a local development of the Afanas'ev, whereby local Neolithic hunter/fisher groups may have adopted diffused ceramic and domestication techniques. This stirs up the classic 'migration versus diffusion debate', in which I shall not engage here. The early Afanas'ev social organization was probably decentralized, with groups of 'proto-pastoralists' interacting in localized zones — such as the Minusinsk Basin.

The later stages of the Early Bronze Age are better documented in the eastern steppe zone, and it is during this period (*c.* 2600–2000 BC) that characteristic features of a more complex material culture fluoresce. The Okunev 'society' is another ambiguously defined 'culture group', distinguished from the Afanas'ev by little more than slight differences in ceramic form. Okunev ceramics are typically flat bottomed, and have a stronger resemblance to the ubiquitous handmade ceramic style that pervades the eastern steppe in the Andronovo period (*c.* 2000–1300 BC) (Savinov 1997). The typological horizon between the development of the Afanas'ev and Okunev steppe cultures in the Minusinsk Basin and the development of the later Andronovo type is very thin. Though the ceramic styles of the Okunev are more comparable to later Incised Coarse Ware (ICW) (formally and ambiguously 'Andronovo' ceramics), Okunev monuments exhibit a greater similarity to Afanas'ev material culture. In Okunev burial mounds, individuals are often buried together, with ceramic vessels, copper, bone, and lithic objects (Vadetskaya 1986; Lazaretov 1997). A notable difference from Afanas'ev burials is that Okunev monuments have stone fences surrounding the tumuli, which are usually large and rectangular, while the graves are clustered under stone cairns (Lazaretov 1997). Like Afanas'ev monuments, Okunev burial forms show similarities to the Xinjiang steppes and Djungar basin (Chen & Hiebert 1995, 269). Though Okunev burials reveal a greater quantity and quality of copper and bronze artefacts, which indicates a 'richer' metallurgy than that of the Afanas'ev (Chernykh 1992, 184; Gryaznov 1969; Vadetskaya 1986) — a topic to which we will return below. Given this suite of similarities and differences, we may speculate that during the late third millennium BC, regional interaction between fragmenting Afanas'ev and Okunev groups generated a social system whereby a similar material cultural package and social practices were exchanged and mutually employed by various distinct bands or tribes (Khlobystina 1973a), over a widening and differentiating geographic range.

In summary, there is considerable overlap between the various archaeological assemblages, as well as some noted divergences. Traditionally, this has been cause to define different 'culture' groups. Perhaps a more fruitful way of handling this paradox of simultaneous overlap and disparity is to look toward possible socio-political motivations for separation and delineation of a previously cohesive and communicative social and cultural complex. I have suggested that there existed conditions of increasing regional interaction and intensified exploitation, suggesting that the Early Bronze Age was a period of increasing political complexity. Attention will now turn to two of the regional conditions that contributed to increased interaction and social communication: 1) metallurgy and 2) geographic control.

Exploitation of copper and bronze

Chernykh (1992, 23–5) rightly notes that the use of metallurgical studies for the recreation of social complexity is problematic. However, because copper deposits are limited in the eastern steppe zone (Chernykh 1992, 6) and metal production centres are

neither evenly nor frequently distributed in the region, copper/bronze artefacts represent a socially active technology that demanded conscious planning and negotiation to produce and distribute. Compared to the limited variation of other Early Bronze Age artefact assemblages such as ceramic vessels or lithics, copper and bronze metallurgy demonstrates a more creative and socially intertwined development over time. The proliferation of copper consumption, from small personal decorations found in Afanas'ev burials to the elaborate assemblage of copper and bronze items from Middle Bronze Age and later Fedorovo (Andronovo) archaeological contexts, suggests that the focus of symbolic power rapidly developed in tandem with metallurgical technology during the second millennium BC.

In the Eastern Steppe zone, substantial copper deposits are localized in the Altai mountains and Minusinsk basin (Chernykh 1992) as well as along the Ili River in Xinjiang (China) (Mei & Shell 1998). Additionally, isolated copper deposits are found North of Lake Balkash in Kazakhstan (Chernykh 1992). Presumably, these ores were known since at least the early third millennium BC, though currently it is difficult to securely provenience the copper and copper alloy artefacts to specific deposits (Chernykh 1992). The assumption here is that groups such as the Afanas'ev and Okunev exploited those ore deposits that were regionally closest — an idea which takes little imagination.

The metallurgical progress of the eastern steppe can best be understood, stylistically at least, as changing from simple to more complex. The metallurgical consumption of Afanas'ev groups was limited to small decorative copper objects of fairly simple form (Chernykh 1992, 183). The range of objects in Okunev contexts is slightly wider and more elaborate — including knives, awls, nails, and bracelets. The chemical composition of most metal artefacts from Okunev burials is essentially pure copper (Cu), with only trace elements such as Antimony (Sb), Arsenic (As), Lead (Pb), Silver (Au) and others (Kavrin 1997, 162). The Okunev artefacts, which are considered slightly later in date than those of the Afanas'ev, already show a more stylized form, and a few bronze artefacts have been found, for example the bronze spearhead found at the site of Moiseikha (Chernykh 1992, 184). Thus, in the late third and early second millennium BC there is evidence for increased metallurgical exploitation in the areas of the Altai and Yenisei River Basin.

By the mid second millennium BC, copper and bronze artefacts became even more prevalent both in terms of stylistic variation and geographic range (Chernykh 1992; Khlobystina 1973a,b; Kuz'mina 1988; 1986, 35). Andronovo sites across the steppes exhibit a highly developed system of trade and metal production (e.g. Rogochinski 1999). Highly stylized casts and technically proficient metal artefacts are frequently found in burial and settlement contexts of the mid second millennium BC (Kuzmina 1986), and evidence for regionally specialized production of metal is apparent in East-Central Kazakhstan (Kadirbaev & Kurmankulov 1992). Thus, within the greater Eurasian Metallurgical Province (EAMP) as proposed by Chernykh (1992), we can begin to differentiate between regions which contain dense ore sources such as the Altai, and those that appear to be operating as highly developed smelting and casting centres, like at the sites of Atasu, Ak-Mustafa, and Mirchik (Fig. 10.2) in East-Central Kazakhstan (Kadirbaev & Kurmankulov 1992).

Various regions of metallurgical specialization (Chernykh 1992) contributed to a more elaborate network of political and economic interactions, which may have spurred the exploitation of new ecological niches like those along the Tian Shan foothills. Andronovo burials exhibit a consistent range of copper artefacts, found in broad geographical distribution, suggesting a complex movement of copper across the steppe (Chernykh 1992). In the eastern steppe zone, however, the regions between the Yenisei River and Central Kazakhstan do not seem to 'cash-in' in terms of metallurgical development. Recent excavations in the Semirechye area of southeastern Kazakhstan do not exhibit the same highly developed metallurgy as that of surrounding areas. Instead, the bulk of copper and bronze artefacts found in sites along river valleys of the Tian Shan (Fig. 10.2) such as Kulsai, Uzunbulak I (Goryachev & Mar'yashev 1998; Mar'yashev & Goryachev 1999), and Oi-Dzhailyau (Mar'yashev & Goryachev 1993) resemble earlier, less elaborate ornaments and jewellery forms, similar to those artefacts found in Afanas'ev and Okunev archaeological contexts. Yet based on the ceramic types and burial styles, these sites are chronologically contemporary with mid-late Bronze Age Andronovo cultures (Fedorovo and Alakul — *c.* 1500 BC). Thus, to the north, south, east and west of the Semirechye region, the development of a network of copper production and extraction was progressing while, apparently, those living at the cross-roads of this 'network' were not using copper to the same extent or for the same purposes. Though, if we assume that those groups living along the Tian Shan range were still involved in this me

Figure 10.2. *Eastern steppe zone showing the principal areas and sites mentioned in text.*

tallurgical network, they must have attained and demonstrated their political position through economic and symbolic techniques other than the manipulation of copper and bronze. The ability to control these conduits of trade would provide these groups with the ability to control certain other resources, such as horses, cattle or other domesticates — essentially creating a new form of symbolic power that could be used to negotiate with other populations involved in economic and social relationships. The control of herds as a form of social and political power is well documented ethnographically (Bacon 1958; Vainshtein 1980; Khazanov 1994); this characteristic aspect of mobile pastoral society may well have its roots in the Bronze Age.

Geographic control and pastoralism

During the second millennium BC, the 'Andronovo culture' became widespread, with regional variations apparent across the Eurasian Steppes (Kuzmina 1986). By 1500 BC copper producing sites such as Atasu (Fig. 10.2) were in operation north of Lake Balkash (Kadirbaev & Kurmankulov 1992), south at sites such as Tamgaly (Rogochinski 1999), and in the Yenisei River Valley (Kuzmina 1986). The Semirechye region has, to date, however, only revealed sites as early as the mid-late Bronze Age (Kuzmina 1986, pic. 31; Mar'yashev & Goryachev 1993). Thus, current evidence suggests that the areas surrounding the Tian Shan foothills were settled before pastoral groups had begun to exploit the river valleys and foothills of the Tian Shan (Semirechye) and Djungar Mountains, as well as areas along the northern rim of the Tarim basin. The exploitation of these mountain steppe zones during the mid to late Bronze Age would suggest a shift from a mixed subsistence strategy to more intensified pastoral specialization, as agricultural potential of this high altitude ecology (900–1500 m) is lower than that of the open steppes of Central Eurasia. The pertinent question is *why* specific groups moved into this zone, which is inter-

estingly located between metal sources and established metal production complexes. Would such a move into these natural corridors cause a shift in the way pastoral groups gained power in relation to their neighbours to the north, south, east and west? The river valleys of the Semirechye region and Djungaria represent natural passageways from the rich metal resources of the Tian Shan and Altai Mountains, and the central steppe zone. Recent studies in river valleys such as the Koksy in Kazakhstan have shown that these valleys contain Bronze Age rock-art and burial monuments (Mar'yashev & Goryachev 1993). The inhabiting groups who controlled these conduits may have marked the landscape with these types of monuments, to communicate their position in monitoring the movement of resources through these valleys. This proposition stems from analogous rock-art monuments from later periods in the same locations, which clearly depict caravans and scenes of trade (Mar'yashev pers. comm.). If these valleys were used as trade corridors during the Iron Age and later, it is at least reasonable to think that they were exploited during the Bronze Age as well — especially in light of the developing metallurgical network of the second millennium BC.

If indeed certain groups moved into these valleys in order to ascertain power by monitoring trade, they would have been exposed to an ecological niche that is most successfully exploited by pastoral transhumance. The ecological conditions of these medium-sized river drainages, which extend from the Tian Shan range toward Lake Balkash, are well suited for 'vertical' pastoral transhumance. Therefore, in order to further benefit politically from their role as trade mediators in this region, pastoral groups may have increasingly specialized their pastoral techniques, so as to more successfully occupy these foothill steppe drainage systems. It is at least plausible that the development of a social framework for organizing status and power in terms of herd management and regional control was instigated by transhumant groups who sought to renegotiate their social and economic position during the mid to late second millennium BC. Future work will necessarily have to look more closely at the consistencies and differences in the archaeological record at Bronze Age sites in Djungaria, the Semirechye, Xinjiang and the Altai Mountains.

Conclusions

The model I have proposed suggests that specialization toward a mobile pastoral life-way can be motivated by broader political and economic relationships. This proposition naturally implies that agents employ strategies that aim to improve their social position and that enable them to effectively exploit their living context at the same time. Additionally, 'agents' need not be individuals who engender change single-handedly — strategies can have effects and be affected by conditions operating at a variety of social scales, whereby a change in *genre de vie* could seamlessly accommodate changing regional political and economic factors as well as those political dynamics that are generated from within social groups. I have discussed two archaeological observations concerning change during the Bronze Age in the eastern steppe zone of Eurasia. The increasing metallurgical interaction and the movement of pastoral groups into new ecological niches both suggest that there was a developing network of politics and economy at the regional scale. The strategic movement into specific corridors engendered specialization of pastoral exploitation, which may have led societies to actively choose a more mobile, transhumant lifestyle. As noted, I propose this model with the hope that archaeologists will be able to discuss the political factors which may have played an important role in the changes in economic exploitation and social organization that form the basis for, and come to characterize Inner Asian societies in later epochs.

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Notes

1. Nomadic monitoring of textile trade, as well as other commodities, is well documented for later archaeological epochs and ethnographically (Allsen 1997).
2. Another aim of this paper is to reorient the forum through which archaeologists discuss the prehistoric exploitation of the Eurasian Steppes. In Western Europe and the USA the circulation of the latest archaeological research from archaeologists working across

Central Asia is rather informal, such that a substantial amount of information sharing comes from personal contacts, regional conferences, and collaborative visits rather than through wide publication circulation. To be sure, the corpus of current research concerning the eastern steppe region is, at present, not complete enough to completely substantiate the model presented here. However, a general survey of the familiar archaeological conditions of the steppe throughout the Bronze Age will help to demonstrate why the above model — pastoral nomadism as political strategy — might explain the changes in steppe exploitation which evidently occurred in the second millennium BC.

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