William Honeychurch

Inner Asia and the Spatial Politics of Empire

Archaeology, Mobility, and Culture Contact



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Contents

1	Voices	from the Steppe	
	1.1	Geographical Contexts	
	1.2	Historical Contexts.	
	1.3	Conceiving of Nomadic Peoples and Their Polities	
	1.4	Lattimore and Anthropology: Approaches to the Nomad	
		as State Builder	
	1.5	Shaping Alternatives for Inner Asia: Mobility, Politics,	
		and Interaction	1
	1.6	Outline of Chapters to Come	1
	Refer	ences	1
2	Over	coming the Tyranny of Distance: Culture Contact	
		Politics	1
	2.1	Novelty from Afar: The Jew's Harp	
	2.2	Do New Foods Beget New Appetites? The Oreo Cookie	
		that Wasn't	4
	2.3	Walls and Relationships: Building New Inequalities	4
	2.4	Interregional Theory and Social Transformations	2
	2.5	How Do Things Move and Become Novel?	2
	2.6	What Counts as Long Distance, Cross-Cultural, or Interregional?	2
	2.7	How Does Inter-cultural Process Change Social Organization?	1
	2.8	Foundations of Entanglement: Relationships, Negotiation,	
		and Contingency	2
	2.9	Social Relationships	1
	2.10	Social Negotiation, Groups, and Social Order	ć
	2.11	Politics and Social Organization	1
	2.12	Entanglement, Inter-contingency, and the Uncertain Politics	
		of Change	2
	2.13	Upscaling and Political Community as a Pathway to Statehood	2
	Refer	rences	2

3	Solvi	ng Contradictions: Nomads and Political Complexity	47		
	3.1	Nomads, the State, and Explaining the Xiongnu Polity	49		
	3.2	Preceding the State	51		
	3.3	From Leaders to Rulers	52		
	3.4	Organization of the State	53		
	3.5	What Makes a Pastoral Nomad: Variation and Commonality	54		
	3.6	What Makes a State: Scale, Duration, and Contingency	57		
	3.7 3.8	Mobility, Relation, and Spatial Politics The Xiongnu State: A Macro-Region Transformed	63		
		and Empires Made	68		
	3.9 3.10	Preceding the State: Early Entanglements, 1400–700 BC From Leaders to Rulers: Regional Consolidation	68		
		and State Emergence, 600–200 BC	70		
	3.11	Organizational Trends of Xiongnu Statehood: Spatial Politics, 200 BC–200 AD.	71		
	3.12	Origins of an Amalgamated Imperial Tradition in East and Inner Asia	73		
	Refer	ences	73 74		
4	The Heartland of Inner Asia: Mongolia and Steppe				
	Pasto	oral Nomadism	79		
	4.1	More than just Grasslands: The Inner Asian Interior of a Macro-Continent	80		
	4.2	Examples of Inner Asian Pastoral Nomadism from Mongolia	86		
	4.3	Egiin Gol: A Northern Mongolian River Valley	94		
	4.4	Baga Gazaryn Chuluu (BGC): Granite Peaks of the Gobi	99		
	4.5	Archaeology at Egiin Gol and Baga Gazaryn Chuluu	105		
	Refer	ences	106		
5		Late and Final Bronze Age Cultures of Mongolia, 1400–700 BC	109		
	5.1	Documenting the Bronze Age	111		
	5.2	Western and West-Central Regions: Khirigsuurs and Deer Stones of Mongolia	112		
	5.3	Eastern and South-Central Regions: Ulaanzuukh–Tevsh Culture and Slab Burials	122		
	5.4	Habitation Sites, Economy, and Lifeways	132		
	5.5	Local and Regional Perspectives	139		
	5.6	Summary: Bronze Age Experiments in Subsistence, Transport, Monuments, and Leadership	147		
	Refer	ences	150		
6	The Surrounding Bronze Age World: Kazakhstan				
		South Siberia, 1300–700 BC	157		
	6.1 6.2	Semirech'e and Kazakhstan: A View from the Western Periphery Minusinsk and Southern Siberia: Connections	159		
		to the Northwestern Forest Steppe	164		

	6.3	Early Iron Age Transformation: Political Communities	. = 0
		of the Scythian Tradition	173
	6.4	East Versus West in Inner Asia	177
	Refe	rences	178
7		e Edge of Inner Asia: The Northern Zone and States	
	of Cl	hina, 1200–700 BC	185
	7.1	South-Central Inner Mongolia: The Ordos and the Chariots	
		of Shang	187
	7.2	Southeastern Inner Mongolia: Cultural Hybrids and the Horses	
		of Zhou	195
	7.3	Follow the Horses: Steppe Influences on Statehood in China	205
	7.4	How the Eastern Bronze Age Came to an End: The Politics	
		of Entanglement	211
	Refe	rences	215
8	Nom	adic Alternatives: Forming the State on Horseback	221
	8.1	Histories of the Xiongnu	222
	8.2	Overview of the Xiongnu Archaeological Record	225
	8.3	Archaeological Trajectories Toward Statehood: The Prelude,	
		c. 600–300 BC	232
	8.4	Patterns of Transition in the Egiin Gol Valley	236
	8.5	Gobi Desert Evidence from Baga Gazaryn Chuluu (BGC)	241
	8.6	A Regional Political Community: From Local	
		to Macro-regional Perspectives, 300–200 BC	244
	8.7	Re-imagining the Macro-region: Multiple Centers	
		and Multi-lateral Contacts	246
	8.8	Disruption and Upscaling: A Complex Macro-region	
		in the Making	249
	8.9	Along the Way to Becoming a State	252
	Refe	rences	254
9	Not o	of Place, But of Path: Nomads on the World Stage	261
	9.1	Xiongnu Landscapes at Egiin Gol and Baga Gazaryn	
		Chuluu: Spatial Politics at Work	262
	9.2	Patterns of Xiongnu Integration and Centralization	270
	9.3	Macro-regional Conversions as Spatial Politics: The Early	
		Silk Roads	274
	9.4	Historical Overview of the Xiongnu and the Western Regions	275
	9.5	Xiongnu Mortuary Archaeology and Riches from the West	278
	9.6	Silk Roads Evidence in the Gobi Desert	282
	9.7	The Western Interaction Sphere of the Late First	
		Millennium BC	285
	9.8	Steppe Roads: A Re-orientation of Perspective	288
	Refe	rences	290

10	Stepp	be Cores, Sedentary Peripheries, and the Statecraft of Empire	297
	10.1	Reciprocal Entanglements: Historical Experiments	
		in Imperial Statecraft	300
	10.2	Epilogue: Mobile Legacies in a Globalizing World	305
	10.3	Modern Mongolia: A Nation of Herders	306
	10.4	Discourses of Development and Modernity	308
	10.5	An Ancient and Unchanging Nomadic Pastoralism?	309
	10.6	Is the Center Always Central?	310
	10.7	Globalized Herders.	311
	Refer	ences	313
Ind	ex		317

Author Biography

William Honeychurch is an Assistant Professor at Yale University in New Haven, Connecticut. His research focuses on interregional interaction and the development of complex political organization, the rise of states and empires among nomadic peoples, and the construction and use of monumental landscapes. He has worked in Mongolia since 1991 and combines innovative survey techniques with habitation and mortuary excavation to recover the often sparse remains of ancient mobile communities. Along with colleagues from the Mongolian Institute of Archaeology, Dr. Honeychurch has carried out multiyear survey and excavation projects at the Mongolian sites of Egiin Gol, Baga Gazaryn Chuluu, and Delgerkhaan Uul in order to better understand the local foundations of steppe politics and lifeways. His research results have helped to shed light on the cultural and political importance of pastoral nomadic societies around the world.

Chapter 1 Voices from the Steppe

The campaign had not gone well. Han Gaozu, China's Son of Heaven and founder of the glorious Han dynasty, reached that inevitable conclusion after assessing the circumstances in which he found himself and his army in the winter of 200 BC. The expedition to punish and defeat the Xiongnu nomads of the northern steppe had begun auspiciously, but as his massive army pushed into unfamiliar and seemingly endless snow-covered mountains and grasslands, the Han emperor began to see signs of doubt in the faces of even his most stalwart generals. The enemy had fled on horseback in front of the advancing army, easily outdistancing his forces. Every now and again, a small contingent of nomad archers suddenly appeared from nowhere, intercepted a flank guard, and shot dead several foot soldiers before charging off northward on swift mounts.

For the past 2 weeks, such sporadic attacks had enraged the Han military ranks and bolstered the determination of commanders to wreak vengeance on the people of the Xiongnu nation. Standing on a low hilltop surrounded by cold sky, Han Gaozu could not remember just when he found his army encircled by thousands of heavily armed steppe cavalry. The trap was sprung all too swiftly, and while the emperor a moment before had been enjoying the final warmth of a dying winter sun, he and his soldiers now faced a dark wall of creaking bows, notched arrows, and sweat snorting horses. The armies of the Han empire stood their ground, surrounded for seven long days.

Sima Qian, the eminent Han dynasty historian, tells how Han Gaozu would live to fight another day and set his youthful dynasty on an historic path that would culminate in one of the political and cultural apogees of China. But on that day in the steppes, the emperor's safe return to his protected capital was made possible only by the intervention of Maodun, the Xiongnu ruler, who provided the Han emperor and his army a narrow corridor of escape. After 7 days of complete encirclement, Maodun permitted the Emperor of China and his forces to slowly withdraw.¹ Maodun's order for the cavalry to pull back was secured by a guarantee of annual tribute payments from the Han state to the steppe aristocracy in the form of luxury goods, wine, grain, and abundant colorful silks (Watson 1993: 138). These events would forever alter China's notion of world order. The established idea of an expanding and inclusive civilization meant to unify "all under heaven" was replaced with a new world view—a view of exclusion and dichotomy where frontier truncated any possibility of China's expansion northward (Pines 2005).

By the time of Sima Qian's writing, 100 years after these events at the outset of the Han dynasty, the significance of nomadic power had become all too clear. Under the warrior Emperor Wu (r. 141–87 BC), the Han dynasty had plunged into total war against its northern nomad neighbors, an effort that would continue for decades and nearly impoverish the empire. Distinctive traces in the material record from this era of the Sino-Xiongnu wars remain today. Archaeologists working in Mongolia's southern Gobi Desert have uncovered unsettling evidence of the extreme violence along the northern frontier. This evidence comes from the ruins of a walled settlement known as Bayan Bulag which lies in an arid and windswept plain. Near its western wall, a small green patch reveals how people were able to live here over 2,000 years ago by drawing water from precious nearby springs. Artifacts strewn about the collapsed walls include corroded Han dynasty coins, simple gray ware ceramics, crossbow lock mechanisms, and dozens of triangular bronze arrowheads that once tipped powerful crossbow bolts.

Based on these materials, Bayan Bulag was among the farthest outlying garrisons of the Han dynasty during the first century BC and was likely populated by soldiers and laborers from China. The site was walled and fortified on the north against the swift advances of horsemen coming across the desert, making daily life a constant and fearsome struggle. Testament to these conditions came to light in 2009 at a location 400 m to the east of the Bayan Bulag walls where archaeologists uncovered a large pit strewn with human skeletal remains (Kovalev et al. 2011). Interred in a makeshift grave, excavators unearthed the piled skeletons of 20 individuals. Among the bones, they also revealed 33 distinct but still mostly articulated body parts, ranging from hands and arms to legs and heads. On closer inspection, the archaeologists found that each body part belonged to one of the skeletons and could be refitted with the bones of its original owner like a gruesome jigsaw puzzle. Evidence for violent trauma included weapon impacts that had crushed the skulls of some individuals and cleanly severed the limb bones of others. The bones tell of individuals having been brutalized and either hacked to death or dismembered soon after they had died. Based on a handful of personal artifacts included in the mass grave, the excavators suggest these skeletons represent the remains of Han dynasty cavalrymen who had been attacked, killed, probably frozen in the cold of winter, and later retrieved and buried near the garrison (Kovalev et al. 2011: 492–493). With additional work, physical anthropologists

¹ This event is known as the battle of Pingcheng which is thought to have taken place 70 km southeast of Liangcheng in south-central Inner Mongolia (Indrisano 2006: 145–146).

might provide more evidence to confirm this scenario and the origins of these individuals. Nonetheless, whoever they were, the grim narrative these bodies tell of frontier life is indisputable.

The Han empire of China and the Xiongnu nomadic state on the northern steppe brought about a new political era in the history of eastern Asia. In this book I attempt to explain the anthropological significance of interactions between these two axial traditions of the Far East. The meeting of the Han and Xiongnu rulers on that cold day in 200 BC and the massacre of Han soldiers in the Gobi Desert a century or more later represent cultural and political demarcations on the boundaries of what has been described as one of the most absolute frontiers in the history of the world (Lattimore 1940: 21). From this early conception of a fundamentally divided existence came an enduring mythology about a civilization centered in China and the distant lands and inhabitants of Inner Asia who became known as the people beyond civilization.

This book explores the lesser known side of the Inner Asian frontier, a world of nomadic societies representing a different kind of civilization that arose from lifeways of herding and movement across the landscape. These mobile peoples built expansive polities that challenged, conquered, and ruled many of the great civilizations of the Old World. Although histories recount these exploits as the workings of great leaders who were as ruthless as they were charismatic, in fact, steppe history is not just a narrative of kings, emperors, and aristocratic elite. It is a narrative that cannot be told without the common herders, farmers, hunters, and crafts people who made up the diverse communities of the Eurasian steppe. From these grasslands comes a mystery that continues to perplex historians and anthropologists to this day. How did these people—who lived primarily as nomads, moving their animals with the seasons, and living in tents—manage to build marvelously large states and empires, some of which, like Genghis Khan's Mongol empire, time and again took over the better part of Eurasia?

1.1 Geographical Contexts

To begin addressing this question, some background on the area, its peoples, and their histories is needed. Most interpretations of early East Asian history take for granted the primacy of China as a main point of reference, the dominant culture, and the organizational center. In contrast, my investigation focuses on the steppe zone, a place where pastoral nomads to this day still drive their herds among a wide range of grasslands interspersed with mountains, rivers, forests, and deserts. The geographic term I use for these steppe lands and surrounding regions is "Inner Asia" which consists of Mongolia, Inner Mongolia and Manchuria, much of southern Siberia, Xinjiang, and eastern Kazakhstan (Fig 1.1). Another area I identify is "East Asia" which includes the present extent of China, Mongolia, Korea, and Japan. These two geographic terms overlap significantly, but together, they comprise the vast macro-region pertinent for a study of the first empires and states on both sides of the frontier. This area is quite large and accordingly, the question



Fig. 1.1 The Eurasian steppe zone, Inner Asia, and other geographical regions of importance

of how to effectively organize politics over such expansive distances has been an enduring issue for nomadic states as well as the many empires centered in China. It is also a key theme of this book and is central to understanding East and Inner Asian forms of statehood.

Another notable aspect of the East and Inner Asian macro-region is its diversity of cultures, languages, lifeways, and environments. Inner Asia marks the eastern most extent of the Eurasian steppes stretching from the fringes of Europe to the forests of Manchuria. This interior swathe of grassland is itself quite diverse, but there are a few general characteristics that give a measure of cohesion to the region—it is arid and cold, with extreme shifts in seasonal temperature, and it has low population densities, animal-centered subsistence economies, and peoples whose mobility adapted them to this fairly harsh setting. Given these characteristics, and especially its mobile cultures, the eastern steppe is often thought of as a territory of migration, interaction, and exchange (Christian 2000). In contrast, beyond the margins of the steppe zone are the rivers, forests, and temperate plains that gave rise to early literate societies built upon intensive agriculture, village life, and aggregated urban populations. In East Asia, these regions include China and its Central Plain cultures as well as the Korean Peninsula and Japan.

1.2 Historical Contexts

My focus is on the end of the first millennium BC, a time when East and Inner Asia experienced a fascinating series of transformations in the way diverse peoples lived and related to one another. But the roots of this narrative begin much earlier than that and extend back more than a thousand years before the rise of the Xiongnu and Han states. At around 1,050 BC in the heartland of China, the late Shang dynasty suffered a series of major defeats and collapsed, to be followed by the victorious and emergent Zhou dynasty. Although it was different from Shang, the Zhou court continued many of the Shang practices including the use of archaic Chinese script, monumental burials with human and animal sacrifices, sophisticated bronze production, and chariot and infantry-based warfare. Conflict, trade, and alliances with outlying peoples also continued during the Zhou dynasty, and through a process of gradual conquest and assimilation, the political territory of Zhou expanded. At this time far to the north, peoples of the Inner Asian steppe zone had established a mobile herding lifeway with horse-riding techniques, powerful belief systems, and artfully made prestige goods that were destined to have appeal for the expanding aristocracy in China. These steppe peoples were organized into small-scale polities which sometimes cooperated and at other times competed. In doing so, steppe peoples constructed intricate networks of exchange and collaboration among the many differentiated groups living within the steppes, deserts, and forests of the north.

These two distinct worlds gradually came into contact along the margins of Inner Asia and northern China. By the final centuries of the Zhou era, a time fittingly called the Warring States period (481-221 BC), the territory of Zhou was divided between seven highly organized and competitive states. Some of these states expanded their territories northward into the fringe of steppe and desert marking the boundary of a region known today as the Northern Zone, which for the most part comprises Inner Mongolia and Manchuria. Peoples of the Northern Zone had long interacted with both the Zhou dynasty in the south and with nomadic groups in present-day Mongolia (Shelach 2009: 127-133). As the quality of interactions changed and contacts increased among peoples of these three distinct regions, Northern Zone communities found themselves occupying a turbulent frontier between what was an emerging state on the Mongolian Plateau and the states of China. This frontier zone was not fixed in space nor was it founded upon great walls, different lifeways, or environmental zones. It was a creation of politics and dual ideologies of division which arose in China and on the steppe simultaneously. These early interactions chart the contemporaneous formations of the Xiongnu state (c. 209 BC-93 AD) and the Qin (221-207 BC) and Han (202 BC-220 AD) empires.

1.3 Conceiving of Nomadic Peoples and Their Polities

The rise of the Xiongnu state in Inner Asia presents a challenge to current theories of political complexity and state organization. Prior to the twentieth century, information about pastoral nomadic polities came from the accounts of ancient observers like Sima Qian mentioned above and Herodotus. Herodotus' *Histories* (c. 450 BC) contains one of the best known and oldest reports of the Scythian nomadic state located in the European steppe north of the Black Sea. The Scythians were a horse-riding pastoral people whose military exploits included resisting the amassed

armies of Darius I, the Achaemenid Persian emperor, during his Scythian expedition of 513 BC. In a narrative passage reminiscent of the encounter between Han Gaozu and the Xiongnu ruler Maodun above, Herodotus tells of horse-riding Scythian archers swiftly retreating into the grasslands with Darius' armies in pursuit. The Persian fighters quickly find themselves in unfamiliar territory, while the Scythians exploited their mobile advantage by launching rear action attacks against the slow-moving infantry (Herodotus 2003: 286). Herodotus recounts that Darius, in his frustration with these tactics of flight, sends a message to the Scythian king Idanthyrsus asking, "why on earth, strange man, do you keep running away?" To this Idanthyrsus answers, "I have never yet run from any man in fear ... there is, for me, nothing unusual in what I have been doing; it is precisely the sort of life I always lead, even in the time of peace" (Herodotus 2003: 282). Clearly, mobility was a lifeway as well as an effective military strategy for the nomads of the Scythian state. For the Greek audience, however, Herodotus' narrative was not about nomads per se, but was an instructive comparison for how another enemy of Persia persevered against the expanding empire (Tuplin 2010; Hartog 1988).

The use of such idealized images of nomads has a long and ongoing history in social science (cf. Sneath 2007: 198–202). For example, another influential historical analysis in which nomads were seen in both an instrumental and metaphoric light was developed in late medieval North Africa by historian Ibn Khaldun (1332–1406 AD). In the *Muqaddima*, Ibn Khaldun provides an Arab-centered world history and argues for a theory of civilization in which powerful states gradually weakened over time and became corrupt, only to be conquered and replaced by unadulterated nomadic groups from the desert periphery. Once formerly pure nomads arrayed themselves with the finery of statehood, their states would in turn decline and the cycle then repeated. As Bonte (2003) has argued, this is a simplistic but by now an almost canonical reading of what is a complex text of much greater depth. It has, however, had substantial influence on the general interpretation of relationships between states and their nomadic neighbors who, for better or for worse, have historically been viewed as untouched by and incompatible with "civilization" (Sowayan 2005).

These somewhat curious ideas about pastoral nomads from the ancient world developed into a historiography of nomads within modern academic discourse—as if these early observers had reported genuine cultural ethnographies of their neighbors. The work of Ibn Khaldun appealed strongly to twentieth-century Western historians and most notably to Arnold Toynbee who adopted the idea of cycles in world history from the *Muqaddima*, though nomadic societies received a less-than-prominent role (Irwin 1997). Toynbee describes nomads as having developed a culture extremely well adapted for marginal environments, so much so that further development was not practical or possible. He argued that nomads, "have a society without history and once launched on its annual orbit, the nomadic horde revolves in [that orbit] thereafter and might go on revolving forever" (Toynbee 1934: 16). This conception of nomadic society with its timeless resistance to political, economic, and social transformation was not unique to Toynbee's work, but in fact reflected cultural assumptions that were widespread in academic research

of the time (Sneath 2007: 121). These historical models, however, speak more to representations of nomads by literate and urban peoples than about the actual lifeways of mobile herders.

Perspectives on pastoral nomads began to change as historians, anthropologists, and archaeologists increasingly spent time and did fieldwork among nomadic peoples and engaged firsthand with nomadic lifeways and politics. In the western part of Eurasia, colonial figures like Richard Burton and T.E. Lawrence are remembered for living among indigenous nomadic groups and adopting their customs and learning their languages. Likewise, three researchers on the other side of Eurasia stand out as informed observers of nomadic society with genuine anthropological interests and language expertise; these were Andrei Simukov (1902-1942), Henning Haslund-Christensen (1896–1948), and Owen Lattimore (1900–1989). Simukov's important ethnographic work on Mongolian pastoralism makes up a good portion of Chap. 4 and will be discussed there in detail. Christensen was a Danish researcher who travelled to northern Mongolia in 1923, learned Mongolian, and spent a significant number of years living among nomadic communities. He subsequently authored some of the earliest anthropological treatments of Mongolian society and focused especially on traditional Mongolian music (Haslund-Christensen 1934).

Of these three, Lattimore's work has the greatest pertinence for this study of pastoral nomads and their regional political organizations. More than any other scholar, he is responsible for adding the Inner Asian perspective to an emerging anthropology of pastoral nomads. Lattimore had spent his younger years riding the camel caravans from China deep into Inner Asia and thereby became intensely interested in Mongolian society, language, and history. While his early writing was of the travelog variety and tended to reinforce some of the stereotypes of nomadic peoples, including those of Toynbee's (Irwin 1997: 474), Lattimore's mature and scholarly work led in a different direction. Not long before the 1940 publication of his classic study on nomadic civilization *Inner Asian Frontiers of China*, Lattimore issued a strong rebuttal of Toynbee's position on the absence of long-term change among nomadic peoples. In a 1938 lecture to the Royal Geographic Society, he stated that, "... the established opinion, so learnedly and ably represented by Toynbee, that there is no 'inner evolution' in the history of the steppe, needs to be modified. The processes are there, though the details are largely hidden from us" (Lattimore 1962: 251).

1.4 Lattimore and Anthropology: Approaches to the Nomad as State Builder

It was Lattimore's ambitious and monumental pursuit of these hidden details that made his book an immediate classic in the fields of history, anthropology, and geography. The ideas he set forth mark the first detailed consideration of a number of anthropological topics using Inner Asia as the case study in question. These include regional-scale political process among nomads, the creation of frontier, and interactions between differentiated cultural groups. *Inner Asian Frontiers* traces patterns of cultural and political change beginning as early as the Neolithic up to the Sino-Xiongnu confrontation of the late second and first centuries BC. As such, the study covers several millennia of cultural process during which both the settled agricultural and pastoral nomadic lifeways came into being and took on organizational significance. The culmination of these long-term historical processes, according to Lattimore, was the emergence of two competing states each of which derived from very different backgrounds of environment, culture, and ways of organizing.

Lattimore asks why the net expansion of China's impressive society and culture that had unfolded over the span of more than 3,000 years had not advanced significantly northward of the original area of Chinese state formation (Lattimore 1940: 12–13). This question was all the more puzzling given the tremendous level of organization, productive capacity, and massive population that were ancient China's foundations. Despite productive and military might, Chinese state suzerainty did not extend into the nomad-dominated steppe areas until the later second millennium AD and, even then, only under a Manchurian dynasty. The answer Lattimore gives to this question represents his early excursion into a theory that later would become known as cultural ecology. He conceived of China and the eastern steppe zone as two very different adaptive core areas. Lattimore pointed out that the technological, demographic, productive, and social adaptations of the Chinese and nomadic civilizations were maximally effective in their respective core, and this led to development and expansion in both cases. As the two cultural traditions expanded beyond each respective core region, their adaptive infrastructures became increasingly ineffective and unsupportable, which resulted in a shifting and contested frontier between them. This frontier zone was inhabited by populations of variable allegiance and cultural composition (Lattimore 1940: 249). The Inner Asian frontier marked the southern and northern limits beyond which the lifeways and political organizations of the steppe and China would experience diminishing returns from further expansion.

In support of this theory, Lattimore proposed a sequence of major developments that contributed to the making of "nomadic civilization" in eastern Eurasia. He suggests that with the widespread introduction of horse-riding, steppe peoples developed a unique sociocultural configuration built upon a sustainable subsistence system of mobile pastoralism with rapid transport and unprecedented military strength (Lattimore 1940, 1962: 253). The emergence of the Xiongnu state and the unification of the Qin empire seemed to Lattimore to be a case of co-development articulating two different trajectories in distinct and autonomous regions (Lattimore 1940: 408–409, 462–463). Lattimore's research during this early period introduced three ideas important to the study of steppe sociopolitical organization and interaction. He argued that nomadic societies, much as any other human society, had potential for complex sociopolitical process. Next, because of the nomadic setting, the organizational forms of these societies were different from those of neighboring polities in China. Finally, Lattimore suggested that inter-societal contacts shaped the major transformations that took place in both China and the steppe zone. In other words, the history of the Inner Asian frontier was not unidirectional and had to take into account perspectives from both sides of the Great Wall (Lattimore 1940: 475).

Not long after the publication of Inner Asian Frontiers, Lattimore's ideas on steppe societies began to change in response to new sources of data on nomadic peoples mainly from Africa and Southwest Asia. During the early to mid-twentieth century, professional ethnographers trained as social anthropologists began taking interest in Old World nomadic societies. As a result, researchers published a number of ethnographies including some of the first participant-observer accounts of nomads such as The Nuer by Evans-Pritchard (1940). This work in particular helped to solidify an anthropological image of pastoralists as stateless warriors with segmented lineage organizations. Where nomads were intimately involved with states and their exchange systems, anthropologists advanced the idea of nomadic "half-cultures" which were made whole through dependence on neighboring sedentary and urban societies (Kroeber 1948: 276-278). A different approach was taken by Fredrik Barth (1961) in his ethnographic work on the Basseri of Iran. Barth's research was the first to call attention to pastoral nomadic encapsulation within dominant states and colonial empires, a condition shared by most if not all nomadic groups of the twentieth century, but not one necessarily indicative of the past. Barth's observations raised the important question of the relationship between powerful and highly organized nomadic groups and the modern states with which they often contended.

Many of these early ethnographic ideas were re-packaged by cultural evolutionists interested in classifying societies according to stage models of organization. Research that investigated the causes behind hereditary social inequality, centralized authority, and economic specialization initiated a more detailed ethnographic and historical examination of societies with and without these characteristics (Sahlins 1961, 1963; Fried 1967). In the case of pastoral nomads, Sahlins discussed two ways that herding societies might have become organizationally complex. He argued that low population density and uncertain production among nomadic groups were not conducive to the emergence of permanent social hierarchy, but where unusually high densities of population and resources existed, a chiefly form of political organization could provide benefits to pastoral nomads (Sahlins 1968: 37). The second pathway involved a kind of pastoral nomadic adaptation to sedentary society in which the consolidation and centralization of herders would have been functional and probable (Sahlins 1968: 38). In this case, settlements rich in agriculture and industry attracted and tended to aggregate dispersed nomadic groups interested in these products. According to Sahlins, the resulting interactions between herders and more highly organized sedentary groups, whether peaceful or not, necessitated higher degrees of permanent leadership and political solidarity among nomads. Such a process would then explain the rise of regionalscale nomadic confederations such as those known from the Eurasian steppes.

Mounting evidence collected by ethnographers and historians seemed to indicate that nomadic organizational change approximated this second pattern best and was therefore directly predicated on nomadic people's desire for the products of sedentary neighbors. Using cross-cultural ethnographic data, social anthropologists argued that relationships between nomadic and sedentary societies were the primary source of development among peripheral herders, to the exclusion of endogenous process (Burnham 1979; Irons 1979). Still other researches cast doubt on the possibility that pastoral nomads who employed a high-risk subsistence strategy in marginal regions could have ever been productively independent of the agricultural surplus of neighboring states (Khazanov 1978). Based on these sources of information, therefore, complex pastoral nomadic groups on the margins of state societies could be explained as a kind of specialized economic subsector intimately related to, but not necessarily integrated within the state.

Lattimore's final work shows great attention to these anthropological ideas calling into question the economic and organizational independence of nomads. In 1979, he revisited his initial model for steppe and frontier development. While still maintaining the fundamental difference between China and the northern steppe as two separate developmental regions, he hypothesized a structural dependence between steppe polities and the states of China. This dependence can best be described as a political economy in which nomadic elites sought to transform pastoral production into politically important luxury and subsistence goods through exchange along the frontier. Goods acquired from China could then be redistributed among followers in support of elite leadership. When the Qin dynasty emerged in 221 BC, frontier trade was curtailed triggering competition, warfare, and conquest among steppe groups. The end result was the Xiongnu state of 209 BC which had the military strength and organization to coerce resources from its southern neighbor (Lattimore 1979: 481, 483–484). This is an entirely different explanation for nomadic statehood than the one Lattimore had offered in 1940, and this change was largely due to anthropological understandings of pastoral nomads and state interaction as documented during the modern era. However, neither the modern state nor the twentieth-century nomad is necessarily a good analog for those of 2,000 or more years ago.

The rise of complex regional polities in Inner Asia and the eventual emergence of nomadic empires is truly a remarkable sequence of social and political transformation. Although Lattimore's early and later theories made great strides toward unraveling the mysteries of this political history, Lattimore recognized the limitations under which steppe scholars like himself worked. In order to address the question of politics and interaction within the steppe regions, researchers had to rely on the textual records of early China and ethnographic studies from the twentieth century, both of which are problematic sources of information (Sinor 1970: 108-109; Chin 2010). Although historical documents and contemporary ethnography are of indisputable value. Lattimore placed his hopes for future scholarship in recovering a genuinely indigenous record of the nomadic past, as promised by the emerging field of Mongolian archaeology (Lattimore 1979: 479-480). In the decades since, archaeologists have substantially increased their understanding of eastern steppe prehistory and are in a position not only to evaluate textual and ethnographic models, but to offer new models and theory based primarily on the material remains left behind by Inner Asian nomads themselves.

1.5 Shaping Alternatives for Inner Asia: Mobility, Politics, and Interaction

Like Lattimore's inquiries, my questions about Inner Asian prehistory are farreaching and are intended to involve eastern steppe nomads in pivotal discussions about the ways human societies change. To do this, I approach Xiongnu statehood by using new evidence from archaeology and the innovative critiques of historical sources by a new generation of Inner Asian historians. Equally important, however, I also develop new theory and hypotheses better suited to the constitution and conditions of nomadic society. In contrast to prevailing cultural stereotypes, I show pastoral nomadic peoples to be more than a mere extension of their subsistence economy, and neither simplistic nor unsophisticated, but rather engaged in forms of political complexity that were quite unique. These are topics at the forefront of discussions in anthropological archaeology, and as such, they make an exploration of Xiongnu state formation both timely and pertinent to a number of areas of research.

Throughout this book, I assess and revisit the comparative value of studying Inner Asian prehistory. For example, eastern steppe polities emerged within expanding networks of inter-regional contact not only with China but with groups in eastern Central Asia, Manchuria, and Siberia. As such, any explanation of Inner Asian statehood first requires a theory of interaction, of political relationships, and specifically a set of theory addressing connections between regional and local scales of sociopolitical process. Such a statement of ideas complements a number of related discussions on the prehistory of politics and interaction in other parts of the world (e.g., Stein 2002; Parkinson and Galaty 2010; Frachetti 2012). Moreover, the past two decades have witnessed numerous critiques of archaeology's reliance on narrowly defined political types to analyze organizational change (Wynne-Jones and Kohring 2007; Smith 2012). The problem of political complexity and statehood among pastoral nomads, a case not at all typical, is well positioned to contribute a new and potentially useful perspective to this ongoing theoretical debate (Honeychurch and Amartuvshin 2007; Hanks 2010). Still another comparative point of interest is that Inner and East Asia, much like Persia, the Andes, or the Mediterranean, had a long history of generating large states and empires. Each of these regions share a number of characteristics in common, including mobile cultures and technologies, substantial records of long-distance interaction, and multiple varieties of state organization. This begs the question of whether organizational diversity, intensive interaction, and political synthesis may have favored organizational traditions well suited for supporting large-scale empires on a cross-cultural basis (e.g., Mann 1986: 130-133; Chase-Dunn and Hall 1997: 84-88; Smith 2003: 82-83; Turchin 2009).

The present study sets out to specifically address these topics by first proposing a basic re-conceptualization of nomadic herding societies of Inner Asia. Pastoral nomadism is a term indicating groups whose lifeway and worldview are shaped by domestic herd animals and their potential for movement. Anthropological approaches have emphasized economic typologies intended to categorize these lifeways, but Inner Asian pastoral nomadism has never been a stable and unchanging economy amenable to fixed categories of analysis. In fact, there is good reason to believe that Inner Asian societies cultivated the capacity to transform practices in both habitual and innovative ways relative to changing conditions. Pastoral nomadism as a lifeway was (and still is) a flexible strategy enabled by co-community with herd animals and the cultural embedding of mobility (Honeychurch and Amartuvshin 2007; Frachetti 2008). These adaptations created social and productive expertise in socio-spatial dynamics and movement that included ways of binding together and maintaining human communities in the face of geographic dispersal. I argue that this capacity gave a unique spatial and temporal foundation for social relationships among Inner Asian nomads, and as a result, we should expect that politics and statehood assumed quite different configurations from those of sedentary and agricultural peoples.

In order to analyze the political importance of mobility within a movementoriented culture, I offer the concept of "spatial politics." This term is intended to highlight the quality of political negotiations where relationships have long been mediated by various modes of movement, spatial remove, and indeterminacy of location. I intend for this concept to capture a quality of political organization more appropriate for horse-riding pastoral nomads because their experience was shaped by a very different mix of geographical distance, transport, communication, and face-to-face interaction. This approach offers a better explanation for how nomads built extremely large complex polities while also solving the universal problem of sustaining authority and political order over distance (Feinman 1998: 112). This is not a concept that pertains to all pastoral nomads, nor does it pertain only to pastoral nomads. The idea of mobility-adapted statecraft is useful for any society in which forms of mobility become implicated in political arenas, and especially in the case of geographically expansive empires and states.

The information I draw upon to make these arguments comes from several sources including ethnographic, textual, and material studies. Of primary importance is the material evidence provided by two archaeological survey and excavation projects in different parts of Mongolia. The first study area is the river valley of Egiin Gol, located in the forest-steppe zone of north central Mongolia, and the second is the arid granite peaks of the Baga Gazaryn Chuluu region along the northern edge of the Gobi Desert. These two regions are substantially different in terms of environment and geographic location. Taken together, they provide an opportunity to compare the changes that transpired among local steppe communities as they participated in political processes related to Xiongnu state formation. I contextualize these specific datasets with the cumulative archaeological records as known from the rest of Mongolia, eastern Kazakhstan, northern China, and southern Siberia, in order to assess local and regional patterns of long-term social, economic, and political transformation.

1.6 Outline of Chapters to Come

This book focuses primarily on the making of the first Inner Asian nomadic state toward the end of the first millennium BC and the political traditions it inspired. I weave this narrative together from two separate strands of history from Inner Asia: one ancient and one modern. The story of Xiongnu statehood occupies most of the study, but I conclude with a contemporary account of Mongolia's transition from a socialist state to a globalized and developing modern nation. I pose the question of how the steppe nomad has played a central role in these strangely similar worlds of inter-cultural connections separated by two millennia. Chapters 2 and 3 develop theory needed to pursue these questions in depth. Chapter 2 explores what anthropologists know about long-distance interaction between different cultures and its affect on political transformation. I review major anthropological and historical ideas about culture contact and then propose a framework that describes how long-distance interaction can influence and change the quality of local political relationships, and vice versa.

Chapter 3 examines different and sometimes competing approaches to eastern steppe political complexity and statehood. I suggest a definition for the "nomadic state" that better conceptualizes the process of state formation in Inner Asia. Current models draw on the long-held idea of nomadic political economy as inherently unstable and unmanageable due to residential movement and productive risk. When indigenous economic and political institutions are assumed to be too weak to support the kinds of polities known to have existed on the eastern steppe, historians and anthropologists logically point to external influence from China as the major cause behind nomadic political complexity. In contrast, I argue that mobile societies structure relationships in ways that are not easily amenable to the standard political and economic frameworks used to understand sedentary complex societies. Instead of making indigenous political complexity untenable, the pastoral nomadism of Inner Asia fashioned a different social and relational idiom for how people interrelated and organized. These ideas set the foundation for the "spatial politics" approach to steppe political organization. Taking advantage of this concept, I propose that longdistance contacts did not occur because of the economic weakness of pastoralism and dependence on external goods, but rather as a logical outgrowth of a movement and transport-enabled culture. Complex steppe polities emerged from a tradition in which movement was normal, and maintaining political relationships over great distances constituted a primary part of statecraft. In short, a sophisticated politics of networking is a better way to understand how steppe states were constituted.

Chapter 4 situates the above theory in the world of the eastern steppe and the pastoral nomadic peoples that inhabit Inner Asia today. I focus on recent ethnography at the two study areas of Egiin Gol and Baga Gazaryn Chuluu where modern mobile herding is the dominant local lifeway. Chapters 5 through 7 introduce the archaeology of Mongolia and the surrounding regions of Inner Asia during the Late and Final Bronze Age (c. 1400–750 BC) and the beginning of the Early Iron Age (c. 750–300 BC). It is often maintained that state formation on the eastern steppe drew upon political precedents established many centuries prior; however, the nature of those precedents and how they influenced later political transformation is rarely explained by prehistorians. I offer one such explanation, and to substantiate these ideas, I compare and contextualize the Mongolia. This broad overview documents dramatic changes over the centuries in Inner Asian lifeways that led up to state emergence. These include an increased reliance on herd animals and movement, the initial use of domestic horses for traction and riding, the

creation of substantial networks of long-distance contacts, and the spread of technologies, ritual systems, beliefs, and material culture—all of which set the foundation for political re-organization at the beginning of the Xiongnu period.

My main interest in Chaps. 8 and 9 is the material record of the Xiongnu state as known from Mongolia, Siberia, and Inner Mongolia. Evidence for this period includes artifacts, habitations, cemeteries, and entire landscapes, and these can be used to investigate the politics and organization of the Xiongnu polity as it emerged and changed over time. I suggest that Inner Asian state formation is best conceived of as a social movement of collusion between peoples of different statuses and positions rather than as a top–down process driven by elite leaders. Institutions established during the initial years of Xiongnu statehood involved the following: (1) the creation of new mortuary rituals and ideologies, (2) a novel collective political identity, and (3) approaches to mobility that supported pastoralism while at the same time empowering local and regional political leadership. These important events on the eastern steppe gave early impetus to parts of the Silk Road and also consolidated the frontier between the two enduring centers of power in Inner Asia and China.

The final chapter highlights the outcomes and broader importance of this reassessment of formative Inner Asian politics. Chapter 10 inverts the assumption that the civilizations of China were "central" and Inner Asia was therefore, by definition, "peripheral." Following Lattimore, the gradual knitting together of this macroregion by way of interaction suggests that instead of an established core and a later periphery, the co-development of multiple differentiated centers was likely the case. Diversity in political models combined with interaction and long-term competition between these centers of power constituted a developmental process of inter-cultural indigenous innovation. Through macro-regional engagements, the Han dynasty expanded geographically and created new approaches to supporting a more distant geographical and political reach. The Xiongnu state experimented with varying forms of centralized authority to stabilize the long-distance reach nomads created early on. Both of these experiences in China and in Inner Asia produced synthesized versions of statecraft which I argue were essential to the development of the large and powerful imperial states that later appeared across Northeast Asia, most notably the Mongol and Manchu empires. In conclusion, I bring forward in time the mobility and spatial politics argument to assess modern Mongolia's integration within the globalizing world. Given a long tradition of sociopolitical mobility and inter-regional relationships, Mongolia is well situated to participate in a world that increasingly relies on these very same capacities on a global scale. These historical trends should be heeded in the current process of managing Mongolia's development as a strong, self-sufficient, and stable member of the international community.

Exploration of Inner Asia's nomadic past reveals a challenging history fraught with contradictions. In the opinion of some scholars, the eastern steppe was marginal, remote, and at the very edge of civilized life; but to others it was a heartland whose peoples time and again configured the dynamics of large parts of the Asian continent. To confront these very different images is to embrace the complexities of the past and its study. By asking new questions, using a different conceptual vocabulary, and considering multiple kinds of evidence, contradictory images of Inner Asia can be reconciled and made more informative about past lives as they were lived, understood, and

transacted. My approach is one that views steppe communities not as dependent herders, belligerent world conquerors, or inhabitants of a peripheral backwater, but as a people, like any other, whose actions arose from relationships, understandings, needs, and precedents. What made these early Inner Asians so unique and interesting were the varied processes they experienced in creating a political tradition that significantly shaped Old World history. It is the conceptual linking of those Inner Asian relations, understandings, needs, and precedents to the eventual shaping of the Old World that I hope to accomplish through this study of the unique politics of the eastern steppe.

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Chapter 2 Overcoming the Tyranny of Distance: Culture Contact and Politics

Distance, difference, contact, and interaction are concepts that are still coming into their own in archaeological understandings of the past. It was as recent as the 1980s that anthropologists felt the need to remind colleagues that in the affairs of human beings nothing transpires in isolation (Wolf 1982: 76, 1984). In particular, the kind of social and political transformation that archaeologists see as their topic of expertise cannot be explained without assigning importance to local, medium, and long-range interactions (Kohl 1987: 29; Trigger 1984: 286; Schortman and Urban 1992: 235). In the case of Inner Asia, these factors cannot be explained without somehow interrelating distance and interaction to the politics they shaped. To that end, this chapter proposes a model for social and political process that links local interactions to interregional dynamics.

Although the East Asian researcher Owen Lattimore developed his innovative ideas based on a polycentric emphasis, he still drew upon a fairly linear model for the geographic spread of complex organization. Based on his analysis of why it was that the powerful and highly organized civilization of China could not expand beyond the frontier, he concluded that China's expansion ran into an Inner Asian environment and lifeway that was ill-suited to the basic premise of Chinese civilization. Lattimore's underlying assumption was that a dominant adaptive pattern and its organizational expression expanded outward by subsuming and acculturating differently organized groups until those processes were no longer practical. In other words, inter-group interaction was mainly a product of expansion taking place after the polity, culture, or society in question had been fully formed, not a formative factor from the very beginning and throughout.

Instead of beginning with a core state that gradually expands outward, there is another way to approach the same process that draws on a multicentric perspective. From that point of view, the question could be phrased differently: i.e., given a large sample of geographic space, how was interaction across its diverse communities and centers variously configured over time? In other words, how did a particular region become socially interconnected and how did that social process relate to the rise of new political groups, territories, and boundaries as older boundaries diminished? This version of the question removes priority from any one center, polity, or civilization and stipulates that in order to understand any particular region, diverse inputs from surrounding areas and peoples must be factored in (Wolf 1984: 395–396). Accordingly, theorizing interaction as a fundamental characteristic from the earliest stages onward encourages attention to the different qualities of interaction that may have begun as indirect and tentative but later took on a more definite shape with greater social and political consequence.

Archaeologists have described these kinds of interactions as social fields, interaction spheres, world systems, peer-polity networks, and so on. Importantly, each of these terms embodies different ideas for how specific sets of interaction pertain to the growth of new forms of organization. The objective of this chapter and the following one as well is to provide a foundation and definitional clarity for a theory of interregional interaction that pertains to the nomadic politics of Inner Asia. In order to do this, some basic but challenging questions need to be addressed about the nature of interaction, distance, and social organization. By considering recent anthropological work on these issues, I propose a theory of interregional interaction that is well-suited for the East and Inner Asian setting and helps to clarify the nature of nomadic complexity on the eastern steppe.

I begin with three case studies each involving a material object or a material practice that moved across cultural boundaries and became entwined in new social contexts. In examining what it means to have items and ideas from distant cultures among and between us, I seek to clarify the social impact of "novelty." In other words, what happens when novel materials, products, practices, and ideas are encountered, in what ways do they change by way of a new context, and can they likewise promote change within that context? These material and social examples set the stage for a consideration of three foundational questions about cross-cultural process: How do things move and become novel in the first place; how do we define the terms "long distance," "cross-cultural," and "interregional," and finally, how does cross-cultural process transform social settings in ways that affect social organization?

2.1 Novelty from Afar: The Jew's Harp

My first case study concerns the curious history of the Jew's harp, a musical instrument which in North America is seen mostly in toy stores and trinket shops. What in America is sometimes a knickknack or a play thing, in Mongolia is a time honored and even mystical instrument connected with traditional forms of music and shamanic ritual (Fig. 2.1). The deep history of this small object's movement across the globe is fascinating but known to only a few historians and ethnomusicologist, some of whom take the Jew's harp as their principle topic of research. The etymology of its name in English is still debated but it likely has nothing to



Fig. 2.1 Modern and ancient Jew's harps. **a** Two instruments purchased in the USA (*left*) and Kyrgyzstan (*right*). **b** Xiongnu period Jew's harp from the Morin Tolgoi cemetery, Mongolia (photo by D. Tseveendorj). **c** One of the oldest Jew's harps ever recovered, excavated from a burial in the upper levels of the Xiajiadian cemetery, Inner Mongolia (adapted from Inner Mongolia 1974)

do with the Jewish religion or culture. The name may be a corruption of an earlier English or German term such as "jue" or "jaws" and in historical documents this has been paired with either "harp" or "trump," suggesting primarily a musical function (Wright 2005).

The Mongolian Jew's harp is called *khel khuur* or literally the "tongue(d) instrument" probably because there is a tongue-like strip of metal or bone which must be plucked to make a sound using the player's mouth as a sound box. In Mongolia and Siberia, the original purpose of the "khel khuur" was not as a musical instrument per se, but as a ritual device which later became included in the musical repertoire. Shamanistic ceremonies use material items to symbolize other processes, and, in the case of this instrument, its sound is heard as the trot or gallop of a horse which is meant to transport the shaman upward in order to communicate with nature spirits (Badamkhatan and Tserenkhand 2012: 446–447). In this sense, the Jew's harp might more accurately be described as a sound-producing tool rather than a musical instrument, but in fact the local meaning and function of that particular sound can be quite diverse in different cultures.

Interestingly, this particular sound-making tool has become a "traditional" object to peoples across Asia, in parts of Europe, Africa, Australia, Melanesia, and in the Americas (Fox 1988). While the manufacture of the Jew's harp changes slightly over time and from place to place in terms of materials, styles, and design, the essential principle employed to produce its twang-like acoustics cannot be

modified too radically. Despite variation in the instrument's shape and different methods of producing vibration, these are all still easily recognizable as essentially Jew's harps. Given the vast geographic range of this instrument's distribution, a good question to ask is how did it travel so widely? Or are we to assume that it was perhaps independently invented in many different regions? Even though the evidence is still somewhat limited, the latest research points to its origin in Asia, and while it could have been independently derived in northeast and southeast Asia, the earliest unequivocal dates for its appearance are from Inner Asia and specifically from archaeological contexts in Mongolia, Inner Mongolia, and in northern Hebei province of China.

The oldest known Jew's harp is from the cemetery of Xiajiadian near the modern city of Chifeng in southeastern Inner Mongolia. Burial 14, from the upper levels of the cemetery, yielded an object with a central tongue cut from a single flat piece of worked bone (Inner Mongolia Archaeology Unit 1974: Fig. 30, number 8). The archaeologists who excavated the bone Jew's harp did not identify it as such but described the artifact as being 9.8 cm in length, with a narrow tongue carved from the center, and having the general shape of a weaving shuttle (see Fig. 5 caption, Inner Mongolia Archaeology Unit 1974). The burial and the surrounding cemetery are part of the type site that defines the Upper Xiajiadian archaeological culture (see Chap. 7), which has been dated between 1200 and 600 BC. Additional discoveries of early Jew's harps have been documented in burials at the site of Jundushan in north central Hebei province of China and dated between 700 and 500 BC (Beijing Municipal Institute of Cultural Heritage 2009: 1362, nos. 3-6). According to the excavators, the region surrounding Beijing and southeastern Inner Mongolia were occupied by groups having strong cultural affinities with steppe regions farther to the north.

More than a decade after finds were made at Xiajiadian and Jundushan, a very similar artifact was discovered in a Xiongnu-period burial from central Mongolia (Tseveendorj 1990: Fig. 6). This instrument also is made of bone, 12.5 cm long, and, like the Inner Mongolian artifacts, it has a small hole at the base of the tongue for attachment of a plucking cord. The Xiongnu-period site of Morin Tolgoi where the Mongolian instrument was discovered is a medium-sized cemetery constructed within an older ceremonial site having monuments of the Late Bronze and Early Iron Age. While this exact burial has not been dated by radiocarbon analysis, most dates established for similar contexts fall into the range of the third century BC to first century AD. Members of the Mongolian excavation team immediately saw that the artifact they had unearthed was similar to Jew's harps still used in Mongolia today made of bone, horn, or bamboo (Tseveendori 1990). In order to verify that these Inner Asian artifacts were indeed ancient Jew's harps, the musicologist and Jew's harp historian, Frederick Crane, reviewed drawings and photographs and positively identified them as such (personal communication 1997). He then passed this information on to others doing historical research on the origins and worldwide distribution of early Jew's harps (e.g., Kolltviet 2006: 4; Wright 2004).

While we cannot completely rule out multiple independent inventions in different parts of Asia and Europe, the British musicologist Michael Wright has recently made an argument, based on all available evidence, for the transfer of this instrument from east to west through Silk Roads interaction and from Europe to Africa and to the New World through later shipping, trade, and migration (Wright 2004: 53). Given that the earliest examples are associated with Inner Asia and probably with peoples having mobile cultures, Eurasian Silk Roads exchange as one means of transfer is entirely plausible. Wright also makes the point that across these continents and across cultures, the Jew's harp is known by more than 1,000 unique names. Ethnographically, its peculiar twang has assumed extremely diverse functions including involvement in magic, healing, courtship, initiation into adulthood, protection, burial ceremony, gaming, and of course, as musical expression.

If this unassuming implement did in fact move across the globe at a slow pace measured in centuries between so many different cultures and language groups, then it is a good example of what might be called "incremental globalization." The widespread use of the Jew's harp is a case of contact and transfer of a particular material object between many different peoples who then adopted it and gave it new meanings as befitted their local needs. In this instance, cross-cultural transfer represents a diversification of the meanings and functions of a single material and acoustic form. Novelty came from afar but was received and transformed locally according to each different cultural context (e.g., Thomas 1991: 28, 29, 87). Instead of seeing the Jew's harp as a unitary, essential object that traveled across world cultures, we might just as well see its history as a thousand new inventions wherever this object was appropriated.

This process of local innovation demonstrates some themes that offer insight into the material correlates of interaction. First, in the course of cross-cultural transfer, the Jew's harp was repeatedly taken up as a novel item and was accepted locally because in some way it appealed to local tastes and systems of value. Different groups, for whatever reasons and by whatever diverse pathways, encountered this instrument and chose to adopt it. Second, the many names, meanings, and uses of the Jew's harp suggest a gradual, indirect, and adaptive diversification based on circumstances of transfer and local traditions of understanding. Indirect, incremental, and essentially innovative transfers of foreign products, materials, and technologies were primary processes in the past related to low-level, episodic, and down-the-line forms of contact. This kind of transfer contrasts dramatically with today's rush of electronic flows of information and the rapid transport of materials, products, and designs (Appadurai 2002). Perhaps one casualty of modern day instant communications and global mobility is this rich diversification of meanings and functions derived from the innovative power of slowness.

2.2 Do New Foods Beget New Appetites? The Oreo Cookie that Wasn't

Even with rapid transmission between different cultural regions, the priority of local reception and understandings of a novel item still operates. The Oreo cookie, my second material case study, demonstrates this point quite well, and compared to the Jew's harp, it is presumably a subject more familiar to Westerners. This case

begins as a frustrating marketing problem originally described in the Wall Street Journal (Jargon 2008). Since its introduction to China in 1996, the iconic Oreo cookie had not been selling very well. After a decade of disappointing sales, rather than pulling the product from shelves altogether, marketers asked how the cookie might be made more desirable for Chinese consumers. Targeted surveys revealed that given taste expectations in China, the cream inside the cookie was too sweet and the cookie itself was too bitter. Furthermore, the Oreo's round shape was not very functional for dipping into a drink. Based on these problems, the famous Oreo was in need of an overhaul that included adjusting the product's sweet to bitter ratio and shifting from a round to a long rectangular shape. To promote sales of the new Oreo, an advertisement campaign was launched with cute kids who demonstrated how to eat the snack "American style." By the time the cookie began to sell in the Chinese market, it was so different from the original that the "Chinese" Oreo could be sold in Canada and Australia as an entirely new product.

This recent history of the Oreo in China points to something that transpires every day in market economies: Designing products to appeal to a particular market. What is interesting is the way in which this particular product with an established history and function in one corner of the world assumed an entirely different form in order to suit the same criteria, that of a snack food, in another part of the world. In order to make it a success, the cookie was redesigned according to local tastes to such an extent that its original form diversified into something altogether new. The Oreo scenario is a good illustration of two major processes in inter-cultural transfer. First, it demonstrates the strength of local tastes and practices in governing the reception or rejection of a novel item. It also suggests that in the process of accommodating a novel item to a new cultural setting, changes in both meaning and form might be expected (Thomas 1991: 105-106). In other words, this process should not be seen as simple cultural borrowing, or as straightforward transmission, or even as cultural translation. The Oreo cookie case study argues that by virtue of its arrival in an arena of different sociocultural assumptions and precedents, a foreign form may be reinterpreted into an entirely new entity. The Oreo in China was quite literally subject to a kind of improvisation upon an established theme (Barber 2007).

The cookie case study tells of intentionally trying to fit the essence of something, such as a snack experience, to a new cultural idiom and thereby having to transform the thing itself. This raises a related question of whether such a process of cultural adaptation likewise transforms the indigenous cultural and social context to which the novel item is introduced. In the case of the Chinese Oreo, the advertising campaign promoted an image of children "teaching" their parents about Western snack culture. While this is an advertising gimmick, I wonder whether it does not also encourage a new role for children in the Chinese family as the gateway for Western cultural practices. I use the next case to argue that foreign products, material practices, and ideas not only take on new meanings and forms through indigenous contexts, but they also introduce a powerful potential to transform those very contexts depending on how such novelty is implicated in ongoing social relationships.

2.3 Walls and Relationships: Building New Inequalities

Moving northward from China, the steppe capital of Ulaanbaatar, Mongolia, has witnessed some important socio-architectural changes over the past decade which are pertinent to this discussion. These changes were made possible by the precipitous fall of the former Soviet Union and its abandonment of political and economic influence over Mongolia. The Mongolian Democratic revolution began in 1990 and initiated a mass pullout of Russian troops as well as the end of Soviet economic support for the nation. Facing economic collapse, the revolution rapidly transformed into a free market revolution under the auspices of international development agencies like the World Bank. The final section of this book looks in more detail at the post-socialist changes in Mongolia, especially relative to its nomadic past. For now, I explore a single transformation that has occurred since the fall of Soviet hegemony: The growing divide in wealth and lifestyle between the "haves" and the "have nots" in Mongolia. What is significant for the present study is how prevalent the role of foreign goods and practices has been in this very recent process of social change. In particular, I examine the role of gated communities, a material configuration imported from the West that has played a conspicuous role in the formation of a new social class made up of the Mongolian moneyed elite.

In Mongolia's rapid transition to a market economy, one of the primary economic priorities has been transferring state-held resources into private hands. This was done prior to changes in the legal and administrative system. As a result, no functioning regulatory or legal framework guaranteed that the country's wealth was distributed broadly and equitably among citizens. During the period of transition from the Soviet era, those few individuals with political influence took hold of existing resources to pave the way for their continued political power and access to wealth. The impacts of inequality have been widely discussed in the Mongolian media and have entered into the everyday conversation of both advantaged and disadvantaged Mongols (Buyandelgeriyn 2007). Today, this national discourse is fueled by the highly visible subculture of individuals with wealth, such as those residing in the relatively new gated communities springing up in prestigious parts of the capital city. These Western style complexes began appearing in Ulaanbaatar around 2004 and quickly became part of the rapidly changing cityscape. While walled cities, palaces, and monasteries are nothing new in Mongolian history, what makes these gated structures novel is how they participate in a specific social context of rapidly changing relationships (Fig. 2.2).

Unlike other walled precincts in Mongolian history, the small residential groups within these gates are defined solely by wealth. Having adequate means to buy a residence and pay fees makes one a community member and bestows a particular identity arising from his or her exclusive membership. Such identities constitute part of an elite subculture that actively builds and supports class emergence. Such a visible and pronounced denotation of class distinctions has not existed in Mongolia since the 1920s and 1930s when socialists violently repressed the indigenous aristocratic lineages supported by the Manchu dynasty (Lkhagvasuren



Fig. 2.2 A new gated community in Ulaanbaatar replete with a military style guardhouse (photo by William Gardner)

2009). While political privilege with enhanced living conditions existed for those well-connected in the Soviet era from 1921 to 1990, it was not at all comparable to the present day social process of elite emergence through ostentation. Gated communities along with designer clothing, expensive foreign cars, trips abroad, frequent club and restaurant dining, and even speaking English all constitute new forms of asserting social difference. The interesting questions are why would non-indigenous products, practices, and ideas be so prominent in the process of producing social difference and how do these novel imports function socially to establish such differentiation?

To understand why novel materials figure into this process, it is useful to think of contemporary class distinctions in Mongolia as a social negotiation that unfolds step-by-step among multiple interest groups, factions, and ad hoc associations. None of these groups are homogenous, permanent, or necessarily "real" in the sense of frequent face-to-face association. The new "elite" in Mongolia is not an actual social group as much as an abstract collective that takes on social consequence by being consistently referenced in interactions and expectations between individuals. Building a class is indeed about wealth and power but from a social perspective it is also about creating new relationships based on daily engagements that follow certain behavioral and interactive patterns: Specifically those that outwardly signal distinction and inwardly impart a sense of difference between interactants.

In this respect, Tilly (2003: 34) argues that one way "distinction" comes to be socially understood, enacted, and consistent is through an expenditure of wealth and power that is socially demonstrable and actively distinguishing. Introduced materials and material practices from foreign cultures have great potential to play this kind of role in ongoing negotiations in two ways. First, novel materials from

afar lack indigenous social context and therefore are endowed with a capacity to elicit new kinds of relationships (Robb 2010: 502). Because these materials are possessed by one party and not the other, the possibility of enacting a new relation based on distinction (i.e., having versus not having) is accentuated. Second, new relations are just that—they are new and therefore neither widely recognized nor stable in the face of continuing interactions which may suppress differentiation. If class formation arises from social encounters transpiring day-to-day, then those material items implicated in this process can be seen as social statements which are particularly insistent and persistent due to their concrete permanence (Robb 2004). Having once acquired social meaning, materials make assertions that occur over and over as part of any ensuing social negotiation.

In the case of gated communities in Ulaanbaatar, interactive episodes plainly visible day-to-day along many streets in the city provide apt illustration. These include individuals being turned away at the gate by uniformed guards, children outside the gated walls staring at children playing inside on imported play sets, and passersby lambasted for being in the way when a resident's car exits or enters the gateway. A single afternoon's observation is enough to reveal how the presence of walls and gates affects interpersonal relations within adjacent neighborhoods and beyond. If two unacquainted individuals, one a member of the gated community and the other an outsider, meet at the gate, what portion of that social encounter registers the operative social statements about privilege and exclusion, especially in terms of the expectations for how each should treat and be treated by the other? Given the climate of social change in Ulaanbaatar today, I would guess there is quite a marked effect, especially given that the gated community is only one of multiple material codes that consistently and simultaneously enact these expectations for differentiation between individuals. To the degree that these expectations are carried through in daily interactions and persist over time and are genuinely believed in, a real and tangible class distinction comes to exist within Mongolian society.

This process is not intentional and cannot be described as the result of strategizing on the part of ambitious elite individuals. Gated community designs were not imported to Mongolia as a way to promote class per se, rather they were selected by land developers intent on marketing housing for a profit. Those purchasing the housing did so for a wide range of reasons including the desire for a functional home, for financial investment, and perhaps because their peers did so. However, these designs were introduced into an ongoing social negotiation and became socially meaningful according to a process that both represented and enacted broader asymmetries. In other words, the role of this particular architectural layout was not necessarily predetermined to be a prestige symbol, although such an effect may have been known to occur elsewhere. After all, in purely material terms what we are discussing is no more than brick and mortar. In fact, how any particular novel material or material pattern takes on local meaning is subject to the ways diverse individuals proceed to interrelate with reference to that novel material. A modal social pattern associating a new material practice with status, exclusion, or inequality comes about only over time and by way of a complex composite of multiple intentions, interactions, and outcomes.

The power of such material assertions to impact the broader social fabric is appreciable and herein lies a pathway for organizational change. Nevertheless, this change is still part of a socially negotiated process regardless of how asymmetric that might be. In the case of the Mongol *noveaux riche*, social resistance to their privileged lifestyles has been palpable. Growing numbers of ordinary Mongols dislike the new inequality and resent the new elite with their accumulations of wealth and the politics of corruption that supports them. By publicly protesting with demonstrations, media and internet campaigns, and even street violence, citizen groups have opposed the grab for wealth and power that marks this new social divide. Gated communities play an active role in this discourse. Mongols who oppose the process of wealth-based distinctions have directly used the gated communities to comment, whether by graffiti or opportunistic vandalism. Most ordinary people, however, express their disapproval of the gated communities quietly but pervasively in thousands of daily conversations. As such, the social negotiation over class continues in Mongolia today.

These three case studies reflect the "nuts and bolts" of how materials and, by extension, non-materials such as symbols and beliefs, move geographically, culturally, and socially. The formula involved intermingles materials, novelty, social contexts, and social relations into a negotiated process that is neither predictable nor inevitable (Helms 1988: 266). Novel materials are introduced by design or by accident, but local reception and meaning derives from involvement of the particular item in a dynamic indigenous social setting. This unique involvement transforms novel materials from an undefined novelty per se into a wide variety of local meanings and forms. My three case studies attest to such transformations: Simple bricks and mortar become an enduring symbol of privilege; a Western cookie becomes a Chinese cookie by altering its very essence; and what is a revered ritual implement in Mongolia becomes a mere plaything elsewhere. In none of these examples are essential qualities or meanings maintained across cultures because the process of transfer is neither simple nor straightforward. Instead, cross-cultural sharing is improvisational and innovative rather than merely replicative (Thomas 1991: 28). It is driven by the inclusion of novel items, materials, ideas, and techniques in local social negotiations which can potentially remodel local relationships and simultaneously confer new social meanings on imports and even refashion them altogether (Hodder 2012: 65). These relational changes play out locally, but when they involve the resupply of materials, information, or infrastructure by way of far flung networks, then local relations become enmeshed in larger spheres of long-distance interaction.

2.4 Interregional Theory and Social Transformations

Archaeologists use a range of terms to discuss encounters between spatially discrete cultural groups. These include acculturation, interregional interaction, culture contact, and even ancient globalization. What each of these terms has in common
is a focus on the transformations brought about when people, ideas, and things from different cultures (i.e., novelty) move by various means into other cultural settings. Given this diverse vocabulary, it is helpful to clarify a number of the basic ideas and concepts used for this body of theory. I am guided in this discussion by Gideon Shelach's (1999, 2001, 2009), thoughtful work on interregional interaction in East Asia which sets a foundation for extending macro-regional analysis to other periods of time and across more distant Asian geographies. With regard to defining terminology and concepts, a few questions need to be addressed forthright: How did transfers between regions and cultures occur in the past and what range of activities count as interaction and contact? Moreover, what is meant by the terms "interregional" and "cross-cultural" and how and why are they related? Finally, how did changes in the way people interact across geographical space contribute to political and organizational change?

2.5 How Do Things Move and Become Novel?

Considering the first of these questions, I agree with Shelach's assessment that the methods of movement and transfer in the past were relatively few and straight-forward: Either things moved person to person or people moved and transported things (Shelach 2009: 117). In most cases, ideas, techniques, and practices moved in conjunction with people and people moved in a wide variety of ways. For example, individuals or groups might move for long or short periods of time spurred by events as commonplace as seasonal change or as catastrophic as endemic warfare and environmental collapse. Ancient peoples moved for many different reasons including relocation, displacement, military forays, territorial occupation, exchange, itinerancy, and slavery among many others. As apparent from the material case studies already discussed, material goods also moved in diverse ways through exchange or gift giving, by incremental down-the-line transfers, or by sudden exposure and discovery.

However, if movements of people and goods were the key processes, why not focus on studies of migration and trade; especially since both of these topics have substantial traditions of research among archaeologists (e.g., Frachetti 2011; Dillian and White 2010)? Trade and migration are indeed pertinent, but the broader topics of interaction and contact treat a different social, temporal, and spatial question about how disparate and distinct peoples began to learn more about their neighbors as part of an expanding social environment. Moreover, a focus on interaction and contact goes far beyond the direct face-to-face encounters or conflicts that receive the majority of attention in research and historical imagination. For instance, the Inner Asian frontier is commonly understood in terms of direct confrontation and warfare between Xiongnu and Han dynasty troops, but what exactly preceded these confrontations? Very likely, there was a period of occasional and opportunistic long-distance contacts meshed into regional networks, and, prior to that, incremental regional exchange and indirect circulation of foreign materials, technologies, and information. Before that, however, we can only imagine how groups separated by a thousand or more kilometers must have had imperfect and piecemeal stories, myths, and legends about other peoples far off who lived in different ways and in strikingly different lands.

All of these incidental, direct, and indirect modes of contact between dispersed groups figured into long-term social trends involving greater knowledge, more interaction, group re-configurations, and political action. As I will argue, these less direct, gradual, and distant forms of contact which often preceded more regular face-to-face encounters are subtle, harder to detect, and difficult to conceptualize; however, they were just as significant and influential (Dietler 1998: 298). Both direct and less direct forms of contact were transformative for societies in East and Inner Asia but these processes had different timelines, histories, and impacts that require careful study if we are to explain the rise of something as complicated as the Inner Asian frontier and the Sino-Xiongnu wars.

2.6 What Counts as Long Distance, Cross-Cultural, or Interregional?

The second question is what do we mean by social interaction that is interregional or cross-cultural in character? Archaeologists use descriptive terms like "interregional" and "cross-cultural" without always defining them clearly, but in the simplest sense, they all mean the same thing: Social interactions carried out across large geographical extents (i.e., spatially defined) and across areas of cultural difference (i.e., socially and symbolically defined). The assumption linking one to the other is that cultures are tied to specific geographical areas and, as distance from or across an area increases, cultural differences should also increase (Barth 1969: 11). The problem arises in how we define geographic-cultural units since who is to say where one region ends and another begins much less where a so-called discrete culture is located in space (Barth 1981: 32-40; Wolf 1982: 387). How then might we conceptualize the intersection of space, place, and culture in order to begin addressing differences across them? The answer to this question must be formulated both theoretically and practically. Since my main argument about Inner Asian statehood concerns space, difference, and organizational change, the way in which these geographic and sociocultural terms are conceptually understood is quite important and deserves close consideration.

Shelach (2009) presents the practical side of this issue in his study of the Inner Mongolian frontier. In order to analyze the movement of people and things across different regions, he breaks up the continuum of interaction into discrete geographical–cultural regions that consist of the Central Plain of China, the Northern Zone, and the Eurasian steppes. Shelach speaks of "regional-scale" interactions occurring within these zones and "interregional scale" interactions taking place between them at distances ranging from between 700 to 1,000 km. His regional definitions are not arbitrary but are based on a contextual knowledge of material cultures and long-term histories that mark real distinctions between inhabitants of these areas. I employ a similar breakdown and add even more geographical–cultural zones to the north, east, and west; however, these spatial representations of cultural difference are extremely coarse when considering the fluidity of interaction and the cultural variation within any one designated space. Shelach uses his categorization in a heuristic manner and appropriately avoids the temptation to essentialize or homogenize these regions and their peoples.

Although this practical approach to local, regional, and interregional geographic extents is effective and convenient for archaeologists, it raises a deeper theoretical question of how to understand and work with the concept of scale. I agree with a number of other anthropologists that interlinking global and local social scales are central to answering questions about long-distance interaction and social change (Dietler 2005; Stein 2002; Schortman and Urban 1992; Helms 1988). Given this, how might the Inner Asian interregional/cross-cultural question be restated in terms of processes of interlinked scales? I turn to the thought-provoking work of Richard Howitt (1993, 1998, 2002), an Australian geographer very much involved in seeking a definition of scale as both a social and spatial phenomenon. Howitt points out that scale is usually handled with descriptive terms of either size extent or social level, all of which are likewise used in archaeology. For example, social level is commonly arranged in a nested hierarchy consisting of household, community, and polity/nation or state. Size-extent hierarchies include local, regional, macro-regional, and global scales. Howitt (1998) contends that these descriptive hierarchies are metaphorical and intuitive, and while they do address real aspects of scale, they cannot capture its implications as a social dynamic.

Instead, Howitt suggests considering scale not just in terms of size extent and social level, but also in terms of relation (Howitt 1998: 49). He proposes that when it comes to social process, scale is not arranged hierarchically such that larger levels contain smaller order levels, but rather these scales interpenetrate, co-constitute and are dialectically related. In other words, global scales contain smaller scales but are also contained within these smaller scales of process and interaction. For an example of this, he points to the dialectical link between national culture and individual values such that "each clearly contains, responds to, encapsulates, and is constructed from the other" (Howitt 2002: 305). To quote Howitt directly:

Any locality (local scale space) is constituted not only by things that are directly manifested within the locality, but also by cross-scale relations. These relations operate not hierarchically or uni-directionally, but simultaneously; not just sequentially but also in different orders ... It is also clear that a shift in scale is simultaneously a change of both quantity and quality. A shift in scale produces consideration not just of more (or less) but also of difference (Howitt 2002: 305–306).

Two of Howitt's points are pertinent for a scale-informed analysis of the Inner Asian past. The first is that his plural, compounded, and dialectical understanding of scale applies globally and locally at the same time. This has consequence for primary social processes involving relationships, identity, group formation, and politics. The second is his recognition that shifts in scale represent qualitative differences in terms of both perspective and emphasis as well as information and content. To be concise, increases in scale and in heterogeneity are strongly correlated. If scale is indeed inter-defining, then the expansion of scale pertinent to a social process will inevitably introduce to that process novel arrangements, information, and content even at the micro-level of interaction between individuals. As such, social life becomes substantially more entangled in affairs that are both immediate and elsewhere at the same time (Giddens 1990: 18, 64).

Over the second and first millennia BC, the social history of East and Inner Asia clearly involved a process of expanding scales of relevance with regard to local interactions. An individual living in 2000 BC on the northern extreme of the Gobi Desert was not greatly affected by events 1,000 km away in the heartland of China. Fast forward the same individual and location to 100 BC and this person's identity, political stance, and local relationships were deeply interwoven with external events at that distance and even farther away. Therefore, the expansion of East and Inner Asian interactions can be thought of in terms of linear and nonlinear frames. Analysis and model building should address both how people of a given region gradually came into contact and expanded social interaction with peoples of other regions, and how expanding scales of contact figured into and shaped interactions at local areas on a day-to-day basis. Again following Howitt, as interaction expanded across and between new geographical areas, these processes necessitated an involvement of "difference" and "novelty" in the quality of activities and interactions locally. As such, a global-local perspective on interregional interaction represents how geographic-cultural differences are encountered, tolerated, rejected, exploited, or politicized as a function of ongoing social negotiations between individuals at the local level.

2.7 How Does Inter-cultural Process Change Social Organization?

The primary objective of this study is to discern how these subtle factors of difference, scale, and interaction became implicated in centuries of sociopolitical change that eventually contributed to the rise of the first eastern nomadic state. For Inner Asia and for other parts of the ancient world where similar questions apply, such inquiries have led to decades of theorizing, debate, and re-theorizing. Given different sociocultural and political contexts, organizational outcomes of inter-cultural contact have varied widely. This has led anthropologists to necessarily draw on an eclectic range of models and frameworks. Despite this diversity of ideas, many of the approaches still focus on powerful centers, usually in the form of states or empires, as constituting the primary drivers of regional and macroregional process. Such thinking has played a substantial role in explanations for how and why states formed in Inner Asia. Existing models tend to emphasize the role of China as a regional center that is thought to have provided both political models for imitation by others and the catalysts for macro-regional complexity on its periphery.

These state-centric ideas highlight the initiative of the most complex society within a growing interactive network rather than the unique dynamic of the network itself. There is, however, a trend in archaeological thinking away from stateand empire-centered perspectives toward multi-polity and multilateral approaches. This shift moves away from a simple sequential emphasis on primary, secondary, and tertiary complexity to a complexity framework that is simultaneous and dialectical but also differentiated in terms of diversity of process and formats of complexity. The most recent archaeological models to address the association of interregional interaction and organizational change explore new ways of implicating long-distance contact in local sociopolitical transformations (Schortman et al. 2001: 325; Parkinson and Galaty 2007: 117). These offer promising perspectives based on concepts like connectivity (Pitts 2008), common difference (Wilk 2004), social fields (Kohl 2008), nonuniform institutional alignments (Frachetti 2009, 2012), and dynamic networks (Knappett 2013). Unlike earlier approaches, these new theories of interregional interaction emphasize multilateral and multi-directional contact, the importance of local choice, diversity of cultural response under conditions of contact, and attention to different scales and inter-scale linkages.

Considering the Inner Asian context and the processes leading up to state emergence, I find Dietler's (2010) use of the concept of "entanglement" particularly promising. Dietler borrows this concept from innovative work by Nicholas Thomas on material culture and European colonialism in the Pacific (Thomas 1991; also cf. Hodder 2012: 89), but Dietler's goal is to analyze the eventual incorporation of southern France into the Roman empire (c. first century BC). His analysis begins with the very first steps of contact that occurred centuries earlier between indigenous French populations (i.e., Gauls or Celts) and Greek wine merchants on the Mediterranean coast. He focuses on the role of alcohol in competitive feasting that provided an arena for local politics among groups in southern France. These groups had long employed their own forms of alcoholic beverages during feasts but the availability of Greek wine and imported drinking paraphernalia greatly changed conditions. Those with access to the wine and the use of fancy drinking implements were able to stage and host feasts which led to their attainment of politically influential positions. In ways that no single set of actors could possibly have anticipated, the wide availability of Greek wine and drinking gear gradually expanded access for junior members of society to compete in feasting ceremonies. Rising competition periodically transformed into unprecedented violent conflicts that spilled over to impact the adjacent Greek trading colonies that supplied wine. These colonies were under Roman protection and as a result, the alliance with Rome expedited imperial involvement in what were essentially small scale and far removed local processes among the indigenous Gauls. Direct Roman military action against the Gauls ended with the colonial occupation of the region and integration of its indigenous peoples into the empire.

In Dietler's case study, entanglement refers to the unanticipated but consequential webs of contacts between different peoples that can interconnect conditions locally and globally. These webs arise between distinct cultural groups through new forms of exchange and the indigenous consumption of foreign goods which become central to local social negotiations. The strength of Dietler's approach is in describing the social, temporal and most importantly, the scalar intricacies, of the way in which indigenous choices can have large ramifications over time (Dietler 2010: 336– 344). Three key concepts distill this interaction model down to its foundations: (1) Contacts between differentiated societies, (2) inter-dependence or "contingency" as one outcome of these contacts, and (3) the unintended consequences of how such conditions then play out. According to Dietler, consumption of foreign goods promotes a process of entanglement that links societies together in new cultural, economic, and political relationships. Over time, inter-dependencies arising from these relationships can have unintended consequences with many possible transformative effects, depending on the nature and history of entanglement (Dietler 2010: 74)

This framework accomplishes a good deal of analytical work in structuring a diachronic narrative of colonialism for southern France. For my purposes, however, the other "possible transformative effects" mentioned above are of interest when it comes to Inner Asia. I find that Dietler's ideas could apply equally well to entanglements in which colonization was not the eventual outcome. On the opposite side of the Old World, the Sino-Xiongnu wars were in full force at the same time as the final Roman colonization of the Gauls (c. late 2nd to mid-1st centuries BC). Whereas these broader entanglements in Europe led to an expanding Roman empire able to colonize distant peoples and lands, the contemporaneous story of macro-regional entanglement in East and Inner Asia played out quite differently. Instead of imperial conquest and colonization, the Qin/Han and Xiongnu states emerged almost simultaneously, provoking centuries of conflict and an eventual stalemate between two equally powerful but very different rivals. How then might Dietler's concepts be expanded to fit an alternative history in which entanglements resulted in diversified forms of statehood counterpoised across a macro-regional frontier?

2.8 Foundations of Entanglement: Relationships, Negotiation, and Contingency

In order to re-orient entanglement toward the Inner Asian experience, I examine more closely Dietler's three assertions about links between distant societies, contingent processes, and unintended consequences. Each one of these important points needs to be considered within the particular context of Inner Asia to work out the precise nature of inter-societal links and how these links may have configured contingent processes of articulation. In particular, I am interested in exploring what exactly "unintended consequences" might mean in the Inner Asian case and investigating how such factors could have facilitated the emergence of statehood among nomads. However, answering these kinds of questions first requires a clear statement of what these concepts mean and how they relate to social transformation. Although words like "contact," "link," and "articulation" are expressive, from a social standpoint they all refer to one and the same process: the making and maintenance of relationships. Taking advantage of Howitt's model for co-constituting local and global scales, Dietler's approach to entanglement can be re-formulated in the shape of a two-part inquiry: (1) How did a given set of local relationships transform as a larger-scale context of interaction, contact, and cultural difference became implicated as part of that particular local setting, and (2) how did larger-scale dynamics simultaneously transform because of these changes within local communities?

I place conceptual emphasis on the range of ways that local and regional relationships might intermingle in order to generalize Dietler's theory for other historical contexts. If questions about relationships are to be central, then recent ventures by archaeologists into relational social science provide a good starting place. A consciously "relational archaeology" has been emerging parallel to, but distinct from, relational approaches in sociology, geography, and political science (Emirbayer 1997; Donati 1995; Archer 1995). Whereas in other fields these approaches derive from diverse sources ranging from social network analysis to symbolic interactionism (Mische 2011), archaeological relational perspectives arise from work on selfhood, practice theory, social identity, and material culture (e.g., Fowler 2001; Brück 2004; Hutson 2010: 23-35; Robb 2010: 501-502; Dietler 2010: 58–60).¹ Relational social science is far from a cohesive set of ideas but these ideas all share an analytical focus on the relationships that tie individuals together and how the quality of such relations constitute groups. To use a network metaphor, it is not the nodes (i.e., individuals) that are the loci of process nor the focus of inquiry, but instead the articulations as they exist and develop between nodes that are of primary interest (Emirbayer and Goodwin 1994: 1417; Robb 2010: 502).

In the simplest sense, a relational take on the question of long-distance contacts suggests that content contributed by such interactions can transform the quality and course of local relationships and thereby affect local social negotiations. I place added emphasis on the word "can" since long-distance inputs do not cause local transformation but instead are caught up in and create new pathways for ongoing social negotiations. Clearly defining these complex terms would help to describe how distant and local processes become entwined. First of all, since social relationships will be the focus of analysis, it is important to decide what a social relationship actually consists of. In step with Rogers' examination of culture contact (2005: 338–339), I take interaction between individuals as the building blocks of relationships and social process. Social interaction can involve many kinds of transfers but fundamentally it is a co-exchange in which information is shared and intermingled (Braun 1986: 122). By way of social interaction, individuals are constituted as "persons" and their behaviors, likewise, become relationally referenced and meaningful (Toren 2002). However, this observation raises some

¹ For useful and brief overviews of relational sociology in Europe and North America see Donati 2007 and Mische 2011. Informative discussions of the differences between structuration and practice theory and recent relational approaches are provided by Crossley (2011: 24–28), Bottero (2009), Dépelteau (2008), and Emirbayer and Mische (1998).

sticky questions for those advocating relationships and networks as the proper units of social analysis. For instance, how do relationships come about and how do they have consequence? Furthermore, if they are "real" phenomena, where do they reside? Still more challenging, how can we connect microscale relationships to the big picture of social organization?

2.9 Social Relationships

To answer these questions and, in so doing, establish clear definitions for a discussion of entanglement and organizational change, I begin with a model for social process built up from one-to-one interactions. I start with the most basic question: What is a relationship? To my mind, a relationship is the sum of those social interactions that accrues over time (cf. Crossley 2011: 35). A relationship between two interactants is a history of their interactions that is remembered differently by each individual and referenced in ensuing interactions. This relationship is overwritten and remade whenever there are new encounters between the interactants, but remade in the context of its prior making, i.e., it unfolds with reference to precedent. Precedents guide co-action in the present and expectations for the future. Therefore, a relationship is more than just a history past and gone; it is an active history that provides an idea of what went before, an assessment of what is presently transpiring, and expectations for what comes next. Each interactant in a pair holds different versions of this history which have reality only in tandem and in process. As such, it is a shaping of both to the pair. The properties of this social relationship cannot be reduced to the individual constituents nor realized in their absence. For these reasons, some refer to this unique social information space as "actors-in-relation" (Crossley 2011: 23).

The above definition refers mainly to a dyadic relationship between two interactants which is the most convenient way to describe and make sense of the coprocess of interaction. However, in the pursuit of clarity, this example greatly simplifies the nature of relational dynamics since there is in fact no such thing as a simple dyad. All relationships are informed by many other multiple and overlapping relationships (Hutson 2010: 28). This encompassing network locates the immediate relationship of interest within an interconnected field of information, consideration, and contingency. Forthcoming interaction within a particular relationship will be influenced by the unfolding of exterior relationships perceived as pertinent and vice versa, i.e., our choices are shaped in part by the relevant choices made by others around us. Therefore, social relationships are inter-contingent in terms of how they play out. I define the term "contingent" using both of its common meanings: Dependence on a process and the possibility that said process may or may not play out as expected.

Inter-contingency of relationships makes any given interaction potentially global in consequence and meaning. To make the point perfectly clear, I take advantage of the common experience of high volume traffic as a metaphor to capture a sense of inter-contingency as it occurs at the moment of action. Because rapid commutes in traffic are a daily practice for many Westerners we often take them for granted, but in reality these actions are anything but simple. In fact, the daily commute could be thought of as a complex multi-agent collaboration continually hovering between more or less successful collective movement forward or collective disruption. This process is minimally regulated by a set of traffic rules but these in no way account for the order of the process. In place of rule-governed behaviors, what might be called "contingent order" is configured by immediate conditions mediated by constant perception and communication. The dynamic flow of multiple drivers makes collective safety entirely dependent on the shifting relationships between individuals and the way interactions of the moment play out in terms of assessment, anticipation, choices, execution, and accommodation (cf. Dépelteau 2008: 60). A misstep on the part of one and the inability to accommodate on the part of others portends a pile-up with subsidiary consequences for all. In this way, individual actions can have collective effect, precisely because they are never entirely individual but rather constantly inter-contingent.

2.10 Social Negotiation, Groups, and Social Order

While a traffic metaphor helps to describe the dynamic process of closely coupled multiple relationships, it does not address the fact that our social relations comprise a great deal of additional information. Any given relationship unfolds with reference to the multiple relationships informing and contingent upon it, but unlike traffic interactions, it also implicates groups of all kinds: ad hoc associations, families, communities, factions, ethnicities, or polities. All of these terms imply a grouping of relationships which are socially recognized and which have a selfrecognized membership over short or long periods of time. Contrary to common usage in archaeology referring to "interaction" between states, communities, or families, I try to avoid statements implying that groups are entities that can and do interact (e.g., Schortman and Urban 1992: 237). In fact, groups per se cannot interact; individuals interact but they do so by contextually referencing a group or groups in the quality of their interactions (Barnes 1986: 82). I would even go so far as to say that the relational impact of a group in "coloring" interaction and relationship building between individuals is what gives that group a social reality beyond momentary, periodic, and often partial, face-to-face aggregations. It follows that any social collective is as much imagined as it is associative.

This provides a pathway for defining "social negotiation" as discussed earlier in the section on elite gated communities of Mongolia. In that case study, a *noveaux riche* elite engaged a largely disenfranchised public in material patterns of exclusivity and privilege appropriated from the West. However, I locate this process in the daily encounters between individuals on the street where interactions, perceptions, expectations, and precedents are formed, even though it would appear to be a process driven by different groups. In this case, the term "social negotiation" implies give-and-take between interest groups in Mongolia, but in fact there was no readily identifiable group or groups on the ground. Rather, there were perceptions among individuals of distinctive groupings that came to have real-relational consequence by way of communication between them. Individuals who are selfrecognized members and non-members of such a perceived group have potential to interact in ways that reference their different understandings of that respective grouping as a part of their unique relationship. Therefore, social negotiation, as I use that term, is an intrinsic part of relationship building that implicates perceptions of a group or groups in the quality of interactions between individuals. These perceptions influence the behavior of interactants as they respond to one another in the progression of a relationship through time.

All human societies are differentiated according to various "groupings," and these are organized by culturally defined arrays of distinction and affiliation. To the degree that these are consistently enacted and reified within relationships, they represent a social order that continues to impact behaviors and interactions. One interesting point from this observation is that groups (i.e., distinctions and affiliations) cannot exist unless people behave as if they do. Since social negotiation is a dynamic and inter-contingent process, failure to enact behaviors that implicate a particular set of distinctions between individuals lessens the social impact of those distinctions. This can effectively diminish the perception and influence of a particular social grouping and thereby re-arrange social order. On the other hand, inventing, emphasizing, and enhancing novel or former distinctions as a part of relationship building can likewise shift social order through the emergence of a social group. In this sense, every relational interaction is a choice made at the spur-of-the-moment that has meaning in terms of whether it reinforces or subverts existing categories of social difference. Because relationships are inter-contingent, that choice has some potential, however great or slight, to subvert and therefore to change the arrangement of society.

2.11 Politics and Social Organization

As the example of recent class formation in Mongolia suggests, social groupings are flexible, dynamic, and enacted; but they are also associated with privileges and limitations. Resources, information, access, capacity, and responsibility are socially allotted according to these arrangements of social groups. How these arrays of distinction and affiliation are defined and then matched to sets of privileges and limitations is the very stuff of politics. This observation allows for a useful definition of politics and political order that is independent of the artifacts produced by political process (e.g., power and authority). Politics is a venue of social negotiation that contests the social makeup of distinctions and affiliations (i.e., differentiated groups) and the allotment of privileges and limitations across those respective social differences. In other words, political negotiation is an ongoing social discourse concerning who does what, who gets what, and how to conceive of the distinctions and affiliations that arrange groups of stakeholders (Wolf 1990: 590). The basic tools of this discourse are accommodation, deference, resistance, coercion, and violence, and these tools are available to all participants in some form. Likewise, the perceived costs and benefits of exercising these tools are often part of the negotiation process and these are usually distributed asymmetrically across groups in ways that are understood in terms of institutional differences in power and authority.

Politics, seen in this light, suggests that social order and the allotment of privilege and limitation among social groups are dynamic and cannot easily be captured by static concepts like structure, system, or network. Like the traffic metaphor above, social order is constantly on the move but is "orderly" to the extent that multiple, inter-dependent relationships more or less redundantly play out in a somewhat anticipated manner. Built into this perception of social order are a number of historical, relational, symbolic, political, and psychological factors that inform individuals that they in fact engage in a more or less predictable social arena that likely will continue to be so. I emphasize the word "likely" since given diverse and complicated inputs, every single relationship is ultimately probabilistic in terms of its anticipated course of interaction. At the spur-of-the-moment, how an incipient set of interactions unfolds between two individuals is never entirely predictable nor completely unpredictable (Barber 2007: 25–26).

As argued above, these interactions can and do have significance for the way other interactions unfold and how differentiation, privilege, and limitation are socially emphasized or diminished in favor of alternative arrangements. Therefore, as Giddens suggests (1984: 257), political negotiation on the part of all participants is very much about anticipating multiple outcomes, and, in particular, about assessing and increasing the probability that a relationship or a set of relationships plays out in an expected way.² As such, political negotiation is this interactive social process of weighting and balancing agendas, costs, and benefits with regard to individual and collective/group outcomes (Campbell 2009: 823). These negotiations are therefore extremely sensitive to perception, anticipation, probability, and uncertainty in relationships. It follows that when such negotiations perpetuate differences between people that are not only exclusive but also unequal with respect to access to important social resources, negotiations will be all the more elaborate and contentious. They may involve violence, theatrics, protest, material symbols and forceful ideology, and the bestowal of titles, ranks, and wealth to incur loyalty, as well as factional alliances of opposition (Baines and Yoffee 1998). If such a social dynamic is to be prolonged, it must draw upon a substantial history of experience and experiment; i.e., a multi-party negotiative capacity that is both top-down and

 $^{^2}$ In contexts where political negotiations have become highly formalized and controlled (i.e., institutionalized), the predictability of these outcomes might even be compared to scripted public theater (Scott 2009: 4). However, I would argue that such political arenas are a relatively recent phenomenon derived from centuries of experimentation with state techniques for political monitoring.

bottom-up and assumes an investment in political technique on the part of all participants whether commoner or elite.

Finally, how is social organization implicated in these dynamics of social process? Political negotiations involve a number of different kinds of shifting and contested groups with degrees of latitude in the daily "give-and-take" of interactions that reinforce or subvert these "groupings." The extent to which contested distinctions and allotments of social resources play out over a short time period may be highly variable, but over a longer period of time, a composite pattern emerges when the outcomes of these many negotiations are more or less broadly consistent. Social organization, therefore, can be thought of as a modal pattern of social negotiations over some period of time and at some prescribed social scale rather than as a structure or a system. It is, as Donati (1995: 72–73) argues, an arrangement of enacted relationships consistent enough to be observable across a given social space and time. Re-arrangement of these more or less consistent relationships indicates organizational change.

2.12 Entanglement, Inter-contingency, and the Uncertain Politics of Change

This framework for social process is abstract and admittedly far removed from the survey transects and excavation units of archaeology, but in my opinion, it sets a groundwork for clarifying one or another of the equally abstract concepts archaeologists habitually draw upon such as "complexity" or "statehood," as well as "entanglement." In the case of entanglement, the above sociopolitical interaction model helps to make clear the potential "tangling" that can occur between local and interregional scales through local consumption of novel imports, e.g., objects, materials, ideas or beliefs, practices, technologies, foods or drink, and so on. The power of novelty is not so much that it is new per se, but that it is relationally undefined and therefore represents a space around which new interactions can be generated and new relationships shaped (Dietler 2010: 59; Alt 2006: 290–293). As such, a novel import has potential to become implicated in the way relationships are negotiated and sustained among an indigenous group, and this is particularly pertinent in the case of negotiating local politics.

When political negotiations depend upon the ongoing availability of an import for perpetuating relationships of distinction and privilege, a more stringent connection between local and regional social scales comes about. The playing out of local politics becomes contingent on the anticipated unfolding of longer distance relationships allowing access to and acquisition of these imports. Entanglement, then, is a scalar process in the sense that Howitt describes above. It implicates distant groups, their respective relations, and regional dynamics in the affairs of an immediate group, and vice versa. These articulated large-to-small scale sets of interactions are well depicted by the imagery of being "entangled." Dietler makes similar points in his work on the diachronic entanglement arising from the indigenous Celtic consumption of Greek wine in southern France. The one addition I wish to make concerns the specific quality of political dynamics as this condition of scalar inter-contingency expands between regions and across cultures. In Dietler's account, the outcome of such conditions over time was an increase in local competition and violence among Celtic groups, eventually spilling over to impact the fringes of the Roman empire. The instability and potential threat represented by indigenous warfare on the frontier eventually paved a pathway for direct colonial occupation and control of the region by Rome (Dietler 2010: 342–344). In a more general sense, however, I believe that entanglement will always lead to a qualitatively different form of politics among the local groups so engaged and this can have various organizational outcomes.

Though colonialism was the primary result in Dietler's account, under somewhat similar conditions of entanglement in Inner Asia, the result was state formation among the northern nomads. What drove these Inner Asian political processes that seem so reminiscent of the Mediterranean example, but which yielded a substantially different outcome? For a possible answer, I consider the association between entanglement and uncertainty. I argue above that politics is a collective negotiation in which assessing the probability for the way certain relationships will play out is critical. If we understand uncertainty as making these assessments more challenging, then periods of heightened uncertainty imply a qualitative change in the overall conditions for politics. When local political relationships in turn are partly contingent on other relationships at local, regional, and potentially interregional scales, local negotiations must take into account a great deal more information coming from farther afield. In other words, the addition of scales of contingency makes the anticipation of local relational outcomes and the hedging of probabilities at the local scale that much more complicated. Entanglement is not just a situation where external articulations become important for reproducing social conditions locally, as some have argued (e.g., Chase-Dunn and Hall 1997: 28; Parkinson and Galaty 2007: 117). Rather, it is a condition in which the extent and scale of contingency transforms politics in a way that incorporates greater uncertainty in the unfolding of all relationships. In short, we cannot discuss long-distance interaction, connectivity, or articulations without considering the very real social effect of heightened uncertainty.

Consider in real terms what heightened uncertainty would have represented for the common man or woman living under these conditions on a daily basis. I argue that entanglement and heightened uncertainty simultaneously change the quality of social negotiation and the ways in which relationships and group stability are perceived. When uncertainty in politics increases, so does the possibility of competition, challenge, alternative arrangements, attempts at backing-up and reinforcement, shifting affiliations, and growing factions. For individuals involved in this setting, no matter their social standing, the portion of relationship building that becomes overtly political increases and overall a more fractious politics becomes embedded in the daily life of the community. James Scott describes this kind of political questioning as "infrapolitics" or the underground discourse of resistance, alternative visions, and new factional affiliations that abrade against established relationships of inequality (Scott 2009: 183–184). Scott's ideas pertain to systems of highly formalized and decidedly asymmetric political negotiations (i.e., systems of domination), but the basic principle is the same for any political arena: An unsecured politics invites alternatives for change.

The condition of entanglement over large spaces and over time increases the probability for organizational change at expanded social scales. Generally, how change comes about is a matter of precedents, setting, and context, but in the case of Inner Asia three general processes stand out. The first of these is the classic "web of multiplied effects" or simply the idea that small events can call forth big effects under specific conditions. This process arises from multiple contingent relationships across and between local, regional, and macro-regional scales making it more likely that small changes ramify and have large organizational impact (e.g., Hodder 2012: 163). Another process is the making of new factions that crosscut local communities or small polities. These can emerge from either elite or commoner connections, communications, and experience shared across local areas. During periods of uncertainty and potentially rapid organizational change such trans-local collectives have greater potential to become self-recognizing, to possess common agendas, and to take part in larger factions or incipient social movements as a way to negotiate a transformation. The third and final process is the innovation of new negotiative techniques adapted to higher levels of uncertainty. Because people "learn" to negotiate new versions of relationships by participating in them, the political uncertainty associated with entanglement encourages shifts in relational range, tolerance, and fluency. This implies that over time both commoners and elite gain greater capacity to work within uncertain political settings relative to their own situations.

These three processes together imply that political practice has the potential to become more sensitive to distant events and larger scales and more sophisticated in terms of possible pathways for negotiation. At the same time, the fractious politics brought about by uncertainty can enfranchise warfare, coercion, violence, and ideologies of lovalty and valor as cogent ways to remake, enforce, and bolster political relationships. Likewise, political techniques among commoners might emphasize other methods of choice including "voting with one's feet," ushering in and supporting new leadership, or armed resistance. Given unique historical contexts, the long-term outcomes of entanglement, uncertainty and fractious politics played out in very different ways in different regions. For example, Dietler's case study describes one way that powerful imperial outsiders acted to impose control over and disrupt the increasingly fractious and violent politics among indigenous groups. In addition to direct conquest and colonization, the same objective has been accomplished elsewhere by imperial strategies of co-option, displacement or genocide, frontier creation, and the support of some groups against others. In those cases where no dominant political or military power is present within a macroregion, a very different outcome may transpire.

2.13 Upscaling and Political Community as a Pathway to Statehood

Such an alternative outcome of entanglement brings us back to the Inner Asian context and the question of state formation. By the fourth and third centuries BC, many regions in Mongolia, Inner Mongolia, and parts of southern Siberia were entangled in political alliances that effectively networked local politics into larger scales of interaction. Most models for Inner Asian statehood view emergence of the Qin empire in China at 221 BC and nomadic warfare as the primary drivers of sociopolitical change on the eastern steppe. In contrast, I argue that a focus on indigenous political process within this context of far reaching but loosely articulated local areas provides a better understanding of what led to the first state among nomads. Events in China were not unimportant, but they were certainly far removed and indirect in terms of what eventually transpired on the steppe. Moreover, the pertinent period for focus in China's history was not the rise of Qin but the preceding Warring States period (481-221 BC) during which time political turmoil and devastating military confrontations produced subtle ripple effects across East Asia. Archaeological evidence suggests the possibility that an indigenous sequence of "upscaling" among numerous small-scale nomadic polities contemporaneous with the instability in China was the first step toward a nomadic state.

I define "upscaling" as one possible outcome of entanglement. It is a process that alters articulations, contingencies, and uncertainty among small-scale networked polities by way of a series of shifts toward a more encompassing collective scale and a new political identity.³ The relational logic behind this explanation draws on the very conditions that make for a setting of "fractious" politics, i.e., the high degree of uncertainty generated by multiple relational contingencies from beyond, across, and between a number of local political arenas. Upscaling is a rearrangement of these relationships at a larger social scale that diminishes uncertainty despite a constant and consistent degree of inter-contingency. In other words, relationships continued to be differentiated and unequal, and they were inter-dependent on the enactment of other differentiated relationships. Despite this, interactions were carried out with a higher degree of predictability such that, by and large, they supported and furthered this arrangement of inter-contingency despite (or maybe because of) the shift to a more encompassing scale. I think of this as a set of political negotiations that comprised a higher degree of consensus among participant parties. Consensus by definition is a process of delimiting uncertainty through negotiation, belief, and mutually perceived benefit, and initially this is what knitted together a series of formerly autonomous small polities into a larger multi-polity organization. This transpired, I argue, despite pervasive group distinctions based on hereditary privilege and inequality.

³ For two entirely different concepts of "scaling-up" see Knappett 2009: 16–17 and Turchin 2009: 198–197.

The term "consensus" is shorthand for suggesting that for some reason, numerous constituents initially bought into and participated in the making of a greatly expanded but highly differentiated polity and more or less behaved in ways that supported that process. Loyalty, ideology, material or social gain, desire for a better life, religion and ritual, fear of the unknown and the unpredictable-all of these are factors that could have served to order and stabilize interactions as they played out day-to-day at larger scales. When such factors become a major part of negotiating political relationships, they reduce uncertainty within a social field of exclusive and unequal relationships. Leadership, in this case, is neither managerial nor coercive but operates as a continually renegotiated, tentative, and unstable consensus among participants relative to their own agendas and shifting conditions. Notably, this enlargement of political scale is participatory and more akin to a social movement in relation to contextual events of a particular time. Anthropologists today would not call this larger collective a "state" or a "confederation" or even a "complex chiefdom," but it was regional in scale, internally differentiated, and it brought together multiple communities that had formerly been distinct. As a matter of fact, it does not fit neatly with any of the usual political typologies, precisely because it was relatively short term and transitional.

A concept I find useful for discussing this kind of regional organization is "political community." A political community has been defined in various ways by archaeologists but generally it refers to a novel collective, formed at an expanded social scale and composed of those who identify with a respective political process by virtue of their participation (cf. Smith 2003: 109; Pauketat 2008: 244). I use the term specifically to discuss a change in group affiliation that has the capacity to dissolve prior forms of political identity and boundaries. A regional-scale political community is not held together by an established statecraft of formalized relations, beliefs, or institutions, rather, it is precisely informal, fluid, and dynamic conditions that motivate diverse peoples to participate as a way to negotiate their own outcomes in the midst of an unpredictable but undeniably critical social event. Because it arises from a political setting in which many small-scale polities with elite privilege and inequality had long been the status quo, these aspects of political life were both universally understood and tolerated as initial conditions, even at larger social scales. For my purposes, therefore, a regional political community is a trans-local political identity marked by consensus and participation that is simultaneously asymmetric and differentiating, but also integrative because of a social movement-like mentality.

In my opinion, the strength of this concept is that it marks a transitional point in the upscaling of political relationships that cannot be adequately described as a "state" per se, but has some qualities that are definitely state-like. This introduces a focus on smaller increments of time and potentiality in state formation, and it suggests that many such regional political communities may have come together in the past but just as rapidly fell apart without leaving much to be detected in the archaeological record. On the other hand, if a regional coalescence offers genuine benefits to those caught up in it, the potential exists for these negotiations to modulate toward a more formal and normalized version of a regional political community perpetuated in the form of statehood. No matter what we might call such a political coalescence today, steppe peoples more than 2,000 years ago probably referred to this novel and emerging organization by still another name: Xiongnu. The obvious question is under what conditions would the people of multiple autonomous communities have participated in such a larger-scale collective? In order to better understand the context behind upscaling and what a nomadic state might have eventually looked like, we need to know much more about the politics of mobile peoples and how political negotiations might have been carried out and sustained among nomads of the eastern steppe.

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Chapter 3 Solving Contradictions: Nomads and Political Complexity

Settled peoples' recorded perceptions of nomads are intriguing in their common expression of curiosity and apprehension. Populations that were predominately sedentary and dependent on farming saw herders emerging from a far off grassland or desert as a cultural oddity, if not an outright threat. Two thousand years ago, the Han dynasty historian, Ban Gu (32–92 AD), expressed this sentiment quite aptly in his writings:

They flee to dwell in the northern borderlands, in the cold and wet wastes. They follow their herds across the grasslands. Their lands cannot be tilled for living; their people cannot be treated as subjects; therefore they must be regarded as external and not internal, as strangers and not as relatives (translated in Pines 2005: 80).

This dichotomy of cultures, often described as "steppe versus sown," is a powerful and implicit concept even today. As some anthropologists and development specialists argue, these stereotypes still support divisive and shortsighted government policies in traditionally nomadic regions of Africa, Asia, and Europe (Galvin 2009; Broadbent 2010). It is important to note, however, that both in the present and past, these ideas reflect not just cultural bias but real political concerns about the military power of nomadic groups in what were often politically important borderlands. If for nothing else, nomadic people are known for military capabilities that centralized states and empires, even in the twenty-first century, have found difficult to contend with.¹

The frequent inability of powerful states to counter nomadic militaries has been expressed time and again in accounts of nomad behavior on the battlefield. Military historian Michael Stephenson (2012: 17–19) sees in these reports two very different cultural ideologies about the nature of warfare as enacted along the frontiers of Eurasia over the past 4000 or so years. One such ideology, he argues,

¹ Witness recent warfare in Afghanistan, northern Pakistan, the Sahara, Somalia, etc.—all regions with long histories of highly organized pastoral nomadic groups, effective asymmetric combat, and turbulent politics.

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emphasized the heroic contest of skill between individuals as defined by handto-hand combat and infantry tactics involving direct confrontation. The other ideology emerged from traditions of horse-based archery that mostly precluded hand-to-hand confrontation. Instead of close individual encounters, this second approach emphasized long-distance engagement using projectiles, rapid coordination, strategic maneuvers, and surprise attacks. For combatants acculturated in a tradition of one-on-one warfare, the nomadic use of hit-and-run tactics was considered devious, deceitful, and even cowardly—as well as highly effective.

Although settled societies quickly adopted horses and archery from their nomadic neighbors, tactical change was more difficult; where military culture had favored direct combat (e.g., the Roman empire), cavalry units still functioned essentially as infantry on horseback (Stephenson 2012: 17). In these differing belief systems and mismatched expectations, the antecedents of today's symmetric and asymmetric (i.e., guerilla) warfare are clearly recognizable. A key difference between these two combat traditions, of course, was mobility and the riding animals that made mobility possible. However, rather than a simple capacity to move around the battlefield, it was the cultural embedding of movement as a customary practice and the daily use of horses that made this difference truly significant. Nomadic combat was devastating precisely because of a cultural expertise that made possible strategically coordinated group movements across large spatial areas and over drawn out schedules-skills which in fact were taken for granted in a pastoral nomadic way of life. In other words, the success of nomadic warfare did not arise from superiority in arms or an intrinsic warlike disposition among nomadic peoples, as sometimes is suggested. It arose from a lifeway in which frequent movement across expansive geographies and substantial knowledge of animals was entirely normal.

At its most basic foundations, this pastoral nomadic lifeway was and still is simply one way of obtaining food from domestic herds. The economics of foodways, however, are less important than the relationships that such a subsistence system requires: principally, inter-relations with communities of animals that are no longer wild but have joined together with human communities. The resulting cultural, social, and technological ramifications of this practice of depending on animals has had profound impact on human history in many parts of the Old and New Worlds. This raises the interesting question of whether there is something fundamentally differentiating about a lifeway of animal keeping and nomadism; and, if so, how might that difference imbue pastoral nomadic social and political organization?

My objective here is to answer this question by developing a theory of nomadic politics contextualized for the Inner Asian setting. I begin with an overview of theory on nomadic politics and examine how these anthropological and historical ideas have configured current explanations for Xiongnu statehood. Most Xiongnu research draws upon typological definitions for "the pastoral nomad" and "the state" but, in contrast, I argue that such definitions hinder a genuine exposition of nomadic politics and statehood. A diachronic archaeological perspective suggests great potential to update and refine anthropological understandings of political complexity among mobile herders, especially in the case of Inner Asia. Toward that end, I draw on cross-cultural archaeological studies of ancient pastoralists and on archaeological treatments of early states in order to bring new ideas to the discussion of Xiongnu archaeology. I propose a model for Inner Asian political negotiation based on the concept of "spatial politics" and argue that when political relationships are mediated by substantial distances and rapid movement, the expression of statehood will be different from that of mostly sedentary farming societies, but no less complex and no less "state-like." By combining the theory of social process and interaction from the previous chapter with ideas on nomads and regional complexity developed here, I arrive at a new model for the emergence and constitution of the Xiongnu state. First, however, an assessment of current explanations for Xiongnu statehood and the anthropological frameworks that support them sets the stage.

3.1 Nomads, the State, and Explaining the Xiongnu Polity

Anthropological research on pastoral nomads became prominent from the midtwentieth century onward and intersected quite well with the theory and agenda of cultural anthropologists of that time. A focus on cultural ecology and economic typology as a way to categorize and compare nomadic groups cross-culturally became a standard approach for anthropologists with less focus on the details of cultural context and long-term history (Bradburd 1987; Tapper 1997). These decades of mostly ethnographic research were important for understanding herd composition, environmental factors, productive risk, and trade. However, emphasis on ecology and economics is less well-suited for explaining politics, organization, ideologies, and lifeways (Cribb 1991). Nevertheless, the primary theoretical effort devoted to analyzing these latter aspects of pastoral nomadic societies has been predicated on economic and ecological characteristics of mobile herding. In contrast to sedentary farming communities with agricultural surpluses that could be taxed in support of large-scale political organization, nomadic pastoralism seemed a poor and risk-prone alternative. With regard to political economy, these ideas suggest that pastoral nomads could not create institutional inequality, stratification, hereditary leadership, or regional-scale polities indigenously. Accordingly, the presence of neighboring sedentary and agricultural states were probably responsible for providing stimulus and convenient models for nomadic states (Khazanov 2001; Salzman 2004).

Anthropologists offer two major arguments to sustain these ideas about nomads and politics. The first suggests that pastoral nomads tend to specialize in herd production, and due to their marginal and unpredictable environments, herd animals and the sustenance they represent can easily be lost to drought, unseasonal snowfall, or animal contagion. As a result, the reliable productive surplus needed to support elite stratification and leadership by way of taxation is simply unavailable. Moreover, because pastoral nomads must supplement what is perceived as a risky and unstable economy by way of obtaining grain from agricultural neighbors, management of these critical interactions with the non-nomadic "outside world" is what likely facilitated the emergence of a nomadic elite (Khazanov 2001, 2004, 2009). The second argument is that mobility would allow pastoral nomads to move away from any attempt to impose conditions of taxation, inequality, resource control, or political centralization. According to this logic, movement poses a significant hurdle for consolidating and controlling a population made up of relatively autonomous and fluid local groups (Burnham 1979; Irons 1979, 1999; Salzman 2004: 98–101). In this case as well, having to deal with neighboring sedentary societies provides a primary incentive for nomads to accept a degree of leadership and to participate in larger-scale political organization (Salzman 2000).

Ideas quite similar to these have a substantial history in anthropology, extending back to the mid-twentieth century if not earlier (e.g., Sahlins 1968: 37-38; Kroeber 1948: 276–278). These strains of anthropological thought also figure prominently in the research of historians whose early texts often describe interactions involving frontier raiding and exchange on the part of nomads, which suggests a need among nomadic peoples for sedentary products (Jagchid and Symons 1989). A good example of these ideas applied to the steppe zone comes from the research of Kürsat-Ahlers (1996) and his account of the relationship between Eurasian steppe nomadism and sociopolitical complexity. He argues the following five points: (1) Unpredictable ecological downturn destroys herds to such a point that accumulation and transfer of surplus is impossible; (2) extensive pastoralism hinders the intensification of production; (3) low population densities preserve pasture from overuse but also prevent sociopolitical aggregation; (4) geographical mobility forestalls the development of internal control and coercion mechanisms resulting in group fissioning; and (5) a monoproductive subsistence economy in marginal areas delimits internal economic diversification making nomads dependent on exchange with neighbors having large diversified economies, most notably adjacent states (Kürsat-Ahlers 1996: 30-32). Therefore, according to Kürsat-Ahlers, the many complex political organizations of the Eurasian steppe likely emerged because of dependent relations with the sedentary and agricultural civilizations neighboring the steppe zone rather than from indigenous political processes.

Versions of this framework for nomadic political economy are still current and have been used to explain regional-scale nomadic polities as diverse as the Scythian state of Europe, the Mongol empire of East Asia, and Bedouin confederations of Arabia (e.g., Paul 2003; Franz 2005). Skepticism about an indigenous nomadic politics of complexity arises from an "economics first" approach that overemphasizes the instability of herding and residential movement. This approach fails precisely because it ignores the variability and diversity that characterized early steppe societies (Sneath 2007). In the case of the Xiongnu polity, recent theories by Barfield (2001, 2011), Kradin (2001, 2005, 2011), and Di Cosmo (2002, 2011) have all benefitted from the past two decades of debate over early pastoral nomadic economies and politics in eastern Eurasia. As a result, the latest iterations of models explaining Xiongnu state formation recognize that steppe nomadic pastoralism was neither consistently specialized nor directly dependent on external economies for basic subsistence (Barfield 2011; Di Cosmo 1994). There also has been a closer consideration of the indigenous political techniques that nomadic peoples drew upon in organizing the early Xiongnu state (Kradin 2008).

That said, the above researchers still place strong emphasis on the influence of China as initiating, stabilizing, or configuring the nomadic state. Perhaps this is because they take the historical documents of the Han dynasty as the primary and, in some cases, the exclusive source of evidence for understanding Xiongnu society. Relying on the Han reports as the major source of information about ancient Inner Asia has the effect of accentuating China's centrality in macro-regional affairs. While space limitations prevent a detailed description of each of the above models, a brief overview of major points with attention to commonalities and differences should suffice. The main points can be broken down and discussed in three parts: conditions that preceded statehood, the transformation of regional leadership to institutional rulership, and the shape of the political organization that maintained authority and elite stratification over time.

3.2 Preceding the State

Though archaeology suggests a slightly earlier and more complicated chronology, the historical date assigned to the rise of the Xiongnu state is 209 BC. Events in China preceding this time, as known from the textual sources, were devastating and chaotic. The fourth and third century BC was a period of great conflict trending toward all-out warfare between several powerful competing states. By 221 BC, one state had triumphed and consolidated the peoples and territories of China into a large empire ruled by the short-lived Qin dynasty (221-207 BC). Due to many factors, the Qin empire fell as quickly as it arose, to be followed by a more stable imperial period during the Han dynasty beginning in 202 BC. To understand the Xiongnu political formation, it is necessary to determine what was going on in the north during this period of turmoil. According to the three models mentioned above, like China, contemporaneous conditions on the steppe consisted of social disruption, warfare, and conquest prior to the emergence of the Xiongnu state. Di Cosmo argues that crisis in the northern steppe was a direct outcome of events in China, resulting from the northward expansion of the Qin empire in 215 BC. Based on this scenario, Xiongnu consolidation was jump-started by Qin invasions northward and their capture of critical pasturelands. This territorial intrusion was followed by a period of nomadic group displacements resulting in warfare, conquests, and eventually a much larger and consolidated nomadic military organization, constituting the initial step toward statehood (Di Cosmo 2002: 178–190).

On this same question, Thomas Barfield offers a slightly different explanation which has been supported and re-argued by Nikolai Kradin. According to these two scholars, an unspecified process of indigenous steppe conflict and conquest led to the aggregation of multiple nomadic groups under a single military leadership. Following this period of inter-group warfare, an enlarged confederation of nomads had little in the way of economic resources to maintain victorious groups in positions befitting a permanent elite. What they lacked in political finance, however, was more than made up by their assembled military might; and this presented a possibility of translating nomadic military power into political power (Barfield 1989, 2001: 15–17). Accordingly, nomadic leadership devised a strategy of military raiding and coercion against China in order to acquire prestige goods and staple resources which could then be re-circulated among the nomadic populace to legitimize elite positions (Kradin 2011). More or less in keeping with the accounts offered in the Han dynasty texts, all of the above models describe the birth of the Xiongnu state as a process of conquest leading to the forced consolidation of disparate groups under a warrior leadership.

3.3 From Leaders to Rulers

Once initiated, the process of translating what was basically a powerful military confederacy into an enduring political structure is one of the major differentiating points between the three current models. Barfield (2001) and Kradin (2011) explain this political process as the emergence of a structured system designed to regularly extort resources from the Han dynasty. Using recent victories over the Han military (as described in Chap. 1) and the imminent threat of frontier raids, the Xiongnu royal court negotiated with China in order to obtain annual payments in wealth, staple goods, and trade privileges. By consistently maintaining a largescale military threat in reserve, the Xiongnu elite was able to secure highly valued goods in return for a mostly peaceful frontier. Small-scale frontier raids could then be used periodically to remind the Han court of nomadic military capacity and to ratchet up the amount of goods demanded each year. This structure of tribute exaction enfranchised the Xiongnu ruler, the Shanyu, as an external negotiator and internal distributor of valued goods. In Barfield's opinion, this strategy provided substantial political finance that would never have been possible by taxing the unstable production of mobile herders (Barfield 2001: 15).

In contrast, Di Cosmo's treatment of the transition from military success to a functioning political system draws more on an indigenous political context among steppe nomads. He emphasizes the role of cadres of local elite across the steppe who joined arms with an ascendant military leader, and during a period of social upheaval, vested that leader with regional authority. This new position of "the Shanyu" was further bolstered by a religious ideology of divine appointment which both explained the Shanyu's success in warfare as "the chosen one" and legitimized his authority over other leaders. Beyond mere belief, the Shanyu also kept a standing guard troop that was exclusively loyal to him and defended his interests. With the highest position of rulership affirmed, the military command hierarchy was then transitioned into an administrative–military system that formed the core structure of the state. This was financed by the continual expansion of the new political–military organization which was able to secure tribute from additional conquered peoples, including significant tribute from the Han royal court (Di Cosmo 2002: 178–190).

3.4 Organization of the State

Although the above differences in hypothetical political sequence may seem small and not entirely exclusive, their implications contrast sharply when it comes to working out the hypothesized structure of Xiongnu integration, centralization, and administration. For example, Barfield's emphasis on the role of political finance from China allows him to argue that the configuration of the polity was primarily geared toward extracting Han dynasty wealth rather than supporting internal integration. According to this viewpoint, the Xiongnu polity was made up of powerful and autonomous local area leaders who collaborated consensually with the Shanyu in order to share in the mutual benefits of wealth extraction. Central authority pertained over these groups only when negotiating with, or acting in unison against, the Han court, but under most circumstances the Shanyu exercised no genuine authority over local nomadic communities. In other words, Barfield argues that Xiongnu political organization did not derive from a genuine process of regional integration but was mostly for combined military action in order to coerce China. By his assessment, the polity was externally autocratic but internally confederated and, therefore, within the steppe zone local areas would have been organized much as they had during prestate periods (Barfield 2001).

Di Cosmo and Kradin both diverge from the views held by Barfield and instead place greater weight on the textual description of a centralized hierarchy headed by the Shanyu who is reported to have exercised substantial authority within the Xiongnu polity. Di Cosmo argues not only for a strong ideology of central leadership and armed support for that position, but also suggests that a nascent administration provided some degree of central oversight in outlying areas (Di Cosmo 2002: 176-177). Likewise, Kradin and colleagues hypothesize unique methods for the delegation of political authority between the Shanyu and appointed subordinates (Bondarenko et al. 2003: 12). Given the spatial extent of the historically attested Xiongnu state, the capacity to support administrative decision making beyond the center, while still maintaining central oversight, would have been a critical development in steppe statecraft (Kradin 2002: 374). Unlike Barfield's conception of a non-integrated confederated structure, Kradin and Di Cosmo tend to view centralized regional authority as legitimate and functional at the level of the local area, though the strength of central leadership certainly would have varied with time.

These three models describe different trajectories for eastern steppe statehood, but they all agree on the operative processes and timing involved in initial state formation and state finance. In each case, mobile herding is not described as dependent per se, but implicitly or explicitly is conceived of as an economy and lifeway having little bearing on local and regional politics. Conquest was the primary way of consolidating mobile and resistant groups, and the Chinese state was the critical factor in making possible a more stable version of regional hierarchy and centralization. By focusing mainly on warfare and external stimuli, the image of the steppe nomad offered is largely apolitical and, as such, these models affirm the presumed lack of fit between nomadic society and state building processes. Notably, none of these models describes the Xiongnu polity as a state, but instead they use alternative categories to describe its qualities of organization such as "nomadic empire" (Di Cosmo 2002), "imperial confederation" (Barfield 2001), "stateless empire," and "supercomplex chiefdom" (Kradin 2011). Clearly, there is both appreciation for the scale and complexity of the Xiongnu polity and discomfort with standard definitions of the state and state formation when it comes to indigenous nomadic politics.

To my mind, problems emerge when the models developed for nomadic society and those for state process contain statements that are categorically incompatible. If conceptions of "the state" and "the nomad" intrinsically conflict, it is not at all surprising that nomadic complexity is so often attributed primarily to warfare and external influences. A critical question arises as to whether this is an adequate appraisal of the nomadic past or whether it is the product of limitations in anthropological models for both nomads and states?

3.5 What Makes a Pastoral Nomad: Variation and Commonality

I address the first part of the above question by closely considering whether pastoral nomads are indeed as organizationally constrained and productively marginal as much Inner Asian research makes them out to be. Pastoral nomadism is a subsistence system based on keeping herd animals and employing periodic residential movements to supply these herds with pasture, water, and protection. Although this description sounds straightforward enough, pastoralism it turns out is in no way as simple as it sometimes seems. Archaeological evidence for the development of pastoral nomadic adaptations across the Old World clearly demonstrates remarkable variety, as does the ethnographic record. To further exacerbate this problem of substantial variation, ethnography also reveals the fact that pastoral nomads commonly spend significant time engaged in non-pastoral activities (Cribb 1991: 40–41; Khazanov 1994: 78–79) and sometimes switch back and forth between nomadism and sedentism (Ingold 1984: 5–6; Rosen 2008). In fact, some even claim to be pastoral nomads after having lived without animals or residential movement for years (Barth 1973: 16; Sobania 1988).

Given this pervasive variability and dynamism, some anthropologists believe that the very concept of pastoral nomadism has outlived its usefulness as a cross-cultural category or, at least, that it carries too much typological baggage to be attuned to the particularities of a given context (Dyson-Hudson and Dyson-Hudson 1980: 55–56; Marx 1992; Sneath 2007: 138–140). Other anthropologists

argue strongly that investment in animals and movement does promote underlying patterns across different cultures, regions, and time periods and deserves more in depth comparative treatment (Salzman 2004: 137–138). While there is indeed great cross-cultural diversity, in my opinion the process of interweaving animals and movement into human communities is both relative and variable but is also entirely relevant. The everyday experience of living with animals and movement produces important commonalities as well as diverse expressions of pastoral nomadism.

Instead of viewing herd animals as economic end products, a deeper consideration of how herds are actively involved in defining a way of life and a social context for that lifeway may be more useful. This emphasis on pastoral nomadic lifeways marks an emerging theoretical shift in the anthropology of nomads and harkens back to Tim Ingold's groundbreaking work on reindeer pastoralism (1980, 1984, 1986). Ingold has long been interested in circumpolar reindeer herding and wild reindeer hunting precisely because these activities have been assumed to be fixed, clearly defined, and representative of fundamentally different kinds of societies. He points out that anthropologists typically label an individual who hunts as a "hunter" until he or she comes into possession of an animal and then re-classifies that individual as a "herder." Ingold perceptively questions what exact qualities differentiate these two versions of human dependency on animals, especially since so many groups practice both hunting and herding simultaneously.

Clearly, performing a different activity or devoting more or less time to an activity would not serve to transform some essential quality in the make-up of society or the individual. Ingold argues that it is not the performance of this or that activity that really matters, but rather the understanding, intentionality, and the agenda that informs that activity as a distinctly "social" way of obtaining resources. He sees pastoralism not as an economy or an ecological adaptation, but as a social system of appropriation that is differentiated from hunting by the very different role animals play in the way human beings relate to one another (Ingold 1984: 6–7; Ingold 1986: 110–111). Over the decades, Ingold has pursued these initial ideas even further and more recently has argued that in pastoral societies, the animal is not just a passive reference point for human relations, but can be thought of as a social participant engaging directly with the human community (Ingold 2000: 76). Therefore, the difference between hunting and gathering and pastoral nomadism is a different kind of co-community with animals that has great implications for how humans relate to each other by continuously referencing the animals among and between them.

This interesting perspective imparts an entirely new impetus to the ethnography of nomadic peoples (e.g., Fijn 2011) and has been expanded upon by archaeologists to re-analyze early domestic stock keeping and forms of mobile herding. To give some examples across the vast time spectrum and geographies associated with early pastoral adaptations, Orton (2010) analyzes Late Neolithic herding practices in the central Balkans using the concept of herds as "sentient property" in order to capture an inter-species social context that was formed conjunctively by human–human and human–animal relations. In a study of Bronze Age animal husbandry in southern Scandinavia, Oma (2010) draws on the concept of a social contract between animal

and human communities to highlight the kinship-like relations pastoralists maintain toward their animals. Hite (forthcoming) brings a similar understanding of human– animal relations to the question of ritual, politics, and ideology among Iron Age pastoral nomads of Mongolia. She argues that the logic of co-dependency in unequal relations between animal and human beings was appropriated and ideologized as a political logic for the relation between commoner and elite.

In each of these examples, herd animals that are closely intertwined in the fabric of human communities and relationships, become a central part of the way people make sense of and inhabit their world. As Hodder (2012): 78–80 argues, this is still another version of "entanglement": one that interlinks human–animal relations to human–human relations. By linking together these two living, social, and dynamic communities, the unexpected modulations of one must be accommodated by greater latitude in the other, and vice versa. Therefore, the range and amplitude of dynamics within intertwined animal–human communities is exponentially greater than would be the case for either community alone. In the past, human beings had to accommodate both gradual and sudden shifts in animal communities, and likewise animals were impacted by the wide range of changes experienced by human communities in economics, technology, territory, and organization. These expanded and linked dynamics selected for cultural strategies of flexibility that systematically increased rather than delimited options for decision making.

The co-adaptation represented by this new relationship led to major changes in the interactive and knowledge content of human communities and in the behavioral and genetic make-up of animal communities. The genetic changes are very clear in the different morphology of animal domesticates in comparison with their wild predecessors. On the human side, the uncertainty of relying on the well-being of animals as living property had ramifications for the way interactive networks formed between communities and the way individuals within such networks related to one another. As an example of this social dynamic, Anthony (2007: 191) points to the volatility of initial pastoralism in the western Eurasian steppe as a factor encouraging alliances between communities in order to mitigate catastrophic herd loss. If heavy snows or drought affected a particular area, chances were that areas at some distance away may have been less severely affected. In such times of need, extra-local systems of loaning and borrowing herd animals between distant communities ensured that no household would lose all its herds. Having just a few animals allows a stricken household to quickly rebuild its stocks, repay the debt, and reciprocate in kind when alliance partners are in need. These early interactions stabilized pastoral communities in the wake of unexpected environmental downturn; but they also expanded inter-regional interaction and inter-local dependency and created pathways for regional inequality to emerge. For example, should cycles of ecological downturn be more frequent in some regions than in others, then animal loaning alliances might usher in relations of inequality between community groups due to recurring indebtedness.

Archaeology indicates that social processes such as these played out over timescales measured in centuries and involved great variety in the modes of human-animal and human-human syntheses. However, this basic process of co-community with animals and its social, cultural, and political ramifications constitute the underlying cross-cultural commonalities that anthropologists seek to explore using the comparative concept of "pastoral nomadism." Far from being synonymous with food economics or an essentialized type of society, pastoralism is a lifeway and ideology having many expressions, but principally derived from the cultural knowledge needed to sustain relationships of co-community with animals by way of relationships within and among human groups. Nomadism joins the repertoire of pastoralism when the capacity for residential mobility is critical to mediating a regime of human–animal and human–human relationships over time. Nomadism and herding are not always linked, but when they are, movement often depends on a very complicated mix of factors. Many variables must be considered in this formula, especially non-herd-related purposes for movement given social and political conditions (Frachetti 2008: 368–372; Schlee 2005: 22–23).

Pastoral nomadism, therefore, is not a static condition, a mode of production, or an economic type. Rather, it can be considered an ongoing and malleable process of "change, range, and modes" in all aspects of experience including diets, mobility, technology, habitation patterns, landscape arrangement, rituals, and belief. This version of pastoral nomadism is quite different from that of herd economics and ecology which to date has guided much archaeological research. As an alternative perspective focused on intertwined relations between human and animal communities, this approach insists on the priority of culture, social relations, and ideology as a more productive way to understand pastoral nomadic prehistories (cf. Lane 2006: 495; Robertshaw 1990: 299; Sadr 2005; Shelach 2005: 46; Szuchman 2009: 5). Emphasis on pastoral nomadism as defined by flexibility and process appeals directly to a main strength of archaeology which is detecting patterns of change over time; however, it also raises questions about the nature of pastoral nomadic political organizations. Flexibility and latitude seem to contrast sharply with the presumption that institutionally fixed political relationships represent the foundation of complex societies. A lifeway dependent on flexibility and multiple options in decision-making would seem to pose a significantly different basis for considering politics, organization, and complexity. If so, what kind of organization could conceivably pertain to a "state" made up of pastoral nomads?

3.6 What Makes a State: Scale, Duration, and Contingency

The answer to this question depends entirely on how one understands statehood and therefore the second part of my inquiry asks whether early states really were as rigid and delimited in their operations as assumed in most Inner Asian models? Shifts in archaeological theory on society and complexity have already led to dramatic changes in the way archaeologists consider early states (e.g., Feinman and Marcus 1998; Smith 2003; Yoffee 2005). Prior frameworks for statehood (e.g., Claessen and Skalnik 1978) viewed the state as an organization that regulates stratified social relations, i.e., the state stands outside of social relations as a structure and supports and enforces internal asymmetric interactions. Support comes from the capture and allocation of surplus, in the form of staples and wealth; and therefore, the state is synonymous with the primary and secondary mechanisms (or institutions) that secure finance and direct surplus toward maintaining elite distinction and stratification (Fried 1967). At the most fundamental level, that which guarantees the capture of surplus in support of class division, is a capacity for organized coercion on the part of an elite (Roscoe 2000: 113–115). This classic measure of statehood was derived from a relatively small sample of regional-scale organizations represented entirely by sedentary, intensively productive, hegemonic, administrative, and centrally integrated political systems (Smith 2003: 90–94).

Ironically, as researchers of nomadic societies have struggled with these received definitions for the state, anthropological understandings of statehood have slipped out from under those attempts, becoming something of a moving target. States have commonly been viewed as powerful and consolidated engines of development across large-scale geographical regions. Archaeological research undertaken within the traditional heartlands and peripheries of archaic state emergence has gradually revealed a very different view. Early states were in fact probably less unified and hegemonic than has traditionally been assumed (Stein 2001), and the process of maintaining early regional polity was not one of the stable institutional domination as much as ongoing negotiation among diverse factions (Brumfiel and Fox 1993). This is not to say that early states were peaceful; in fact, political negotiation was rooted firmly in inequality and differentiation, and acts of repression, threat, and terror were often as much a part of the negotiation process as was monumentality, theatrics, collective ritual, and degrees of power sharing (Yoffee 2005: 33–34).

The effect of these recent ideas in archaeology has been to move analysis away from documenting a rather restrictive definition of "the state" toward consideration of variability in political process over time and space (Feinman 1998, 2012: 96). These approaches are certainly not a unified set of ideas, but represent reappraisals of the archaeology of early states in Mesopotamia, China, Egypt, Mesoamerica, and the Andes where a number of common themes have emerged. One of these is an emphasis on political relationships as situational and multi-scalar, i.e., drawing on individuals, family, local community, faction, and polity, as reference units (Smith 2003: 102-104). Another is the opportunistic suspension of terms like "state" or "chiefdom" in favor of more flexible concepts like "polity" which specifies a condition of political interaction but leave its qualities to be contextually defined. In relation to better understanding such interactions, archaeologists have developed ideas on leadership that go far beyond the traditional exploitative and managerial models and instead recognize that politics could be both asymmetric and participatory in ways that established negotiated but highly unstable consent (Blanton and Fargher 2008: 17-22; Kanter 2009).

The temporal dimension of statehood has been another important topic for archaeological exploration. Early states typically experienced substantial diachronic fluctuation and cycling (Marcus 1998) and cannot be seen as stable and singular entities but rather as dispersed processes, including rises and falls and successes and failures that are distributed across macro-regions in the form of multiple and often differentiated political traditions. Wright (2006) has considered these patterns in Mesopotamia and argues that multicentric dynamics over time were important experiments in political process that produced a kind of organizational learning, which otherwise might be called "statecraft." These observations are extremely important in the context of the newer social and relational models for political process because they suggest that statehood involved innovation, trial and error, and numerous political failures before the "art" of multi-party negotiation (both top-down and bottom up) could promote a form of large-scale organization that endured long enough to leave traces in the material record. Therefore, "the state," at any one time, could be more or less consolidated, centralized, integrated and stable; and these phases of organization included modes of dispersion, power sharing, and factional division as an intrinsic part of statehood.

As a result of this archaeological attention to variability, ideas about what constitutes a state have expanded dramatically and, at the same time, have become much less precise. This situation has encouraged some archaeologists to question the usefulness of studying "the state" per se as compared to a more general focus on early complex polities and their politics (Smith 2003: 102; Campbell 2009). Others have considered alternative definitions for the state and more inclusive ways of comparing across different expressions of statehood (Chapman 2008; Castillo 2010). In fact, these approaches are not mutually exclusive and suggest a need to clearly integrate concepts of political process, political complexity, and early statehood. In my opinion, a general goal of inquiry should be to better understand political processes that produce relations of difference, exclusion, and inequality across large social scales as would be expected under conditions of statehood. How such relations come about and persist across large groups is a classic anthropological question but one that benefits from consideration of a wide range of regional polities rather than a few organizations delimited arbitrarily as proper "states." Consequently, a study of Inner Asian prehistory takes on added value as an opportunity to explore political complexity through the very different and multiple shapes that Inner Asian polities are known to have assumed (e.g., Sneath 2006, 2007; Atwood 2014).

In order to convey an understanding of complexity that would make sense for eastern steppe states, I turn to the research of James Scott on Southeast Asian political history. Research on this geographical region is appealing, I think, because the fluidity and mobility of mainland Southeast Asian communities bear some resemblance to conditions on the Inner Asian steppe, as Scott himself notes. Scott gives what I find to be a straightforward definition for a regional complex polity. Ironically, his definition was developed to explain how we might think of a state within the mobile social environment of Southeast Asia where the large, centralized, and hierarchical forms of statehood met with little success. Scott says:

we attempt an account of the elementary units of political order in mainland Southeast Asia. Depending on the location and date, such units might range from nuclear families to segmentary lineages, bilateral kindreds, hamlets, larger villages, towns, and their immediate hinterlands, and confederations of such towns. For all their fluidity, they are relatively constant features of the landscape, while the successful dynastic state is rare and ephemeral. The contingency of the "state" invites us to treat it less as a unity than as a "complex web of contractual mutualities" (Scott 2009: 36-38).²

Indeed, what complex polity, including a classic hierarchical and centralized state, could not be imagined in this way having been arrived at through negotiations and re-negotiations between enduring groups? Scott's quote is a good starting point for developing a general concept of "regionally complex polity" as a negotiated arrangement of relationships with some special qualities. These qualities include regional-scale, multi-generational time duration, and differentiated relationships that are (1) inter-contingent and (2) either exclusive or both exclusive and unequal as configured by an ongoing process of negotiation. These points require some elaboration in order to make clear their pertinence to political complexity and statehood. Beginning with the first two characteristics of time and scale, the term "generational" time should be clear enough, though "regional" scale must be considered according to the extent and make-up of prior political contexts. Generally however, I define "regional" polity as an integration of prior political communities (i.e., smaller scale polities) that results in a larger composite organization across which face-toface interactions no longer inter-relate the majority of constituents. Anticipating the discussion to come, this aspect of large scale raises important questions about the way in which political processes rooted in direct negotiation might be carried out when populations are spatially dispersed and not interacting on a regular basis.

The third set of qualities, i.e., inter-contingency and exclusive and unequal differentiation, warrants more discussion because, to my mind, these get at the heart of what it means to be politically complex. I refer back to the relational model discussed in the previous chapter for definitions of negotiation, politics, and contingency, all of which provide a social framework for understanding these abstract terms. Although a number of definitions for complexity have been offered by archaeologists, I find the argument developed by McGuire (1983, 1996) to be particularly useful especially since it evolves over time. Drawing on Peter Blau's work on organizational sociology, McGuire conceives of complex organization in terms of degrees of vertical differentiation (inequality) and horizontal differentiation (heterogeneity) (McGuire 1983: 101-104). Many archaeologists agree with this basic model but I also find myself in agreement with McGuire's later statement that these structural variables obscure the social and political processes that, in the end, are really responsible for making "sociopolitical complexity" complex (McGuire 1996; cf. Wynne-Jones and Kohring 2007). This interesting tension begs the question of how we might view these variables in terms of dynamic political process and how that changes an appraisal of heterogeneity and inequality as conditions of "complexity".

In his original statement, McGuire considers the social make-up of heterogeneity and inequality as preexisting social positions (i.e., structures) that he describes as configuring relations as they play out between individuals. On the other hand, as I argued in the prior chapter, structure and relationships can be considered the

² This phrase is quoted from a study of Indonesian history by Anthony Reid (1998).

other way around. In other words, the manner in which relationships are continuously negotiated determines differences between people and consequently forms or transforms the social "groupings" by which those people collectively understand and recognize social difference (cf. McGuire 1996). However, individuals always interact with some knowledge that their own differentiated positions are simultaneous products of how others behave within similar kinds of differentiating relationships (i.e., inter-contingent), the recognition of which makes such groupings a social reality in the first place. To the degree that individuals, grouped as such, are invested in that status quo, they will expect and insist (often punitively) on behaviors among others that reinforce these differentiated relations and, thereby, groups. This collective balancing act is made up of day-to-day contingent interactions that may or may not support a consistent version of social difference as an ongoing social reality. Instead, every interaction is probabilistic in outcome and can challenge, stretch, and pull-back on the shape of relations of difference among individuals—all of which constitutes a process of dynamic social order.

The nature of social differentiation that makes up a significant part of this complicated negotiation process itself requires some examination. According to McGuire (1983), horizontal and vertical differentiation is based on allotments of social resources and configurations of access to those social resources. These might include, for example, access to the means of subsistence, to surplus and wealth, to positions of leadership, or to knowledge and specialized skills. Instead of describing these differences as vertically or horizontally structured; however, it is more useful to refer to social differentiation in terms of inclusive, exclusive, and asymmetric/unequal. These terms specify a dynamic kind of differentiation (including or excluding) and a relative quality for such interactions (enfranchising or disenfranchising). Given that social resources enable the well-being of individuals and associated groups, it follows that more stringent and contested negotiations would be expected from more exclusive and asymmetric differentiation among people. This expectation should be particularly pertinent when these qualities of differentiation promote greater social resistance and when this condition of resistance pits the few against the many.

In Chap. 2, I defined politics as a process of negotiating over these allotments and configurations in terms of who can do what, who gets what, and how to conceive of the distinctions and affiliations that arrange and define groups of stakeholders. All human collectives involve politics at some level but political practices are called upon to negotiate very different arenas of social scale, time duration, difference, degrees of contingency, and uncertainty. The condition of being sociopolitically complex, therefore, is not a standing structure of differentiated positions sorted into fields of qualitatively different groups, but a continual social process of negotiating inter-contingent differences, some of them quite stringent and critical, between people on a more or less consistent basis. My concept of a "regionally complex polity" focuses specifically on this condition of organizational persistence and accordingly I consider a wide range of polities as regionally complex but not necessarily as states per se. An example might be the polities of West Africa's Middle Niger River that were inter-contingently differentiated based on ethnicity, ritual distinctions, and productive specialization (McIntosh 1993: 205–206). These organizations indeed could be described as expansive, enduring, and exclusively differentiated (i.e., complex), but they were not unequal in terms of the lifeway resources and opportunities allotted to each group over time (McIntosh 2005). In contrast, my definition of "statehood" pertains specifically to those polities sustaining negotiations of exclusive and unequal differentiation beyond age and gender divisions, over regional social scales, and across generational time periods.

Notably, this definition does not include hierarchy or centralization as critical components of statehood. Where then does this leave the "classic state" if expansive, hierarchical, and centralized polities are no longer the defining criteria for complex organization and statehood? In place of terms such as "heterarchy"³ or "hierarchy" and "centralized" or "distributed" authority, it is useful to remember that these patterns represent real actions between individuals who are consenting, asserting, yielding, preventing, and so forth. For example, hierarchy is usually taken as a structural characteristic, but in social terms hierarchy emerges from a consistent pattern of assertion and yielding that permits a recognized sorting of individuals into groups of either "deferred to" or "deferring to."

These groups we imagine or refer to as ranked one above the other and they usually overlap with the presence or absence of other behavioral attributes involving access to wealth, resources, network contacts, and information. But in reality, the terms hierarchy/heterarchy and centralized/distributed are only approximate or "modal" configurations expressing how numerous interactions register inequality and exclusion over time. In my opinion, inclusion, exclusion, and inequality are the main characteristics for focus while these more structural terms can be seen as temporal expressions of hierarchy and heterarchy and centralized and distributed authority are bound to be mixed, multiple, and compounded and can be expected to shift relative to conditions (Feinman 2012; Zagarell 1995). In other words, hierarchy and centralization, or the absences thereof, are not absolute criteria for complexity or statehood; rather they must be qualified in relation to time, process, and context.

In the end, to better understand the condition of statehood, I employ this model just described as a dynamic version of Scott's "complex web of contractual mutualities." As such, this framework raises a different set of questions about Inner Asian states beyond what are still important issues of centralization, hierarchy, and surplus extraction for political finance. Instead, it stipulates a focus on political process as a negotiation of difference that can take many configurations, that has a distinct history and tradition, and that deals with the same underlying organizational issues of scale and connections that all states must deal with. Therefore, the primary task with regard to statehood among early nomadic peoples is to

³ "Heterarchy" has been defined in many ways (Crumley 2007), but here I draw on its simplest definition as a differentiated horizontal network with variable relationships between different sectors, i.e., in contrast to "hierarchy" as differentiated vertical levels with established relationships between levels.
establish a relation between the historical particulars of nomadic lifeways and the techniques and traditions of political negotiation implicated in Inner Asian state making. Although there are many ways to make this connection, I choose to focus on Inner Asian traditions of mobility as a significant part of conducting political negotiations. Mobility was implicated in expansions of social scale, cross-cultural contacts, exchange, warfare, and inter-regional process—as well as daily sustenance among common households. Although, regimes of movement and transport would have been significant to any early state that comprised a large enough territory, these were especially pertinent for nomadic states of Inner Asia.

3.7 Mobility, Relation, and Spatial Politics

There is only one problem with the above proposition: Mainstream thinking on nomadic political economy still focuses on what is assumed to be an intrinsic organizational limitation of pastoral mobility. Most anthropological theories view movement as a deterrent to large-scale complex organization, and these perceptions continue to drive theoretical work on Inner Asian state formation and especially views regarding the Xiongnu polity. In contrast, I argue above that pastoral nomadism can be thought of as a lifeway enabled by co-community with herd animals and by the cultural embedding of mobility. Accordingly, movement and animals involved quite a bit more than just subsistence production; they figured into the way early Inner Asians built and negotiated relationships among themselves. This would suggest that rather than being peripheral to political practices, animals and movement were core components of politics and political negotiation and, consequently, of state building. As Cribb (2008: 543) rightly points out, this question of pastoral mobility and politics has received relatively little attention given its potential importance. In the case of Inner Asian nomadic states, there is good reason to delve deeper into this interesting issue and re-examine it closely.

Mobility among pastoral nomads is about much more than the economics and ecology of supporting herd animals. In fact, some anthropologists have altogether questioned the priority of animal needs as the basis for nomadism and argue that movement is primarily a flexible way to negotiate situations of conflict and threat (Chang 2006: 31, 34; Chatty 2006: 2; Lancaster and Lancaster 1998: 25–26). The best known of such accounts is the detailed ethnographic study of the Yomut Turkmen in northeastern Iran by William Irons (1974). Irons describes the Yomut as exploiting traditional movement regimes in ways that build military skills, alliance strength, and defensive capability in the face of military and political pressure from the Iranian state during the early to mid-twentieth century (Irons 1974: 647–653). The Yomut case study is a much cited and now classic example of the techniques deployed on the periphery of powerful states to resist centralized hegemony and evade subjugation (Scott 2009: 182–185).

To my mind, there is one problem with the way these important observations have been applied to nomadic societies of prehistory. Based on ethnographic perspectives, the strategic deployment of pastoral mobility is most often a form of political action resisting centralized authority. Philip Salzman in particular claims that this potential for strategic movement on the part of nomadic households was a primary method of maintaining nomadic autonomy in the presence of a powerful and centralized state, but it also could deter indigenous political processes that comprised authority, leadership, and political centralization (Salzman 2004, pp. 29, 68–69). This capacity to move out from under authority has consistently been referenced to explain why pastoral nomads did not organize complex polities unless in some way influenced by a neighboring state or empire, and usually one made up of sedentary agricultural peoples (Barfield 2001; Burnham 1979; Franz 2005; Salzman 1999). With regard to this curious notion that there is something intrinsic to movement that negates politics, a few points are sufficient to expand this theory from one of limitation to one of enablement.

First, although movement certainly poses some interesting challenges for politics, the pattern of disengagement in the wake of state hegemony identified in a great deal of ethnographic and ethnohistoric research is only one small part of what is certainly a much more diverse repertoire of potential actions. Of the many accounts of pastoral nomadic evasive strategies, a number of them describe relatively modern situations within militarized empires and nation states involving warfare against internal or frontier nomadic groups. As a result, movement and politics among nomads are ethnographically framed in terms of coercion and subjugation on the part of authorities and resistance and evasion on the part of nomads-all of which hardly exhaust the range of possible political response involving mobility. These accounts exemplify modern state aggression against nomadic peoples, but they do not address the kinds of negotiations that, for instance, might configure differentiation and inequality within a nomadic community over time and under different circumstances. In fact, when it comes to the politics of mobile societies, mobility-related techniques for negotiating political relationships were as much about contesting, asserting, or consenting to authority, as about evading it.

The capacity to "vote with one's feet" and move out from under authority is indeed one mode of such negotiations and one particularly well-suited to the needs of commoners. But there is a wide range of actions and counteractions that involve mobility in the process of politics. A different example that has been studied in several parts of the world is the use of peripatetic courts, moving capitals, and royal tours on the part of elite factions as ways to monitor political territory (Allsen 2006; Haour 2005; Honeychurch and Amartuvshin 2007: 55; Sinopoli 1994; Stahl 2004: 158). Swidler (1972) reports still another interesting example of such "mobile politics" from a seventeenth century nomadic polity in western Pakistan known as the Khanate of Kalat. Mountainous terrain and a strong local nomadic aristocracy created circumstances in which centralized leadership under the khan could not militarily coerce or even easily access many areas within the khanate. Nonetheless, a major source of income for the local aristocracy was taxation of trade caravans that used mountain passes under the control of specific local leaders; however, caravan drivers received itinerary information from administrative officials of the khan. The khan, therefore, was well positioned to reward and

punish the local elite by directing caravans away from or through their respective areas, giving him substantial indirect leverage over members of the aristocracy (Swidler 1972, p. 119). Far from being intrinsically anti-authoritarian, mobility in this case was an important part of the kind of factional negotiations that could assemble or, at times, disassemble a nomadic polity.

Cultural expertise in mobility, managing relations over space, as well as involvement in mobile conflicts—all gave rise to a pastoral nomadic politics built upon a substantially different architecture. Some characteristics of these mobile strategies are well known from historical accounts and include monitoring and controlling pathways of movement as in the Kalat example above, using animal transport to promote integration, facilitating or inhibiting exchange, opportunistic raiding, tribute collection from traders, and highly effective asymmetric warfare. Although such political uses of movement are usually understood as actions by nomads against sedentary states or empires, the use of mobility for political advantage is one way that nomadic groups conducted politics among themselves, as well as with non-nomadic communities.

Furthermore, if mobility constitutes a venue for political engagement, then indeed movement resulting in separation is likewise part of that political venue. However, dispersive mobility must be viewed in a much broader context and not simply as an act of fleeing authority. If, as I have argued above, relationships of differentiation and inequality are produced primarily by way of face-to-face interactions, then movement toward or away from any such engagement mediates that interactive presence or its absence. This implies a more fundamental level at which separation plays a role in politics. The self-styled "mobilities" theorists, John Urry and Monika Büscher, expand on this idea of movement in social science usually betrays an existing "metaphysic of presence" that assumes spatial proximity is a prerequisite for interaction and social process. As an alternative, they maintain that cultures of mobility necessarily include techniques for sustaining presence and relation even when time and distance intrude. In the words of Büscher and Urry:

many connections with peoples and social groupings are not based upon propinquity. There is a substantial empirical realm of imagined presence. All social life presumes relationships of intermittent presence and modes of absence depending in part upon technologies of travel and communications (Büscher and Urry 2009: 101).

While modern communication technologies (e.g., phones, internet, etc.) directly mimic the experience of co-presence, in prehistory social absence had to be addressed by other means. For much of the past, the "imagined" presence referred to by Büscher and Urry existed in more abstract forms of symbolism, i.e., as systems of place holders, reminders, kinship roles, identities, and beliefs (cf. Empson 2007). Moreover, from a political point of view, the manner in which contingent and differentiated relationships might be sustained over time and space in the absence of face-to-face interaction is of great significance. When direct engagement is suspended, other factors, such as ideology, religion, loyalty, ceremony, and ritual, and a wide range of material and landscape markers, assume a heightened importance for maintaining an expected configuration of political relationships. It

would seem, therefore, that such periods of disengagement represent times of very interesting politics precisely because the question of what it is that binds the polity together is thrust to the fore. One good example exploring this issue within the nomadic world is Porter's (2004, 2012) research on the Amorite polity of northern Syria (c. late third and early second millennium BC) which politically united mobile pastoralists, farmers, and urban populations across an expansive geographical region. Porter argues that models for large-scale integration were already available from local practices since geographical dispersal and connection were implicit in the indigenous traditions of nomadic mobility. The polity was kept from fragmenting through a nomad inspired ideology of kinship, descent, and ancestor veneration which maintained economic and political relations between differentiated groups despite distance (Porter 2004: 69–70, 2009).

The above discussion challenges a deeply embedded assumption that communities more or less affixed within landscapes (i.e., sedentary) constitute the normative condition for society and politics. To the contrary, mobility always constitutes an important social and political variable in the lives of so-called sedentary agricultural peoples as much as it does for "nomadic" herders. Although these respective lifeways would seem to be polar opposites, in fact they are just different configurations and cultures of movement that are both equally dependent on "mobility" in greater or lesser forms (Ingold 1986: 170-172). Whether pastoral nomadic or not, movement promotes social engagement and disengagement, and therefore, it has political ramification in any context. Furthermore, when movement, geographical dispersion, and infrequent face-to-face relationships are part of everyday politics, then a variety of means for sustaining such indirect relations becomes increasingly important. As such, movement and dispersion do not disable political and organizational process, but instead these qualities transform political discourse by eliciting a different mode of negotiation: a negotiation more appropriate for a dispersive form of politics in which distance and space normally intervene.

In order to concentrate on ways in which mobility becomes an important aspect of political process, I suggest the term "spatial politics." I define this as the harnessing of communal spatial knowledge and movement capacity as a recognized venue for the negotiation of political relationships. In keeping with the points above, emphasis on spatial politics leads us to expect that differently mobile peoples will practice different versions of politics and statecraft. It also makes clear that the quality of politics must change with changes in social and spatial scale as distance and dispersion intercede in relations and as technologies of movement and communication develop. In this regard, spatial politics conveys an understanding of space, movement, and relations much better suited for the decidedly atypical case of horse-riding pastoral nomads dispersed over an expansive landscape of deserts, grasslands, forests, and mountains.

Rather than an impediment to complex organization, mobility can be envisioned as both a tool of resistance and a way to strategically enmesh individuals, families, and communities in unequal relationships. From the perspective of an empowered elite, spatial politics involved the strategic use of a community's understanding of movement and space to entwine individuals in relationships which favored the agenda of one faction over others. One way to think of this is described succinctly by Owen Lattimore who proposed that "the phases of steppe nomadic history are to be traced by the rise and fall of greater and lesser lords who are protectors of the right of movement of common people" (1940: 67). In other words, the ability to monitor, encourage, or restrict the mobility of a population, its resources, and objects within a mobile setting provides leader-ship with a good deal of leverage over the ways in which political relationships are enacted.

This statement of Lattimore's assigns agentive action primarily to an elite class with authority to assert its own agenda. On the eastern steppe, however, this was never the case. Rather, steppe politics always comprised give-and-take between various empowered interest groups or factions. My emphasis on spatial politics as a platform for political negotiations among steppe nomads assumes that the spatial statecraft employed by an elite would have been subject to similar spatial techniques and understandings among commoners. Therefore, the concept of spatial politics does not guarantee prerogative to any specific group but defines space and movement as a major arena in which to debate and manifest such prerogative. From the perspective of non-elite members of a society, spatial politics included techniques for factioning or resistance but also methods that could provide trade-offs and benefits that accommodated asymmetric power structures, especially in securing more productive pastoral economies and delimiting day-today political uncertainty.

Furthermore, spatial politics implies that as the spatial extent of steppe polities increased, techniques of political negotiation would have become increasingly strategic, opportunistic, and flexible in order to mediate across a broadly distributed sociopolitical setting. For example, given a highly mobile tradition of politics within an expansive state, the shape of political centralization would necessarily be different from that associated with more "sedentary" states. Some consequences for the exercise of central authority might be (1) a greater predisposition to distribute decision-making responsibility; (2) a capacity to tolerate higher levels of autonomy in outlying centers; (3) the tendency to incorporate flexibility in organizational structures; and (4) political techniques to manage territory based on limited input strategies as opposed to more comprehensive micro-management. Clearly, centralization within such a setting must be thought of in a different way, and this recognition argues for significant diversity in the forms of statehood.

In the case of Inner Asia, the result of such mobile statecraft was a very different kind of complex polity, one that was more decentralized, resilient and horizontally integrated. As such, it represents a political formation difficult to classify using measures for complexity derived from centralized, bureaucratic, intensively agricultural, and sedentary states (Crumley 2001). Moreover, since spatial politics suggests that different large polities will solve these spatial problems of integration differently, within a diverse macro-region with several large polities there could well be a wide variety of spatial political models in use. Therefore, under conditions of interaction and competition between differently configured polities, these traditions of spatial politics would have potential to cross-inform and promote innovation, synthesis, and perhaps more comprehensive and capable traditions for large-scale integration. I argue that this diversity of statecraft, given the right kinds of interaction over time, was an important ingredient that helps to explain the rise of very large empires in some parts of the Old and New Worlds, including Inner Asia.

3.8 The Xiongnu State: A Macro-Region Transformed and Empires Made

In the preceding sections and chapters, I have proposed two broad sets of theory to address the case of eastern steppe states. The first presents ideas on inter-regional interaction, entanglement, and political uncertainty, while in this chapter, I examined the nature of pastoral nomadism, mobile politics, and statehood. Taken together, these ideas significantly reshape the standard political narrative of the Xiongnu polity as it has been conceptualized from historical texts and pastoral nomadic ethnography. What remains to be done is joining these theories together in order to derive a probable sequence of events and processes leading up to the Xiongnu state. The model I propose here has four sections which roughly correspond to the structure of the forthcoming chapters on archaeological results from Mongolia. These parts comprise an account of early Inner Asian long-distance interactions, regional consolidation and state formation, organizational trends of statehood, and the hypothesized origins of a prolific imperial tradition in the Far East.

To re-emphasize my approach, I assume a polycentric perspective on the East and Inner Asian macro-region. Although my primary focus is on the ancient nomadic peoples that inhabited the steppes of present-day Mongolia, I place no preconceived priority on any particular area or group in terms of influence over others. My attention is on the late second and first millennium BC during which time East and Inner Asia transitioned from a politically dispersed and largely unconnected configuration prior to 800 BC to a radically consolidated and intensely interactive configuration by 100 BC marked by different versions of statehood, conflict, and an intervening frontier. An account of that sociopolitical change and its long-term ramifications is the primary objective behind this new model for steppe statehood.

3.9 Preceding the State: Early Entanglements, 1400–700 BC

Existing explanations for Xiongnu state emergence begin with the assumption that large-scale warfare and conquest were the operative preconditions for this polity. This idea is suggested by early textual accounts from China and the historical

association of steppe nomads and warfare. In contrast, archaeology insists on a longer-term perspective and asks how events centuries in the making might have prefigured organizational changes in eastern Eurasia. Research in Kazakhstan, South Siberia, Mongolia, and Inner Mongolia demonstrates that political process among small-scale complex polities set important organizational precedents more than a thousand years prior to the rise of the Xiongnu. These precedents included not only early forms of differentiation and inequality, but, just as important, they involved forms of politics that habitually relied on extra-local relationships for support of local differentiation. The first long-distance contacts across East and Inner Asia began in earnest around the middle of the second millennium BC with transfers of bronze technologies, artifact styles, wheeled vehicles, belief systems, and especially, animals.

What began as occasional and intermittent interactions between local communities over relatively short distances transformed abruptly during the initial part of the first millennium BC when secure and competent horseback riding became widespread. This novel "transport technology" promoted the building of relationships far beyond the local area, and impacts from this transformation were felt from Kazakhstan to Manchuria within a few short centuries. Beyond the functional use of horse riding for greater mobility and its interactive importance for extending and projecting relations, alliances, and conflicts, I believe that horse riding also had a decidedly integrative effect among local steppe groups. New harness and saddle technologies allowed even the youngest and oldest members of society to ride competently, and this gave rise to multi-functional uses for the horse, novel forms of ownership and wealth, and communal ideologies that meshed with older beliefs centered on forest animals. Domestic horses likely arrived in Mongolia from Kazakhstan and West Siberia and the benefits of horse riding for pastoral households and the role of community leaders in procuring horses brought elite and commoner interests more in line. Horse riding was also tied to complex bronze industries for the production of harness gear. Therefore, the availability of horses, their ownership, breeding, and use for riding depended upon productive skills and resources across multiple communities within Inner Asia. In short, this emerging mobile lifeway spurred a novel form of local-regional politics that ended up entangling diverse steppe communities across a substantially large geographical area.

Movements of products, materials, technologies, and animals within this region increased markedly, most notably involving the Northern Zone of Inner Mongolia in bidirectional networks extending northward to Mongolia and Siberia and southward toward the Central Plain of China. These transfers underwrote the emergence of a competitive politics on the eastern steppe that emphasized display, opulence, ritualized and strategic alliance pacts, as well as greater emphasis on territory and a gradual increase in conflict. I argue that by the middle of the first millennium BC, networks of interaction, exchange, and alliance extended in total over two thousand kilometers from north to south, but these were regionally compartmentalized such that no interaction stretched more than one or two hundred kilometers at most. In each geographical zone, political relations and arenas were primarily negotiated and situated at the local and subregional levels, although these increasingly relied on multiple other transactions farther away to support legitimacy at home. In other words, each of these regions, from China to the northern steppe and Siberia, was characterized primarily by politics that were "local," though the consequences and ramifications of such politics were increasingly experienced "globally" across East and Inner Asia.

3.10 From Leaders to Rulers: Regional Consolidation and State Emergence, 600–200 BC

By the mid-first millennium BC, some parts of the eastern steppe zone saw increased warfare and inter-personal violence while other parts seem to have experienced less direct and less violent conflict, though political competition in a variety of forms was certainly pervasive. Current models offered by Barfield, Kradin, and Di Cosmo link Xiongnu state formation to warfare and suggest that violent conquest was important for the consolidation of small-scale steppe polities under a military leadership and a formal command hierarchy. According to these ideas, an initial multi-local organization was stabilized by the extraction of resources from China and by an ideological investiture of the supreme military leader as a new kind of ruler who claimed a mandate from heaven. The established military hierarchy was then translated into a stratified state structure that was politically financed by a continued expansion against weaker neighbors. While such models fit the historically known narrative, archaeology suggests an alternative sequence of events.

Instead of warfare acting as the prime mover for politics and organization, material evidence favors a scenario in which Xiongnu regional consolidation took its start from inter-dependent entanglements at local, regional, and macro-regional scales. By the second half of the first millennium BC, many local communities on the Mongolian Plateau had negotiated positions of leadership among them which favored particular lineages and factions that controlled specific territories. The relationships constituting political authority at the local level were not self-contained but instead depended on extra-local relationships between other local elite and factional groups. I argue that this condition of loose entanglement made the playing out of local politics more uncertain and more fractious. The result was competitive political arenas continually subject to challenge and change. At a larger geographical scale, these regional networks of inter-dependent politics involved groups across the Gobi Desert in the Northern Zone. In turn, Northern Zone groups were gradually becoming more directly implicated in the intense competition on their southern periphery between the three major Warring States of northern China: Qin, Zhao, and Yan.

The latter part of the third century BC witnessed the fall of one state after another to neighboring competitors. In the end, a single state—that of Qin—conquered all remaining rivals and did so quite precipitously which, in the case of the neighboring states of Zhao and Yan, had consequences for the direct and indirect northern networks they had been part of. If, as I contend, groups in Mongolia formed loosely tied alliances with groups in the Northern Zone who were likewise involved with the northern Warring States, then the overthrow of these two final states would have affected political negotiations across a substantially greater geographical area, potentially as far as the Mongolian steppe. The archaeological picture from Mongolia for this time period is still developing but one thing is clear: The central regions within Mongolia seem to have been relatively stable, while others to the east were more dynamic and unpredictable. This condition invited a regional re-configuration accomplished by the affiliation of local groups in unstable regions with stable polities in the center. Trans-local consolidation brought about a radically different, more diverse, and much larger political arena. This "upscaling" event presented the possibility of a larger collective unit and by virtue of that scalar increase, an entirely new set of political options for peoples of the steppe. These new opportunities were in sharp contrast to the uncertain and competitive politics of the small-scale polities prior.

This "regional political community" combined together a number of smaller communities across central, west-central, and eastern Mongolia but did not constitute a state per se nor was it simply a confederation. It was a multicentered polity that, given the nature of prior competitive contexts, made participation an attractive option for numerous dispersed households, local groups, and communities. In that sense, the polity was more like a social movement that encouraged involvement despite embedded social asymmetry and differentiation. As such, it was a key experiment in complexity at a larger scale prior to the formalizing of more state-like institutions. The eventual Xiongnu state represented an improvisation upon these initial regional conditions. The rough outline of a regional political order and a hierarchy of leadership was already implicit in these recent events of differential collapse and stability. Relatively stable leadership in the central sections of the Mongolian steppe provided an existing kernel of structure to which newly emergent factions in the east could readily affiliate for assistance, protection, and legitimacy. Indeed, warfare may have been a part of this negotiated reconfiguration, but it was neither the singular nor even the primary political process responsible. The successful transfer of these new relationships to a second and third generation of political participants (i.e., over 20-40 years) genuinely solidified the making of the state. In effect, steppe peoples learned from the youngest age how to think about life in terms of a regional sociopolitical environment and this process eventually shaped statehood-a good example of Bruce Trigger's assertion that, "human nature is transformed in substantial ways by social change" (1989: 344).

3.11 Organizational Trends of Xiongnu Statehood: Spatial Politics, 200 BC–200 AD

The Xiongnu state was founded upon mobility, expansive size, and a participatory form of politics that presented novel opportunities for the newly constituted interest groups composing the body politic. Greatly increased spatial scale, in particular, posed new advantages and challenges for these constituent groups over the initial decades. Political expansion and tribute extraction are widely recognized as having sustained initial Xiongnu organization. In addition to these, four other factors had disproportionate influence on the establishment of a more stable and enduring political order. These include an elaborated ideology of leadership, politically symbolic public ceremony, lifeway advantages for commoners, and spatial politics as a state idiom for both exerting and resisting authority. As the basis for a new kind of negotiation, spatial politics provided the means to contest and resolve relations between members of social groups and political factions. What was unique about eastern steppe statehood was the degree to which the setting for political negotiation was mobile, changeable, and dispersed over large spaces. In other words, unlike the nucleated form of politics in the urban and village centers of China, the eastern steppe presented a negotiative environment in which authority, control, resources, and information could not be socially or spatially concentrated nor readily monopolized.

Therefore, elite and commoners had their respective repertoires of socio-spatial practices that gradually evolved through participation in this relatively open negotiative environment. Several examples of techniques used on behalf of elite agendas include control over major arteries for travel across the steppe, mobile courts that facilitated elite monitoring and circulation, methods for making the seasonal movements of commoners and intermediate elite more predictable, emphasis on areas of resource and movement conjunction as primary centers for elite activity, and interjecting in the traditional long-distance circulation of resources across ecotonal boundaries. Commoners, on the other hand, sought to enfranchise their own prerogatives which sometimes brought them into conflict with elites and at other times revealed shared interests. In either case, non-elite groups maintained substantial recourse for expressing and enacting their agendas. Examples of these practices included "voting with ones feet" which, in the Xiongnu context could also involve political defection to the Han dynasty, using geographical distance as a buffer to protect oppositional activities, manipulating edges of political territory that were critically important to external affairs and wealth generation but at the same time geographically remote from state centers, utilizing the indeterminacy of seasonal movement and community dispersal to promote spatial uncertainty, and controlling the same methods of coercion and communication as those controlled by the state, i.e., animal transport and projectile warfare.

Because commoners and their associated factions indeed held the same military and movement capacity that empowered the uppermost elite, the last point in the above list guaranteed commoner households a significant voice in politics. Commoner participation and service shaped political negotiations and, as a result, governing was accomplished by coalition building as opposed to a strongly centralized, comprehensive, and consistent management of daily life. In fact, while many scholars have focused on the problem of strong versus weak political centralization in Inner Asian polities, the real problem was not how to centralize but how to reliably distribute authority in a protected manner so that power sharing became a tool for stabilizing a large political arena. Centralized and distributed authority were two sides of the same coin and at least in the eastern steppe context, the weighting of these sides often changed over time to suit regional and macro-regional conditions.

3.12 Origins of an Amalgamated Imperial Tradition in East and Inner Asia

These methods, among others, managed to sustain a regional political discourse built upon exclusive and unequal differentiation for at least three hundred years. If there was one thing that eastern steppe nomads became demonstrably good at, it was the creation of very large complex polities. The Xiongnu state established precedents for how such organizations could plausibly come about and introduced cultural knowledge and political practices that would later figure within a broader tradition of Inner Asian statecraft. Characteristics of this political tradition already detectable during the Xiongnu period include the following emphases:

- (1) syncretic, inclusive, and adoptive cultural systems;
- (2) expertise in the technical, logistical, military, and social aspects of movement and transport, including an understanding of political relationships as partly structured and negotiated through the practice of mobility;
- (3) control over the logistics of movement as a basic method for gaining political influence over resources, resource access, human resources, factional loyalty, and wealth promulgation;
- (4) political practices that distributed authority across social space, resulting in multiple centers or seats of power and diachronic variation in expressions of centralized authority;
- (5) conversions of value as a major part of nomadic political economy and most obvious in the creation, promotion, and control of long-distance trade and tribute relationships.

If steppe organization emphasized a mobile, distributed, and somewhat decentralized form of politics while the polities of China were consolidated, largely sedentary, and highly centralized, then a pertinent question to ask is what were the effects of centuries of competitive interaction between these two groups with such distinctive traditions. I argue for a kind of inter-organizational learning under these circumstances which transformed and broadened each tradition separately. I do not view this as a direct transfer of knowledge, culture, or technique but rather as shifts in indigenous statecraft that were meant to contend with the dissimilar organizational capacities presented by differentiated and powerful neighbors. In other words, the leadership of China dealt with the spatial and mobile advantages of steppe nomads in ways adapted to the Chinese context, while nomadic rulers did the same in dealing with the amassed resources, manpower, and persistence of a highly centralized China. In expanding the organizational ranges of each tradition, over time the Han dynasty experimented with greater spatial reach, while the Xiongnu state shifted toward a more centralized political process. As I argue in the final chapter, these distinctive bodies of political knowledge co-constituted the roots of a later imperial tradition that gave rise to some of the world's largest land empires, including the Mongol and Manchu empires.

This four-part model is an ambitious attempt to account for patterns of organization and transformation across a very large area and spanning in total more than 1500 years in time. These changes have been documented in texts and by archaeological materials but so far have not been explained in a way that satisfies the evidence from both records. My theoretical framework is intended to organize this body of information into a coherent account of nomadic statehood and macro-regional process. In the following chapters, I present detailed overviews of Mongolian geography and pastoral nomadism and the archaeology of the Late Bronze Age through Xiongnu period of Inner Asia. I argue for the above model of Xiongnu state formation using archaeological evidence from mortuary patterns, landscape organization, seasonal habitation and settlement site distributions, and the results of material analyses. Ethnographic and historical reports also figure significantly in this exploration of nomadic statehood. Throughout, I strive to convey how the study of pastoral nomadic polities in Mongolia adds an important comparative perspective to the anthropology of political complexity.

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Chapter 4 The Heartland of Inner Asia: Mongolia and Steppe Pastoral Nomadism

Myths about Inner Asia and its peoples are numerous. Among them are abstractions like the absolute frontier, the pure nomad, and the fearsome barbarian clamoring at the gates of civilization. These abstractions simplify the historical reality of diverse communities and distinct peoples who were dynamic subjects and who changed over time. Without attention to the details of place and context, such labels become caricatures of the activities, relationships, and transactions they originally signified. In fact, they begin to track a geography of words more so than of people and this is nowhere more apparent than the stereotypical conceptions of pastoral nomadic peoples and their ways of life. Archaeologists in Mongolia are extremely fortunate that the places in which they work almost always are inhabited by nomadic families who continue to exploit local landscapes by herding their animals and moving their campsites seasonally. These families are hospitable and usually show great interest in their ancient predecessors and can form close relationships with the prehistorians working in their midst. They also provide archaeologists with invaluable local knowledge of the landscapes in which they make their homes and methods of caring for herdsinformation that would otherwise be unknowable to an outsider.

In today's fast-moving world, Mongolia's nomads are experiencing significant changes to their lifeways. They are rapidly adjusting, which is no wonder because historically, nomads on the eastern steppe have always adapted to change within their broader social and political contexts. With pervasive change as a starting point, any ethnographic description of Mongolian herding must itself be an invention of its time. In the prior chapter, I discussed traditional anthropological approaches to pastoral nomads and the tension between cross-cultural generalization and the particulars of historical context. This chapter attempts to capture the latter perspective by emphasizing the great variability of Inner Asian environments and cultural expressions in order to better convey the reality of what is an intricate and sophisticated way of life well suited to a challenging and harsh region of the world. To that end, I provide ethnohistorical and ethnographic information that clarifies Mongolian pastoral mobility in terms of its techniques, technologies, and cultural orientation. This information cannot tell us exactly what pastoral nomadism was like two thousand or more years ago, but it greatly assists archaeological efforts to understand past lifeways. I begin with a brief overview of the physical and environmental geography of the Eurasian steppe zone at the continental scale followed by more specific detail on Inner Asia. I introduce the Egiin Gol and Baga Gazaryn Chuluu study areas that together contribute much of the material evidence in support of the present argument. These two local areas and their present-day communities are good examples of the diversity of eastern steppe environments and pastoral nomadic ways of life.

4.1 More than just Grasslands: The Inner Asian Interior of a Macro-Continent

For many Westerners, what first comes to mind about Inner Asia is the phrase, "might as well be in Outer Mongolia!" coined by explorer Roy Chapman Andrews almost a century ago to evoke isolation and remoteness. In reality, Chapman found many similarities between his native Midwest America and the Mongolian steppes. Unless you live in the North American interior, it is easy to forget that the prairies of Great Plains have the same land type and topography as many of the landscapes of Inner Asia. People living in Kansas would probably feel right at home on the opposite side of the earth in the broad open spaces of Kazakhstan or eastern Mongolia, just as Mongolians might well see their northern steppes, forests, and mountains in the landscapes of Wyoming and North Dakota. Although the northern boreal forests and temperate grasslands are fairly continuous across the Old and New World, the way human beings adapted to these conditions was quite different. The Great Plains was home to Native American hunters and farmers, while the Eurasian grasslands supported domesticated animals tended by herders riding Asian horses bred as mounts long ago. It was not until the sixteenth century that horses from the Old World arrived in the Southwest and Great Plains and transformed Native American plains communities. Even with this time gap, Native American horse cultures still had many fascinating parallels to the ancient horse cultures of the Eurasian steppe (Anthony 1986; Hämäläinen 2008).

However, putting horses and grasslands aside for just a moment, it is useful to ask what exactly the label "Eurasia" means in geographical terms. Normally, Eurasia refers to the macro-landmass of Europe and Asia combined, ranging from Iceland in the northwest to East Timor in the southeast. As used in archaeology, Eurasia refers to the middle regions of this landmass and, specifically, to those parts of the former Soviet Union around which Europe and Asia meet, i.e., the Ural mountains. On either side of this arbitrary dividing line are expansive grasslands stretching from Manchuria to the Great Hungarian Plain. The full extent of this mostly land-locked continental interior has been called by many names including, among others, Inner Eurasia and Central Eurasia (Sinor 1970; Christian 1998: 3–4). It consists of a broad belt of steppe fringed by tracts of coniferous forest to the north and by mountain ranges in the south alternating with arid belts of desert. While these grasslands are tremendous in breadth and scale, they are not at all uniform but instead contain diverse microenvironments punctuated by north–south trending mountains, great lakes and rivers, and massive inland seas. Beyond the southern mountains and deserts of Eurasia are the mostly littoral and riverine regions that gave rise to several of the acknowledged seats of civilization: the Mesopotamian plains, the Mediterranean, the Indus valley, and the Central Plain of China.

A familiar conception of the Eurasian steppe zone is a region comprising a virtual highway of pasture across which nomads migrated immense distances from west to east and, at other times, from east to west (Frachetti 2011). Historical evidence suggests that diasporas did sometimes occur across the steppes, as perhaps evidenced by the broad distribution of Turkic peoples whose putative origins are in western Mongolia. However, there is little doubt that mass migration of nomads as a cultural process has been greatly overemphasized in explanations of Eurasian history and prehistory (Shishlina and Hiebert 1998). Archaeological focus on macro-scale migrations and cultural distributions more often than not has been at the expense of detailed attention to local areas and smaller-scale sequences of cultural change. In either case, local details and macro-regional process should ideally be considered simultaneously using a back-and-forth perspective between large and small scales. This latter technique, in my opinion, is a robust way to explore both the intricacies and general shape of Inner Asian prehistory.

Inner Asia makes up the eastern part of the Eurasian steppe zone, and as I defined it in the first chapter, the modern nation of Mongolia is at its center with parts of Inner Mongolia, Siberia, Manchuria, Xinjiang, and Kazakhstan surrounding the Mongolian core. This area represents a sharply reduced geography from Lattimore's original definition which also includes the entirety of Manchuria as well as Tibet (Lattimore 1940: 3). My definition also differs from others that are even more expansive and include former Soviet Central Asia and all of Kazakhstan. No matter which definition is used, Inner Asia is still a tremendous landmass and one convenient way to begin analyzing its vast geography is to focus on the makeup of climate, vegetation, and land types. I describe these different landscapes in some detail as a way to introduce geographic place names and characterize the diverse kinds of environments that gave context to prehistory. Note that the two maps provided below (Figs. 4.1 and 4.2) should be consulted for major geographical terms, place names, lakes and rivers, and all provinces within Mongolia.

The Mongolian heartland of Inner Asia contains a variety of steppe vegetation, lake and river systems, mountains, and deserts—all distributed across the Mongolian Plateau. The plateau is relatively high in elevation, with a majority of land situated at one to three thousand meters above sea level and topographically composed of mountainous territory in the west and center of the country and



Fig. 4.1 Map of Mongolia showing the surrounding regions that make up Inner Asia



Fig. 4.2 Provinces of Mongolia

rolling plains and hillocks in the east. Five vegetational belts traverse Mongolia from north to south and represent gradual changes in temperature and precipitation according to latitude. These vegetation regimes grade into each other, but in some

places, especially in the west, they form patchy distributions rather than a continuous sequence. Nevertheless, from north to south, Inner Asian environments can be generally classified as taiga coniferous forest, forest steppe, classic or temperate steppe, desert steppe, and arid desert landscapes (Fig. 4.1).

Of these five zones, the southernmost Gobi Desert is probably the best known region within Mongolia and consists of arid desert and desert-steppe environments. The Mongolian Gobi is situated at about 43°-44° north latitude, but these desert lands extend farther south into western Inner Mongolia and Xinjiang province as well. This substantial arid zone creates a natural frontier between the watersheds of Mongolia, which mostly comprise arctic and internal drainages, and those of China which drain into the Pacific Ocean. The Gobi is a scrub and pebble or semi-sand desert that has a mean annual rainfall of less than 100 mm. In many places, especially in the southwest of Bayankhongor and Gobi-Altai provinces (Fig. 4.2), rainfall does not exceed 50 mm. Surface water consists of occasional salt marshes, brackish lakes, and playa basins, though in some parts of the Gobi, springs and accessible water tables make it possible to live and support herd animals and even farm despite the aridity. Gobi herds are mostly made up of goats and Bactrian camels, though in places with reliable subsurface water, sheep and horse herds are also common. These animals require that herding households make frequent camp movements in order to supply them with enough of the sparse, tough pasture characteristic of the region.

To the north of the arid desert is a broad belt of desert steppe composed of grasses well adapted to a semiarid environment. These regions in Mongolia generally receive an average of between 100 and 200 mm of rainfall annually. The desert steppe is capable of supporting a broader range and greater numbers of herd animals as well as a human population that is somewhat denser. Similar to the arid Gobi, land surfaces are comprised of playa basins and salt pans, but the surface water, usually in the form of springs, is more common and widespread. Wells are still a major source of water in desert steppe regions and are usually the traditional hand-constructed variety that tap into relict river beds and other locations having near-surface water tables. In some cases, major rivers, like the Tuin Gol (the Tui River) of Bayankhongor province and the Ongi of the South Gobi (Omnogobi province), flow southward through the desert steppe to end in closed drainages. Within their basins, these rivers maintain higher-quality grasslands and even small plots of farmland. North-south-flowing desert rivers have long acted as transit routes into the desert and jump-off points across the Gobi into to Inner Mongolia and regions farther south. Desert-steppe environments support goat and sheep as well as camels and famed Gobi horse herds. Herders can maintain cattle in pockets of higher precipitation, which are usually characterized by greater topographical relief and more plentiful spring-fed water sources. One benefit of living within the desert-steppe belt is mobile access to moderate temperature winter environments in the Gobi Desert and abundant spring and summer pasture in the temperate steppe immediately to the north.

The temperate steppe belt of Mongolia spans the central portion of much of the country at approximately 46° north latitude. The region supports the five



Fig. 4.3 Horse herders of Arkhangai province in Mongolia

traditional herd animals of sheep, goat, horse, cattle, and camels. In zones of higher humidity and along streams, dry-farmed and irrigated agriculture of vegetable and grain crops can be sustained. Surface water is relatively plentiful in this part of Mongolia with large freshwater lakes and some of the most important waterways of the northlands. These include the Orkhon, Tuul, Kherlen, and Onon rivers, all of which arise as streams in the Khangai or Khentii mountains and eventually make their ways northward to Siberia. Annual precipitation averaging 200-300 mm, lush and diverse pasture, and robust sources of water make the steppe belt an attractive ecology for herding in that it does not necessitate long-distance seasonal movements. However, the variable topography and river valleys that offer different pasture types and facilitate movement make this zone ideal for more intensive and specialized herding. A good example today is the specialized horse herds numbering in the hundreds of animals that are characteristic of the central Mongolian provinces and especially the west-central province of Arkhangai (Fig. 4.3) which has the highest percentage of the nation's horse herd (e.g., NSOM 2005: Appendix 7, 2010: Appendix 14).

The northern vegetational belt in Mongolia is the forest-steppe zone which is transitional to the boreal taiga forests of Siberia. The forest steppe stretches across the northern part of the country at approximately 48° north latitude but alternates in the west with patches of semiarid basins and forested alpine meadow. Land cover consists of steppe grasses, shrubs, and medium-dense forest cover of birch, larch, and pine located mainly on the north-facing slopes of ridges. This is a region of seasonal and perennial streams, numerous freshwater lakes and ponds,

and substantial rivers such as the Selenge which joins the Orkhon and Tuul rivers to feed Lake Baikal in southern Siberia. Mean annual rainfall across the foreststeppe zone exceeds 300 mm and sustains dry farming and irrigated agriculture, making this region the bread basket of Mongolia. Abundant sources of fodder support large animals during the winter and into early spring, and while all of the five major herd animals including camel inhabit this environment, it is especially well suited for cattle. Higher-altitude areas also support yaks and yak–cattle crosses known as *khainag*. Abundant pasture, lower productive risk, and a landscape punctuated by ridges, forests, rivers, and lakes produce a resource landscape in which herding can be practiced over very short distances within the fertile low lands of major river valleys and their tributaries.

A final small part of the Mongolian environment is made up of the taiga biome which consists of the same dense coniferous forests that comprise much of Siberia. These forestlands occur in the northernmost Mongolian province which is also home to Lake Khovsgol, an extremely large freshwater lake that forms a major headwater of the Lake Baikal system. In this mountainous and forest-covered area situated around the shores of the lake, reindeer herding is still practiced by the Dukha-Tsaatan people (Badamkhatan 1996). Their culture and population were originally part of Uriankhai groups in Tuva before the Mongolian-Soviet border was established in 1944. The Dukha-Tsaatan are one of the southernmost expressions of the many reindeer herding cultures inhabiting the boreal forests of Siberia and northern Manchuria (e.g., Evenki, Nenets, Yakut).

These five major land types are further differentiated across the altitudinal zones of Mongolia. From east to west, environmental differences are linked to dramatic changes in topography and elevation across the country. Moving westward from the border between Mongolia and eastern Inner Mongolia, the landscape is a continuous plain of broad rolling grasslands with low relief, many streams, and dotted with lakes. These plains are similar to the prairie grasslands of North America but are intersected in central Mongolia by two major mountain ranges: the Khangai Mountains of west-central Mongolia and the Khentii range of central northeast Mongolia. These two mountainous regions are made up of eroded peaks of moderate elevation with good soil development supporting a variety of steppe grasses. Lush intermontane steppe valleys capture rain runoff and form the headwaters of most of the major rivers in Mongolia. Further to the west beyond the Khangai Mountains, topography drops off to a plain of scrub and arid steppe flatlands with closed drainages, large salt lakes, and the first low foothills of the Altai Mountains. The Altai is an impressive mountain range having the highest peaks in Mongolia, rock-carved river gorges, glaciers, and high mountain passes that provide corridors for movement beyond Mongolia to the west, southwest, and northwest. This mountain range overlaps the borders of four countries linking the westernmost portions of Mongolia to southern Siberia, eastern Kazakhstan, and northern Xinjiang province.

The above description of the physiography and environments of Mongolia demonstrates both the diversity of landscapes and the adaptability of pastoral nomads within these varied regions. In this regard, Mongolia is quite different from the western Eurasian steppe zone due to its wide range of biomes and the overall richness of its subsistence resources. To broaden this overview of Inner Asia, I move beyond the modern territory of Mongolia and touch on adjacent areas in Russia, China, and Kazakhstan. Moving directly northward across the border of Mongolia into southern Siberia, there are several regions whose archaeology is of particular importance to the forthcoming discussion. These areas include the following: the Siberian side of the Altai Mountains, the upper Yenisei River and Sayan Mountains of Tuva, the Minusinsk Basin, and Cisbaikal to the northwest of Lake Baikal, as well as Transbaikal to the southeast of the lake. Each of these regions is characterized by either mountain steppe, forest steppe, or taiga environments, and each sustains various traditional forms of pastoral and agricultural production.

To the east, Inner Asia includes the plains of eastern Inner Mongolia and the forest zone of Manchuria beyond the Great Khinggan Mountains. Inner Mongolia is another expansive region critical for understanding the early politics of Inner Asia. As already noted, archaeologists working in China refer to the Inner Asian Chinese borderlands as the "Northern Zone." Included in this historical and geographic term are Ningxia and Gansu provinces, all of Inner Mongolia, and Manchuria (currently Heilongjiang, Liaoning, and Jilin provinces), and sometimes adjacent parts of Qinghai and Xinjiang as well. Inner Mongolia makes up the core region within the Northern Zone and can be divided into eastern, southeastern, central, and western sections. Inner Mongolia traces a substantial northeast to southwest arc from the lush grasslands bordering Manchuria and the Russian Far East down to the most arid western extensions of the Gobi Desert. These desert regions of western Inner Mongolia and northern Gansu continue still further to the southwest and eventually merge with the Taklimakan sand desert of the Tarim Basin in Xinjiang province. Xinjiang is well known for several major routes of the ancient Silk Roads including those around and through the Tarim region and those farther north beyond the high Tian Shan Mountains. Between the Tian Shan and the Altai Mountains is the Dzungarian Basin which provides an east-west corridor of travel between the mountain chains and gives access to the grasslands and mountain fringes of eastern Kazakhstan.

4.2 Examples of Inner Asian Pastoral Nomadism from Mongolia

The diverse environments and landscapes of Inner Asia suggest different configurations of subsistence practices, resources, movement regimes, and productive risk. Clearly, a one-size-fits-all approach to pastoralism cannot encompass this variety unless it is founded on the idea that the practice of pastoralism is itself highly flexible and has a *modus operandi* that anticipates change and quickly adapts to it. This raises a problem for any synchronic account of pastoral nomadism since, by default, these communities and their activities promote the potential to assemble and disassemble in numerous ways over space and time. It is necessary to keep this caveat in mind when reading the vast ethnographic literature of mostly synchronic accounts of pastoral nomadic peoples.

Perhaps even more critical, ethnographers themselves must be aware of the importance of extended time observations, especially in the case of mobile herders. What might be called "diachronic ethnography" is required to properly contextualize the events, relationships, and arrangements of pastoral nomadic lifeways. In fact, there are many good examples of ethnographers turning to historical texts and oral histories in order to augment their own experience as participant observers (e.g., Tapper 1997; White and Johansen 2005). An even more innovative approach to overcoming the problem of time is the sharing of ethnographic projects between parents and children who have worked together for decades within the same pastoral nomadic communities. A wonderful example of this has been the mother–daughter team of Beck (1986, 1991) and Huang (2009) who have made inter-generational time a significant element of their ethnographic understanding of the nomadic Qashqa'i of Iran.

Ethnographic research has done a good job of documenting the conditions of contemporary pastoral nomads who in many cases have been encapsulated and subordinated as second-class citizens within modern nation states in some parts of the world (e.g., Chatty 2006). However, from a deep diachronic perspective, these events of the past century and their observation by cultural anthropologists are but a small sample of pastoral nomadic organizational and interactive patterns. Ethnographies and histories of nomadic peoples as a whole provide a very particular and somewhat limited set of information on the nomadic past and should not be taken as the definitive accounts of nomadic societies in general (Rosen 2008). Mongolia, in this respect, might present a contrast since its nomadic peoples have indeed been encapsulated within a modern state but one made of and by nomadic peoples themselves-which is a very different situation from many of the marginalized and embattled nomadic groups in the Middle East and Africa (Galvin 2009). This raises the interesting question of the status of Mongolian pastoral nomadism today. Among present-day Mongolian people, this very question of their own identity, their investment in pastoral nomadic lifeways, and their cultural heritage is greatly debated as Mongols attempt to navigate radical economic changes. Given these recent transformations, to what extent can modern Mongolia still be considered a nation of herders?

The nation state of Mongolia is a land-locked country of 1.6 million km² with a population approaching three million people. Though the numbers vary over time, average livestock holdings for the nation are currently around 25 million animals or about eight animals for each person. From the late 1950s to the collapse of the Soviet Union in 1989–1991, Mongolian pastoralism was carried out and organized through herding collectives with state ownership of animals, though families maintained small personal herds of about fifty head. These collectives, called *negdel*, had hierarchical arrangements, robust infrastructural investment, technological and scientific support, and a specialized approach to stock keeping. Herders benefitted from the availability of heavy trucks for transport as well as permanent wooden winter shelters, mechanical wells, and veterinary assistance. Mobility in the negdel system was largely tethered within local administrative districts, though authorities permitted longer-distance movements for obtaining seasonal pasture in times of need.

During the socialist period, the national economy focused primarily on pastoral production with subsidized support for vegetable, fodder, and grain cultivation sectors, as well as mining and light industries. The relatively small population of socialist Mongolia was largely rural, and if not nomadizing and living on the steppe, citizens resided in one of a number of built settlements ranging from small hamlets to provincial centers to the primary urban center of Ulaanbaatar (Schmidt 1995: 81–95). During the 1970s and 1980s, the high level of health, education, and infrastructural services available to rural pastoral nomadic communities set a unique precedent among the world's nations (Fratkin and Mearns 2003: 117). Mongolia still has a major investment in the pastoral economy with almost 50 % of households directly or indirectly involved in pastoral-related activities. This statistic is changing rapidly, however, due to an increase in multinational corporate mining of gold, copper, and coal deposits throughout the steppe nation.

Beginning in the 1990s, Mongolia privatized its state-owned herds by distributing animals among all citizens and disbanding the negdels. At the same time, many of the support systems and services that rural residents relied on were withdrawn. In order to adapt to these changes, herding families have sought to reestablish community-based traditions and institutions that in the past collectively supported the herding economy. The challenge for herders has been to integrate the old with the new, which has meant adapting within the context of a developing market economy, the pressures of globalization, and national priorities for land management and resource use (Templer et al. 1993; Sneath 2001). Despite the new economic and political setting, traditional herding practices remain in use among pastoral households and have been combined with modern mobile technologies that facilitate pastoralism and rural life.

The traditional Mongolian circular felt tent, known as a *ger* in Mongol or yurt in Turkish, provides a superb transportable dwelling that gives shelter from the cold, wind, and dust. Inside the ger, family members might be using mobile phone service or the Internet to connect them with the world outside. Herders regularly use such equipment to monitor regional weather, watch animal and fiber market prices, and make arrangements for cash and supply deliveries from urban areas. To power this twenty-first century production unit, herding families commonly install solar arrays for electricity and even satellite dishes for television, all of which can be easily packed up and moved along with the herds between seasonal camps. Short- and long-distance transport is made possible by an array of vehicles including motorcycles, jeeps, and heavy trucks supplemented by the traditional uses of horses and camels. In short, the stereotypical steppe nomad on horseback in the middle of nowhere is a far cry from today's globalized herder (Fig. 4.4).

As mentioned above, traditional herding depends on sheep, goats, horses, cattle and/or yaks, and camels with limited herding of reindeer in Mongolia's northernmost reaches. Herders exploit these animals for transport, meat, milk, skins, wool, and other fibers. While sheep and goats form basic constituents of most herds,



Fig. 4.4 Mongolian gers setup along a road in southern Tov province to sell food to travelers on their way to the Gobi Desert (photograph by the BGC Archaeological Project)

there is a clear north-to-south shift in species emphasis from cattle and sheep in the high-precipitation forest steppe to camels and goats in the arid regions of the Gobi. In general, species composition, timing and number of seasonal movements, distance of movement to new camps, and the number of families in co-residence are all complex variables configured by household decision making and short- and long-term goals. These configurations are subject to wealth, locality and environment, animal holdings, seasonality, and relations with other households.

Animal holdings and herding are not the entire story of subsistence production in Mongolia. Hunting, gathering, fishing, and small-scale agriculture can also supplement pastoralism (Erdenebaatar 2000: 12; Vainshtein 1980: 145-147). These activities were probably more important in the past when local stores did not make available flour, rice, and vegetables. However, the Russian economic pullout in 1990-1991 following the fall of the Soviet Union demonstrated the importance of supplementary production for economic survival during hard times. Mongolia lost one-third of its GDP practically overnight as Russia halted economic support and subsidies including the many food products that Mongols had relied on for decades. As a result, shelves were empty of food supplies in stores across the nation. While the urban population in Ulaanbaatar had ration cards and weekly handouts, rural populations relied primarily on herding and opportunistic horticulture to get by. During the difficult years of 1992 and 1993 in the town of Bayankhongor (central southwest Mongolia), townspeople and herders alike tended large gardens of vegetables using water from the Tui River. The largest garden plot was inside the crumbling mud walls of a 200-year-old Manchu garrison near the river floodplain. Gardeners grew vegetables for their own use and for gifts or payments, but when these products returned to local stores, horticulture diminished.

While today supplementary activities like small-scale horticulture are not a critical part of subsistence for households, their occasional use can still be quite important. The possibility of sudden environmental shifts that can wipe out herds in a matter of weeks always looms large in the minds of pastoralists and, for this reason, additional subsistence skills are not forgotten. Unseasonable snowstorms, epizootic disease, steppe fires, and drought are all risk factors that threaten the livelihood and surplus wealth of herders. Different parts of Mongolia have higher and lower pastoral risk profiles, but in general a serious environmental downturn can be expected every 5-8 years (Fernandez-Gimenez 2000: 1322). While any particular episode is unpredictable, the probability that a hardship event will eventually occur is 100 %, and therefore, the practice of Mongolian pastoralism includes many ways to buffer against productive risk. For the individual family, these strategies include the production of multiple subsistence sources of food and storage techniques for meat and dairy products. Community practices comprise techniques for dispersing herds over space against localized downturn and social storage through reciprocity, obligation, and ritual (Sneath 1993). One of the most important protections against herd loss is still seriously underappreciated, namely intimate knowledge of pasture, climate, and animals and how these three intersect over time. Personal and collective knowledge among herders allows for the flexible adjustment of productive, spatial, and social variables to meet short-term goals and long-term sustainability (Fernandez-Gimenez 2000; Miller and Sheehy 2008).

Pastoral planning must be as dynamic as the variables it seeks to accommodate. For that reason, more predictable variables are enlisted as a framework to organize less predictable ones. Seasonality presents such a framework, and much of the practice of Mongolian pastoralism can be understood in relation to the highcontrast seasons of the Inner Asian continental climate. It is customary to greet people in the countryside by inquiring as to how a particular season has been for them and their animals. These seasonal greetings correspond to the traditional seasonal movements and campsite types used by most Mongolian herders. The four seasonal camps are *zuslan* (summer camp), *ovooljoo* (winter camp), *khavarjaa* (spring quarters), and *namarjaa* (fall quarters). In practice, however, the summer and winter camps represent primary locational differences, while fall and spring camps tend to be optional, flexible, and usually not too far from the summer or winter sites, respectively.

One of the periods of greatest hardship for herd animals is during winter and early spring when prolonged low temperatures, winds, and snowfall cause animals to lose a significant portion of their body weight. Therefore, winter quarters are perhaps the most important of the four seasonal camps and the one site most delimited in terms of viable locations. Winter campsites must provide a setting that gives protection from the weather, adequate storage conditions for fodder, and good nearby pastures that can be held in reserve during other seasons and are accessible despite snow cover. The winter camp is usually occupied by a single household with user rights to that particular spot and its surrounding resources year after year and sometimes over generations. Generally, the cold season is a time of more isolated activities; however, the celebration of the lunar New Year (*Tsagaan sar*) in late winter offers an occasion for extended family gatherings, ceremonial visits between households, and exchanges of information and planning for spring and summer. It also provides an important occasion for the redistribution of food and monetary resources as needed to support any household in crisis.

In contrast to winter camps, summer sites exhibit much more diversity in terms of geographical location. Relocating in the summer is not predicated on long-term user rights but rather on local community negotiations and respect for precedent and household desires. Very often, the summer season involves one or more movements to multiple locations depending on pasture quality and local weather conditions. Access to adequate water supplies is one of the most important variables during the warmest months. In the northern temperate steppe and forest-steppe regions, families will relocate near valley or grassland streams, while families in the more arid parts of Mongolia select locations that are near wells and springs. Another primary difference in summer habitation patterns is the aggregation of households at one summer camp into *khot ail* groups made up of multiple family ger tents. Khot ail camps can be based on kinship, or mutual benefit, or some mixture of the two that brings together two to thirteen households to share labor, information, and resources (Simukov 2007: 465, 489). An example of a labor-intensive practice that khot ail groups readily accommodate is the dividing up of herds on the basis of species and age to be pastured as subgroups in spatially dispersed, but nutritionally optimal pasture locations. Members of each family will take different age species groups from the combined khot ail herds and disperse them over the landscape for the day's grazing. As such, the warm weather seasons are those of maximal movement and interaction. Summer is also the season of festivals and competitions throughout Mongolia which bring together large spatially dispersed communities for collective sports and ceremonial activities.

Given these seasonal dynamics, it is clear that the way in which a household migrates over the course of a year will be contingent on both social and productive conditions. When selecting a new seasonal campsite, a complicated mix of factors is involved such as what other families will be nearby, access to local townships, the respective distance of travel, distribution and quality of grazing sites and water, the nature of follow-up movement to subsequent camps, and whether adequate transport can be organized. Flexibility and variation are always dominant aspects of how household movement actually unfolds. A move occurs only after herders consider the multiple environmental, productive, social, economic, and technological variables that go into site selection as well as the overall household goals for production and assessments of potential risk. Owen Lattimore sums up the complexity of movement quite well:

Within the world of the steppe there are many types of migration cycle, governed partly by geography and partly by social specialization in the use of different animals. There are groups that move over considerable distances and others that move only a few miles in the course of a year. Some nomads have a pastoral range which includes both rich and poor grazing, while some never leave the arid steppe or remain entirely in good meadow country. There is an intricate relationship between the kind of pasture that predominates, the frequency of moving camp, the distance travelled from one grazing ground to the next, and the climate and soil (Lattimore 1940: 73).

To clarify how anthropologists have attempted to understand the decisions that make up Mongolian "nomadism," I refer back to an informative research program carried out at the beginning of the twentieth century. During the 1930s, the socialist government of the Mongolian Peoples Republic was searching for effective and sustainable ways to nationalize and collectivize herding. This project had probably more to do with politics, both internal and external, than with genuine economic restructuring or development. The Mongolian government initiative sought to reproduce the agricultural collectivization model set forth by Stalin in the Soviet Union; in addition, it aimed to combat the powerful Buddhist monasteries in the country by appropriating their herd wealth and lands (Bawden 1989). In order to devise a state-sponsored approach, the initiative required extensive ethnographic studies of pastoralism. Russian researcher A.D. Simukov, an acknowledged expert on Mongolian geography and lifeways, participated substantially in this effort. He documented and analyzed the complex relationships between water and vegetation, microclimate, herd composition, range and frequency of seasonal movement, and the makeup of extant administrative systems that embedded these diverse factors. In his reports, Simukov placed primary emphasis on movement practices which were important for managing not just herds of animals but also people. In this respect, what interested government authorities most were methods to create a functional relationship between centralized administration, mobility, and herding that suited the needs of politics as well as pastoral production (Simukov 2007: 605–606).

Simukov's project called for the analysis of distances of annual migrations which, in and of itself, is not an easy task given the substantial variability in movement. To do this, he observed the spatial range that would effectively encompass all campsites of a single household over the course of four seasons as represented within a tightly fitted circle. The annual migration for that household would then be logged as the circle's diameter even though the actual pathway of migration was obviously not circular. After conducting extensive field research and interviews across Mongolia, Simukov proposed six basic patterns of seasonal movement according to geographical location and environmental conditions. His classification is organized according to Mongolian regions and consists of the following configurations of herd mobility: western, Ovorkhangai, eastern, steppe, Khangai, and Gobi types (see Simukov 2007: 443–449). Before describing these patterns further, it is important to point out that this typology compiles hundreds of observations of households moving in real time. As such, it is a heuristic way to work with a great deal of information about varied behaviors. In practice, these simplified "types" cannot adequately describe the complicated frameworks developed by herders as they think about pastoralism or make decisions concerning its many intricacies. Nevertheless, it is useful for revealing major similarities and differences in movement regimes.

That said, Simukov's "western" pattern arises from his observations in the western Altai Mountain region and along the dry closed drainage plains of the lower Altai foothills. Seasonal locations suitable for campsites are located at some distance from one another and at markedly different altitudes. Movement consists of high-, middle-, and low-elevation migrations in the range of up to 100 km annually. Summer quarters are located near high-elevation summer pastures along upper slopes of the mountains, while autumn camps are in the plains at the lowest elevation. The best areas for winter/spring quarters are those with adequate wind protection, and these tend to be in the middle-elevation foothills where there is moderate slope. One variant of this elevational strategy is the "Ovorkhangai" pattern practiced in the southwestern Khangai Mountains of Mongolia. Here, high mountains border on the arid upper portions of the desert-steppe belt making longer-distance movements between these zones practical. Moving across distances of 150–200 km allows herders to exploit summer streams and meadows in the upper Khangai Range and the warmer winter pastures of the lower-altitude Gobi-Altai region.

The "eastern" pattern is somewhat similar to the "Ovorkhangai" strategy. Simukov made observations related to this form of herding in the eastern grassland plains located between the arid steppe in the southeast of Sukhbaatar province and the southern fringes of the Khentii Mountains and Kherlen River basin in the north. Summer camps are located in the hill regions around the Kherlen River where water is plentiful, while winter camps are in the more arid areas to the south with warmer winter temperatures and low rising hills to offer wind protection. These north-south migration routes in the east constitute up to 100 km of movement annually. In contrast, the "steppe" type of pastoral mobility covers less distance and elevation within the central temperate steppe of Mongolia. This strategy makes use of available surface water within the open grasslands including small streams and lakes which, during the summer season, provide good locations for campsites. Summer camps are often shifted periodically throughout the season as immediate pastures around a khot ail group are gradually consumed by grazing. Winter camps are chosen on the southern side of low hills or ridges or otherwise in gullies to protect herd animals from the prevailing cold winds; otherwise, winter camps are at about the same elevation as summer camps. The distance of seasonal rounds varies according to Simukov, but in most cases between 30 and 50 km is a characteristic annual range for central steppe herders.

The last two types of mobility, i.e., the "Khangai" and "Gobi" types, are pertinent for the two archaeological study areas of Egiin Gol and Baga Gazaryn Chuluu, respectively. Egiin Gol is located in the forest-steppe zone along a major river way in Bulgan province of northern Mongolia. Herding families living along the river valley organize production in ways similar to Simukov's "Khangai" configuration. Khangai mobility is well suited to areas with high-precipitation and high-productivity pasture so that only two to four seasonal movements are made by a household annually over a relatively limited distance of up to 8 km and sometimes slightly more depending on topography. Winter sites are located in the lee of hills or ridges that offer northern-side protection from wind chill, and these locations tend to be in higher-elevation areas often in the upper reaches of tributary river valleys, small side valleys, and ravines. Summer sites are at lower elevations within broad meadow pastures along the river and stream courses of major valleys.

"Gobi"-type mobility is practical for environments having lower-productivity pasture such as that documented at Baga Gazaryn Chuluu in the desert-steppe province of Dundgobi. Simukov argues that arid grasses are not very diverse and re-occur in similar patterns across the Gobi Desert. As a result, longer-distance migration does not secure a qualitatively different environment; therefore, the best strategy is multiple small-scale movements by single households which are relatively dispersed from one another. On the other hand, herders in the northern Gobi not too distant from the temperate steppe zone can benefit from farther movements into the more humid grasslands. Reliable water sources act as a tether on household distributions during the hot summer season, and in winter, families move to campsites sheltered at the base of low ridges or hills. Simukov points out that gobi mobility can include very long-distance movements of up to 250 or more kilometers, but such migrations usually occur in reaction to drought or unseasonal cold snaps and are emergency measfocusing specifically on camel herding sometimes practice a different strategy in which they remain on the open desert plains all winter to secure the graze best suited for their animals. Alternatively, Gobi households with mixed herds can split up in winter to give camels open pasture while providing goats, sheep, and horses with the much needed protection of low hills and mountains elsewhere.

Over the course of his ethnographic research, Simukov documented a full range of movement from no movement at all to up to 200 km annually. Overall, most households moved between a sequence of campsites that encompassed an annual round of between 10 and 100 km (Simukov 2007: 601). If not brought on by emergency conditions, the significantly longer-distance ranges tended to be specialized forms of herding that maximize nutrition for horses or camels by accessing the highest quality graze despite its spatial dispersion. Even though Simukov recorded this information more than 80 years ago, much of the pastoral organization he observed and reported was in some way incorporated in the creation of herding collectives and is still evident in practices today. That Simukov's classification is still pertinent for understanding pastoral nomadism in Mongolia is testament to the deep insight of his work. To follow up, I provide more detail on the Egiin Gol and Baga Gazaryn Chuluu regions not only to describe their respective environments and local communities but also to give context for the archaeological fieldwork at both sites. These two areas were purposefully selected for archaeological study precisely because they are so different from each other in terms of environment and geographical position within Inner Asia. As such, they provide a broader perspective on the diversity of Mongolian landscapes and lifeways.

4.3 Egiin Gol: A Northern Mongolian River Valley

The Egiin Gol¹ River is a major tributary of the Selenge river system which feeds into Lake Baikal in southern Siberia. The river takes its headwaters from the southern spill point of Lake Khovsgol and winds its way through southeastern

¹ Another transliteration of this place name has been published as "Egyin Gol." The transliteration I use here draws on the Cyrillic spelling as it appears in the 1:100,000 Mongolian national map series.

Khovsgol province and into Bulgan province where it joins the Selenge. Along the final section of the Egiin Gol immediately above the Selenge confluence is a broad valley rich in archaeological sites representing a history of human occupation dating back at least 30,000 years. The lower Egiin Gol River flows in an east to southeast direction and meanders along a valley bottom made up of a wide and active floodplain and a series of old terrace remnants at elevations between 840 and 900 m above sea level. Surrounding the river are steep eroded mountains rising up dramatically to 1,300 m above sea level. On the southern bank, the lower river basin is bounded by a high east–west ridge system that divides the Egiin Gol from the larger Selenge river further to the south. On the northern bank, the Egiin Gol basin is intersected by a number of north–south-trending ridges that alternate with flat-floored valleys formed by perennial and seasonal tributaries to the Egiin Gol River (Fig. 4.5).

Intrusive magmatic events, metamorphic processes, and later volcanic activity formed the geology of this region. Local parent materials consist of coarse-grained gabbros, granites, grano-diorites, and pyroclastic rocks. The region has sources of copper, clays, garnets, and rich colluvial and alluvial soils atop of earlier loess deposits from the end of the last glaciation (Asian Development Bank 1992). Current morphology in the valley is the result of long-term processes of weathering and erosion, occasional volcanic activity, and tectonic movements. Land cover at Egiin Gol is classic Inner Asian forest steppe and consists of vegetation



Fig. 4.5 Topography of the lower Egiin Gol valley

dominated by varieties of feather grass (*Stipa sp.*), shrubs (*Rhododendron sp.*), and medium-dense stands of birch, pine, larch, and dwarf elm (*Ulmus pumila*) growing along seasonal waterways. The forest–grassland interface is patchy and distinct with tree cover mainly situated along higher-elevation ridges and strongly favoring north-facing slopes.

Grasslands make up most of the valley bottoms and provide high-quality pasture for use by the local herding community. Average temperatures in January and July are -20.5 and +15.9 °C, respectively.² Mean annual precipitation in the area is between 360 and 440 mm with rainfall mostly during the warm season months, though winter snowfall also makes a significant contribution. Water is plentiful in the area and is available from the Egiin Gol River, from spring snow melt, and from seven tributary streams feeding into the main river. Of these, six are seasonal and begin to flow in July depending on the amount and timing of summer rain, while one is a perennial stream. Older individuals in the valley say that they can remember when a number of the now seasonal streams were perennial water sources. Soil quality and rainfall is sufficient at present to support extensive dry-farmed agriculture. During most of the nineteenth and early twentieth centuries, local Buddhist monasteries maintained a system of intensive agriculture using canal irrigation.

In 1999 and 2000, about 20 herding households made their summer camps along the lower Egiin Gol River, and many more were located in and around the small township of Khantai along the upper northwest bank of the river. During this time, Diimaajav Erdenebaatar, the lead Mongolian archaeologist working in the valley, completed a detailed ethnographic study of local herding practices (Erdenebaatar 2000). His research provides a good idea of the lifeways of modern Egiin Gol herding families. With its high annual precipitation and pasture diversity, Egiin Gol is generally recognized as a resource-rich area in comparison with many other parts of Mongolia. Herding households in this region make relatively short seasonal movements in order to maintain herds of sheep, goats, cattle, and horses, with sheep and cattle as the primary herd animals. Productive mobility in the valley is based on a system of three to four seasonal camp movements with some families opting to maintain their summer site well into autumn, while others establish new fall campsites at the family's discretion. Seasonal camp size varies from between one and two families in winter to three to four khot ail households in summer. The total extent of a family's movements at Egiin Gol is usually not more than 8–15 km.

Herding families establish winter camps in the middle to upper reaches of tributary valleys away from the main Egiin Gol basin and at slightly higher elevations. They locate their summer camps mostly along the Egiin Gol River or at the mouth of the major side valleys. Herders describe their priorities for choosing winter sites as finding a location that is protected from wind, has accessible areas of graze reserved for the winter months, and has proximity to early spring pastures.

² Measured in the nearby Bulgan provincial center from 1961 to 1990.

To better protect their animals, herders often build partially sheltered corrals from local timber. Herd sizes and the number of herding households in the valley are subject to the carrying capacity of the least productive seasonal pasture. In the case of Egiin Gol, the availability and productivity of pastures from late winter through early spring represent the critical resource period. Harvesting and storing winter fodder during the fall helps many households stabilize their animals into spring during the lambing season when the herds must be in good health. Snow melt in late March and April is important for encouraging initial pasture growth for early grazing, but it is not until rains come in mid-June that grasses become abundant within the valley. When pastures are robust, the choice of summer camp locations is governed by other concerns like proximity to streams, adequate breeze, scarcity of insects, and distance from or proximity to other families, stores, and services (Fig. 4.6). By late June and early July, the Egiin Gol herds are stabilized and progressing toward their maximal body weight which will be maintained throughout autumn and into the next winter.

For local families, herd animals are both a form of wealth and the main source of food. Herders choose older or infirm animals and cull redundant younger males to provide meat for their families. In late autumn when the animals are still robust and temperatures drop sharply, Egiin Gol families slaughter several sheep and goats or a cow; these animals are then frozen, stored, and eaten throughout the winter. Strips of meat are also hung out to naturally freeze dry through the winter months and are ready in spring for use in soups and tea or are stored for up to a year. A major food source during the warm weather period is a vast array of



Fig. 4.6 The summer landscape of the Egiin Gol valley basin (photograph by A. Russell Nelson)

dairy products that are made from the milk of sheep, goat, cow, and horse. These include wet and dried forms of cheese, curds, and yoghurt as well as milk tea and *airag*, the famous fermented horse's milk. Since the township of Khantai and other towns in the area have well-stocked stores, families in the valley purchase rice, flour, cooking oil, tea, root vegetables, and sugar to complement a largely meat-and dairy-based diet.

In addition to herd production and store purchases, local households also rely on hunting and gathering to add variety and improve diets through summer. Hunting supplements herd products with game meat from deer, elk, and wild boar, while wolves are hunted for their pelts. Marmots (Marmota sibirica) were once numerous at Egiin Gol, but today, they are all but gone since their meat is a much sought after delicacy. Fish are plentiful in the Egiin Gol River, and some families will catch and eat them, but others heed a traditional Buddhist prohibition against disturbing animals of the water. Gathering within the valley provides fruits, berries, leafy plants like rhubarb, and various tubers and roots. Seasonal fruits and vegetables gathered from the surrounding areas are used as seasonings in cooking, in teas, made into jams, and eaten fresh directly off the bush or collected in bowls for the table. These products sometimes supplement small dry-farmed or hand-watered vegetable gardens near summer campsites. Herders consider hunting and gathering an opportunity to participate in traditional activities that family members clearly enjoy but that are not necessarily required for basic subsistence. However, these traditions support the idea that a multi-resource subsistence economy of agro-pastoralism, hunting, gathering, and fishing is plausible for the Egiin Gol region.

Despite the presence of stores nearby and state assistance in times of emergency, extreme drought or cold are persistent hazards for modern pastoralists. Herd losses directly affect household wealth, and severe environmental downturns can directly impact the number of families that are above and below the poverty line. Moreover, shifts in pastoral viability due to animal losses can significantly re-arrange the social and political landscape of local communities (Okayasu et al. 2010). In this regard, Egiin Gol provides the distinct benefit of being one of the lowest risk regions of Mongolia. In terms of inter-annual variability in climate, Bulgan has one of the more predictable regimes in Inner Asia (Humphrey and Sneath 1999: 272). In addition to wildfires, the single greatest danger in this region comes from what Mongols call zud or unseasonable snow storms and cold snaps that ice or bury critical pasture needed by animals in order to maintain their strength (Farkas and Kempf 2002). A sudden heavy snowfall that deprives weakened animals of graze for a few days can rapidly decimate an entire herd. Such events can and do regularly occur in most parts of Mongolia. For example, from 2000 to 2002, a particularly bad and widespread series of cold events killed off approximately ten million herd animals across the country (e.g., NSOM 2005: Fig. 10). Interestingly, compared to areas in the steppe and desert steppe zones which in 2001 were littered with animal carcasses, Egiin Gol experienced a much milder version of these events. Such contemporary experience suggests that this part of the forest steppe is generally quite robust for sustaining pastoral lifeways.
Today, the lower Egiin Gol valley is a region of great activity, especially around Khantai township and the former agricultural collective at Inget Tolgoi down river from the Egiin Gol-Selenge confluence. Both these areas have large agricultural fields planted with wheat and fodder crops that are left unattended through the summer and harvested by combine teams in early fall. In seasons when rivers can be easily crossed at fords or on frozen surfaces, the lower Egiin Gol is a convenient thoroughfare toward the upper reaches of the Selenge River where fording and travel is much easier. Prior to bridge construction at several points along the Selenge, this portion of the Egiin Gol valley was one of the preferred routes for moving up river along the Selenge basin. As such, Egiin Gol was an important corridor for reaching west-central parts of Mongolia from the north and for traveling back northward from the south. For this reason and also because of its agricultural productivity, the greater Egiin Gol area constituted a center for Buddhist monastery administration during the eighteenth to early twentieth centuries (Honeychurch and Amartuyshin 2007).

4.4 Baga Gazaryn Chuluu (BGC): Granite Peaks of the Gobi

Moving southward from Egiin Gol, across the central steppe and toward the southern Gobi, travelers pass by a series of prominent peaks known as Baga Gazaryn Chuluu.³ Here in the northern Gobi desert of Dundgobi province, the Baga Gazaryn Chuluu granite ridge system rises dramatically 300 m from above the surrounding plain of arid grasslands, playa basins, and salt marshes. The landscape in and around the ridges is composed of brown coarse granites that have weathered along natural lattices and fissures to make each impressive ridge seem as if it was built up from modules of geometrically shaped rock. As a result, local people often refer to their home using the name "Chuluuny Uul" or Stone Mountain (Gerelbadrakh 2010). An outsider wandering into the rocks is quickly caught up in a labyrinth of finger ridges, box canyons, and towering spires of upright stone. This complex geological formation begins out in the surrounding flatlands at about 1,450 m above sea level and shoots up to 1,768 m in maximum elevation, making it a visually striking part of the landscape (Fig. 4.6). BGC has been a reliable hunting ground, a seasonal pasture range, and a major central place for different groups over several millennia. The earliest dated habitation was in use more than 14,000 years ago (Janz et al. 2009: 1984), even though human occupation likely dates back much earlier (Fig. 4.7).

According to Badarch et al. (2002), BGC is an elevated, semi-elliptical granitic pluton covering about 120 km² and belonging to the Middle Gobi volcano–plutonic

³ Other published transliterations of this place name are "Baga Gazryn Chuluu" and "Baga Gazriin Chuluu." As mentioned above, the transliteration used here draws on the Cyrillic spelling as it appears in the 1:100,000 Mongolian national map series.



Fig. 4.7 Topographical landscape of the Baga Gazaryn Chuluu granite peaks (shaded in *gray*) and the surrounding plains

belt. The granites represent a Late Triassic intrusion into a rolling topography of valcano-sedimentary layers that were formed during the Permian (Machowiak and Stawikowski 2012). BGC is one of several granitic plutons; another is the nearby site of Ikh Gazaryn Chuluu located 110 km to the east. These and other formations may have resulted from hot spot activity associated with the gradual closure of the Mongol-Okhtosk Ocean that converged 200–140 million years ago. Over time, weathering of the granites has carved long valleys through the BGC ridges, the broadest of which extends from the center of the formation outward to the northwest in one direction, and from the center to the northeast in another. A second major valley trends in a roughly north–south direction along the eastern flank of the rocky outcrops. BGC marks an ecotonal boundary between steppe grasslands and the Gobi; however, rainfall in the area is at the upper end of the range for desert-steppe environments. Annual precipitation is 160–200 mm with most rain falling in July and August, while winters are cold with modest snow accumulation. Average temperatures in January and July are -17.5 and +18.7 °C, respectively.⁴

⁴ Measured in the Dundgobi provincial center from 1961 to 1990.

One of the remarkable features of the BGC granites is the complex structure of micro-fissures and crevices that absorb and retain rainwater in a manner quite different from the outlying environment. This water percolates down and collects in the main basins, and as a result, the small and large valleys within the ridge system maintain a relatively high water table. Freshwater springs are numerous, and water can be easily accessed by shallow wells in valley bottoms or along the outer periphery of the rock formation. Surface water is present in outlying areas in the form of marshes and a few springs, some with potable water. These water sources attract numerous wild animals and migratory birds and support a range of vegetation types that are composed primarily of drought-resistant chenopods, grasses and forbs, and woody shrubs. Graze plants that make up the local pasture include Allium odorum, Festuca siberica, and Poa sp. (Makarewicz 2010; Makarewicz and Tuross 2006). Buddhist leaders are credited with once having planted the few stands of aspen (Populus tremula) growing within BGC's protected side vallevs nearby reliable spring sources. These few areas with trees were tended by Buddhist adherents during the early twentieth century and today are regarded with ceremonial reverence.

BGC is currently home to about twenty-five herding families who make annual movements in and around the ridge system or strike out from the ridges to reside on the desert-steppe plains and then return at a later season. With two small towns within its territory and a major unpaved road system nearby, BGC is not considered to be an isolated area. The township of Adaatsag is 30 km to the northwest, and Delgertsogt township is 29 km to the southeast. In both places, stores, post offices, clinics, Buddhist temples, schools, and other services are available. At BGC, an extended ethnographic and ethnohistorical project was carried out by Jamsranjav Gerelbadrakh, a prominent Mongolian historian who grew up in the local area and is widely known among the communities there. Information reported here is largely comprised of that research (e.g., Gerelbadrakh 2010; Makarewicz and Gerelbadrakh forthcoming).

BGC households usually have from four to six individuals living in a single ger. These numbers change seasonally as children go to town for school or other family members move from place to place within their extended family, often between urban and rural sectors. BGC herders keep goats over sheep by a ratio of about two to one and keep horses and camels over cattle. Goats are more resilient in arid environments and cattle require a great deal of readily available and reliable water. Those few families that maintain cattle seek out areas with surface water by moving their herds seasonally into the temperate steppe zone about 80-100 km to the north. The landscape at BGC offers good pasture and campsites for all seasons, and some families choose to spend the entire year within the ridge system, while others use BGC as either a warm or cold season site and spend complementary seasons elsewhere. Even when a household chooses BGC as its primary site, family members are likely to disperse seasonally in order to take a subgroup of their herds to optimal graze in another location. These patterns of presence/absence at BGC shift over time, but movements within and outside of BGC territory depend largely on the immediate weather and pasture conditions.

Mobility, herd composition, and possession of transport animals or vehicles are all factors correlated with household wealth. As mentioned above, those with fewer animals find it more efficient to make short movements as needed, while families with large herds need to be more mobile. Wealthy families also tend to have more horses and camels to assist in their herding and can better target optimal graze at farther distances. A family considered to be wealthy in local terms keeps herds in excess of 500 head, while poorer families have fewer than 50 head. Herding is done on horseback or on foot, and animals graze over the course of a whole day, usually with only minimal supervision. Sheep and goats graze areas that are between 1 and 3 km from a campsite, but depending on the quality and condition of graze and the number of animals, orbits of up to 8 km and a maximum of 15 km are possible. In order not to deplete the graze in the immediate vicinity of a camp, herders separate out camel and horses and take them farther away leaving female animals giving milk nearby the family ger. It is a common sight to see herds of camels and horses roaming mostly unattended among the ridges. While herding is done primarily for meat and dairy products, BGC households also engage actively in the regional cash economy. Meat, dairy, skins, wool, cashmere, and Gobi-bred horses are all income generators for these households, as is participation in the local tourism industry.

At BGC, the summer khot ail group structure is unlike that of communities in the steppe and forest-steppe regions. Whereas at Egiin Gol many gers join together for the summer, at BGC summer camps tend to consist of only two gers or just a single household that remains alone throughout the year. This reflects the difference in abundance and concentration of summer pasture between the semiarid and high-precipitation regions of Mongolia. Summer camps at BGC are selected based on pasture quality and water availability, and sites are usually within the broadest valleys of the ridge system, along the perimeter of the granites, or out in the desert-steppe flatlands (Fig. 4.8). Movements between these different locations are frequent and can occur from two to four times during the summer months and generally range in distance from between 3 to 40 km.

In the winter, BGC herders select ger sites that provide protection from wind and ready access to reserved winter pasture and water. Although fodder is collected and stored for the winter, the most important aspect of the winter camp is access to a sufficiently large pasture area that has been set aside and not grazed in summer and fall. Herders understand use rights to such pasture areas as belonging to a particular household, and conflicts are possible especially if unaffiliated households graze those areas prior to the winter season (Makarewicz and Gerelbadrakh forthcoming). Camp locations are within the granite ridges where box canyons and compact ravines provide excellent protection from the elements. At these winter sites, households invest in corrals and sheltered stables made of dry stone walling, wood, metal sheeting, or other available materials. A common feature at these sites is a floor of compressed dung that insulates corrals and other shelter areas. Families also use dried dung and dung blocks to burn in stoves year round rather than wood or coal. Winter camps are not moved during the cold



Fig. 4.8 The Baga Gazaryn Chuluu arid valley landscape seen from a cave at 1,600 m elevation (photograph by the BGC Archaeological Project)

season, though some families report at least one move if pastures are critically depleted. Fall and spring camps are variants of winter and summer seasonal locations, and movements during these seasons are similar to those in summer. When a number of local families were asked the distance of their shortest seasonal moves, the average was 6 km, and when asked about maximum distances of movement, the average was 108 km. This range suggests that for some "local" herders, the pastoral landscape extends far beyond the granite peaks to include an area better thought of as the "greater BGC region."

Life in the Gobi presents substantial challenges to herding households and is considered to be more difficult than life in the high-precipitation zones of the north. The kinds of everyday problems are different from those at Egiin Gol and include the need for more frequent household movements, for reliable access to camels or trucks for transport, and often the need to purchase winter fodder on the open market. However, in ways quite similar to Egiin Gol and also most other parts of Mongolia, it is the unpredictable environmental problems that are most worrisome. Because of its location on the ecotone between desert and steppe, BGC tends to be impacted by both winter and summer maladies. Cold snaps and abrupt heavy snowfalls can decimate herds in late winter and early spring, as was the case during the 2000-to-2002 zud episode and again to a lesser degree in 2004 and 2005. Likewise, the warm weather season can be surprisingly harsh and variable. In 2004 and 2008, BGC was racked by inundating flash floods and hail storms. From 2005 to 2007, Gobi provinces suffered from a prolonged drought during which time winter snow was marginal and the summers brought consistently high temperatures and next to no rainfall. BGC was hot and dusty with arid winds and many of the local wells dried up except for those in the lowest valleys. In 2006, a Gobi emergency unfolded as dozens of herding families from other parts of the desert and desert-steppe region arrived at BGC as a result of moving their herds out from even more draught-stricken regions. The unique hydrology of BGC is well known as having water and pasture resources even when other areas in the Gobi become seasonally unsustainable for herds.

Pastoral meat and dairy products supplemented by store-bought goods are the basic sources of food for families inhabiting BGC. However, much like Egiin Gol households, these families hunt, gather, and practice small-scale local cultivation as part of their subsistence. Hunting was once much more of a mainstay than today since the diverse wildlife living among the granite outcrops is now protected by law and monitored by local wildlife agents. The ridges are home to herds of wild sheep (*Ovis ammon*) and goat (*Capra sibirica*) which thrive atop the high-elevation peaks and in the uppermost valleys. In the desert-steppe flatlands around BGC, gazelle herds (*Gazella subgutterosa* and *Procapra subgutterosa*) are likewise numerous; however, even the local marmots, considered the choicest of game, are a protected and managed species here. Although hunting is no longer permitted locally, gathering is still important and herder families collect local plants like wild rhubarb and onions to use for medicinal purposes, to flavor food, and to enhance the diet.

Somewhat surprisingly, a number of Gobi regions also have traditions of cultivation that usually are found in those desert-steppe locations with reliable spring, well, or surfaces water. A good example of this is the Bayan Bulag site of South Gobi province 400 km south of BGC where, despite local aridity, a series of springs have watered small agricultural fields for at least 2,000 years (Kovalev et al. 2011). Habitation sites at BGC dating to about 1,000 years ago are littered with grinding stones related to grain processing, and terraced field plots of the same period are still detectable along mountainsides. Today, local cultivation is minimal but still practiced. One small gardening project using well water was initiated in 2005 by local households in order to produce potatoes for a new tourist encampment. The largest and most interesting plot is in a southeastern BGC valley where local families farm a small field next to the ruins of a Buddhist monastery of the nineteenth and early twentieth century known as Delgeriin Choir khiid. These families draw water from one of the wells formerly used by the monastery occupants, and although it has not yet been confirmed by archival research, they may even be working a relict field that once belonged to the monastery. Indeed, there are several areas within BGC where relict field outlines and stone clearing piles are clearly visible. According to BGC residents, these are associated with monastery-sponsored cultivation or with later socialist-period experimental agriculture or, possibly, both.

4.5 Archaeology at Egiin Gol and Baga Gazaryn Chuluu

Current lifeways at Egiin Gol and Baga Gazaryn Chuluu are informative, but in some ways, they also are very different from the past. Mongolian herding families today have the benefit of stores, networks of towns, schools, a market economy with cash transactions, vehicles, and satellite communications. At the same time, the methods of supporting household-based pastoralism have become more complex and truly global. A typical family living in a ger in the steppe region likely has children or close relatives in the nearby town, one child studying in Ulaanbaatar, an in-law on the payroll of a mining corporation, and another relative living and working in Chicago, London, or Seoul and sending funds back to the family on a regular basis. Such globalized support is indeed novel, but it is also a logical extension of the flexible networks and diversification strategies that pastoral nomads have engaged in for millennia.

Descriptions of the many and diverse contemporary pastoral practices in the regions covered in this chapter provide useful context and insight for building hypotheses about ancient life in these particular places. For example, knowing that BGC herders might range as far as 100 km around the granite ridges suggests that the spatial scale of a "local" community in this area might be quite distinct from that of the Egiin Gol area. Likewise, the long history of agricultural production at Egiin Gol and at BGC begs the question of how far back such practices can be traced. It is important to note that these ethnographic and ethnohistorical insights are not "analogies" to be projected backward into the past. They are only one source of information among many others that help bring into focus these regions during earlier time periods and to shape ideas about lifeways at Egiin Gol and BGC in the past. These ideas in turn must be evaluated against the archaeological evidence recovered from the two regions.

Archaeological research began in earnest at Egiin Gol in 1990 under the supervision of Mongolian archaeologists Zagd Batsaikhan and Diimaajav Erdenebaatar. The initial Mongolian project was designed to map and sample the major monument and burial sites in the wake of a hydroelectric dam project proposed for the Egiin Gol river. In spring 1994, a Mongolian-American collaborative reconnaissance and excavation project was started in the lower valley that would later become the Egiin Gol Survey (1996-2000). During the summer of 1994, a Mongolian-French bioarchaeology project (1994–1999) joined research efforts in the area to excavate cemeteries and collect samples for DNA analysis of ancient steppe populations. Over a period of 6 years, the Egiin Gol material dataset grew to become one of the most informative archaeological assemblages known from Mongolia. The regional survey examined approximately 310 km² of the lower valley and documented more than 500 archaeological sites, while excavation efforts studied several major cemeteries, stone monument complexes, and habitations dating to multiple periods of Mongolian history and prehistory. The kinds of data collected, field methods used, and subsequent material analyses are reported in several recent publications among which Wright et al. (forthcoming), Torbat et al. (2003), Honeychurch et al. (2007), and Giscard et al. (2013) provide good overviews of the Egiin Gol fieldwork and its results.

Archaeological work at BGC began in the 1980s, and the region was quickly recognized as a major center for monument sites and cemeteries and notable for its hundreds of rock art panels. In 1989, a Mongol-Hungarian-Russian collaborative project arrived at BGC under the direction of Damdinsuren Tseveendorj to document the Dund Shand Xiongnu-period cemetery along the northern perimeter of the rock outcrops. Their work informed a 2001 reconnaissance visit from the Egiin Gol Survey group which then selected BGC as a good survey area to address comparative follow-up questions on Inner Asian state formation. We adapted Egiin Gol methods for the Gobi region to make datasets from the two areas comparable, and from 2003 to 2006, we proceeded to carry out the Gobi survey. Our teams intensively covered approximately 140 km² including the entire granite ridge system and some outlying areas. The combined survey and other reconnaissance within the greater BGC region brings the survey total up to more than 200 km². Survey was followed by a bioarchaeology program (2007-2008) to provide data for comparison to Egiin Gol mortuary and monument research. For methods, data, and initial analyses, see Wright et al. (2007), Nelson et al. (2009, 2011), and Amartuvshin and Honeychurch (2010).

An approach that uses comparative case studies is one way to come to terms with a dispersed and complicated social process like statehood. Baga Gazaryn Chuluu offers a setting entirely distinctive from that of the lower Egiin Gol valley in terms of geography, resources, and social environment. Like Egiin Gol, the people inhabiting these granite ridges more than 2,000 years ago participated in the changes leading up to the Xiongnu state. The BGC area therefore provides an alternative perspective on these same series of sociopolitical transformations as they transpired 400 km away from the Egiin Gol valley. Comparisons between northern and southern conditions, material assemblages, timing, interactions, and continuities and discontinuities promise the kind of multi-local insights needed to understand the making of the first Inner Asian state.

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Chapter 5 The Late and Final Bronze Age Cultures of Mongolia, 1400–700 BC

The pastoral families that today live in the Egiin Gol and Baga Gazaryn Chuluu regions of Mongolia follow lifeways that originated more than 4,000 years ago. Incremental transfers of domesticated animals by way of trade or group migration into the eastern steppe zone over many centuries gradually gave rise to a primary emphasis on herding and a reduced emphasis on hunting, gathering, and fishing. Over time, through a process of acquisition, breeding, and domestication, pastoralists increased their herds of cattle, sheep, goats, and horses and slowly developed the techniques and knowledge needed to manage and sustain these herds over the long term. The story of this cultural experiment is one of the highlights of Mongolia's Bronze Age during the second millennium BC. That animals might be kept in some form of collaboration with human beings is an old concept that dates back to our relationship with the domesticated dog, beginning some time in the Late Paleolithic. However, the very different idea of keeping animals as living property and as a major subsistence source was an entirely new innovation, one that promoted a long-term human dependency on the well-being and upkeep of animals. In order for human communities to prosper, the animals they cared for also had to prosper.

Livestock dependence and herding mobility emerged across Mongolia, South Siberia, and Inner Mongolia through different processes and at different rates. Moreover, pastoralism arose in various combinations with other subsistence pursuits such as farming. Although it is indeed possible that indigenous animal and grain domestication had already been independently underway in Mongolia, as some have argued (Derevianko and Dorj 1992: 174–175), most evidence points to multiple introductions of plant and animal domesticates from neighboring regions. In other words, inter-group interactions and exchanges slowly initiated the tremendous transformations that characterized the Eneolithic Copper Age and Early Bronze Age (mid-third to early second millennium BC). During this time period networks of contact were small scale and precise knowledge of distant peoples and

their cultures was certainly limited. However, materials, foods, and ideas moved from group to group and gradually came to be shared across vast geographical areas. In this way, domestic grains such as millet and wheat moved westward and eastward, respectively (Frachetti et al. 2010; Betts et al. 2013); herd animals were introduced into hunting societies, and the use of copper-based metals slowly began to alter a primary reliance on stone tools that had persisted for hundreds of thousands of years.

These changes and early contacts greatly diversified the ways in which Inner Asian and East Asian peoples lived and organized. Within the Central Plain of China, Late Neolithic complex societies gave way to the regional-scale Erlitou polity at 2000/1900 BC, argued to be the first state of East Asia (Liu 2009; but see Shelach and Jaffe 2014). Contemporaries of the Erlitou polity far to the north in Inner Asia pursued a wide range of lifeways quite different from their distant statelike neighbors in China. These pursuits included terrestrial and aquatic huntinggathering around Lake Baikal and mobile hunting-herding in the Altai Mountains, the Mongolian steppe, and Gobi Desert (Weber and Bettinger 2010; Janz 2012). Sites from eastern Mongolia, such as the Early Bronze Age settlement of Khuiten-Bulag Nuur, show that some steppe peoples practiced a sedentary way of life. Reports from Khuiten-Bulag describe small settlements with long-term site use and faunal remains of possible domestic animals¹ along with evidence for hunting, fishing, and perhaps early farming (Tsybiktarov 2006: 74, 80, 83–85; Dorj 1971: 39-40, 77). About 700 km south of Khuiten-Bulag in southeastern Inner Mongolia, peoples of the Lower Xiajiadian culture built relatively large fortified settlements with watchtowers, farmed plots of millet, and kept fully domesticated pigs, cattle, sheep, and goat (Shelach 2009: 49–50; Shelach et al. 2011).

By the end of the second millennium BC, these discrete communities had transformed significantly. Belief systems centered on stylized animal symbols and impressive monument building had spread broadly across many of these regions and encouraged new kinds of interactions and understandings between local groups. Horse riding, wheeled vehicles, and technologies of high-quality bronze production likewise became widespread, and the growth of intricate exchange networks and alliance systems emerged throughout Inner Asia. It is at this point, during the mid- to late second millennium BC, that I take up the story of the eastern steppe Bronze Age in order to chart almost 1,000 years of nomadic political experimentation and cultural change that preceded Xiongnu statehood. What we know about Inner Asia between 1400 and 700 BC comes primarily from the study of burials, stone monuments, artifact technologies, and rock art. So far, examples of settlements or seasonal campsites with information about how people lived day to day are still comparatively few in number and this is especially true of Mongolia. Despite this imbalance of data, archaeologists have explored major developments in social and political organization including the rise of hereditary inequality and

¹ Until quite recently, faunal analyses for Inner Asian sites have not exploited systematic metrical comparisons to differentiate domesticated from wild animals.

formalized positions of local leadership, long-distance exchange of rare and exotic items, increased warfare, and the rise of distinctive territorial centers.

To contextualize these processes within the broader macro-region, I begin with an overview of the Late Bronze to the Initial Early Iron Age record from Mongolia and surrounding areas to identify general trends and regional contrasts. The impressive monumental and mortuary sites of Mongolia are becoming better known internationally, but they still sit in the shadow of more famous sites such as Arzhan in Tuva, Issyk in southeastern Kazakhstan, and the Pazyryk cemeteries of the Altai region. For that reason, I focus specifically on what is known from the Mongolian record and then contextualize that perspective in terms of the broader East and Inner Asian macro-region in forthcoming chapters.

5.1 Documenting the Bronze Age

Unlike the later Xiongnu period, there are no textual records for the Bronze and Early Iron Ages of Mongolia. At best, scattered references in the Zhou-period histories (first millennium BC) mention numerous groups in what is today northern and western China and also document the geographical expansion of the Chinese states into the territories of these groups (Di Cosmo 1999). The information from these accounts is far from ethnographic in character. Instead of providing accurate descriptions of the groups in question, these brief texts document Chinese attitudes toward unfamiliar peoples and their cultures (Pines 2005; Poo 2005).² Archaeology is the primary source of data for conditions in Inner Asia during the second and first millennia BC, and accordingly, I make use of what are imperfect archaeological periodizations derived from changes in material culture that are still not fully understood (Fig. 5.1). A wide variety of absolute and stylistic chronologies have been assembled and debated with regard to the monument types, interment practices, ceramic and decorative styles, and landscape configurations across Inner Asia (e.g., Erdenebaatar 2002; Chugunov 2011; Kuzmin 2008; Mandel'shtam 1992; Tsybiktarov 1998: 103-104, 141). These chronologies differ according to region, material sequence, and the extent of radiocarbon dating, but a generally accepted periodization divides the midsecond to first millennium BC as follows: the Late Bronze Age (1400-1000 BC), the Final Bronze Age (1000–750 BC), and the Early Iron Age (750–300 BC).

Highly visible changes in social and religious life mark the Late Bronze Age of Mongolia. While the evidence is still far from robust, the first hints of enduring social differentiation and inequality appear around the mid-second millennium BC. Evidence for this comes mainly from the rise of labor-intensive stone monument building and differential burial patterns across much of the far-eastern steppe zone. These monumental site types are distributed across different parts of

 $^{^2}$ It is also important to note that at this time, even the concept of "China" as a political entity and a cohesive sense of common culture did not exist (e.g., Elliot 2012).



Fig. 5.1 Comparative chronologies for select regions of Inner Asia and China

Mongolia and southern Siberia with some overlap. They include *khirigsuur* stone mounds, deer stones, shaped and *Ulaanzuukh*-style burials, and the earliest slab burials which appear at the very end of the Late Bronze Age period. Although these monuments are not the earliest examples of elaborate mortuary and ceremonial sites in Mongolia (e.g., Erdenebaatar and Kovalev 2008), they represent an era when monumentalism reached extraordinary heights and became universally understood across the Inner Asian steppe zone (Fig. 5.2).

5.2 Western and West-Central Regions: Khirigsuurs and Deer Stones of Mongolia

Beginning around 1500 to 1400 BC, steppe peoples began to construct the first impressive stone monuments known today as khirigsuur (also khirgisuur and khereksur). These were built along hill slopes, at major mountain passes, and in the broad valley floors of the steppe lands. How these monumental stone piles and the collective labor they embody reflected differences in status between individuals



Fig. 5.2 Map of Inner Asia showing the major archaeological sites mentioned in the text. *1* Egiin Gol; 2 Baga Gazaryn Chuluu (BGC); 3 Khuiten-Bulag Nuur; 4 Urt Bulag; 5 Ulaan Tolgoi; 6 Doroljiin Am; 7 Shurgakhyn Am; 8 Shiebar-kul; 9 Uushigiin Ovor; *10* Tevsh Uul; *11* Umdaan Gol; *12* Ukhaa Khudag; *13* Chandman' Khar Uul; *14* Ulaanzuukh; *15* Delgerkhaan Uul survey; *16* Orog Nuur; *17* Iterkhei V; *18* Tsagaan Uul/Avargyn Ovoo; *19* Khanui Gol survey; *20* Dureny 1 and Dureny 2; *21* Sagan-Zaba; *22* Dottore-namak; *23* Taishir-Ulaanboom; *24* Jargalant Uul; *25* Kyshtachnaia Sopka; *26* Kunkur; *27* Narasun

or new links between communities is a subject of growing debate and much recent fieldwork in Mongolia. Khirigsuur monuments are stone mounds with rectangular or circular stone enclosures or "fences" surrounding them, as well as multiple small rock heaps beyond the centrally enclosed space in the form of "satellite" features (Fig. 5.3). This basic layout can also be elaborated with stone pathways, entryways, and pavements and elevated standing stones inside the fencelike feature (Wright 2007). The central mound is constructed of systematically positioned rocks that cover an internal cist made up of slabs or fitted stones with one or more capstones atop the cist (Tsybiktarov 1998: 138–139). Such cist constructions are not always identified at a khirigsuur's center, and in that case, the mound might have just a simple shallow pit or no detectable structure at its core (e.g., Frohlich et al. 2009: 102; Torbat et al. 2003: 39; Amartuvshin and Jargalan 2010: 178–179).

Diameters of khirigsuur central mounds range from about 5–20 m and 0.01–2 m high even though smaller and substantially larger features have been reported (Tsybiktarov 1998: 138; Houle 2009: 365). Satellite feature counts can range in





the thousands, although there are many cases of a mound having just two or three small satellite heaps. Satellite features sometimes contain horse crania oriented to the east, vertebrae, phalanges or hoof cores, and calcined faunal remains, and, on rare occasions, a ceramic fragment or bronze artifact (e.g., Erdenebaatar 2002: 211–213; Torbat et al. 2003: 39). Another kind of satellite has also been reported in the form of stone ring hearths with evidence of charcoal, ceramic fragments, and burnt bone (Fitzhugh 2009a). Both the horse skull interments and hearth features are thought to be remnants of sacrifice and feasting events associated with monument building (Allard et al. 2007; Houle 2010: 11, 129). Otherwise, the central mounds of khirigsuur monuments rarely include artifacts as part of the original construction event, though subsequent millennia of re-use have almost always left substantial intrusive artifact deposits (e.g., Davis-Kimball 2000).

Excavators of these monumental sites encounter human skeletal remains in the central sections of stone mounds with orientations to the west or northwest,³ although not all monuments have human burials (cf. Tsybiktarov 1998: 138–139). This discrepancy has led to substantial debate over the mortuary function of khirigsuurs (Wright 2007: 350, 2014: 148) as well as the role of taphonomy in skeletal preservation and recovery (Littleton et al. 2012). To date, human burials in khirigsuur mounds occur most consistently in the western and west-central parts of Mongolia, while central and east-central regions, as of yet, do not have evidence for such remains. Indeed, poor preservation and a relatively small number of excavated contexts may be responsible for what otherwise might seem to be interesting geographical variation between east and west (Honeychurch and Amartuvshin 2011: 204). One point so far not considered in the debate over khirigsuurs and their possible mortuary function is the fact

³ Frohlich et al. (2009: 106–107) suggest a very different system of burial chamber orientation referencing local slope characteristics instead of a pre-established direction.

that the central and eastern regions of Mongolia have contemporaneous and alternative modes of monumental human burial (e.g., Amartuvshin and Jargalan 2010: 175– 176; Kovalev and Erdenebaatar 2009). Therefore, monumental practices like the building of khirigsuurs, may well have had a burial function in one place but different uses and meanings in other parts of Mongolia. Moreover, khirigsuurs in the eastern regions show marked differences in landscape distribution, size ranges, and feature elaboration, suggesting that more comparative work across geographical regions is badly needed. In all likelihood, the emerging consensus that khirigsuurs were multifunctional and built with a wide range of local understandings will be supported by this future research (Littleton et al. 2012: 3369; Tsybiktarov 2002a: 176).

The dating of khirigsuurs has also been a topic of controversy from the midtwentieth century up until today. Proposed periodizations range from the Bronze Age all the way up to the medieval period, making discussions of the societal contexts for khirigsuurs somewhat perplexing. A dearth of artifacts contemporary with the construction of these monuments combined with later re-use activities that involved the placement of offerings and materials on top of the mounds has contributed substantially to the chronological confusion. Most recently, careful observation of stratigraphic relationships between khirigsuurs and later types of burials and the advent of radiocarbon analyses of human and faunal bone samples has provided reliable dates for khirigsuur constructions between 1400 and 700 BC with a majority of dates falling between 1200 and 900 BC (Amartuvshin and Jargalan 2010: 166; Frohlich et al. 2009; Fitzhugh 2009a; Torbat et al. 2003: 136; Allard and Erdenebaatar 2005: 7; Tsybiktarov 2003; Kovalev and Erdenebaatar 2007: 84).⁴ Preliminary radiocarbon results from one project at the Urt Bulag khirigsuur (also Urt Bulagyn) of Arkhangai province suggest that the numerous satellite features and the central mound were probably constructed at the same time, taking into account the margin of error typical of radiocarbon analysis (Fitzhugh and Bayarsaikhan 2011: 174, but see Allard and Erdenebaatar 2005: 5-6).

So far, this chronological range has been surprisingly consistent across the central and west-central parts of Mongolia where almost all khirigsuur dating has been carried out. This is a relatively small geographical sample of the entire distribution of these sites which includes all of the territory of Mongolia and Transbaikal (Danilov and Konovalov 1988). Contrary to claims in earlier research (Volkov 1967), khirigsuurs are indeed present in significant numbers in both the southern Gobi and in the far-eastern provinces of Mongolia, although in the east, there is a noticeable decline in numbers. In general, khirigsuurs are related to the

⁴ A radiocarbon date from the Kholtost Nuga site in the Egiin Gol Valley for a stone feature described as a khirigsuur was quite a bit earlier than this chronological range (1675–1404 BC, 95 % probability; Torbat et al. 2003: 136). This date is often cited as an example of a very early khirigsuur; however, this particular feature had a small stone mound with no surround or satellites and was located in an area topographically quite different from that of most khirigsuurs. The feature also contained the burial of a child and while it does resemble the internal cist of a khirigsuur (cf. Takahama et al. 2006: 67), it lacks all of the usual external structures. In that respect, it is important to examine how this early context, and others like it, might be related to the development of khirigsuur practices later in time.

widespread Eurasian tradition of building stone or earthen kurgan mounds, and as such, they have strong similarities to monumental and burial constructions in the western regions of Inner Asia including Xinjiang, Gorno-Altai, and Tuva. Outside of Mongolia, the same kinds of features, or features very much like khirigsuurs, are identified using different cultural typologies and names. For example, the Late Bronze Age Mongun-Taiga kurgans of Tuva, which are smaller and tend not to have surrounding fences, have been discussed extensively in terms of their possible relationship to khirigsuurs (Chugunov 1994; Tsybiktarov 2002a). Tsybiktarov argues that these two kinds of monumental features in fact represent one and the same cultural group, and the differences in construction register levels of social status rather than distinct cultural traditions (Tsybiktarov 2002a: 176). While the issue of status differentiation has yet to be thoroughly studied, the recent identification of Mongun-Taiga burials in western Mongolia nearby to areas with khirigsuur monuments strengthens their hypothesized relationship, although its exact nature is still unclear (Kovalev and Erdenebaatar 2007: 83, 2010b: 105-106). This example speaks to the many persistent unknowns that beset archaeological research on the Late Bronze Age of Mongolia.

The landscape arrangements of khirigsuurs are varied and can sometimes comprise isolated monuments, but more often consist of multiple monuments, sometimes numbering in the hundreds, forming distinct complexes. Another well-known Mongolian monument type, the deer stone stele, sometimes marks these large khirigsuur complexes and is considered by many to be part of khirigsuur-centered beliefs and practices (Jacobson 1993; Volkov 2002). Deer stones are found in western, central, and east-central Mongolia, as well as in the Altai Mountains, Tuva, Xinjiang, and Transbaikal. They can occur in association with khirigsuurs, as solitary steles, or in small groups. These highly decorated monuments have several different variants of which the northern Mongolian type is the best known. It consists of a four-sided dressed stone made of granite, diorite, or slate and standing from 1 to 3 m in height with elaborate pecked images organized into three bands wrapping around the body of the stele (Fitzhugh 2009b). The uppermost panel features circular designs or, occasionally, a human face, while the central and primary band is decorated by stylized deer oriented in an upward direction, and the lower panel consists of what seem to be belts with hanging tools, weapons, and recurved bows. The artistic rendering of the deer on these stones (Fig. 5.4) is an early form of "animal-style" art that eventually comes to predominate across the Eurasian steppe, both east and west, over the subsequent one thousand or so years (Jacobson 1993; Novgorodova 1989: 156). Other variants of deer stones, especially those of the Altai Mountains, portray a different set of forest animals and have a less standardized arrangement of themes and thematic bands (Fitzhugh 2009b: 196-197).

In addition to clear spatial associations between deer stones and khirigsuurs, another characteristic that connects these monuments as part of a single ritual package is the presence of stone features discovered at their base with interred horse skulls or hearths, much like the satellite features surrounding khirigsuurs (Fitzhugh 2009b: 189; Novgorodova 1989: 201). These have been discovered around deer stones at the site of Ulaan Tolgoi and at several other deer stone sites in Khovsgol



Fig. 5.4 Stylized deer ascending upward on the surface of a deer stone in Khovsgol province (a version of this photograph appears in Honeychurch 2010)

and Arkhangai provinces. A number of radiocarbon analyses on bone and charcoal samples from the deer stone features provides a chronological range that overlaps quite well with khirigsuur chronology (1300/1200–700 BC), although early khirigsuur monuments appear a century or two prior to the earliest deer stones dated so far (cf. Fitzhugh 2009a: 398–399; 2009b: 189; Fitzhugh and Bayarsaikhan 2011: 167, 181; Frohlich et al. 2009: 110). Moreover, the terminal dates for both monuments are approximately the same. The new radiocarbon chronology supports a prior and independent periodization for deer stones derived from typological comparison of the weapons and tools realistically depicted on the lower belts of the monuments (Volkov 2002; Erdenebaatar 2004: 193; Tsybiktarov 2003: 89–90).

Khirigsuur complexes and deer stones produce impressive ritualized landscapes that usually tie in surrounding clusters of other khirigsuurs in neighboring valleys. In some cases, khirigsuurs reach tremendous sizes and can be surrounded by multiple deer stones. Four good examples of these sites arranged from east to west are the Urt Bulag khirigsuur⁵ (26-m-diameter mound, 5 m height) in Khanui Valley of

⁵ There are two such large khirigsuurs at Khanui, but the second, which was originally larger than Urt Bulag, has been partially destroyed by modern activities (Seitsonen et al. 2014). In both of these cases, deer stones were located somewhat farther away from the khirigsuurs than at the other listed sites. The Urt Bulag khirigsuur contained granite stones weighing up to one ton, and it would have taken approximately 60 individuals laboring every day for 1 year to build such a monument (Houle 2010; 30).



Fig. 5.5 Shurgakhyn Am khirigsuur in profile and in plan view (sketch plan by Henry Wright)

Arkhangai province (Houle 2010: 30); the Doroljiin Am khirigsuur (estimated 20–25-m-diameter mound, 3.5 m height) of southern Khovsgol province (Tseveendorj et al. 2003: 105); Shurgakhyn Am khirigsuur (49-m-diameter mound, 6 m height, Fig. 5.5) of Zavkhan province in western Mongolia (Amartuvshin and Jargalan 2007: 2); and the Shiebar-kul khirigsuur site (60-m-diameter mound, 15–20 m height; also known as Chembet and Sandaohaizi) in northern Xinjiang (Hatakeyama 2002; Wright 2014: 140–141). There are several more of these super-sized khirigsuurs known, and all are located in the western reaches of Inner

Asia and especially in the west-central and northwestern provinces of Mongolia (cf. Tsybiktarov 2003: 90). Not one of these massive monuments has been thoroughly excavated and few if any have even been surveyed or mapped. Only the Urt Bulag khirigsuur has had surrounding features tested and the dating results suggest that the satellites (and some would argue the mound itself) were built between 900 and 800 BC toward the end of the chronological range for khirigsuur sites (Allard and Erdenebaatar 2005: 5; Fitzhugh 2009a: 399).

A more subtle but equally impressive khirigsuur-deer stone complex is the Uushigiin Ovor site (also Uushgiin Ovor and Ulaan Uushig I) in Khovsgol province of northwestern Mongolia (Novgorodova 1989: 203-208; Takahama et al. 2006). The local environment around this site consists of the nearby Delger-Moron River to the south and Ulaan Uushig Mountain, which is the highest elevation immediately north of the river at 1,726 m above sea level and 400 m above the surrounding steppe lands. There are numerous khirigsuur complexes ringing the Ulaan Uushig peak of which Uushigiin Ovor to the southeast is probably the most interesting given its concentration of both khirigsuurs and deer stones. The site comprises 15 deer stones in two north-south groups spread in linear fashion over 160 m; however, one has been removed to the provincial museum and its original position is unknown. Khirigsuur monuments likewise number 15, including one located 340 m north of the site center. Of the khirigsuurs in the central area, only two have rectangular surrounds and the rest are smaller with circular surrounds. Both the khirigsuurs and deer stones at Uushigiin Ovor have satellite features containing eastward-oriented horse skulls, vertebrae, and leg elements (Takahama et al. 2006: 61). Of the two excavated khirigsuurs, both had internal cists oriented along an east-west axis, but only one had human skeletal remains identified as a five- or six-year-old child (Takahama et al. 2006: 65, 67).

The 14 deer stones present at the site are concentrated in the southern sector nearby a group of five small-to-moderate-sized khirigsuurs, all with circular surrounds. These various steles are different in shape and design, but all feature the main stylistic components of classic northern Mongolian deer stones. They are made of local red granites with the exception of two of the monuments which are made from gray and white stone imported from areas with a different geology (Takahama et al. 2006: 63). The deer stele of white stone, number 14, has been particularly important for supporting interpretations of what these steles may have been originally intended to symbolize. This particular stone is located in the southernmost part of the complex and stands about 2.6 m high. It was engraved with many of the traditional themes including stylized deer, a belt with hanging weapons sets such as a war hammer and dagger, and a striped pentagonal shape believed to be a shield. The uppermost portion of this deer stone is what makes it so unique and important: Looking out along a direct line southward toward the river is a clearly shaped human face with ears and earring loops on either side of the head and an encircling necklace or neck ornament (Fig. 5.6). There are a few other such deer stones known in Mongolia (e.g., at Bor Khujiryn Gol, Khovsgol) and the Russian Altai, and they lend strong support to an interpretation of deer stone monuments as anthropomorphic representations depicting the head,



Fig. 5.6 Deer stone no. 14 from the Uushigiin Ovor site in Khovsgol province (drawing after Volkov 1981)

deer-tattooed body, and weapons of a male individual (Jacobson-Tepfer 2012a: 192; Navaan 1975: 63–64; Novgorodova 1989: 183). As such, deer stones may be somewhat abstract and stylized examples of an earlier tradition of anthropomorphic standing stones found in many parts of western Inner Asia (e.g., Kovalev and Erdenebaatar 2009: 155–160; Kubarev 2009).

Khirigsuurs and deer stones are seen by some archaeologist as clear indications of the beginning of social inequality on the Mongolian Plateau. Arguments offered for this viewpoint identify deer stones as memorials to deceased chiefly figures who perhaps combined skill in warfare with the ritual powers associated with shamans (Fitzhugh and Bayarsaikhan 2011). Moreover, although khirigsuur monuments do not contain grave goods and wealth, the collective labor needed to build these sites was indeed significant and suggests some degree of difference in the social capacities of individuals, lineage groups, or communities. The wide variation in numbers, size, and complexity of khirigsuur mounds may therefore have registered differences in community wealth and regional standing (Wright 2014) or perhaps in individual leadership and prestige (Frohlich et al. 2009).

Changes toward greater inequality among individuals or between regional groups as represented by these monumental complexes have been explained in a number of ways using different variables. For example, some of these explanations place emphasis on changes in climate and corresponding shifts in Inner Asian pastoral environments that resulted in group migrations and territorial conflicts. As a result, a premium was placed on a form of warrior culture best expressed by an elite stratum of leaders who were successful in battle and, therefore, memorialized by deer stones and khirigsuurs (Tsybiktarov 2003; Erdenebaatar 2004). Another set of explanations views leaders as progressively building up a following, not so much through conquest but by their control of collective ritual. These emergent elite individuals aggrandized themselves by gathering households for feasts and public ceremonies, part of which included monument building (Allard and Erdenebaatar 2005; Houle 2010). Still other researchers de-emphasize the importance of individual status and instead argue that khirigsuurs and deer stones were a way of creating new kinds of networks and alliances between spatially dispersed communities in support of an increased dependence on herd animals (Honeychurch et al. 2009; Wright 2014). However, conflicts, alliance building, and emergent forms of inequality are not mutually exclusive, and probably, all of these factors contributed to the spread of similar monumental types beginning in the mid-second millennium BC.

While the advent of social inequality on the eastern steppe is still much debated, there is no question that khirigsuurs and deer stones demonstrate two important cultural processes: the geographical transfer of beliefs and practices through forms of inter-community interaction and the early significance placed on domestic horses and horse centered ritual as a result of these transfers. Preliminary but systematic analyses of Bronze Age horse remains from satellite features show that these animals were indeed domesticated equids and not the wild East Asian Przewalski's horse (Houle 2010: 30, 128; Johannesson and Hite 2007; Taylor et al. 2014). There is good evidence that domesticated horses were present in the westernmost reaches of Inner Asia as early as the mid-fourth millennium BC (Hanks 2010) and probably in the Altai and Minusinsk Basin of South Siberia by the third millennium BC (Kuz'mina 2007: 252; Anthony 2012: 21-22; but see Frachetti 2012: 10). This process of gradual eastward transfer likely continued and brought domesticated horses into west-central Mongolia via Tuva or the Mongolian Altai. So far, such a scenario is suggested by the absence of horse remains in burials and monuments prior to c. 1400 BC, followed by their widespread and sometimes numerous occurrences at khirigsuur and deer stone sites (e.g., Kovalev and Erdenebaatar 2010a, b).⁶ Though even earlier dates for Mongolian domestic horse will probably emerge, the data so far argue for a provocative connection between monument construction, horses, and new ritual and belief systems. These changes were associated with widespread

⁶ Claims of domesticated horses in Eneolithic and Early Bronze Age contexts have been made for a handful of Transbaikal and Mongolian sites (e.g., Tsybiktarov 2002b: 111, 116), but these lack both comparative faunal analysis and absolute dating. Despites this, there is a strong probability that domestic horses were present in Mongolia earlier than we now have evidence for. Radiocarbon analyses on identified domestic horse bones from khirigsuur satellite features include several dates from Khovsgol and Arkhangai provinces, 1300–1000 BC (Fitzhugh and Bayarsaikhan 2011; Fitzhugh 2009a, b); one from Egiin Gol, 1219–898 BC (Torbat et al. 2003: 136, #8); and one from Baga Gazaryn Chuluu, 1410–1200 BC (Amartuvshin and Jargalan 2010: 166, EX04.04).

similarity in monument forms and new kinds of contacts with groups even further to the west, indicating the growth of long-distance, inter-community networks as an outcome of the circulation of these cultural practices.

5.3 Eastern and South-Central Regions: Ulaanzuukh-Tevsh Culture and Slab Burials

Based on the latest distribution data, khirigsuur monuments, khirigsuur-like kurgans, and deer stones seem to be concentrated in the western and central parts of Mongolia and in bordering regions, even though, as mentioned above, a smaller number of these sites can be found in the east as well. In the eastern, southern, and central regions of Mongolia, entirely different forms of monumental and mortuary practices characterized the Late and Final Bronze Age. The earliest of these burial types is so little known that their chronology and architecture have become understood only in the past few years. These burial monuments originally attracted attention from archaeologists as early as the 1920s and over the decades have been called by several different names including *shorgooljin bulsh* and *khelbert bulsh* in Mongol, *figurnaia mogila* in Russian, and shaped burial in English—all of which refer in some way to the hourglass outline of the stone surface of these burials (Erdenebaatar and Kovalev 2008).

The so-called shaped burials are constructed using an east-west or northeastsouthwest orientation with east and west walls forming the ends and the north and south walls having a concave form that configures a distinctive hourglass-like shape. Prominent slabs of stone define the eastern and western ends, while the north and south concave walls are built up from fitted layers of undressed rectangular stones that visually resemble masonry work or drystone walling (Fig. 5.7). While the end stones can stand more than a meter high, the side stone walling is usually two to five layers (20-50 cm) above the original soil surface and supported with foundation stones. In the center of this construction, a shallow earthen pit was dug and the interred individual placed face down and oriented to the east or northeast. The interior of the stone feature and the burial pit was then filled in with earth, followed by a covering fill of small to medium sized stones. The lengths of shaped burial monuments can be as large as 39 m or as small as 3.5 m from east to west, but they average about nine meters in size. Like contemporaneous khirigsuur monuments, a substantial labor investment was involved in the process of their construction.

In contrast to khirigsuurs, however, these monuments have more consistent evidence for human interments in all parts of their geographical distribution and often contain burial furnishings, although several contexts without artifacts have also been recorded (Amartuvshin and Jargalan 2010: 176–177; Navaan et al. 2009). In addition to the remains of both small and large domestic fauna (sheep/goat, cattle/ horse), burial inventories can include decorated ceramics, beads made of semiprecious minerals as well as shell or bone, decorative items in gold, a wide variety of



Fig. 5.7 An excavated "shaped burial" from Baga Gazaryn Chuluu showing detail on the masonry-like construction technique characteristic of these sites

ground stone artifacts, occasional microlithic tools, and, less often, bronze items (Erdenebaatar and Kovalev 2008; Tumen et al. 2011; Novgorodova 1989: 138; Amartuvshin et al. 2013). Although the majority of contexts investigated so far shows signs of early pillaging or desecration, an occasional undisturbed context can yield surprising finds. Such was the case with Volkov's 1971 discovery of impressive gold ornaments rendered in animal style (see Fig. 5.8) from an undisrupted shaped burial at the site of Tevsh Uul, Ovorkhangai province, Mongolia (Novgorodova 1989: 137–138; cf. Bunker 1997: 142–143).

Recognizing the importance of Volkov's early work on the Tevsh Uul burials and the distinctiveness of these features, Erdenebaatar has proposed a Late Bronze Age "Tevsh culture" that includes, but is not limited to, classic shaped burials (Erdenebaatar and Kovalev 2008: 12). Rather than relying on the hourglass-shaped mound as a primary diagnostic, Erdenebaatar, as well as Amartuvshin, Jargalan, and Navaan, places emphasis on the masonry-like construction technique, east and Fig. 5.8 *Top* Gold clasps recovered from a shaped burial at the Tevsh Uul site, Ovorkhangai province (drawing appears in Tsybiktarov 1998, Kovalev and Erdenebaatar 2009). *Bottom* A similar but fragmentary gold clasp from a contemporaneous burial at the Chandman' Khar Uul site in Dornogobi province (photograph by Chunag Amartuvshin)





northeast orientations, and the practice of facedown interment in an earthen pit as being diagnostic of these mortuary practices. This set of characteristics has been documented at Late Bronze Age cemeteries in the central, west-central, southern, and eastern provinces of Mongolia including Gobi-Altai, Bayankhongor, Ovorkhangai, Omnogobi, Dundgobi, Dornogobi, and Sukhbaatar (Erdenebaatar and Kovalev 2008; Navaan et al. 2009: 11–12; Amartuvshin and Jargalan 2008: 83–84).

In each of these regions, Mongolian and international archaeologists have brought to bear systematic survey, full feature excavation, and absolute dating to trace similarities in mortuary forms that had previously been seen as unrelated. Even though Erdenebaatar does not explicitly include more than two burial configurations in his designation of Tevsh culture (i.e., hourglass and stirrup-shaped burials), subsequent work has contributed to a growing consensus among Mongolian archaeologists that the high degree of internal uniformity of burial structures across these regions is a highly significant factor despite differences in external architecture. Notwithstanding the different surface appearances of burials at sites such as Umdaan Gol and Ukhaa Khudag (Omnogobi province), Chandman' Khar Uul (Dornogobi province), and Ulaanzuukh (Sukhbaatar province), the internal characteristics are indeed strikingly similar (Tumen et al. 2011). Therefore, in addition to the classic hourglass-shaped burial and Erdenebaatar's "stirrup-shaped" burial, other configurations with oval shapes (e.g., Chandman' Khar Uul burials) and rectangular features (e.g., Ulaanzuukh culture) should probably be included in the Tevsh culture category as well. In order to draw attention to both the eastern and central expressions of these mortuary practices and to provide some way to reference this tradition, the term "Ulaanzuukh–Tevsh culture" is not elegant but will suffice for now.⁷

The various mortuary sites included in this cultural horizon consistently date between 1500/1400 and 1000 BC (Tumen et al. 2011: 4, 7; Kovalev and Erdenebaatar 2009: 154; Amartuvshin and Jargalan 2010: 22-23, 162; Amartuvshin et al. 2013). Moreover, Ulaanzuukh-Tevsh sites in different regions also occupy similar landscape settings in valley entrances and junctions, along waterways, or on mountain slopes. Still another connection between these geographically dispersed sites is the occasional appearance of highly distinctive but strikingly similar artifacts, which further suggest mutual participation in early inter-area networks. Such is the case of the recently recovered gold decorations from burial 117 at Chandman' Khar Uul (eastern Gobi) which closely match those found by Volkov at Tevsh Uul some 700 km to the west (Amartuvshin et al. 2013, Fig. 5.8). Interaction across even greater expanses is indicated by the presence in a few contexts of bronze knives similar to those depicted on deer stones and related to the northwestern Karasuk culture (Amartuvshin and Jargalan 2010: 160; discussed below) and beads made from imported carnelian, lazurite, and turquoise (Kovalev and Erdenebaatar 2009: 165; Novgorodova 1989: 138).

While work on Ulaanzuukh–Tevsh site types and chronology has added greatly to understandings of the Late Bronze Age and cultural diversity at this time, there are still many unanswered questions. So far, no habitation sites associated with these features have been studied or even located, which deprives us of crucial contextual information about lifeways.⁸ Patterns of differentiation in the mortuary treatment of various individuals, whether juvenile or adult, have not yet been noted (Navaan et al. 2009: 11). Faunal remains from a number of contexts suggest the importance of domesticated herd animals but few if any of these assemblages have been systematically examined and analyzed (cf. Johannesson and Hite 2007: 9–10). Nevertheless, the general expectation among researchers is that pastoral nomadism was the primary economy associated with Ulaanzuukh–Tevsh culture. In general, there is not a great deal of archaeological evidence to clarify issues of social relations, economy, and politics among these Late Bronze

⁷ At least one group of researchers (Tumen et al. 2012: 22) prefers to see these mortuary cultures as regionally distinct and therefore would not accept this synthesis without a great deal more research. For the time being, "Ulaanzuukh-Tevsh culture" should be understood mainly as a convenient reference term for these various Late Bronze Age burial types.

⁸ However, survey work at Baga Gazaryn Chuluu (Dundgobi province) and at Delgerkhaan Uul (Sukhbaatar province) has documented habitation sites that are promising candidates for future research on this issue.

Age groups or, for that matter, for groups and practices that preceded them during the second millennium BC (but see Tsybiktarov 2006: 88–94; Janz 2012: 368–374).

Likewise, there is continuing controversy over the relationship of Ulaanzuukh-Tevsh cultural sites, and especially shaped burials, to the subsequent slab burial mortuary practices which emerged at about the same time that Ulaanzuukh-Tevsh sites began to decline (c. 1100/1000 BC). This question was much debated after the 1928–1929 excavations by Sosnovskii in Transbaikal of what appeared to be burials with hourglass structures and their subsequent categorization as one type of slab burial (Dikov 1958: 33; Volkov 1967: 6; Chlenova 1992: 250). Based on additional excavation, and especially broader horizontal exposure of features, as well as the advent of absolute dating for the sites in question, the latest opinion is that Ulaanzuukh-Tevsh culture was a distinct set of mortuary practices that preceded and influenced the development of subsequent slab burial culture. What were assumed to be shaped burials in southern Transbaikal are, in fact, best understood as slab burials influenced by Ulaanzuukh-Tevsh forms, but dating later than and differentiated from the hourglass-shaped burials known from Mongolia (e.g., Kovalev and Erdenebaatar 2009: 163; Konovalov et al. 1983: 87). This begs the question of how slab burial practices developed as a monumental vocabulary, first influenced by, but later replacing Ulaanzuukh-Tevsh constructions. Despite a dearth of concrete evidence, most researchers believe that changes in pastoral knowledge, technique, and dependency as well as geographical movements of different cultural groups played some role in these transformations (Batsaikhan 2003: 139; Amartuvshin and Jargalan 2010: 163).

What is certain, however, is that by the Final Bronze Age (1000-750 BC), the appearance of slab burial culture brings about a different, though not a radically different, approach to burying the dead (Erdenebaatar 2002). Slab burials (also referred to as dorvoljin bulsh, plitochnaia mogila, slab graves, or quadrangle/square burials) were constructed, as their various names suggest, using medium-to-large-sized stone slabs positioned upright on edge to create a rectangular enclosure around a central burial pit. While Ulaanzuukh-Tevsh culture constructions sometimes include prominent standing stones, in slab burials, upright stone slabs became a defining and emphasized attribute (Fig. 5.9). It is important to note that these slab stone constructions do not form a "cist" per se, but instead create an external enclosure, and so they should not be confused with the contemporaneous "cist" burials (sometimes called "slab graves") known from southeastern Inner Mongolia and Manchuria (cf. Shelach 2009: 131; Linduff 1997: 69-73; Watson 1971). Occasionally, genuine cist structures are documented inside of slab burials, and some archaeologists offer evidence that this is a later trend in slab burial constructions dated to the mid- to late first millennium BC (Volkov 1967: 43, 45; Sohn et al. 1993: 48, 127–130) and perhaps suggesting greater contacts between groups of eastern Mongolia and southeastern Inner Mongolia.

Based on the Egiin Gol and Baga Gazaryn Chuluu data, the size range of these slab built features varies from 1 to 10 m in length and 0.7 to 9 m in width (cf.



Fig. 5.9 An impressive slab burial at the cemetery site of Tsagaan Uul/Avargyn Ovoo in Dornogobi province

Torbat et al. 2009: 93; Erdenebaatar 1997: 71; Volkov 1967: 40–41; Navaan 1975: 83–84). The erect slab stones can stand as much as 2 m above the surface, though in some cases, these have been disrupted or have completely collapsed, making measurement and surface identification difficult. The major axis of slab burials and the direction of the interred individual are primarily to the east with northeastern and southeastern variations and occasionally a northern variant (Navaan 1975: 84). A number of typological and chronological schemes have been proposed for slab burials (Chlenova 1992: 248-249), but recent radiocarbon analyses from multiple regions provide a periodization beginning at 1100 BC to 400/300 BC (see Erdenebaatar 1997: 89; Torbat et al. 2003: 136; Tsybiktarov 1998: 103-104, 2003: 90; Torbat et al. 2009: 104; Tseveendorj et al. 2003: 97).⁹ Tsybiktarov has published some of the earliest radiocarbon results from slab burial contexts in Siberia. However, taking into account both the new dates from several regions in Mongolia and the large error ranges for radiocarbon analyses obtained from these Siberian samples, I have selected a more conservative start date and a later end date for these features (cf. Parzinger 2006: 477-478). Despite such differences in periodization,

⁹ The earliest radiocarbon-dated context that I am aware of from Mongolia with a reasonable error range is slab burial excavation OR-85 from Orog Nuur, Bayankhongor, dated to 1211–907 BC, 95 % probability [LTL-1822A, 2866 \pm 55] (Gunchinsuren et al. 2006: 8–10). Turkin (2004: 83) reports an early date from the Iterkhei V site, but it seems to be a far outlier from the other 14 dates he publishes for slab burial contexts from Cisbaikal cemeteries.

the slab burial time range clearly overlaps and continues later than the period of khirigsuur and deer stone use. The three monument types can appear together or in close proximity, especially within the central regions of Mongolia and Transbaikal (Tsybiktarov 1998: 137).

Unlike Late Bronze Age khirigsuur monuments and more like the Ulaanzuukh-Tevsh sites, slab burials have relatively consistent evidence for human interment. This is despite serious preservation issues due to pillaging, desecration, and natural factors (Dikov 1958: 57; Nelson et al. 2009: 575). Burial chambers can be up to 1.8 m in depth, and the dead were laid at the bottom of an earthen pit in a supine position. Most slab burials contain one interment, but sometimes evidence for more than one individual is apparent and this usually involves an adult with a child or in rarer cases multiple adults (Konovalov et al. 1983; Nelson and Naran 1999: 6-7, 10). In addition to human interments, slab burials contain domestic herd animal remains such as cow, sheep, and goat, but interestingly, horse bones are among the most common (Navaan 1975: 105; Grishin 1975: 100; Tsybiktarov 1998: 148). In addition, slab burials contain a wide range of artifacts that include items made from bronze, stone, ceramic, and bone. Microlithic blades and scrapers are recovered from a few contexts as are tripod-shaped cooking vessels similar to those from Inner Mongolia, Manchuria, and Transbaikal (Navaan 1975: 38, 85; Shelach 2009: 20-21; Tsybiktarov 1998: 59-60, 151; Novgorodova 1989: 247). Bronze finds are fairly typical in slab burial contexts, and inventories might consist of buttonlike ornaments, horse gear such as harness parts and mouth bits, arrowheads, axes, knives, and impressive animal-style decorations (Erdenebaatar 1997: 91-121). Furthermore, there is robust evidence for indigenous bronze production of such items in the form of stone molds, ore mining, metal working tools, and slag sites (Park et al. 2010; Tsybiktarov 1998: 149; Erdenebaatar 2004).

The presence of horse harness equipment in slab burial contexts is the first regular appearance of such artifacts in Mongolia and raises the important topic of horseback riding. Direct evidence for riding is notoriously difficult to come by, especially since much of the harnessing gear could just as well have been used for traction (Drews 2004). By the beginning of the first millennium BC, however, some eastern steppe burials contain horses buried in full harness gear making the use and arrangement of the equipment unequivocal and clearly designating these animals as trained and outfitted for horseback riding (Bokovenko 2000). The same horse equipment is recovered from slab burials and also as surface finds, including bone, antler, and bronze cheekpieces, strap holders and harness ornaments, as well as bronze snaffle bits with jointed canons (Chlenova 1992: 251; Sanjmyatav 1993: 32-34; Erdenechuluun and Erdenebaatar 2011: 82-85; Navaan 1975: 88-89, Fig. 5.10). The new harnessing technology greatly facilitated horse control and horse riding and most likely made the proverbial "life in the saddle" possible for the first time in history. Similar artifact types are likewise well known from the Altai, Tuva, and Minusinsk regions of Siberia and also from sites in Kazakhstan (Kiriushin and Tishkin 1997: 75-76). The earliest appearances of such equipment across this vast region are surprisingly synchronized, dating in each area to the initial first millennium BC or, at the earliest, the terminal second millennium BC



Fig. 5.10 Bronze cheekpieces excavated from slab burial no. 2 at the site of Jargalant Uul in Arkhangai province (photograph by Chunag Amartuvshin)

(Kuz'mina 2008: 65; Parzinger 2006: 504; Legrand 2006: 857). This is also the exact period during which rock art images of horse riders first appear in many parts of Eurasia and particularly across Inner Asia (Drews 2004: 62; Francfort 2011: 59; Jacobson-Tepfer 2012b: 8). So far, the earliest slab burial evidence for horse use consists of 3-hole bone cheekpieces excavated at the site of Tapkhar, Transbaikal, dating to the early first millennium BC (Chlenova 1992: 251), and 2-hole antler cheekpieces excavated from a slab burial in the Egiin Gol Valley, recovered along with three horse skulls and radiocarbon dated to 940–800 BC at 95 % probability (Honeychurch et al. 2009: 347).

Although at times slab burials are found individually, more often they are grouped in small-to-medium-sized cemeteries consisting of 3 to 20 or sometimes more monuments. The largest and most impressive examples of slab burials, as well as the largest cemeteries, are in the eastern portions of Transbaikal and Mongolia where burial lengths are commonly 8 or 9 m and can have especially tall cornerstones (Volkov 1967: 35; Dikov 1958: 31). These eastern patterns include the well-known Dvortsy burials of eastern Transbaikal which have been singled out for their impressive size, their internal stone lining, and comparatively rich burial furnishings. However, as Chlenova (1992: 250) points out, these features were probably characteristic of slab burial contexts in other regions, but ancient pillaging has disrupted the slab burial record to a much greater degree in the steppes south of Transbaikal. In all respects, Dvortsy burials are probably best understood as large slab burials and not as a separate culture or special construction reserved for the elite, as has been suggested (cf. Tsybiktarov 1998: 128-136; Chlenova 1992: 250). Besides, as the data from Egiin Gol and Baga Gazaryn Chuluu suggest, these large features are not outside the upper range of slab burial sizes from many parts of Mongolia. In fact, the newly discovered cemetery of Tsagaan Uul

(also Avargyn Ovoo) in the east Gobi Desert has more than 200 such graves and is a good example of the prominence of these features, some of which measure up to 8 m in length and 6 m in width (Amartuvshin and Galdan 2013, see Fig. 5.9).

Both the large sizes and the pervasiveness of slab burials in the east lead researchers to view these mortuary traditions as having emerged among eastern populations. Nevertheless, based on the absolute chronology, there is still no single region of markedly early slab burial construction yet discernible. It is clear, however, that slab burials are the dominant monumental practice in the east where contemporaneous khirigsuurs are quite few in comparison with their representation in the western regions of Mongolia. Likewise, slab burials are relatively few in the west, though they are found in small numbers as far as Gobi-Altai, Zavkhan, and Khovsgol provinces (Tsybiktarov 1998: 144; Volkov 1995: 321). As mentioned above, these distinctive types of monuments mix together in the central provinces of Mongolia, and this geographical and temporal overlap in khirigsuur and slab burial constructions raises questions about how we might understand major differences in monumental practices that coincide in time and place. For example, a number of archaeologists associate this overlap with encroaching ethnic populations, conflict, and desecration of mortuary monuments. That several slab burial sites have fragments of older deer stones as part of their construction suggests to some a dynamic of warfare and conquest (Tsybiktarov 2003: 87-88). On the other hand, given no additional evidence for inter-group conflict and many Inner Asian examples of monument re-use as a legitimizing strategy (e.g., Honeychurch et al. 2009; Wright 2012; Kovaleva 2006), inter-ethnic conflict may not be the best interpretation. More likely, these patterns represent some change in political conditions that made possible novel ritual and social orders and, subsequently, new material expressions of those in the form of different funerary rites.

In terms of the social referents of slab burial mortuary practices, the prevailing opinion among archaeologists is that these interments in some way represent an elaboration of inequality and leadership among nomadic groups of eastern Inner Asia (Volkov 1967: 96; Tsybiktarov 2003: 82). While it is not clear to what extent status and prestige may have been involved in earlier Ulaanzuukh-Tevsh cultural practices, slab burials show systematic variation in the size and depth of construction and correlations with the presence or absence of ceramics, animal offerings, bronzes, and long-distance prestige items included in the assemblage (Dikov 1958: 62; Turkin 2004: 85). The character of non-local artifacts is particularly telling in this case since many of these items were moved substantial distances to end up in a specific burial context. Examples include impressive cast bronze helmets originating in Inner Mongolia and carnelian beads from West or South Asia (Erdenebaatar and Khudiakov 2000; Grishin 1975: 53-55, 60-61, Fig. 5.11). Even though inter-regional exchange already had a long history on the eastern steppe by this time, slab burial contexts speak to a marked upswing in the amounts and diversity of such goods (Tsybiktarov 1998: 79). It is also clear that in some cases, subadults received higher numbers of such prestige objects and more labor-intensive burial treatments than did some senior males, suggesting a hereditary component to status (Honeychurch et al. 2009: 350-352).



Fig. 5.11 *Above*, a bronze helmet recovered from Zavkhan province (after Yerool-Erdene and Regzen 1999). *Below*, a photograph of archaeologist Diimaajav Erdenebaatar excavating a similar helmet from a slab burial at the Kholtost Nuga site, Egiin Gol Valley

Taken together, these characteristics imply differentiated ranks for those select few who were buried in this manner. While the default attribution of rank and inequality to patterns of mortuary differentiation has been fittingly questioned and reconsidered by archaeologists, this interpretation of slab burial patterns agrees with multiple lines of other evidence and fits with patterns and processes in the regions neighboring Mongolia as well (Honeychurch and Wright 2008; Hanks 2010). However, this assessment does contrast with earlier views of slab burials as relatively modest and undifferentiated (e.g., Chard 1974: 165). I suspect such opinions relied on comparisons with much more opulent and grandiose burials of the time, such as those at Arzhan in Tuva. As I argue in the following chapter, even though the Arzhan 1 burial is impressive and unique, the social processes that gave rise to it are likely the same as those involved in the emergence of slab burial culture, although slab burials represent a very different cultural idiom situated mainly in the east.

5.4 Habitation Sites, Economy, and Lifeways

As is commonplace in Inner Asian archaeology, beyond the study of monuments and tomb making, not much is known about the living spaces associated with those who built so many impressive stone constructions (Chlenova 1992: 250; Grishin 1975: 37). The latest data come from recent excavations at Late and Final Bronze Age seasonal campsites in the river valleys of west-central Mongolia (Houle 2010). In addition, diachronic and comparative information is available from a small number of stratified habitations in the Transbaikal and Cisbaikal parts of Siberia as well as from dated artifact scatters in the Alashan Gobi of Inner Mongolia. Contributing to the existing problem of relatively few discovered sites is the added difficulty of dating what are often sparse remains with little in the way of in situ deposits. Identification of diagnostic ceramics is the primary way of periodizing settlements and campsites, but this approach has its own pitfalls. These include the stylistic and ware similarities between ceramics of the Bronze and Early Iron Ages and later medieval periods (e.g., Davydova and Miniaev 2003: 31-32) and assemblages that are often highly fragmented with too few rims or decorated sherds to be identified in the first place.

As a result, while monumental typologies provide resolutions of between 200 and 400 years, without absolute dating settlement chronology tends to resolve in 700–1,000 year blocks of time (Houle 2010: 2; Honeychurch and Amartuvshin 2007: 50–51). A further problem is that when habitation sites are successfully located and then tested by excavation, they often contain little cultural deposition and few if any features with secure contexts from which to obtain samples for radiocarbon analysis. Nevertheless, better habitation chronologies will certainly be forthcoming as more pedestrian surveys and detailed habitation studies are done. Furthermore, experimentation with a variety of analyses for absolute and relative dating has also shown great promise for the archaeology of early pastoral nomads. In the past few years, luminescence dating of both surface ceramics and sealed soil contexts has emerged as an important alternative method for dating Inner Asian artifact scatters and cultural features (e.g., Janz 2012: 117–119).

As of now, however, it is not far off the mark to say that for Mongolian archaeology, settlement excavation and analysis have only just become a priority among archaeologists. One bright spot in this otherwise substantial dearth of information is that when researchers do dedicate time, labor, and proper methodologies to the study of Bronze and Early Iron Age living areas, results can be obtained that have great significance, especially when it comes to contextualizing monumental sites and recognizing major transformations in community lifeways. Such is the case of Houle's recent survey and detailed excavations of several Late Bronze Age sites in the Khanui Gol river valley (also Khanuy Gol) of Arkhangai province (Houle 2009, 2010). Khanui Gol is a major river valley located in the Khangai Mountains of west-central and central Mongolia and is characterized by a forest-steppe environment not dissimilar from that of the Egiin Gol river valley to the north. In addition to a robust settlement record, the area also has multiple khirigsuur and slab burial complexes along with deer stone sites. Several centuries later in time, Khanui Gol becomes a major center of Xiongnu elite mortuary activities (Erdenebaatar et al. 2011). Survey at Khanui was originally initiated by Allard and Erdenebaatar (2005), but the emphasis on seasonal campsite excavation has been Jean-Luc Houle's major contribution to the research project and to Mongolian archaeology generally.

In order to detect artifact scatters in a grassland environment with substantial colluvial sedimentation, survey crews conducted intensive survey with closely spaced systematic test-pitting across two different valley zones totaling 20 km². The zones were chosen in reference to the distribution of khirigsuur sites in order to examine the relation of monuments to living areas (Houle 2010: 46–47). The outcome of this labor-intensive search strategy has been impressive: Within the two survey areas, every side valley entrance onto the main valley had remains of settlements and, in total, 26 occupation sites were revealed (Houle 2010: 49–58). Survey crews dated sites to the Late and Final Bronze Age using diagnostic ceramics and singled out one major occupation cluster for additional testing and excavation. A combination of landscape analysis and excavation results has done a good job of revealing how people lived in the Khanui Gol Valley over three millennia ago.

Houle's work provides a clear picture of small-scale community groups practicing pastoralism and short-range seasonal movements. Faunal remains suggest that Late Bronze Age households herded at least four of the major species typical of Inner Asian pastoralism: sheep, goat, cattle, and horses. Residential movements were between cold and warm weather campsites in the upper sections of protected side valleys and in open valley mouths, respectively. Due to the rich pastoral resources and plentiful water, these movements probably did not exceed 5 km in most cases. However, even though households seemed to have covered only small distances over the course of a year, they probably had the capacity to move longer distances and possessed the technology needed to do so, including moveable shelters and developed animal traction. In addition to pastoral subsistence, Houle reports only minimal use of hunted species such as musk deer, some evidence for fish, and a few collected wild plants such as *Chenopodium* (Broderick and Houle 2012). Furthermore, he found no botanical or artifactual indication of local farming whatsoever (Houle 2010: 126–135, 180). Most subsistence needs were therefore met by herd animals, and although no direct evidence was recovered, it is likely that the full range of secondary products including edible dairy, wool and other fibers, and skins and leathers was exploited.

Survey and excavation also demonstrate that Khanui Gol was an area of craft production that included locally made lithic tools and ceramics. Interestingly, fieldwork failed to recover any evidence for bronze metallurgy in the valley. In fact, bronze artifacts rarely occurred in settlement contexts (e.g., a single arrowhead was recovered), while in contrast, bronzes were common in nearby burial assemblages (Houle 2010: 146–160, 170). This may attest to the high value of bronzes, which seem to have been treated in the same way as imported jade and turquoise objects, also found in mortuary contexts and considered by archaeologists to be prestige markers (Houle 2010: 149–150). Such differences argue for some degree of control over items of value and, in turn, imply privileged access to these materials on the part of some members of the community but not for most.

The monumental landscape at Khanui Gol might also be understood as representing patterns of social differentiation and control. The many khirigsuurs, some of extremely large size, and the local deer stones would have required extensive labor investment and a leader capable of mobilizing such labor—probably even involving groups that did not live in the immediate area (e.g., Houle 2010: 30).

On the other hand, the settlement evidence provides less indication of clear social differentiation within the valley's local community. Houle argues in favor of some suggestive differences between habitation sites based on frequencies of decorated ceramics and cattle remains. He also identifies what seems to be an area reserved for lithic production which might represent early specialization or perhaps controlled production. However, overall, there are no great differences between living areas within sites and between residential sites themselves that would corroborate the degree of political and social differentiation indicated by the burial and monument record. This mixed evidence suggests to some archaeologists that emphasis on social hierarchy and elite leadership as primary organizational factors in Late Bronze Age society may be premature (Wright 2014). Then again, perhaps settlement differentiation would be less obvious or even reflected in different ways, given the fact that the local community was residentially mobile. In order to resolve this mismatch in archaeological perspectives, systematic comparison between habitations and other contemporaneous site types is needed from additional parts of Mongolia.

One of the advantages to conducting settlement research at Khanui Gol is that the resource-rich forest-steppe environment and the early practice of short-distance mobility encouraged a regular re-use of campsites. These sites, when discovered, have strong potential for containing intact cultural features such as hearths and trash pits as well as stratified cultural deposits. It is no coincidence then that the majority of habitation sites with such informative features are reported in the forest-steppe zones of Mongolia and southern Siberia. Perhaps the best example is the Dureny 1 and Dureny 2 settlement complex along the Chikoi River in southern Transbaikal, roughly 15 km north of the Mongolian border. This complex is one of the few stratified habitation sites with occupation levels dated by radiocarbon analysis to the early and mid-first millennium BC. Comprehensive ceramics analysis supports this periodization based on numerous fragments of pottery matching those known from slab burial contexts. The diagnostics include tripod-shaped cooking vessels and coarse red ware ceramics with "piecrust" rims and impressed or incised appliqué bands (Davydova and Miniaev 2003: 29, 40).

Dureny 1 and 2 also have ceramic evidence for occupation during the early medieval era (mid- to late first millennium AD), but the primary interest for archaeologists has been the extensive occupation remains dating to the Xiongnu period at the end of the first millennium BC (Davydova and Miniaev 2003: 41). As a result, information about earlier occupations, and especially how people may have been living at the Dureny sites prior to Xiongnu emergence, has been somewhat neglected. This continues to be the case despite the fact that the Final Bronze and Early Iron Age evidence is crucial for establishing patterns of long-term continuity and discontinuity between these major periods of occupation. The excavators of Dureny do suggest that the
habitation pattern prior to the Xiongnu period may have been more mobile and less permanent (Davydova and Miniaev 2003: 41), although the degree of cultural deposition suggests at least consistent seasonal use during most of the first millennium BC.

Several habitations contemporary with the pre-Xiongnu layers of the Dureny complex are reported from eastern Transbaikal at distances of about 50 to 200 km north of the easternmost parts of Mongolia. These habitations are located along major waterways and tributaries including the middle Onon and Nerch rivers, and all were discovered in wind-eroded sand banks or dune fields. As such, they have no intact deposits or features and, therefore, multi-component sites were recorded as mixed surface assemblages lacking any reliable context; all of these conditions make their interpretation and periodization difficult. Nonetheless, Grishin presents a thorough analysis of the site collections and identifies Late Bronze through Early Iron Age components at the three sites of Kyshtachnaia Sopka, Kunkur, and Narasun (Grishin 1975: 37-41). Among the diagnostic finds from these sites are coarse red and brown ware ceramics with impressed or stamped appliqué, piecrust rims, and tripods with decorated bodies and hollow legs. All of these ceramic patterns are also characteristic of slab burial ceramic assemblages. In addition, each site has distinctive copper-bronze artifacts that can be stylistically dated to the Late Bronze or Early Iron Age including knives, awls, decorative pendants, and buttons. Again, this metal inventory is very similar to that found in slab burial contexts. Finds of particular interest collected at some but not all of these sites include microlithic scatters (especially scrapers, micro-blades, and borers); stone molds for bronze casting and slag from metalworking; and harness pieces for horses. Completely lacking from the description of these sites, however, is evidence for the early inhabitant's lifeways such as the prevalence of herding, hunting, and farming or to what degree the inhabitants may have been seasonally nomadic or sedentary.

Nonetheless, claims for the development of mobile pastoralism in Mongolia and Transbaikal during the late second and early first millennium BC are are commonplace, but based on non-systematic observations of animal bones in burial contexts (e.g., Dikov 1958: 57-61; Volkov 1967: 92; Navaan 1975: 104-107; Grishin 1975: 98; Tsybiktarov 1998: 147–149). By and large, Houle's focus on settlement excavation with full faunal and botanical recovery by soil screening and flotation is still a rarity in eastern steppe archaeology, as is his use of comparative and quantitative analysis of animal and plant remains. These steps are crucial for a reliable assessment of subsistence evidence including the presence and abundance of domesticates and/or wild species (both plant and animal) as well as changes over time in their representation as a part of ancient diets. Such a methodological approach provides a much richer and more dependable interpretation of daily economics and processes of transformation. Archaeologists have employed techniques like these with impressive results at habitation sites 250 km north of Mongolia on the western coast of Lake Baikal (Cisbaikal region). In order to chart the arrival and exploitation of herd animals in this northern forest-steppe and lacustrine zone, Nomokonova and colleagues have systematically excavated a stratified settlement site known as Sagan-Zaba II located in a large valley opening onto the lake coast. The site has 11 layers dating from the Mesolithic to the period of the Mongolian

empire; however, the Late Holocene layers 3-B and 3-A are those most pertinent for understanding the introduction of herding during the Late and Final Bronze Age (Nomokonova et al. 2011).

Several hearth features with charcoal were discovered within the site deposits, and these, along with animal bones, provided samples for radiocarbon dating. The chronology of the different strata is still quite coarse with dates from a single layer ranging across five or more centuries, though artifact assemblages and especially decorated ceramics provide extra confirmation for the periodization. Layer 3-B has the earliest occurrences of domesticated animal bones and radiocarbon dates from the mid-second to early mid-first millennium BC, in addition to diagnostic ceramics supporting a Bronze Age chronology. Finds recovered from this layer include bronze, microlithic, and bone artifacts, and the faunal assemblage consists of sheep/goat, horse, and cattle, as well as terrestrial and aquatic wild species such as deer, ground squirrel, Baikal seal, and fish (Nomokonova et al. 2011: 166). The early dates lead Nomokonova and colleagues to suggest that layer 3-B may well contain the remains of both huntergatherers and slightly later groups who possessed domesticates, since there is clear emphasis on hunting and gathering activities and, most notably, seal hunting.

Radiocarbon dates from layer 3-A place this stratum firmly in the first millennium BC, and accordingly, excavators recovered microlithic tools, ceramics, and iron artifacts suggestive of an Early Iron Age assemblage. These finds are consistent with what might be expected from middle- to late-period slab burial inventories. The faunal profile of this layer comprises many of the same domestic and wild species, but there is a notable change in the relative abundance and use of these animals. By the mid-Early Iron Age, the presence of herd species increased dramatically relative to hunted species. Moreover, culling patterns, indicating the makeup of diet and presumably the overall composition of herds as well, shifted from a focus on sheep/goat to one with increased cattle production. Horses were present at the site but were not as numerous as in neighboring areas, perhaps due to the relative aridity of local grasslands or because they were not a regular part of the diet. Sealing and fishing continued to make significant contributions to subsistence, but, interestingly, seal numbers declined as the investment in herds increased. Following the Early Iron Age, the proportion of pastoral-to-wild mammal species became fairly consistent and continued into the later medieval periods at Sagan-Zaba, suggesting that a mature and sustainable herding strategy was developed early on. Finally, Nomokonova and her team argue that the increasing reliance on cattle during the Early Iron Age may indicate a decline in mobility as has been documented during historical periods around Lake Baikal. However, besides the numerous hearth features, no infrastructural evidence for how people inhabited the site has been discovered as of yet (Nomokonova et al. 2011: 169-173).

Well-dated habitation sites are not just restricted to the northern regions but are also being identified in the arid southern parts of Mongolia as well. This is especially true of the past decade due to numerous archaeological rescue projects organized in the wake of large-scale mining activities in the Gobi Desert. In an innovative analysis project using artifact collections from museums, Janz has employed luminescence dating to periodize ceramics recovered from Gobi surface sites by the Roy Chapman Andrews and Sven Hedin expeditions during the 1920s and 1930s (Janz 2012). This has added significant chronological detail to our understanding of the Neolithic and Early Bronze Age periods. Of these collections, only one assemblage from the Dottore-namak site in the Alashan Gobi can be reliably assigned to the Late and Final Bronze Age. However, by comparing data from Dottore-namak with nearby Late Neolithic and Early Bronze Age site information, Janz offers important insights about long-term trends in Gobi habitation patterns.

The Alashan Gobi makes up much of the northern part of western Inner Mongolia and is continuous with the Gobi zone of Bayankhongor and Omnogobi provinces of Mongolia immediately across the border to the north. The site of Dottore-namak is 50 km south of the Mongolian border and is located in the Goitso Valley, a region known for its relatively high water table, several springs and small oases, and relatively rich grasslands (Janz 2012: 25). The site itself is represented by a sparse scatter of microlithic artifacts, ceramics, and metalworking slag. Luminescence dates on two ceramic samples date the site most probably between the late second and mid-first millennium BC, despite one date with a substantial error range (Janz 2012: 120). The microlithic assemblage is consistent with earlier periods, and the ceramics have impressed molded or appliqué bands on the shoulder quite similar to those described for the Siberian settlements above. Of note is the clear evidence for bronze manufacture at the site in the form of slag remains and melted copper residues on ceramic fragments which might have been parts of crucibles for copper smelting (Janz 2012: 372).

Janz points out that Dottore-namak is particularly interesting because it is a good example of a site type not normally recovered by the early twentieth-century archaeological surveys. It is a small, low-density artifact scatter near a spring, and as such, it epitomizes characteristics that become more prevalent for habitation sites of the middle to late second millennium BC (Janz 2012: 372-373). These characteristics include artifact scatters that are comparatively sparse and appearing in locations best suited for short-term exploitation, implying a more spatially dispersed resource strategy with brief site occupations. Janz also notes an increase in pottery remains and a de-emphasis on microlithic tool production, suggesting a shift in domestic and productive activities. The opportunistic collections made by the Andrews and Hedin expeditions did not find many of these Bronze Age habitations, despite extensive recovery of surface sites dating to the earlier Neolithic period and having the same classes of artifacts. This contrast in detection probably results from a change in Late Bronze Age lifeways that produced a less obvious surface pattern for campsites (Janz 2012: 371-374). One explanation for this change in habitation practices is more frequent and longer-distance nomadism derived from animal transport in conjunction with greater reliance on mobile herd animals as a primary food source (Janz 2012: 373). Short-term seasonal sites, such as Dottore-namak, suggest that during the second millennium BC pastoral nomads may have transited the Gobi Desert. If so, this demonstrates one way that material culture, resources, technologies, and animals could have moved from central Mongolia into Gansu and Inner Mongolia (see Chap. 7).

One important aspect virtually absent from the discussion above is the role of domesticated grains and cultivation in Late and Final Bronze Age societies. Based on the discovery of millstones and ring-shaped digging stick weights, a majority of archaeologists have argued that grain cultivation was a critical practice at this time (e.g., Volkov 1967: 91, Tsybiktarov 2003: 83; but cf. Grishin 1975: 27, 1981: 196). However, little else in the way of artifactual or botanical evidence for agriculture has been discovered. This may simply reflect the lack of soil flotation practices in Mongolian and Siberian archaeology which is the primary method for collecting botanical remains. On the other hand, contrary to the dominant opinion, what seems to be a lack of supporting evidence for farming may also affirm the conclusion of Houle (2010: 183), Janz (2007), and Wright (2006) that the transition to mobile pastoralism in many parts of Inner Asia was brought about by hunting and gathering groups without much reliance on domesticated grain. If so, this process would have been similar to the emergence of pastoralism in East and North Africa as we now understand it (Marshall and Hildebrand 2002).

An alternative line of evidence for early Inner Asian agriculture is stable isotope analysis of human bone to detect chemical indications of diet. Isotopic results can be combined with dental information to give an idea of what people were eating 3,000 or more years ago. Several recent studies using these techniques have now been published and suggest an interesting picture of geographical and diachronic variability across Inner Asia. Machicek has pioneered some of the very first stable isotope research using samples from Mongolian archaeological contexts. Her research has examined human bones from Late Bronze Age khirigsuur burials at the site of Taishir-Ulaanboom in Gobi-Altai province, from Ulaanzuukh-Tevsh burials at Baga Gazaryn Chuluu in the Middle Gobi, and from khirigsuurs north and east of the Uushigiin Ovor site in Khovsgol province (Machicek 2010, 2011, forthcoming). Machicek's results support the conclusion that Late Bronze Age groups were eating a diet without domesticated grain and instead relied mainly on animal products (i.e., terrestrial herbivores, probably herd animals) and possibly wild edible plants (Machicek 2011: 117-132; forthcoming). It is not until the very end of the Early Iron Age at some central Mongolian sites that C₄ or C₃ grains (most likely millet or wheat) began to enter local diets (Machicek 2011: 123, 129; Machicek and Zubova 2012). These findings contrast markedly with what is known from the surrounding regions of Xinjiang, southeastern Kazakhstan, and the Minusinsk Basin where millet and/or wheat were either traded or cultivated as early as the Middle to Late Bronze Age and then became staple foods throughout the Early Iron Age (e.g., Svyatko et al. 2013; Li et al. 2011; Murphy et al. 2013; Miller-Rosen et al. 2000; Frachetti et al. 2010; Doumani et al. forthcoming).

In summary, although habitation evidence and chronology are still being worked out, reports from archaeologists conducting research around Lake Baikal, in central Mongolia, and in western Inner Mongolia all indicate a similar set of processes enacted during the end of the Bronze Age. These include a primary reliance on domestic herd animals, use of animal transport and traction, and a developed capacity for residential movement, whether regularly exercised or not. Furthermore, these changes coincided with major shifts in monument construction, artistic styles and ideology, and mortuary culture beginning at 1500/1400 BC. Additional changes, especially in monument and funerary practices, occurred again at around 1000 BC, giving rise to a very diverse and regionally differentiated mixture of burial architectures, ceremonies, and funerary assemblages. This conclusion would not come as a surprise to an earlier generation of Mongolian and Russian researchers who, beginning from the 1960s, argued for a relatively similar timeline of cultural transformation. These prior arguments, however, depended primarily on assemblages from burials, i.e., ritualized context not well suited for addressing subsistence practices and daily lifeways. What is different about much of the recent research from Mongolia and Transbaikal is the use of diverse field methods employing a wide range of site types and analytical approaches. These multiple lines of evidence together provide a much more satisfying account of how pastoralism, mobility, social differentiation, and monumentality began to coalesce on the eastern steppe.

5.5 Local and Regional Perspectives

Egiin Gol and Baga Gazaryn Chuluu (BGC) provide additional detail on the transformations that accompanied the Late and Final Bronze Age. Both survey areas have similar records of monumental sites and somewhat underdeveloped datasets for Bronze and Early Iron Age habitation. Like many of the areas already discussed, this is largely due to site preservation and a lack of chronological resolution from surface collections alone. At Egiin Gol, habitation sites assigned to the mid-second to mid-first millennium BC are small with a mean size of 0.25 ha, very sparse (i.e., fewer than 1 artifact per m²), and have modest subsurface cultural deposits. At BGC, contemporaneous sites are also sparse and even smaller with a mean site size of 0.08 ha, but with the added problem of wind-deflated soils that leave artifacts sitting on the immediate surface with little beneath them for further exploration. Although the chronology of these sites is coarse (i.e., 800-year intervals), it is clear that campsites in both survey areas are concentrated in locales highly suitable for seasonal residence. Similar to the settlement pattern Houle documents in the Khanui Valley, Egiin Gol Bronze and Early Iron Age habitations are either in the upper reaches of tributary valleys or around valley mouths. This pattern is the same for khirigsuur and slab burial sites as well. At BGC, habitations are in protected ravines and on the southern sides of wind breaks as well as in the largest valley bottoms and at valley mouths. Although there is still no other supporting evidence besides these landscape locations, when considering the organization of warm and cold weather campsites, these settlement patterns are quite similar to current pastoral nomadic practices in both areas (Honeychurch and Amartuvshin 2007; Wright et al. 2007).

Based on these locations and assuming that they represent winter and summer campsites, Late Bronze to Early Iron Age mobility regimes in and around Egiin Gol and BGC were about 10 to 15 km annually. In addition, a preliminary oxygen and strontium isotope study from these regions was carried out to analyze the mobility of

community members during this period in prehistory. Although more work is needed to establish baseline isotopic values for the local and regional environments in each survey area, a viable interpretation of results so far is that that Egiin Gol Valley individuals probably spent both early and later phases of life within the valley region itself, while BGC community members spent significant amounts of time in other locales 80–100 km away, suggesting a much wider circuit beyond BGC (Machicek et al. 2012: 16–17, also see Chap. 8). These movement ranges are based on limited samples from each local area and the analysis does not represent daily or annual movements, but rather the location of an individual early and later in life. However, the results in both cases conform surprisingly well to the maximal extents of herding mobility in use today. Such isotopic analysis also cannot identify movements that may have been longer distance but at shorter intervals of time, but it is very likely that such movements were indeed practiced as part of Bronze Age lifeways.

While landscape organization and site locations strongly suggest pastoral nomadic subsistence patterns, faunal evidence from the Bronze Age habitation sites is minimal. On the other hand, animal bones from local monument and mortuary contexts do demonstrate the presence of most of the major herd animals species in both regions (sheep/goat, horse, and cattle), with higher instances of cattle remains at Egiin Gol (Torbat et al. 2003; Delgermaa and Hite 2010). Stable isotope analysis of human bone from slab burials at Egiin Gol and shaped and slab burial contexts at BGC supports primarily meat-based diets during the mid-second to mid-first millennium BC. While the BGC diet drew mostly upon terrestrial herbivores, Egiin Gol diets were more diverse and likely included fish as well (Machicek 2010). Beginning at c. 300 BC, both local communities experienced a dietary shift toward increased plant foods probably associated with cultivated grain consumption (Machicek 2011; Machicek and Zubova 2012: 155).

Despite the fact that Egiin Gol and BGC habitation data for the Late and Final Bronze Age are limited, patterns in monument and burial construction can provide additional information for local organization. Monument types at both survey areas include khirigsuurs and slab burials, and these sites adhere to more or less similar locational arrangements and inter-site associations. However, there are also some interesting differences; for example, deer stones are found in and around the Egiin Gol Valley, while they are not present at BGC. On the other hand, shaped burials related to Ulaanzuukh–Tevsh culture are numerous at BGC, but they do not occur at Egiin Gol. These contrasts raise questions about the relationships between these diverse monumental practices and how their uses and meanings may have been different between the Gobi and the forest-steppe. Still another question concerns the process by which some forms of monuments became common to both regions, while others were more confined geographically. In general, each of these monument types as known from Egiin Gol and BGC conforms to the descriptions given above for their respective structures, chronologies, and assemblages.

At Egiin Gol, only khirigsuurs and deer stones comprise the Late Bronze Age monument record based on the current levels of excavation and dating. By the Final Bronze Age (c. 1000/900 BC), these sites are complemented by slab burial constructions which nevertheless are clearly associated with the older monuments.

As of yet, there is no evidence for human interments or burial inventories from among the 181 or so khirigsuur features recorded.¹⁰ and therefore, human burial practices at Egiin Gol during the late second millennium BC are still somewhat of a mystery. Relatively few of these sites have been excavated, but given that fieldwork is ongoing in and around the valley. I fully expect that some evidence for human interment in khirigsuurs will be forthcoming. One point that is clear, however, is that Egiin Gol slab burials, though almost always disrupted, were definitely intended for human interment and were built with great attention to the existing khirigsuur landscape. Not only are slab burials in close proximity to, or even embedded within, khirigsuur complexes but their is also a clear association between larger slab burials and complexes with larger khirigsuurs (Honeychurch et al. 2009). Despite a clear spatial relationship between the two site types, slab burials at Egiin Gol present a very different set of practices, even though they overlapped in time with khirigsuurs for 200-300 years. In addition to housing the dead, slab burial funeral events included small-scale feasting and the deposition of prestige and imported items such as bronze weapons, turquoise, cowries, beads, bronze helmets, horse gear, and animal-style bronzes. A total of 86 slab burials recorded by the Egiin Gol survey attests to the fact that a very small number of people received this mortuary treatment over the centuries.

Though khirigsuur and slab burial monuments are somewhat integrated at the site level, at the regional scale, the landscape organization of the two site types diverges sharply. An appreciation of this difference begins by taking account of the major khirigsuur and deer stone complexes in and around Egiin Gol. A combination of pedestrian and vehicle survey has identified four such complexes, one of which is in the lower Egiin Gol Valley, while the other three are situated in distinct river valley systems, including one across the Selenge River basin. Each deer stone complex is surrounded by multiple groups of khirigsuur sites, usually in smaller side vallevs, and these regional clusters of monumental landscapes are separated by areas without monuments at 20-30 km intervals (Honeychurch et al. 2007: 378). The horizontal distances between each of the deer stones are also fairly regular measuring 46, 40, and 60 km between each nearest neighbor (Fig. 5.12). This large-scale patterning suggests a series of duplicate "local" communities, each occupying a topographically defined and distinct subset of the greater river valley system. Each subregion was organized in relation to a monumental landscape centered on a major deer stone complex and encompassing sufficient land, pasture, and water for sustaining herd animals, as well as hunting, gathering, and fishing. In fact, khirigsuur monument building may have been one way these different communities created closer ties between their respective groups since khirigsuur construction required the aggregation of large numbers of people and likely marked inter-community gatherings in late summer or fall (Seitsonen et al. 2014: 98-100; Houle 2010: 30).

¹⁰ The Egiin Gol Survey recorded a total of 383 khirigsuur sites in the valley but many of these were in poor condition or obscured by sedimentation. Of the total count, 181 were in good enough condition to be categorized as unquestionable khirigsuur monuments. The same applies to BGC khirigsuur counts given below (see Honeychurch and Amartuvshin 2011).



Fig. 5.12 Khirigsuur and deer stone distributions in the greater Egiin Gol and Selenge region. Data are based on three separate surveys and extensive reconnaissance

Slab burial distributions, on the other hand, tell a different story. From additional survey in the Tarvagatai and Teshig areas north and northwest of Egiin Gol, we now know that slab burial distribution was geographically much more restricted than khirigsuurs (Gardner and Jargalan forthcoming). The earliest slab burial so far dated at Egiin Gol appears at about 900 BC in the same tributary valley as the Egiin Gol deer stone and khirigsuur complex. Subsequent slab burial constructions were carried out only in the central portions of the lower valley, significantly truncating the much larger extent of the khirigsuur distribution (Honeychurch et al. 2009). Beyond Egiin Gol, slab burial sites have not been discovered in or around the other deer stone centers as of yet with the exception of the one large complex located across the Selenge River at Bugat.¹¹ This strikingly delimited slab burial distribution with twin clusters focused on opposite sides of the major river within the area may indicate a process of consolidation of a number of neighboring local groups on either side of the Selenge. A combination of local area consolidation, the emergence of dual regional central places, and new burial practices that involve non-local prestige goods suggests major political transformations. Moreover, the evidence for horseback riding associated with slab burials at Egiin Gol mentioned above points to a means for greater geographical contact among formerly dispersed groups and a new basis for local wealth, perhaps facilitating political and organizational changes (Fig. 5.13).

¹¹ The Egiin Gol team carried out a vehicle reconnaissance in this area in 1999, and a limited CRM survey was done in 2012 (Gunchinsuren et al. 2013). The CRM survey also reports some slab burials in the Khutag Ondor region which may indicate a third complex 70–80 km to the west.



Fig. 5.13 Known slab burial distributions in the greater Egiin Gol and Selenge region

Interestingly, the Late and Final Bronze Age patterns at BGC are somewhat different from those at Egiin Gol, perhaps due to the very different mobility regimes in the two regions. Khirigsuur monuments at BGC are contemporaneous with shaped and other burial formats already discussed as representative of Ulaanzuukh-Tevsh culture. As a matter of fact, these very different monument types are sometimes located within close proximity to each other, although the relationship between them is still far from clear. Of the few khirigsuurs excavated at BGC, none have had evidence for human interment or an artifact inventory contemporary with the time of construction. Of the few Ulaanzuukh-Tevsh burials excavated, half of them have had human remains and some form of burial inventory. In fact, the excavation of one such burial at the Baga Mongol site (EX07.23) on the west side of BGC had a substantial faunal, ceramic, worked stone, and bronze assemblage (Nelson et al. 2009; Park et al. 2011). Moreover, the Baga Mongol burial is only about 200 m distance from a major khirigsuur complex that probably overlaps it in time, raising the question of how these two sites were related in the past. Barring the discovery that BGC khirigsuurs were indeed mortuary monuments albeit with extremely poor preservation of skeletal material due to acidic soils (e.g., Littleton et al. 2012), perhaps the construction of khirigsuurs at BGC did not require a burial event for the purposes they served. In other words, the aggregation of local people, their participation in monument construction, and visits by prominent outsiders may have been the main focus, rather than a funeral. If so, that would explain contemporaneous forms of burial treatment at BGC such as the Ulaanzuukh–Tevsh burials (Honeychurch and Amartuvshin 2011).



Fig. 5.14 Khirigsuur sites within the BGC survey area and particularly dense clusters of khirigsuurs marked by circles

In any case, khirigsuur monuments at BGC are quite numerous (187 identified) and are organized into major complexes along the upper reaches and bases of prominent ridges, at passes, and at the mouths of outwash valleys. An association with waterways and notable peaks seems to be a commonality between khirigsuur landscapes in different parts of Mongolia. Major clusters of khirigsuurs occur within the western and northeastern sectors of BGC which match the two separate watersheds that arise from the granite ridges and flow outward into the plains (Fig. 5.14). These monument complexes are situated near the two widest valleys with intermittent surface streams that today have shallow water tables and consequently provide water for some of the most reliable wells in the area. The 261 slab burials¹² recorded at BGC far outnumber khirigsuurs, but, just like Egiin Gol, slab burials mostly occur nearby or within khirigsuur sites. In fact, with the exception of one area in the north, the densest spatial clusters of slab burials consistently overlap

¹² It is worth pointing out that both khirigsuur and slab burial counts are approximate due to surface feature disruption and local variability in types. The only way to verify a surface identification is to excavate, and therefore, surface data will always incorporate some degree of error. That said, at Egiin Gol and BGC, over 95 % of excavations proved the original surface identification correct.

the densest clusters of khirigsuur monuments which again suggests a landscape purposefully integrated over time. A number of slab burials have been excavated at BGC, but their assemblages have been disappointing due to pillaging, desecration, and acidic soils. The fact that these burials were well supplied with artifacts is attested by numerous bronze surface finds in the vicinity of slab burial cemeteries including knives, decorative items, and arrowheads (Nelson et al. 2009).

The pattern of regional distribution of slab burials beyond BGC is quite different from that at Egiin Gol. Unlike the truncated pattern seen in the forest-steppe region, the Gobi sites around BGC exhibit a high degree of diachronic continuity between khirigsuur locations and slab burial monuments. This is true not only at large and impressive sites such as BGC, but even in outlying secondary locales where construction of a handful of khirigsuurs usually was accompanied by at least one or two slab burials. In fact, wherever khirigsuurs are present in the greater BGC region, slab burials were also constructed and that would seem to suggest that no exclusive "central place" emerged during the early to mid-first millennium BC. On the other hand, the regional perspective is complicated by the fact that there may be a second center of monumental activity only 80 km to the north around another granite ridge known as Zorgol Khairkhan at Bayan Onjuul. As mentioned above, isotopic analyses suggest contacts between BGC and this area in the temperate steppe zone, and even today, extended families move regularly between the two locales. In addition, there are two other major khirigsuur and slab burial concentrations 65 km to the southeast of BGC near the site of Suman Uul and 77 km to the southwest at Erdenedalai. Three more small clusters of khirigsuur and slab burial monuments (at Adaatsag Uul, Delgertsogt, and Khar Khad) are situated between these larger centers and BGC, and all are separated by otherwise non-descript arid plains lacking monument sites (Fig. 5.15).

It is difficult to know what relationships existed between these several dispersed areas of activity stretched over 130 km north to south. For example, did these monument sites represent multiple separate communities or just one or two large communities in circulation around BGC with regular contacts? Furthermore, did a form of greater consolidation of these groups occur over time, similar to what seems to have taken place at Egiin Gol? Three observations help to interpret this expansive regional landscape. First, there is little doubt that BGC has by far the largest, the most diverse, and the most impressive assemblage of monuments among these several areas of monumentality. Next, based on preliminary assessments of outlying sites, counts of khirigsuur monuments over the spatial extent of each respective site area yield a relatively similar khirigsuur per square kilometer result. In contrast, if assessing slab burial numbers in comparison with khirigsuur counts, BGC has a substantially greater representation of slab burial monuments than any of the outlying areas-roughly 1.4 slab burials per khirigsuur compared to less than 1:1 in all other areas. It is clearly the case that slab burial construction was substantially greater at BGC as time progressed. Finally, from an ecological and economic point of view, the north-to-south arrangement of these outlying sites makes sense, given that pastoral movements tend to exploit seasonal differences in vegetation zones according to north-south latitude. Moreover, the Middle Gobi



Fig. 5.15 Areas in the greater BGC region known to have khirigsuur and slab burial sites. Data are from two separate surveys and extensive reconnaissance

was well positioned as a northern launch point for travel and exchange further to the south into Inner Mongolia, also encouraging a strong north–south gradient in terms of broader movement and interactions.

Based on these three points, one hypothesis for the observed site distribution is that during the Late Bronze Age, this region was made up of multiple autonomous but interacting communities, each with a subregional territory and distinct monumental center. During the Final Bronze and the Early Iron Age, these communities became more integrated through shared mortuary rituals, festivals, feasting, and other ceremonial events at the one site already geographically central to the greater network of both the northern and southern areas, i.e., BGC. Such a process of closer integration could have been initiated for a number of reasons including greater emphasis on regional and inter-regional exchange and alliances, competition from neighboring groups, or even a more specialized focus on those herd animals benefitting most from movement across latitudinal zones—or perhaps a combination of these. This hypothesis emphasizes north–south interaction networks and suggests that east–west networks would have been either de-emphasized or perhaps subject to inter-regional competition.

To check the east-west distribution of sites, survey crews made several jeep reconnaissance trips outward from BGC at distances of up to 100 km. We encountered no large-scale monumental sites similar to BGC in either direction, nor have any such sites been reported in the Mongolian literature. The nearest major monument sites known so far are Ikh Nartyn Chuluu about 200 km east of BGC and

Tevsh Uul at about 300 km southwest of BGC. Particularly telling is the fact that at 110 km directly to the east is a granite ridge called Ikh Gazaryn Chuluu, a sister site to BGC with very similar geology, ecology, and size. In comparing the two locations and their respective environments, there is very little to differentiate them. The main difference turns out to be in the human record. Based on two reconnaissance visits in 2001 and 2004, the BGC teams discovered Ikh Gazaryn Chuluu to be surprisingly devoid of Late Bronze and Early Iron Age monumental sites. This fact suggests that plentiful water, pasture, and good winter camps were not enough to determine the prominence of a site, rather it seems that social and political processes played a role. The fact that Ikh Gazaryn Chuluu falls between two areas of monument building (i.e., BGC and Ikh Nartyn Chuluu) suggests that it occupied something of a buffer zone. A similar buffer zone to the west of BGC hints at somewhat even spacing between major centers across the desert-steppe.¹³ Such spacing intervals argue for political territories that emerged in places well supplied with water and pasture but, even more importantly, places that fit into a developing network of social and political relationships and larger-scale regional movements.

5.6 Summary: Bronze Age Experiments in Subsistence, Transport, Monuments, and Leadership

Ancient pastoral nomadism as an emerging subsistence strategy has dominated prior discussions of the Mongolian Late and Final Bronze Age. Although subsistence economics are indeed important as reflected in the above discussion, it should be clear, even from this cursory overview, that subsistence was embedded in larger contexts of social and political relations in addition to very different local environments and climatic regimes. Subsistence is not a simple interrelation between household producers, resources, environment, and climate but involves social process at local and regional scales of community in order to make a particular food system workable. Because so much of the Mongolian past has been traditionally explained as a direct result of the transition to and limitations of the pastoral nomadic economy, an emphasis on the "sociality" of subsistence and its diversity re-balances the discussion toward the recognition that food exists in a social web that sustains it and not the other way around. In the case of Mongolian pastoralism, social interactions, exchanges, contacts, and politics continually spurred the repertoire of what was eaten and how sustainable those products were over time.

The corollary is that changes in food strategies may have had more to do with social and political contexts than is generally recognized. This provides a good starting point for emphasizing some major themes from the Bronze Age of Mongolia.

¹³ By "major" monument site, I mean a dense concentration of monuments numbering in the hundreds with smaller "satellite" monument sites in the vicinity. Such a monument center might be expected near the edge of the Khangai zone in Ovorkhangai province at about 200 km due west of BGC, but additional survey there would be needed to test this hypothesis.

Even though additional evidence for early herding lifeways is greatly needed, the Late Bronze Age archaeological record attests to a time when pastoralism, mobility, local politics, and external ties all seem to be transforming in concert. Herding practices developed in different social and subsistence milieus across Mongolia and Inner Asia and that variability produced different traditions of movement, subsistence combinations, and interactive regimes. That said, so far most of the evidence suggests that domestic animal herding formed a basic foundation for subsistence with a great deal of flexibility for incorporating additional kinds of products (cf. Miller et al. 2014). These complementary foods were obtained by hunting, gathering, and fishing, while domestic grains entered the Mongolian diet only later in the first millennium BC, but much earlier in the steppe and mountain regions surrounding Mongolia. Ranges of movement documented so far have been between 5 and 20 km but, especially in the more arid zones, movements were potentially as much as 100 km. This implies mobility-enabled households using transportable structures for shelter and animal traction for hauling household possessions between seasonal campsites.

Another significant aspect of the Mongolian Bronze Age is the obvious importance of horses in ceremonies and beliefs. Domesticated horses were certainly used in feasting events associated with both khirigsuur and slab burial rituals, and at least one faunal study suggests that horses were herded and culled in a manner consistent with meat consumption (Houle 2010: 127-129). Domestic horse use, as far as we can tell, begins during the Late Bronze Age and initiates a subsequent tradition of knowledge, handling, breeding, and a variety of uses for horses, as well as specific ideas about the symbolic and prestige value of these animals-in short, the genesis of a genuine "horse culture." Given the estimated 1,700 horse skulls possibly interred in satellite features around the large Urt Bulag khirigsuur in Arkhangai province, Bronze Age groups in west-central and central Mongolia clearly had access to substantial horse herds (Houle 2010: 30). While some herders may have been skilled enough to ride their horses for short periods, perhaps using an organic bit and a felt pad, the bronze horse gear occurring in slab burials, such as the jointed snaffle bits already mentioned, made horseback riding functional, secure, and comfortable over long distances. Ancient groups in Mongolia, with 400 or more years of experience managing horse herds and undoubtedly rich in horse holdings, were perfectly positioned to exploit this new technology.

The Late Bronze Age also marked the beginning of larger spheres of interaction across Inner Asia. The widespread extent of khirigsuur monuments and their similarities with other kurgan forms as far away as southern Xinjiang and Kazakhstan (Wagner et al. 2011) all hint at multi-regional networks that archaeologists have posited as early as the Middle Bronze Age if not earlier (Frachetti 2012). Stone mounded monuments, bronze technologies and artifact types, deer stones and the "animal-style" symbolism pictured on them all became cultural elements in circulation across a large portion of the eastern steppe. These transfers were gradual, incremental, and probably transpired on a community-to-community basis, but this piecemeal sharing of practices, beliefs, and symbols eventually prefigured the shape of later political consolidations during the first millennium BC. While domesticated horses also arrived in Mongolia through these same networks, their ritual association with monument building during the late second millennium BC was a practice emphasized in west-central and central Mongolia more than in neighboring regions (discussed in Chap. 6). In these same central regions, archaeologists have discovered the largest of the khirigsuur monuments, the densest concentrations of deer stones, and a geographical conjunction of slab burial culture from the east and khirigsuur culture from the west—all spurred by new regimes of inter-regional contact (Honeychurch and Amartuvshin 2011).

From the Late to Final Bronze Age, monumental practices in Mongolia transformed radically as did the nature of local leadership. In contrast to most khirigsuur monuments, which probably involved multi-local gatherings and communal feasting during monument construction, slab burial practices focused on the interment of individuals and wealth items. At the same time, some areas, like Egiin Gol and Baga Gazaryn Chuluu, emerged as major central places which experienced substantially greater monumental and mortuary activity relative to surrounding areas. As such, slab burial cemeteries were more concentrated and delimited to specific areas, unlike the widespread distribution of khirigsuur sites. These changes in monument practices may have reflected a real shift in the priorities of local leadership, what Stahl (2004: 258) refers to as two contrasting leadership processes: (1) leadership by composition, and (2) leadership by accumulation. In the first case, leaders seek to assemble communities for participatory and inclusive activities which bring together different peoples, skills, and knowledge. In the second case, leaders bring together groups in ways that emphasize exclusiveness such as the possession, display, and conspicuous consumption of rare, valued, and often non-local exotic goods. While the first implies groups that were not too large for direct interaction with leaders, the second suggests an emphasis on symbolism and display which in turn would be expected of larger-scale political groups such as the multi-community consolidations seen at Egiin Gol and BGC.

In contrast to some assessments of the Mongolian Bronze Age which see the region as a kind of cultural backwater, the material evidence suggests that there was in fact a great deal of organizational dynamism indicative of complexity and interaction. This overview supports the statement made by Shelach about the timing and trajectory of Inner Asian interactions on an interregional scale. He argues that at c. 1500 BC, long-distance contacts were just beginning across the greater region, and at that time, they still had relatively minor local impact in contrast to what would come. By the end of the second and early first millennium BC, inter-regional networks were deeply ingrained in the shape of cultural and political changes across the region, to the point that the concept of "entanglement" becomes pertinent. Although Shelach does address the Mongolian record somewhat, there is still a strong sense among researchers that this upsurge in interregional process had to have involved communities in Mongolia in some way, but their exact role is still far from clear (e.g., Shelach 2009: 128-131; Liu and Chen 2012: 322). A critical question, therefore, is what part did Mongolian Bronze Age communities play in constructing these broader inter-regional networks? To adequately address this question, a larger perspective is called for-one that characterizes cultural differences and similarities across the breadth of Inner Asia, from Kazakhstan in the west to the Northern Zone of China in the east.

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Chapter 6 The Surrounding Bronze Age World: Kazakhstan and South Siberia, 1300–700 BC

Mongolian archaeology still is not widely known outside of Mongolia, and as a result, reconstructions of East Asian prehistory generally leave out Mongolia altogether or mention it only in passing. Given that the Mongolian Plateau represents a substantial land mass in the very center of this part of Asia, the result has been a substantial gap in our conception of Asian development in terms of an inclusive mix of diverse cultures. In the prior chapter, I presented two general but significant observations about the Mongolian archaeological record of the Late and Final Bronze Age. The first of these emphasized the evidence for long-distance interaction networks. Monuments, bronze artifact, technologies and styles, domestic horses, and symbolic systems were in broad circulation among Bronze Age groups, and these constituted some of the foundational supports for the growth of larger political communities. In fact, the politics and ideologies of early Inner Asians increasingly became entangled with resources, information, products, and services that originated from multiple and often far-off regions.

Second, I pointed out trends and differences between the west, central, and eastern parts of the Mongolian archaeological record, most notably the distinction between western kurgan cultures and eastern shaped and slab burial practices. In the west, these geographical differences are all the more interesting given that areas neighboring on western Mongolia (i.e., Xinjiang, eastern Kazakhstan, and the Russian Altai) all seem to have participated in somewhat different interregional networks—as if the Altai Mountains presented just enough of a geographical barrier to distinguish cultures located on the eastern flanks of the mountains from those on the western flanks. This is despite the fact that throughout prehistory the Altai Range never constituted an absolute barrier, but only lesser or greater degrees of permeability based on the regularity of transit through the high mountain passes. During the mid- to late second millennium BC, in contrast to the Mongolian side, areas west of the Altai were characterized by more sedentary lifeways, a greater reliance on cultivated grain, and less emphasis on horses as ritualized animals. What appears to be a geographical–cultural divergence in the way Late and Final Bronze Age groups chose to live and create communities is important for understanding the later course of events, especially during the second half of the first millennium BC.

In order to contextualize the similarities and differences in lifeways surrounding Late Bronze Age Mongolia and Transbaikal, overviews of subsistence, monuments and burials, technologies, and movement regimes from four major archaeological regions are most informative. These regions include south-central and southeastern Inner Mongolia, the Minusinsk Basin of southern Siberia, and Semirech'e of southeastern Kazakhstan. Even though these places are separated by thousands of kilometers, their respective peoples all shared in cultural transformations that suggest important interconnections with early groups of Mongolia. This chapter focuses on those regions to the west which are sometimes thought of as tangential to Mongolia's prehistory based on the assumption that ancient Mongolia shared its closest connections with China. This mistaken perception is a legacy of China's vast body of historical texts which routinely steer attention in that geographical direction at the expense of equally significant interactions with early nonliterate groups. Archaeology tells the story differently: Mongolia has long been a territory that actively channeled the networks of many distant regions and therefore participated in all of those regions to some extent (Fig. 6.1).



Fig. 6.1 Map of western Inner Asia showing the major archaeological sites mentioned in the text. *1* Egiin Gol; 2 Baga Gazaryn Chuluu (BGC); 3 Begash; 4 Mukri; 5 Tasbas; 6 Tuzusai; 7 Tsenganka; 8 Taldy Bulak 2; 9 Talapty I; *10* Chicha; *11* Kent; *12* Shilikty; *13* Besshatyr; *14* Asy Zaga, Turgen, and Issyk; *15* Shortandy-Bulak; *16* Buguly I and II; *17* Myrzhik; *18* Kopenskoe, Torgazhak, Kamenniy Log I; *19* Anchil Chon, Malye Kopeny III, Suchoe Ozero II; *20* Tevsh Uul; *21* Chandman' Khar Uul; *22* Kharbukhyn Gol; *23* Kyshtachnaia Sopka; *24* Kunkur; *25* Narasun; *26* Arzhan 1 and 2; *27* Izmailovka; *28* Tuekta 1; *29* Bol'shoi Salbyk; *30* Olon Guuriin Gol; *31* Baga Turgenii Gol

6.1 Semirech'e and Kazakhstan: A View from the Western Periphery

I begin with the westernmost reaches of Inner Asia where the semideserts and arid steppes of eastern and southeastern Kazakhstan abut the Altai, Tarbagatai, Dzungar, and Tian Shan mountain ranges. The Semirech'e region of Kazakhstan is in the southeast part of the country between the Tian Shan and Dzungar Mountains and Lake Balkhash. Semirech'e was an important conduit for longdistance interactions both east-west as well as north-south. In addition to extensive archaeological work in this region by Kazakh and Russian archaeologists, recent international collaborations have added a great deal of new information about the long-term development of pastoral societies from the third through first millennia BC (Frachetti 2008; Chang et al. 2002). The varied environments of Semirech'e consist of mountainous foothills with rich highland pastures and lowlands that transition to steppe, arid steppe, and semidesert. One landscape feature of particular importance for pastoralists has been the numerous glacier-fed rivers arising in the mountain-steppe zone. These flow into the lowlands where they collect in major lake basins including Lake Balkhash and Lake Issyk-Kul in neighboring Kyrgyzstan. The river channels provide natural corridors for altitudinal nomadic movements transiting through a mosaic of diverse pasture types, wild resources, and good locations for seasonal campsites.

A notable characteristic of this region is the prevalence of easily detectable stratified habitations, such as those recently excavated at Begash, Mukri, and Tasbas. These highland living areas have occupation layers spanning several thousands of years, and their careful excavation employing faunal and botanical analyses has encouraged lead excavators Frachetti and Mar'yashev to argue for a high degree of diachronic stability in subsistence practices and pastoral strategies (Frachetti and Mar'yashev 2007; Frachetti et al. 2010a). Regional surveys around these habitations have revealed a pattern of semi-subterranean houses with substantial stone foundations at more permanent low-elevation sites as well as smaller upland seasonal camps still with substantial investment in house architecture. The Begash sequence dates from the Middle Bronze Age (c. 2500 BC), and Mukri is first occupied during the Final Bronze Age (c. 900/800 BC). Faunal and botanical evidence as well as site patterning all suggest a sheep/goat-dominated mobile pastoralism with movement regimes of between 10 and 20 km (Frachetti 2008: 154-156; Frachetti et al. 2010a; Spengler et al. 2013a: 142). Two major observations from these sites demonstrate important differences with the neighboring Mongolian record. First, there seems to be an unexpectedly low representation of horses at Begash and Mukri throughout the second and into the first millennium BC (Frachetti and Benecke 2009). Second, the evidence from Semirech'e for a robust investment in mobile herding is complemented by early and continuous indications for the use of millet and later on, wheat and other cultigens (Frachetti et al. 2010b).

Millet was recovered from an early ritual context at Begash dated to 2300 BC and continued to be found from living floor contexts for the entire extent of the

site's occupation, although in fairly small amounts (Frachetti et al. 2010b: 999). More recent work at the Tasbas summer settlement about 100 km northwest of Begash provides ample macro- and micro-botanical evidence for multi-cropping of millet, barley, and wheat by 1500 BC (Doumani et al. forthcoming). This evidence fits with other findings from Kazakhstan, Xinjiang, and South Siberia that by the second millennium BC domesticated grain was widely used for subsistence by mobile pastoralists and semi-sedentary agro-pastoralists alike (e.g., Wagner et al. 2011: 15737; Jia et al. 2011; Ryabogina and Ivanov 2011; Li et al. 2011; Svyatko et al. 2013). Millet is not reported at Mukri, but contemporary sites about 250 km to the south on the Talgar plain have substantial evidence for grain cultivation with an early emphasis on millet (Chang 2012a: 149). The settlements of Tuzusai, Tseganka 8, and Taldy Bulak 2 excavated by Chang and Tourtellotte demonstrate that, by the mid-first millennium BC, local agricultural production was well established and included not only varieties of millet, but also wheat, barley, and rice and, perhaps, even grapes (Spengler et al. 2013b: 73-74; Rosen et al. 2000). Moreover, there is architectural, botanical, and faunal evidence to suggest that the largest of these settlements, the Tuzusai site, was occupied year-round to support both farming and animal husbandry (Spengler et al. 2013b: 69). In comparison to Mongolia, this subsistence evidence implies distinct differences in the technology and knowledge drawn upon to link mobile pastoralism to subsidiary food production. It also indicates a very different approach to residential mobility.

The second point, that horses in the Semirech'e region were not as prevalent or important as usually assumed for steppe societies, has proven both salient and controversial. From the earliest periods onward, the horse is considered central to steppe cultures, and both horse-drawn chariots and horse riding have Eurasian steppe origins (e.g., Anthony 2007; Olsen 2006). Based on excavations and analysis of faunal assemblages at a number of settlements in Semirech'e, Frachetti and Benecke (2009) disagree with this notion. Their findings suggest that the equestrian culture of steppe herders was probably quite variable throughout the Bronze Age and even into the Early Iron Age. Begash, Mukri, and the nearby Talapty I settlement as well as the Talgar Plain sites all show a long-term pattern of relatively low percentages of horse remains in their respective faunal assemblages. These range from only 3 % in the earliest phases at Begash during the Middle Bronze Age to 5 % during the Final Bronze Age at Talapty I (Goriachev 2004: 119) and between 4 % and 10 % during the Early Iron Age (Frachetti and Benecke 2009: 1028; Frachetti et al. 2010a: 630; Chang and Tourtellotte 2012: 3). Over this entire period, sheep and goat were consistently the most abundant herd animals documented, while horse representation increased only by the mid-first millennium BC. Frachetti and Benecke therefore argue that the pivotal role typically assigned to horsemanship in steppe societies was probably not a major factor during these earlier periods. Horses were certainly present, but may have been just another utilitarian herd animal in many areas until political changes that marked the Early Iron Age brought them to the social and cultural forefront. More specifically, Frachetti and Benecke suggest that it was probably the political and symbolic uses of horseback riding that eventually made the horse a central actor for groups in Early Iron Age Kazakhstan (Frachetti and Benecke 2009: 1035; cf. Chang 2012a: 145).

Outram and colleagues (2012) have challenged this argument by offering a re-evaluation of faunal assemblages from a number of habitation sites located between the Ural Mountains and Kazakhstan and dating to the Late and Final Bronze Age. Outram et al. report on seven settlements in central Kazakhstan assigned to the Final Bronze Age (c. 1300 and 900 BC). Their results show a clear pattern of horse remains at most of these sites at much higher levels than at Semirech'e (e.g., a mean of 24 %), and as they make clear, this difference probably has something to do with the more arid steppe conditions in the southeastern Semirech'e area (Outram et al. 2012:2428-2429) cf. Parzinger 2006: 497). However, they also report that horse representation is highly variable, ranging from 2 to 46 % at sites that are in similar environmental zones with no apparent explanation for such a degree of variation. This result would seem to support Frachetti and Benecke's argument for greater variability than the typical "steppe horse culture" model suggests. Despite the significant variability in horse representation, there is little doubt that horses were beneficial to the overall pastoral economy, and that they were being herded and probably eaten as a regular part of the diet in parts of Kazakhstan and West Siberia (Outram et al. 2012: 2429, 2433). In other words, horses were kept and were treated as herd animals without a great deal of additional political and symbolic significance during the Late and Final Bronze Age.

Another way to explore these patterns of horse presence, absence, and status is to consider the role of horses in ritual and symbolic contexts. In that regard, there seems to be a clear reduction in the ceremonial use of horses and horse-related paraphernalia in cemeteries across the Trans-Urals and Kazakhstan from c. 1400 to 900 BC (Koryakova and Epimakhov 2007 :135; Outram et al. 2011:120). For example, Goriachev's (2004) thorough overview of Late and Final Bronze Age cemeteries in the Semirech'e region reveals little if any horse remains or related material culture.¹ This decrease must be understood relative to the widespread appearance of horse and chariot burials associated with the Sintashta and Petrovka cultures (2100–1750 BC) during which time horses and their associated equipment were indeed a major part of ritual practices and burial inventories (Anthony 2007). Perhaps, it is possible that with the broad diffusion of equestrian chariot technology across Eurasia between 2000 and 1200 BC, chariotry and horses no longer effectively conveyed status and Epimakhov 2007: 135).

As in their settlement research, Outram et al. (2011:119–120) have likewise questioned the hypothesized diminishment of horse use in burial ceremonies. Based on the idea that horses could have been used for funeral feasting without any direct interment of their remains, Outram's team tested burial pottery for the fat residues associated with horse meat using lipid analysis. Their results show clear evidence for the cooking of horse products at burial events during the Late Bronze Age in Kazakhstan (c. 1700–1300 BC), but their sample size for the Final Bronze Age (c. 1300–900 BC)

¹ A single exception to this may be a horse decorated ring from the cemetery of Mynshunkur which likely dates to the mid-second millennium BC (Kuz'mina 2007: 177).

was only a single sherd lacking horse fat residue and giving us little to go on for this crucial time period (Outram et al. 2011). In any case, the status of horses in ritual and ceremonial events was certainly very different in these Kazakh contexts from contemporaneous khirigsuur contexts on the far side of the Altai (Hanks 2012: 97). This points to an important distinction in the longer-term development of cultural ideologies and systems of value having horses as their center of focus.

In my opinion, these faunal and residue studies temper the idea that horse use, numbers, and cultural value were universally on the rise during the Final Bronze Age of Kazakhstan (e.g., Kuz'mina 2007: 153-154; Koryakova and Epimakhov 2007: 168, 209). To be more precise, horses seem to have different representations and different use profiles across central, eastern, and northern Kazakhstan and into the West Siberian forest steppe and these cannot be explained simply by environmental factors. As Outram et al. (2011) argue, this pattern is consistent with differing levels of experimentation on the alternative and potential uses of horses beyond mere meat production. Indeed, at some sites, there are clear signs that a more distinctive role had begun to accrue to horses around the turn of the millennium. Faunal, isotopic, and lipid residue analyses at the stratified settlement of Chicha in the West Siberian steppe north of Kazakhstan demonstrate such a transition quite well (Privat et al. 2005). Phase 1 at the site (fourteenth-thirteenth centuries BC) is characterized by a primary emphasis on horses (wild or domestic or both) and a culling pattern intended to maximize meat production. Phase 2 (tenth-ninth centuries BC) transitioned to a primary emphasis on cattle, but horses were used for a much wider variety of tasks including for meat and dairy production, probably for traction, and very likely, based on the age mortality profiles, used for riding as well (Privat et al. 2005: 427).

A similar pattern for the emergence of horse multi-functionality has likewise been documented by Outram et al. (2012: 2432) at the central Kazakhstan settlement of Kent during the Final Bronze phase dating from the twelfth to ninth centuries BC. Similar to the Chicha settlement, culling patterns are consistent with horse use for traction and possibly riding with meat obtained from older, redundant animals. Despite a lack of evidence from milk residue analysis, the milking of mares may also have been practiced. Further evidence that horses were the subject of special attention and innovation at Kent is provided by the recovery of new kinds of harness cheekpieces made of bone or horn, one of which dates (at the earliest) to the twelfth or eleventh century BC. Most of such artifacts, however, date to the ninth century BC at which time they also appear made from bronze both at Kent and at other sites in Kazakhstan (Kuz'mina 2007: 130–131; Parzinger 2006: 491). As mentioned previously, similar cheekpieces fashioned in bone, antler, and bronze are also recovered from habitation and burial contexts across South Siberia and Mongolia during roughly the same time period at the beginning of the first millennium BC.

In short, the variability in horse presence that Frachetti and Benecke bring to our attention is the kind of pattern we would expect to see if the status and use of horses were in transition. In all likelihood, horses were not being ridden extensively or not ridden terribly well prior to the first millennium BC (Drews 2004; Renfrew 2002) and therefore were not as yet a focus of cultural innovation and widespread multi-functionality (i.e., used for transport, traction, meat, milk,

symbolism, and value). What seems to be a dearth of evidence for "horse exceptionalism" up to the turn of the first millennium BC must be understood in contrast to the virtual florescence of horse ritual and associated material culture dating to the ninth and eighth centuries BC. At this time, ritualized horse remains, diverse kinds of harnessing equipment, horse riding images, and greater emphasis on horse husbandry and milking, become hallmarks of the Early Iron Age. Moreover, this new emphasis on the horse is evidenced across all venues of archaeological evidence including material culture, human and equid skeletal pathologies, faunal assemblages, burial contents, and rock art depictions recorded in northern, central, and eastern Kazakhstan and in West Siberia (Vishnevskaia 1992: 131; Bokovenko and Zadneprovskii 1992:142; Koryakova and Hanks 2006: 281–283; Toleubaev 2012; Francfort 2011).

The Early Iron Age time period, often referred to as the Early Nomad or Saka-Scythian era, not only constitutes a different relationship between people and their horses but more importantly between people themselves. Good examples of this social and political transformation can be found in eastern Kazakhstan where Final Bronze Age cemeteries attest to a tradition of modest cist burials with circular or rectangular surrounds (Parzinger 2006: 504). These were replaced only a century later by massive kurgan-style burials, many of which were constructed with earthen mounds resembling man-made mountains. These kurgans were indeed monumental constructions that range from 20 to 100 m in diameter and up to 10 m in height with multiple earthen layers covering complex burial chambers made of logs and stone (Bokovenko and Zadneprovskii 1992: 142). Recent excavations by Toleubaev (2012) at Kurgan 82 located in the well-known kurgan site of Shilikty (also Chilitka) testify to the immense size and grandiose furnishings of these burials as well as to their fairly early construction dates (c. 810–750 BC). Equally, if not more impressive kurgan cemeteries, appear in the Semirech'e region of southern Kazakhstan at the sites of Besshatyr (c. 750-550 BC) and later at Asy Zaga, Turgen (500-200 BC), and Issyk (c. 400-300 BC) (Panyushkina et al. 2013; Gass 2011). These cemeteries are made up of north-south-trending lines of kurgans (usually 1-7 lines) with 3-20 mounds in each line. Kurgan diameters at these sites range from 16 to 148 m, and they are 2 to 21 m in height (Gass 2011: 59-66). The Issyk kurgan group is home to the famous "Golden Warrior" kurgan from which archaeologists recovered a veritable treasure trove of gold objects provided for the burial of an elite male individual of the late Saka culture.

What seems to be a sudden increase in social differentiation, wealth, and complexity across Kazakhstan in the first millennium BC is certainly not without precedent in the greater region. The earlier settlement sites of Shortandy-Bulak, Buguly I and II, and Myrzhik (Final Bronze Age, Begazy-Dandybai culture of central Kazakhstan) were dense settlements with 25 to 50 rectangular structures, most of which were residential, and built using sophisticated stone architecture techniques (Parzinger 2006: 493–497). The settlement of Kent seems to have constituted a genuine proto-urban center with more than one hundred house-like structures over an area of 150,000 m² as well as extensions into the hinterland and across the neighboring river (e.g., the Alat sites) that covered in total about 30 ha (Varfolomeev 2003). Ancient mines and industrial-level bronze manufacture at these sites attest to their central role in supplying bronze metal and finished products across the greater region. Finally, what are considered to be cultic mausoleum structures built of massive stones also suggest some degree of social differentiation within these large Final Bronze Age communities (Varfolomeev 2003; Koryakova and Epimakhov 2007: 168).

These impressive complexes went into decline as the region transitioned to a strikingly different organizational pattern with the advent of the Early Iron Age—one that archaeologists believe was based on greater mobility and new forms of pastoralism, but also on simultaneous investments in agriculture and sedentism (Chang 2012b). Novel ways of expressing inequality were adopted by a new form of horse-riding elite whose displays of power made the impressive kurgan funerary sites ubiquitous. The reasons and processes behind this dramatic transformation are still unclear, and many site types of the Early Iron Age, including settlements and seasonal campsites, are still not very well known, with a few notable exceptions (see Chang et al. 2003; Parzinger 2006: 652, 658). However, these practices indisputably mark a new era of organization expressed through a heightened emphasis on horse use and symbolism, investment in precious materials like gold and silver, and elaborate animal-style artistry rendered in bronze, wood, and textiles. These changes were not only witnessed by peoples of the west, but seem to have occurred quite rapidly and seemingly in similar ways across much of Inner Asia.

6.2 Minusinsk and Southern Siberia: Connections to the Northwestern Forest Steppe

This transformation in complexity signaled by the appearance of the "royal" kurgan culture, in fact, had its earliest expression in regions eastward of Kazakhstan. The genesis of this cultural and political tradition is the subject of many theories, and new data are continually refining our understandings. Not surprisingly, many scholars have focused attention on the linkages between pastoral nomadic complexity and the various influences from sedentary, agricultural, and urban neighbors; a good example of which is the Achaemenid Persian empire during its expansion into Central Asia (c. 500 BC). While neighboring empires and states certainly did have great impact upon the Central Asian steppe and vice versa (Wu 2012; Stark 2012), the material and cultural patterns associated with the Early Iron Age transition drew upon alternative and older networks of contact-ones that probably had existed throughout the Bronze Age. Recent progress in dating kurgan contexts across Kazakhstan and South Siberia using radiocarbon analysis and dendrochronology indicates that this tradition most likely arose within the Yenisei River valley and Sayan-Altai mountain range (Alekseev et al. 2002; Bokovenko 2004; Koryakova and Epimakhov 2007: 327). Today, these regions comprise Tuva, the Minusinsk Basin, and the Russian and Mongol sides of the Altai Mountains.

The Late and Final Bronze Age of the Altai Mountains has still not received much attention from archaeologists; however, it is clear that cultural influences from both the West Siberian forest region (Irmen culture) and the Minusinsk Basin (Karasuk culture) appear along the many rivers and passes through these mountains. In Tuva, the small khirigsuur-like Mongun-Taiga kurgans mentioned above (see Chap. 5) characterized burial practices during the late second and initial first millennium BC, while Karasuk cultural influences are apparent in the northern parts of Tuva (Parzinger 2006: 462–463). Similar to the Altai record, the Mongun-Taiga culture is also not well understood in terms of the lifeways of the people who built these small kurgan-like graves. In contrast, the Late Bronze Age Karasuk culture of the Minusinsk Basin north of Tuva and the Altai Range has been intensively studied over several decades and contributes important information about interaction networks across western Inner Asia at the end of the second millennium BC. The Minusinsk Basin is located in the middle reaches of the Yenisei River which has its headwaters in Tuva and Mongolia. The basin is enclosed by forested peaks with a wide swathe of steppe lands between them, making up a riverine foreststeppe environment with ideal conditions for both pastoralism and agriculture.

Minusinsk's archaeological record is impressive in its detail largely thanks to a great many excavations and analyses conducted by Russian archaeologists during the 20th century. This record captures the transformation from Eneolithic hunting, gathering, and herding societies of the mid-third and initial second millennium BC, to the rise of horse-riding agro-pastoralists in the first millennium BC, and even covers the political changes brought about by the Xiongnu state during the second century BC. Minusinsk bronze technologies and cultural connections to Kazakhstan and West Siberia provide early evidence for a corridor of interaction that had indirect impacts as far away as the Central Plain of China. Drawing on the latest comprehensive radiocarbon study for the region (Svyatko et al. 2009: 257), the Late Bronze Age is characterized by the classic Karasuk culture which begins around 1400 BC and comes to an end at 1000/900 BC. The Final Bronze Age dates from 1000 to 800 BC and is generally considered a transitional phase of the Karasuk culture called the Kamenniy Log period (also Kamennyi Log). This later period has differences in ceramics, artifact styles, and in the positioning of individuals in burial chambers, although the main cultural patterns including burial constructions are not terribly different (Parzinger 2006: 466, 470). Even though Kamenniy Log marks a transition to the subsequent Tagar period, the latest dating results suggest that the initial Bainovo phase of Tagar culture overlaps in time with Kamenniy Log beginning in the tenth century BC (Bokovenko 2010). As such, Karasuk culture and the Kamenniy Log-Bainovo transitional period taken together (c. fourteenth to ninth centuries BC) are contemporary with the khirigsuur and early slab burial cultures of Transbaikal and Mongolia.

Karasuk culture shows both geographical variation and change over time, although researchers identify it primarily by distinctively styled bronze artifacts, stone slab and cist burial constructions, and coil-built rounded pottery with geometric incised or stamped decorations arrayed in intricate patterns (Legrand 2004, 2006, 2008.) In comparison with the prior Andronovo period (eighteenth–fifteenth centuries BC), the Karasuk population was larger, the subsistence economy became diversified and more productive, and from a regional perspective, the number of cemetery and settlement sites increased markedly. Legrand (2006) suggests

that many of these changes were facilitated by a change to cooler and more humid climate conditions making local grasslands robust and dependable for domestic animals as well as supportive of farming. Karasuk peoples exploited mountain pastures and rich soils of the river valley bottoms through small-scale cultivation and by practicing seasonal transhumance to manage sheep- and goat-dominated herds. The faunal assemblages for Karasuk habitations sites, such as Kopenskoe and Torgazhak, consist of 66 % sheep/goat, 23 % cattle, and 16 % horse which represents a shift from the former Andronovo period emphasis on cattle (Legrand 2006: 846). In addition, archaeologists now have good isotopic evidence from human bone samples confirming a long hypothesized reliance on millet agriculture (Savinov 1996: 22), as well as on fishing and hunting as major parts of Karasuk subsistence (Svyatko et al. 2013).Karasuk settlements generally have substantial architecture including semi-subterranean dwellings with high roofs supported by wooden pillars and a range of sizes up to 260 m² in total living area. Some archaeologists describe these settlements as having a seasonal pattern with some sites inhabited in winter and others during the summertime (e.g., Kamenniy Log I and Torgazhak respectively) (see Parzinger 2006: 470-472; Savinov 1996). However, other researchers have observed that the degree of infrastructural development and architectural investment at these village sites are more consistent with permanent habitations (Legrand 2006: 846). Moreover, the Karasuk settlement pattern around major rivers and their tributaries does not display the kind of locational differences that would indicate close attention to seasonality. As such, mobility was likely limited to grazing herds at higher elevations in the vicinity of these settlements perhaps with small and temporary shelters in the uplands. In other words, Karasuk-period mobility was probably not very extensive and residential movements like those known from the contemporary Mongolian record were not in practice. This interpretation seems appropriate despite arguments for a higher degree of Karasuk mobility based on finds at some habitation sites of horse harness cheekpieces made of bone similar to those from central Kazakhstan. These artifacts, in addition to at least one rock art image of a person astride a horse pecked into a Karasuk-style grave stone, lead Legrand (2006: 855-857) to argue that Karasuk peoples were likely engaged in horse riding. However, the cheekpieces date toward the later part of the Karasuk sequence (i.e., Kamenniy Log phase; Askarov et al. 1992: 460), which would make them roughly contemporary with those in Kazakhstan, and also with the above-mentioned examples from slab burials in Transbaikal and northern Mongolia. Again, this evidence is probably best understood as experimentation with new potential uses for the horse as opposed to habitual and secure riding.

Interestingly, similar checkpieces could have been used for horse traction as well as chariot use and although no remains of chariots or carts have been recovered in the Minusinsk Basin, rock art depictions and bronze artifacts associated with chariot driving are indeed found there (Francfort 2011: 59; Wu 2013: 37–40; see Chap. 7).² Throughout Eurasia, the harnessing technologies for chariots and

 $^{^2}$ See Jacobson-Tepfer 2012 for a different perspective exploring the importance of chariot symbolism as opposed to their actual presence and frequent use.

horse riding seem to have developed in a reciprocal relationship of back-and-forth innovation that gradually promoted greater control over horses (Drews 2004: 64). Notwithstanding this focus on horse functionality and experimentation during the late Karasuk period, it is clear that horses still did not have the ritual and ceremonial importance that was attributed to them at sites in Mongolia. Horse remains are only rarely found in Karasuk graves or other ritual contexts, and artifacts directly associated with horses do not appear in the burial inventories at all (Legrand 2008: 161). A long-term emphasis on the ceremonial use of horses is one consistent difference between the Late and Final Bronze Age of Mongolia and Transbaikal and surrounding Inner Asian cultures of the same period.

These observations about Karasuk morturary rituals can be considered quite reliable because so many Karasuk cemetery sites have been excavated and thoroughly studied. Current research can draw on samples of burial contexts numbering more than two thousand from cemeteries like Anchil Chon, Malye Kopeny III, and Suchoe Ozero II. Like many regions of Inner Asia, most of these burials have been disrupted in the past, though a small but very useful subset of undisturbed burials does exist for comparison (Legrand 2008). In general, Karasuk cemeteries are made up of rectangular or circular stone enclosures built of vertically positioned low slabs or masonry-like layers of stone usually enclosing an area of $10-30 \text{ m}^2$, though some are significantly larger. These surrounding features were then filled with earth to form a low mound and sometimes covered with additional stone. Within the surrounds, individuals were placed laying on their sides or backs in rectangular cist chambers made of stone slabs placed on edge and topped by a capstone. Each stone enclosure could contain one to three such cists, and cemetery sites tended to be large with several hundred to more than a thousand of such tombs organized into clustered groups of multiple rectangular or circular enclosures (Legrand 2006: 846-850). These clusters seem to represent related individuals, and these kin relationships were organized spatially according to age such that burials of adult men and women made up the center of a cluster, while children and infants were placed on the outskirts. Legrand makes the case that irrespective of age and gender, high-status individuals were given larger and more labor-intensive burial structures and had higher numbers of pottery vessels, animal offerings, and bronze prestige objects (Legrand 2008: 173-174). This suggests to her that Karasuk society was organized according to a simple elite-commoner division derived from higher- and lower-status kin lineages.

Besides the mortuary traditions, perhaps the single best known aspect of Karasuk culture is its impressive bronze work, examples of which have been found as far away as Kazakhstan and China. Clearly, the far-flung distribution of these bronzes reveals much about the role played by peoples of the Minusinsk Basin in bridging cultures west and east across Inner Asia. Production of the elaborate Karasuk bronzes likely indicates that some kind of prestige system with distinctive material markers probably existed in the basin. Moreover, the ability of these time- and labor-intensive artifacts to mark social distinctions and differential status is one factor that may have led to their substantial geographical distribution. Some of the earliest attempts at dating the Karasuk culture were based on the fact that so many of the stylized bronze daggers, knives, socketed axes, and personal

ornaments discovered in the Minusinsk Basin had close analogies in Chinese contexts that could be positively assigned to the late second and early first millennium BC. Because of these finds, early explanations for the Karasuk bronze culture hypothesized migrations of groups from China into South Siberia carrying the bronze technology and styles along with them (Kiselev 1951). It is clear today that the Karasuk tradition arose from its cultural antecedents (i.e., Andronovo culture) and that these bronze artifacts were not only produced in Minusinsk and widely exchanged, but also reproduced in the local bronze cultures of Mongolia, Transbaikal, and Inner Mongolia (Erdenebaatar 2004; Legrand 2004).

Archaeologists have provided robust evidence that much of this bronze work was indeed performed locally within the Minusinsk Basin and in nearby locales. Chemical analysis of a large number of Karasuk bronze knives demonstrates that 60 % of them contained varying amounts of arsenic which occurs naturally in the copper deposits of the Minusinsk region and in West Siberia (e.g., the Kuznetsk Alatau deposit) where substantial numbers of Karasuk artifacts have also been recovered (Parzinger 2006: 474; Koryakova and Epimakhov 2007: 170). In addition, evidence for copper mines and smelting furnaces is found in many parts of Minusinsk in association with Karasuk-period ceramics. Lastly, the stone and ceramic molds and other tools for casting and working these artifacts have been recovered from settlements like Kamenniy Log I and Torgazhak (Legrand 2004: 144). Interestingly, the same metallurgical study also found that about 15 % of the bronze knives were cast from alloys that included tin as an intentionally added element for which no local source exists in the Minusinsk Basin. Tin had to be brought in from the Sayan-Altai Mountains, eastern Kazakhstan, or Tuva, and these exchange networks directly connected Karasuk groups to the intensive mining and bronze production centers of Late and Final Bronze Age Kazakhstan already mentioned above (Frachetti 2008: 54; Legrand 2004: 143-144). For example, along the Upper Irtysh River of eastern Kazakhstan, sites of the Trushnikovo culture have extensive evidence for copper and tin mining activities and ore processing in addition to numerous finds of Karasuk-style bronze artifacts (Parzinger 2006: 502).

These were just some of the significant relationships between Minusinsk and neighboring groups to the west that would have filtered through the northwestern Tom-Chulym corridor into the basin. These networks of long-distance contacts are known to have conveyed cultural practices and resources such as raw materials, tin-based bronze technologies, millet agriculture, and equestrian equipment and techniques. Furthermore, contacts that interconnected South Siberia to the west and southwest were paralleled by similar networks to the east and southeast. Despite the fact that Mongolia is seldom referred to when it comes to archaeological discussions of Late Bronze Age networks,³ there is substantial material evidence to suggest that Mongolia was a primary route for conveying both the Karasuk material culture and the symbolic meanings associated with these artifacts into East Asia. As Novgorodova rightly points out, in unprovenienced surface

³ See Linduff (1997), Novgorodova (1989), Erdenebaatar (2004) for notable exceptions.



Fig. 6.2 Karasuk-style knives from the Mongolian National Museum of History, the Dundgobi Provincial Museum, and from private collections [drawn by Diimaajav Erdenebaatar (1997)]

collections from Mongolia, Karasuk-style knives, socketed axes, tools, and ornaments are all strongly represented (Novgorodova 1989 :130–131). Recent comprehensive publications of bronze artifact collections from Mongolian museums and especially the impressive collection of the Dundgobi Museum (Byambajav et al. 2011), in addition to private collections (e.g., Erdenechuluun and Erdenebaatar 2011) fully support this conclusion and demonstrate the presence of Karasuk-style artifacts across every part of Mongolia (Fig. 6.2). In particular, numerous Karasukstyle bronzes have been recovered from the southern and southeastern regions, including all of the Gobi provinces. These Mongolian artifacts provide a southern complement for the well-known Karasuk-style finds from the Transbaikal region directly north of Mongolia (Chlenova 1992).

From Mongolian burial contexts, the earliest examples of Karasuk artifacts are known from sites of the Ulaanzuukh-Tevsh culture. So far, these finds are not many, only three, but they do have reliable context and an initial radiocarbon chronology. As mentioned before, the most famous Karasuk-style finds from such sites are the gold clasp-shaped decorations with stylized sheep heads discovered by Volkov at the Tevsh Uul site of Ovorkhangai province (Novgorodova 1989: 137–139; Linduff 1997: 29). While this particular context is dated by burial and artifact typology, a similar gold decoration was recently excavated from the Late Bronze Age cemetery at Chandman' Khar Uul (burial 117, see Chap. 5

and Fig. 5.8) where five other Ulaanzuukh-Tevsh burials have been radiocarbon dated to between 1610 and 1200 BC (95 % probability) (Amartuvshin et al. 2013). The only other dated context with Karasuk artifacts is the Ulaanzuukh-Tevsh-style burial (EX07.23) excavated at the site of Baga Mongol at Baga Gazaryn Chuluu, Dundgobi province. A sample of human bone was radiocarbon dated to 1390–1110 BC at 95 % probability (Nelson et al. 2009: 572–574, see Chap. 5 and Fig. 6.3). In addition to other artifacts of great interest, this burial included what Novgorodova would categorize as a "curved blade" Karasuk knife (see Legrand 2004: 145; Amartuvshin and Jargalan 2010: 160). This artifact was one of three knife fragments from various sites at Baga Gazaryn Chuluu, all of which were produced using Karasuk technology. Each knife was cast from tin bronze alloys using 7–10 % tin and then forged using either a hot or cold working process (Park et al. 2010: 814).

Artifacts were not typically included in Late Bronze Age khirigsuur monuments of Mongolia and so it is difficult to get a sense of the relationship between contemporaneous Karasuk and khirigsuur cultures. It is clear that some researchers consider khirigsuur sites to be closely connected with, if not an actual part of, Karasuk culture. These scholars develop the interesting argument that Karasuk culture may have been a multi-regional phenomenon rather than one centered primarily in the Minusinsk Basin (Volkov 1995: 324; Novgorodova 1989: 137). At least one case has been reported of a Karasuk-style bronze decoration excavated from a satellite mound within a khirigsuur complex (Erdenebaatar 2004: 209– 208). In addition, one khirigsuur excavated at Kharbukhyn Gol in Bulgan province had an individual interment placed face down and a bronze celt of Karasuk style placed nearby (Tseveendorj et al. 2003: 101; cf. Kuz'mina 2004: 64, Fig. 2.6.11; Erdenechuluun and Erdenebaatar 2011: 350).

Besides these two cases, the only other evidence that Karasuk bronzes were associated with khirigsuurs is found meticulously pecked into the deer stone monuments often situated within khirigsuur complexes. In fact, the first attempts at dating deer stone steles took advantage of the artifact types depicted as hanging from the belt-like bands encircling these standing stones. Above or below these belts appear Karasuk-style knives, daggers, and socketed axe heads in addition to recurved bows, sharpening stones, and other tools (see Fig. 5.9 drawing). It is a striking fact that these bronze artifact depictions are so exactly rendered that archaeologists some 3,000 years later easily recognize them as the same artifacts found in Karasuk tombs. That such close attention was paid to artifact form suggests that, whoever commissioned the deer stones and whoever the specialists were that made them, both sought to convey material details that represented something highly distinctive about individuals in possession of these bronze tools and weapons. It is indeed fascinating that what seem to be artifacts of almost mass manufacture in the Minusinsk Basin radically transform into symbols of social order, prestige, and belief when encountered 500-1,000 km to the southeast on the Mongolian plateau.

Karasuk-style artifacts are not only associated with deer stone sites but also occur in slab burial assemblages. Diagnostic examples of Karasuk knives were


Fig. 6.3 A partial inventory from the Ulaanzuukh-Tevsh burial at Baga Mongol, BGC (EX07.23). Finds include a ground stone crucible with handle, a Karasuk-style curved blade knife, and worked and ground stone objects

recovered from Transbaikal slab burials as early as the nineteenth century (Grishin 1975: 50; Novgorodova 1989: 238) and even two-piece stone molds for their local production have been found (Bunker 1997: 150). From eastern Transbaikal, Grishin (1975: 37–40) reports that the three habitation sites of Kyshtachnaia Sopka, Kunkur, and Narasun each had surface finds of Karasuk-style knives and decorations. In Mongolia, there are far fewer examples of large Karasuk artifacts such as knives excavated from slab burials, but many smaller Karasuk-style decorative

items have been excavated in addition to numerous surface finds within or nearby slab burial cemeteries (Erdenebaatar 1997: 118-121). These discoveries have been responsible for a major debate among archaeologists over the periodization of such artifacts and also the dating of slab burials themselves. Early on, slab burials were thought by many to date to the Early Iron Age, and therefore, the Bronze Age Karasuk items could not have been contemporaneous with slab burial contexts (Chlenova 1992: 248-249). Two arguments proposed during this 40-year controversy are still notable today. In order to explain the seemingly late appearance of Karasuk knives in slab burials, Volkov (1967: 44) suggested that Karasuk-style artifacts likely extended later in time within regions outside of Minusinsk. On the other hand, Grishin (1975: 43-44, 63-64, 1981: 40, 194), along with Okladnikov, advocated a fairly radical re-periodization of slab burials and assigned them to the late second and early first millennium BC, prior to the Early Iron Age. In the end, both of these opinions turned out to be correct. The recent absolute dates for slab burials and Karasuk contexts clearly show that there is a significant transitional period following the Karasuk culture proper at the end of the second and beginning of the first millennium BC (i.e., Kamenniy Log and Bainovo) and that the earliest slab burials indeed overlap both the late Karasuk and this transitional period.

Questions still persist, however, about the nature of these contacts across northwestern Inner Asia. Neither the routes nor the process of interaction between Mongolia and Minusinsk are known, but they most likely involved down-theline movements of materials, ideas, and technologies by way of the Sayan-Altai mountain range and Tuva. Given the topography of this mountainous northwestern region, logical routes might have included southward movements into the Altai Mountains of western Mongolia and southeastern movements through the western Sayan Mountains, either along the Yenisei River basin or by way of eastern pass systems entering onto central Tuva. Karasuk cultural influence in northern and central Tuva is clear (Parzinger 2006: 463), and archaeologists have found evidence for continued interaction between Tuva and Minusinsk during the Final Bronze and the initial Early Iron Age (Chugunov 2011: 72).

If indeed links between Mongolian deer stones and Karasuk material culture suggest some form of long-distance interaction, then the significant numbers of these stone steles in Tuva (Fitzhugh 2009a: 186, 196), as well as their clustering in the northwest and west-central Mongolian provinces of Arkhangai and Khovsgol, imply routes of contact. These routes may have extended southward from Tuva along the Tes River and westward along the Lesser Yenisei River. Such an interaction sphere linking Tuva to west-central Mongolia is supported by existing maps of Mongolian deer stone sites which show a distinct northwest to southeast regional distribution in Khovsgol and Zavkhan provinces and into the Mongolian Khangai Mountains (see Fitzhugh 2009a: 185). In contrast, the distribution of deer stones in the Mongolian Altai farther to the west suggests a distinct cluster separated from others by western Zavkhan and Uvs provinces which, archaeologically, are still among some of the least studied parts of Mongolia. Future research, particularly in Zavkhan province, will clarify these Late and Final Bronze Age patterns of potential contact.

6.3 Early Iron Age Transformation: Political Communities of the Scythian Tradition

Similar to events in Kazakhstan, the early first millennium BC brings radically new patterns to South Siberia associated with the Scythian or Early Nomad era. In fact, most researchers now believe that the process of organizational change in Kazakhstan and regions even farther west were initiated in part by activities centered in South Siberia and northwest Mongolia (Alekseev et al. 2001; Kiriushin and Tishkin 1997: 61-62). The primary marker of these Siberian events is the "royal" kurgan of Arzhan in the Uyuk Basin of central Tuva (Griaznov 1980). Arzhan 1 is regarded as the type site which begins the Scythian Early Iron Age. Based on multiple radiocarbon analyses and matched by dendrochronology, the kurgan is dated to the late ninth and early eighth century BC with the year 810 BC being the best estimate for the kurgan's construction date (Mallory et al. 2002; Zaitseva et al. 1998: 579). The size, arrangement, and structure of this kurgan, its numerous horse burials and clear evidence for horse riding, and its many decorative animal-style artifacts all signal a dramatic change in the material culture, beliefs, and organization of Inner Asian society. The problem persists, however, of explaining how these diverse elements came about and why they emerged suddenly at this time in South Siberia. This question is especially interesting in terms of clarifying the local and inter-regional influences behind the Arzhan burial (Chugunov 2009, 2011).

Arzhan 1 is truly a grand monumental interment of two elite individuals whose burial assemblage, so far, has no contemporary match within the Inner Asian region. The kurgan itself is a circular stone mound 120 m across and 4 m high and partially ringed by a series of smaller satellite mounds on the northeast, east, and southeastern sides (Fig. 6.4). When excavated, these satellite features are found to contain burnt remains and faunal material of which horse bones, including skulls, leg extremities, and hooves, are dominant—much like the satellite features ringing khirigsuur monuments. In fact, from the exterior, the Arzhan 1 kurgan resembles a very large khirigsuur that over the centuries experienced stone robbing from its surface making the original shape difficult to determine (e.g., Griaznov 1980: 5–6). One major difference, however, is that the stone surface structure of Arzhan 1 was reinforced at its base by a retaining wall making the kurgan cylindrical at its bottom rather than loosely mounded like a khirigsuur.

Internally, Arzhan 1 has an entirely different and unique kind of structure. Excavations by Griaznov and his students in the 1970s revealed a complex internal timber construction that divided the kurgan radially into 70 distinct sections. At the center was a heavily pillaged wooden burial chamber with elaborate log coffins associated with the two primary elite occupants. Positioned around them were almost 200 harnessed riding horses and a number of accompanying human interments described as "attendants." Both human and horse bodies were carefully placed in the burial laying on their left sides. The artifact inventory included bronze weapons and tools, items of personal adornment in gold, silver, and turquoise, examples of Scytho-Siberian animal-style showing ungulates with extended



Fig. 6.4 Plans of the Arzhan 1 kurgan showing its surface and internal structure (after Griaznov 1980)

legs on "tiptoe" and coiled felines, and a large fragment of a deer stone (Parzinger 2006: 608–609). Relatively early iron implements were also recovered, but these were among the stones enclosing the chamber roof and so were likely intrusive (Griaznov 1980: 44). The deer stone is of particular interest and may have originally been positioned as an upright pillar inside of the kurgan within chamber 34a on the northern side (Savinov 1994: 64–66). Furthermore, several other freestanding deer stones have been documented within the local area not far from the Arzhan site (Griaznov 1980: 54–55).

The similarities between Arzhan 1 and khirigsuurs and Mongun-Taiga burials have been noted by archaeologists (Chugunov 2011: 70; Houle 2010: 11) as has the clear significance of the deer stone tradition for the Arzhan burial ceremony. It is important to note, however, that at the time of the Arzhan 1 construction event, the building of khirigsuurs and the carving of deer stones were practices already in decline (ending c. 750/700 BC). Though Houle (2010: 6) mentions the issue in passing, his study of the Urt Bulag khirigsuur in the Khanui Gol Valley suggests an important precedent that sheds light on events at Arzhan about 700 km northwest of this central Mongolian site. As mentioned in the prior chapter, the vast majority of khirigsuur monuments are of moderate size with the exception of a subset of disproportionately large monuments such as Urt Bulag and its nearby sister site, an even larger khirigsuur to the south, which is badly disrupted (Seitsonen et al. 2014). Beginning in the early first millennium BC, monumental ceremonies increasingly turned toward enhanced displays and the consumption of commodities suggestive of wealth, like the estimated 1,700 horses killed and buried in satellite mounds around Urt Bulag. The fact that four radiocarbon dates from this prominent khirigsuur site show it to be contemporary with or slightly

preceding Arzhan 1 (i.e., circa ninth century BC) suggests that late khirigsuur practices were likewise beginning to promote more of a wealth-based ideology.⁴ At that early time, the only monuments constructed prior to Arzhan 1 having a similar scale and emphasis on wealth consumption in the form of horse sacrifice are indeed these grandiose khirigsuurs sites located in Mongolia. Even though construction methods and the emphasis on human and artifact interment mark the khirigsuur and Arzhan site types as different, the underlying principle may have been somewhat similar.

Clearly, despite its apparent uniqueness, the Arzhan 1 kurgan did not emerge without significant regional precedents. There are many more features of the Arzhan kurgan and its inventory that echo cultural practices and forms from across western Inner Asia including the Altai, the Minusinsk Basin, and as far away as Kazakhstan (Kiriushin and Tishkin 1997: 61–62). Other inter-regional similarities and influences include the obvious horse ceremonialism similar in some respects to that of khirigsuur sites. Another potential influence may have been the radial layout of some western khirigsuur sites (Chugunov 2011: 70; cf. Kovalev and Erdenebaatar 2007: 84) as well as the radial arrangements of Karasuk enclosures around central burials (Parzinger 2006: 468). One more similarity with the Karasuk period is the placement of interred individuals in a contracted position on their left side (Legrand 2006: 851). The use of timber to create internal burial chambers was also a practice already in use in the Minusinsk Basin by the tenth century BC (Tagar Bainovo phase) and increased in use by the ninth to eighth century BC (Tagar Podgornovo phase) (Parzinger 2006: 621; Bokovenko 2006: 866).

Additionally, the animal-style bronzes from Arzhan with coiled feline themes also occur in the earliest Scythian burials of the Altai Mountains (Arzhan–Maiemir period, Biike culture, Kurtu phase) dated to the late ninth and eighth century BC, as does the ritual burial of horses with the inclusion of a wide variety of harness gear (Tishkin 2011).⁵ The kinds of horse equipment from the Arzhan burial, as well as from the Altai and Minusinsk sites, comprise genuinely new technology, most notable of which is the bronze snaffle bits with jointed canons. These bits, along with new types of bone or bronze cheekpieces, girth buckles, strap holders, and probably the earliest saddles, also occur in contexts from central Kazakhstan such as the settlement of Kent, in eastern Kazakhstan at the cemetery of Izmailovka (also referred to as Kurylys in Kazakh), and at sites in southern Xinjiang (Kuz'mina 2007: 131; Parzinger 2006: 504; Bokovenko and Zadneprovskii 1992: 143; Linduff and Olsen 2011; Kiriushin and Tishkin 1997: 75–76). These western analogs are dated to about the same time or slightly earlier than their counterparts at Arzhan and elsewhere in the east. Their regular appearance in archaeological

⁴ This assumes that the Urt Bulag central mound and satellites were the outcome of a more or less synchronic event, about which there are differing opinions (see chapter five). The radiocarbon results from four satellite features are 1040–850 BC, 975–680 BC, 980–770 BC, and 970–780 BC (95 % probability) (Fitzhugh 2009b: 399; Allard and Erdenebaatar 2005: 5).

⁵ Here, I draw on the geographical division of the early Scythian period of the Altai into Biike and Maiemir cultural regions as suggested by Tishkin (2003, 2011).

contexts coincides with the multi-regional emergence of horse ritualism, horse burials, and horse symbolism in material culture (Bokovenko 2000, 2011: 16).⁶

Numerous other regional analogies exist for the artifact types and styles at Arzhan 1. All suggest that while early Scythian culture first arose from antecedents in the east (i.e., Tuva, Altai, and Mongolia), this occurred in the context of frequent exchanges and contacts with communities in Kazakhstan and West Siberia including Begazy-Dandybai, Sargary, and Trushnikovo groups (Chugunov 2009). Bokovenko points out that there is geographical directionality implied by the arrangement of the Arzhan chambers with northern chambers having artifacts originating in eastern Kazakhstan, Altai, and Minusinsk and artifacts from southern chambers being from Tuva and Mongolia (Bokovenko and Samashev 2012: 25). These objects, which Bokovenko refers to as "burial gifts," imply that the Arzhan 1 kurgan is an early case of what later becomes an Inner Asian tradition of multi-regional mortuary innovation in support of long-distance networks. In order to differentiate a new and emergent elite, those groups organizing funeral activities, perhaps, drew upon a variety of existing mortuary practices and synthesized them into a unique but not wholly unfamiliar format for burial. The eclecticism of these practices guaranteed that some part of the ceremony would be recognizable by all attendees who may have arrived from distant communities as part of an alliance cohort. As such, mortuary innovation and funeral assemblies facilitated faceto-face contacts for re-establishing long-distance political relationships following the death of a significant individual. If these practices were then repeated enough times in different locales, eventually a novel mortuary culture would take hold as an acknowledged symbol of loyalty, participation, and the strengthening of political ties, despite the death of a prominent leader.

Following Arzhan 1, kurgan culture continued to develop in Tuva where numerous kurgan sites have yet to be excavated. The nearby Arzhan 2 burial, recently examined by Russian and German archaeologists, dates to the end of the seventh century BC (between 619 and 608 BC) but demonstrates many of the same elite patterns seen at Arzhan 1. The overwhelming amounts of fine gold work recovered from the undisturbed grave 5 context beneath the Arzhan 2 mound indicate the Early Iron Age emphasis on elite wealth, conspicuous consumption, and craft specialization (Chugunov et al. 2006). Numerous artifacts from the burial also suggest that inter-regional contacts to the southeast and western regions were still significant for maintaining this degree of elite opulence (Chugunov et al. 2004: 6). By the fifth century BC, other impressive kurgans like Tuekta 1 (c. 430 BC, Pazyryk culture) appear on the Siberian side of the Altai Range. In the Minusinsk Basin, virtual mountains of earth and stone best describe the Sargash-phase kurgans of Tagar culture, including the badly pillaged Bol'shoi Salbyk burial mound (sixth/fifth century BC) (Bokovenko 2006: 867). The incredible expenditures of

⁶ Interestingly, this is not the case for the Minusinsk Basin where horse ritualism in mortuary contexts was not much emphasized even though the same harnessing technology is clearly present based on surface finds (Bokovenko 2006).

wealth, labor, and resources represented by the Scythian era kurgan cultures have led many researchers to conclude that the individuals buried in these royal tombs must have led powerful multi-regional confederations of nomads. Moreover, these early Inner Asian polities were probably engaged in expansive trade networks that involved imperial neighbors such as the Achaemenid Persians far to the southwest (Bokovenko 2006; Chang 2012b; Stark 2012).

6.4 East Versus West in Inner Asia

From the beginning of the first millennium BC, Arzhan 1 and the rise of Scythian culture introduced Inner Asia to an era of tremendous transformation. This included accentuated elite–commoner differentiation and inequality, increased reliance on mobile pastoralism, a dramatic increase in horse significance and horse riding, the spread of classic animal-style decorative motifs, new weapon types, and soon after, the first use of iron weapons as well as their eventual use in violent conflicts and mounted warfare. Many of these patterns begin in South Siberia, but they soon came to characterize all parts of the Eurasian steppe zone from the Black Sea to Manchuria—of course, with substantial variation in how they were expressed. Curiously enough, in contrast to the elaborate kurgan cultures of Tuva, Minusinsk, the Altai, and Kazakhstan, one of the areas with major differences in the development of mortuary culture during the Early Iron Age is Mongolia. Across much of central and eastern Mongolia during the "Scythian era," these patterns of grandiose monumentality simply do not pertain.

A notable exception is the Mongolian Altai region which we now know participated fully in the classic kurgan phase of Pazyryk culture (fifth to third centuries BC). Recent archaeological projects have documented kurgan sites in Bayan Olgii province; some of which, like Olon Guuriin Gol burial 10 (early third century BC), were internally frozen and superbly preserved (Tseveendorj et al. 2007). Others sites, like the burials at Baga Turgenii Gol, were not frozen per se but still retained many original organic artifacts due to the cold and arid conditions in the mountains (Torbat et al. 2007). These recent discoveries in the Mongolian Altai have extended the geographical distribution of Pazyryk culture significantly, and at the same time, they further underscore the significant difference in cultural patterns between the westernmost provinces of Mongolia and all other regions to the east and southeast—even including the Transbaikal region of Siberia.

The Final Bronze Age and the Early Iron Age archaeological record across most of the Mongolian steppe lands is dominated by the same slab burial mortuary practices and lifeways established at the end of the second millennium BC, as described in Chap. 5. From 1100 to 400 BC, there were indeed changes in slab burial culture, but these were comparatively modest. For example, there appeared larger and more grandiose forms of slab burials constructed after 800/700 BC and slab burial cemeteries especially in the eastern provinces of Mongolia grow to monumental extents in terms of numbers. Likewise, artifact inventories change to include the regional animal-style decorations and weapon sets known from the Scythian northwest, especially the Tagar-style bronze work of the Minusinsk Basin which appears in abundance in slab burial inventories. But in comparison with the kurgan mortuary treatments seen at Arzhan 1 and 2, slab burials present a very different expression of monumentality and of social differentiation. In order to fully understand these regional contrasts, a view from the areas south of Mongolia is required.

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Chapter 7 At the Edge of Inner Asia: The Northern Zone and States of China, 1200–700 BC

The Northern Zone of China (*Beifang*) is a region made up mostly of peoples whose histories, cultures, and languages associate them closely with Inner Asia (Lattimore 1940). These lands have long acted as a frontier between the steppes beyond the Gobi and the centers of Chinese civilization associated with the lower Yellow River and the Chinese Central Plain. The role of a frontier region, however, should not be conflated with the condition of being peripheral. The history and prehistory of the Northern Zone is one of culturally and politically independent groups who more often than not used their geographical position between the heartlands of China and the northern steppe to enfranchise themselves as a third center that generated its own political culture and gave rise to multiple states and empires in the later history of East Asia (Barfield 1989). As such, the Northern Zone is particularly important as an area that created, encouraged, and exploited diverse forms of inter-regional contact.

Similar to Mongolia, the landscapes of the Northern Zone comprise mountainous forest steppe, and classic grasslands, as well as some of the driest portions of the Gobi Desert. One of the important environmental characteristics of this frontier is an east to west aridity gradient along the Gobi zone in which deserts dramatically increase as one moves westward. While eastern Inner Mongolia is part of a continuous belt of rich grasslands that extend from Sukhbaatar and Dornod provinces of Mongolia into Xilingol, Inner Mongolia, the regions of western Inner Mongolia and northern Gansu are extremely arid. These desert lands neighbor the most arid parts of Mongolia which are found in southern Gobi-Altai, Bayankhongor, and Omnogobi provinces. Though the Gobi Desert has never been a total obstacle to movement, these climatic and physiographic differences between east and west certainly influenced the nature and periodicity of long-term interactions and routes of mobility across the Northern Zone.

This geographical difference establishes an initial context for better understanding a major part of East Asian prehistory: the cultural connections between the northern steppes of Mongolia and the southern steppes of Inner Mongolia (i.e., the heartland of the Northern Zone). Although recent archaeological research has been devoted to analyzing the cultural relationship between central China and Northern Zone cultures, neither the frontier nor the full narrative of statehood in China can be fathomed without knowing about contemporaneous events in Mongolia. To explore this zone of cultural intersection and political entanglement, I focus on the latest archaeology and issues pertinent to south-central Inner Mongolia around the Ordos Loop and southeastern Inner Mongolia in the Chifeng region. Both areas have relatively well-studied material records for the second and first millennium BC, and both show evidence for substantial interactions with groups on the Mongolian Plateau to the north and with early state societies of China in the south. How these two regions differed in terms of the nature and timing of long-distance interactions sheds some light on the east–west interaction spheres of Bronze Age Mongolia and the shape of state development in China. (Fig. 7.1).



Fig. 7.1 Map of eastern Inner Asia showing the major archaeological sites mentioned in the text. *1* Egiin Gol; 2 Baga Gazaryn Chuluu (*BGC*); 3 Maoqinggou and Yaozi; 4 Zhukaigou; 5 Liangcheng survey area; 6 Xicha; 7 Huogeqi mining site; 8 Oyu Tolgoi mining site; 9 Yinxu (Anyang); *10* Chaodaogou; *11* Taixi; *12* Suide; *13* Lingshe; *14* Liulin; *15* Qiaobei; *16* Darvi sum; *17* Tsatsyn Ereg; *18* Chuluut; *19* Tevsh Uul; *20* Arabjakh; *21* Qianzhangda; *22* Wanliu; *23* CICARP survey area; *24* Fengtai; *25* Dashanqian; *26* Guandongche; *27* Sagan-Zaba and Ol'khon Island; *28* Dadianzi; *29* Mount Malyi Bator; *30* Liulihe; *31* Baifu; *32* Nanshangen; *33* Tsagaan Uul/Avargyn Ovoo; *34* Buural Khangain Uul; *35* Pazyryk; *36* Liushiu (west of map edge); and *37* Jinggouzi

7.1 South-Central Inner Mongolia: The Ordos and the Chariots of Shang

The Ordos Loop is a region formed by the Yellow River as it flows up into southcentral Inner Mongolia and southwards again toward the Central Plain of China. It is usually thought of as a gateway between China and the northern steppe because of its historical role as a critical region for frontier politics of the Xiongnu period. Extensive archaeological finds during the twentieth century have extended that role backward into the prehistoric past to at least the second millennium BC. Some of the most impressive discoveries are artifacts related to the famous Ordos Bronze culture dated from the eighth century BC and displayed in the collections of prominent international museums (Shelach 2009: 17). The Ordos Bronze culture consists of mostly unprovenienced finds of beautifully fashioned animal style decorative items, weapons, and belt plaques associated with the Early Iron Age cultures of the northern steppe. Systematically excavated burial sites of the Early Iron Age, such as Maoqinggou and Yaozi, suggest that the impressive bronze artifacts now in so many museums and private collections around the world were originally part of a mortuary culture of Ordos groups that interacted and identified with their northern neighbors across the Gobi Desert. Additional excavations by Tian Guangjin and Guo Suxin at the settlement and cemetery site of Zhukaigou (c. 2100-1300/1200 $BC)^1$ provide even earlier evidence for these steppe contacts. Interestingly, this is about the same time that Ordos peoples first began interacting with representatives of the Shang dynasty (c. 1550-1050 BC) in the Central Plain of China as well.

Zhukaigou is a multi-phase settlement in the northeast of the interior section of the Ordos Loop (Ejin Horo [Yijinhuoluo] Banner). It consists of a series of stratified living floors and associated storage and ash pits that have been divided into a five phase occupational sequence. Houses were both semi-subterranean and built on the surface with mud construction walls and regularly placed holes for support posts. The entire site including burials encompasses 17 ha of which 5.7 ha constitutes the habitation area (Indrisano 2006a). Re-use of houses suggests long-term, sedentary, and continuous occupation over the better part of a millennium (Linduff 1995). Neither the storage pits nor the houses contained botanical evidence, but archaeologists presume that grain was cultivated and stored in some of the 207 pits at the site. Bones of domestic pig (33 %) and sheep/goat (36 %) make up the majority of animal remains followed by cattle, dog, and some deer as well as other wild animals. Bactrian camel was also documented at Zhukaigou, but no evidence for horses has been recovered (Shelach 2009: 50).

This settlement has become the type site for Zhukaigou culture throughout the greater Ordos region and for which about 40 sites have been identified or excavated within south-central Inner Mongolia and northern Shaanxi province (Liu and Chen 2012: 312). At least one systematic pedestrian survey has been carried

¹ The chronology of this site has been re-interpreted following its original publication, at which time the start date was established at 2000/1900 BC and the end date at 1500 BC (see Indrisano 2006a: 101; Shelach 2009: 17, 19; Liu and Chen 2012: 312).

out in Liangcheng, Inner Mongolia (Ulaan Chab Prefecture), 200 km northeast of Zhukaigou, and the results from this and other fieldwork confirm a regional settlement pattern of long-term habitations occupied by sedentary farming communities with a mix of domestic animals (Indrisano 2006a; Indrisano and Linduff 2013). Animal husbandry practices shifted slightly over time, but faunal collections from habitations indicate a consistent emphasis on pigs, cattle, and sheep/goat (Shelach 2009: 50–51; Liu and Chen 2012: 312, 385). Immediately adjacent to the Zhukaigou settlement are burial sites contemporary with the entire period of habitation, and these provide evidence for an array of ritual practices, human and animal sacrifice, a degree of social differentiation, and imported materials and artifacts (Linduff 1995: 138–143). Local craft production evidence includes kilns for ceramic making, a wide variety of stone and bone tools, and in the final phase of occupation, possible bronze metallurgy as implied by a fragmentary bronze axe mold. Besides this single mold, however, there does not seem to be much other evidence to indicate bronze production at the Zhukaigou site itself (Shelach 2009: 26; Linduff 1995).

Shelach (2009: 35) points out that over the almost 1,000-year period of occupation at Zhukaigou, the numbers of houses occupied varied substantially. Of 83 houses excavated, 89 % were in use during phases 2, 3, and 4 while the initial phase 1 and final phase 5 each had only five and four houses occupied, respectively. Clearly, the settlement became a magnet for population sometime during the early second millennium BC and declined towards the end of the millennium. The Liangcheng survey shows that neighboring small communities of farming households disbanded at about the same time that Zhukaigou and other large settlements were expanding in size and population (Indrisano 2006b: 104-106). Likewise, counts of habitation sites in the greater Ordos region dated to each of the Zhukaigou cultural phases also demonstrate that the majority of settlements were in use during the middle three phases of the Zhukaigou period (Shelach 2009: 35). These pieces of information suggest the possibility that a process of nucleation characterized the Ordos region during the second millennium BC and larger settlements with multiple family groups became a preferred settlement pattern. The long process of settlement rise and decline during most of the second millennium BC came to an end by 1300/1200 BC when Zhukaigou itself seems to have been completely abandoned (Indrisano and Linduff 2013: 178). However, an interesting exception to this pattern is seen at the Xicha settlement 100 km to the east of Zhukaigou where occupation was continuous throughout the late third and second millennium BC and population increased as Zhukaigou declined (Liu and Chen 2012: 385). Xicha culture then comes to constitute the next major phase of Ordos prehistory (c. 1300-1000/900 BC).

The involvement of Ordos groups in early inter-regional contacts is what makes Zhukaigou culture especially interesting and pertinent. These interactions are best evidenced by the bronze and ceramic artifact assemblages from the Zhukaigou site itself. The first small bronze needles and personal ornaments arrived at the settlement via the Qijia and Siba cultures to the west sometime during the first half of the second millennium BC (Linduff 1995: 139–140; Chen 2013: 106–107). Qijia and Siba bronze technologies (c. 2200–1500 BC) arose in the Qinghai–Gansu region and are thought to represent a combination of local experimentation and contacts

with bronze cultures of eastern Xinjiang, Kazakhstan, and the Altai Mountain region. This process of gradual transfer of technologies and styles synthesized with local innovations is not only characteristic of the western regions but also is seen throughout the entire Northern Zone during the second millennium BC. Qijia and Siba cultures in the far west, together with Zhukaigou in the center, and Lower Xiajiadian culture (c. 2000–1200 BC) in the eastern part of the Northern Zone all experienced sporadic contacts between their respective regions and populations (Linduff and Mei 2009: 276–277). Their different bronze industries are best understood as locally derived but in the context of knowledge and examples from neighboring areas—and these certainly included parts of Mongolia and Central Asia.

The final centuries at the Zhukaigou site are those most important for understanding initial interactions with groups further north in Mongolia and Siberia. During the Late Bronze Age phase 5, the first bronze artifacts in Karasuk-style occur in Zhukaigou burial contexts as well as in the uppermost levels of the settlement (Linduff 1997: 21; Liu and Chen 2012: 321-322). These bronze finds include daggers, knives, awls, bracelets, and earrings, and while there is some debate over the typology and dating of these imports,² the radiocarbon chronology for Minusinsk and Mongolian contexts with similar style artifacts agrees quite well with the proposed dates for these finds (c. 1500-1300 BC). Metallurgical research has further supported this identification with Karasuk culture. Analysis of the steppe style bronzes from phase 5 shows that their manufacture process involved casting followed by either hot or cold forging with annealing. These same techniques are especially well documented for Karasuk knives and daggers, but are not known from contemporary Middle Shang workshops to the southeast (Linduff 1995: 143; Legrand 2004: 144). How these artifacts arrived in the Ordos is still a mystery; however, burial sites of the Ulaanzuukh-Tevsh culture, contemporary with late Zhukaigou and having similar artifacts, are indeed present in the Mongolian Gobi provinces that neighbor central Inner Mongolia. These sites suggest one way that such artifacts could have circulated southwards. In fact, Mongolian archaeologists have identified burial sites in central Inner Mongolia that have slab structures and interments quite similar to those of Ulaanzuukh-Tevsh burials (Amartuvshin and Jargalan 2010: 153; Fairservis 1993: 166). Together, these observations indicate that the Gobi zone was probably more continuous culturally than is generally assumed.

The evidence from Zhukaigou for Bronze Age contacts across the desert, while not based on a large number of artifacts, is nonetheless convincing. The presence of these bronzes in the Northern Zone during the mid- to late second millennium BC is part of what archaeologists refer to as the "Northern Bronzes Complex" (Shelach 2009: 28–30). The term designates the earliest appearance of steppe style bronzes in the eastern and western parts of the Northern Zone. These initially

² This list is given by Kuz'mina (2004: 43) who connects the Zhukaigou bronzes with the Late Bronze Age Fedorovo sub-culture of the Andronovo family in Kazakhstan. Karasuk is considered to be a late derivative of the Andronovo culture and there is debate over which of these regional influences played a primary role in the western and central Northern Zone (Shelach 2009: 123). The most probable solution is that both regional traditions were involved.

occur in small numbers and most often as surface finds, as isolated caches, or from otherwise unprovenienced contexts. In addition to knives and daggers, typical bronze artifact types included in this category are socketed axes and other socketed weapons, mirrors, celts, and personal decorative items such as ornate buttons and earrings. Interestingly, these steppe style bronzes were not the only imported artifacts found at Zhukaigou; there also was discovered bronze weapons, ritual vessels, and ceramics associated with the Middle Shang dynasty to the southeast (Linduff 2003: 156–157; Liu and Chen 2012: 321). This mix of long-distance artifacts within the Ordos suggests that its inhabitants took part in creating some of the early north–south relationships that would later come to have a powerful impact on the shape of statehood in China, specifically during the late Shang and early Western Zhou periods (c. 1200–900 BC).

Although Zhukaigou clearly played an early and important intermediary role in linking northern and southern cultural spheres, it still is a puzzle as to why in the midst of these significant developments between 1500 and 1300 BC, the site declined in population and was abandoned. One hypothesis suggests that an increased investment in sheep/goat pastoralism and the need for greater herding mobility led households to move away from the site (Linduff 1998). Some facts might indeed support this idea. For example, fewer houses were occupied by the final phase of the settlement yet the number of pit features in use actually increased (Shelach 2009: 35). If, as Shelach surmises, these features were for grain storage, then perhaps families began to practice a two season settlement strategy that seasonally returned them to access, plant, and replenish grain reserves. Likewise, the presence of Bactrian camels at the site might also be significant in this respect since the second millennium BC is well within the chronological window for camel domestication and Inner Mongolia is one of the probable regions for early camel transport and traction (Potts 2005: 50). That said, only a single camel tooth was recovered from the late phase of the site, and the archaeological evidence for early domestic camels in East Asia is still surprisingly minimal given their early dates in Southwest and Central Asia (Flad et al. 2007: 194). Moreover, if this settlement change did occur, it was not in the context of increased sheep and goat herding since faunal remains at the site do not change substantially from those of earlier phases (Indrisano 2006b: 109-110; Shelach 2009: 50; Indrisano and Linduff 2013: 178). In contrast to Zhukaigou, the nearby Xicha settlement did experience an increase in goat and sheep consumption, but not until after 1300 BC and also in conjunction with greater investment in pigs, an animal that is not herded but is more associated with sedentary village life (Liu and Chen 2012: 385).

Another explanation for Zhukaigou's abandonment is that the site was a strategic location for north–south trade in copper ore to the Shang dynasty and some form of major disruption occurred in those exchange relations. It is possible that toward the mid- to late second millennium BC, other groups became intermediaries or producers in this trade network and interfered with opportunities for exchange by way of Zhukaigou (Linduff 2006a: 362–364). Again, this is a plausible suggestion given the Shang state's significant investment in bronze production and its critical need for raw materials at centralized elite workshops. The presence of Shang artifacts

at Zhukaigou also lends support to this idea and some scholars even view the settlement as having hosted individuals from the Shang capital who may have managed these trade relations (Liu and Chen 2012: 320). Indeed, several copper sources with evidence for early exploitation exist within the greater region including the Inner Mongolian mining site of Huogeqi (Bayannur League) that is about 300 km northwest of Zhukaigou as well as more distant sources like the Oyu Tolgoi copper deposit in Mongolia's South Gobi Desert. Unfortunately, there is not much evidence as to whether copper ore, cast ingots, bronze finished goods, or entirely different products were passing through Zhukaigou, but some form of early trade center is the dominant interpretation for later period activities at this site (Indrisano 2006a).

The end of Zhukaigou culture was marked by the development of stronger connections between Ordos groups and steppe peoples to the north. The handful of Karasuk-style bronzes at Zhukaigou sets a precedent that continued and increased through the late second and early first millennium BC. Once again, the final phase of the Xicha site (c. 1300-1000 BC) offers the best example of this process. Archaeologists have recovered a variety of steppe style bronzes at Xicha including diagnostic ring pommel knives and socketed axes, but the quantities of these artifacts as well as the higher numbers of clay molds for their local manufacture provide confirmation that, by the end of the second millennium BC, the Ordos had in fact become a production area for these bronzes (Liu and Chen 2012: 322). The Ordos bronze workers specialized in the bronze artifacts most fashionable and highly valued among northern steppe groups, which perhaps indicates a shared cultural identity and a desire to obtain northern resources through exchange. It is notable that this emphasis on steppe-style bronze production occurred at Xicha in conjunction with the first appearance of horses at the site. These animals were consumed as food, interred in burials and used in other ritual activities (Liu and Chen 2012: 388). Just as noteworthy is the fact that at about the same time (c. 1200/1100 BC), very similar transformations were taking place in the eastern part of the Northern Zone as well, including the appearance of similar bronze artifacts, their local production, and the first evidence for horses and horse-related material culture (Jin 2009: 205).

Very likely, these early cultural interactions and exchanges with communities in the Gobi and the northern steppe had a significant influence on the Late Shang state. At some time between 1300 and 1200 BC, trade or conflict between the Shang and Northern Zone groups led to the adoption of a critical technology in the heartland of China: the horse drawn chariot. These early chariots were first discovered in the royal burials at the late Shang capital of Yinxu near modern Anyang, Henan province. Moreover, the chariots were buried in association with ritualized horse sacrifices as well as Karasuk-style weapons and toolsets (Linduff 1996). The question of where these chariots first originated stirs up controversy among scholars, but based on textual and archaeological evidence, the best candidates are Northern Zone groups located west of the Taihang Mountains. These include peoples of the Xicha culture in the greater Ordos region and those of the Lijiaya culture in northern Shaanxi and Shanxi provinces—groups that certainly had relationships with communities even farther to the north and west (So 1995: 36–37; Linduff 2003: 154–155; Wu 2013: 44–45).

A contrasting opinion is given by Shelach (2009: 133) who argues that a more likely route for transmission of steppe style bronzes and chariot technology would have been through the eastern part of the Northern Zone via groups of the Upper Xiajiadian culture (southeastern Inner Mongolia). He suggests that, in this eastern region, there is more comprehensive evidence for the Northern Bronzes Complex and especially the Karasuk-style weapons often found along with Shang chariot burials. Indeed, the bronze knives with animal style and openwork pommels from sites like Chaodaogou in northeastern Hebei province are classic Karasuk-type artifacts. These bronzes from the eastern part of the Northern Zone have also been recovered at the major Shang settlements in the northeast such as the site of Taixi in Hebei province (Liu and Chen 2012: 362–363). It is not clear to me, however, that the differences in numbers of such artifacts are significantly great between east and west especially considering that archaeologists and art historians have consistently identified the Ordos as a major center of Karasuk bronze finds and production (Bunker 1997: 113; Kuz'mina 2004: 71; Legrand 2004: 148–149; Novgorodova 1989: 120).

The latest research on the problem of chariot, horse, and bronze artifact transfers from Inner Asia to Shang dynasty China points to sites along the periphery of the Ordos Loop in northern Shaanxi and western Shanxi provinces. To advance the argument for a northwestern entry point, Wu (2013: 3-5, 45) draws attention to Karasukstyle finds from burial sites at Suide (northern Shaanxi), Lingshi (Shanxi), Liulin (Shanxi), and the early chariot burials at Qiaobei (Shanxi, c. 1200 BC)-all with examples of bronzes that are similar to artifacts from Minusinsk and Mongolia as well as those discovered in the royal cemeteries at Anyang (cf. So and Bunker 1995: 100-102). In fact, the main evidence that Wu provides for a northwestern area of introduction (via Mongolia) rather than a western one (via Xinjiang-Gansu) is that the particular toolset associated with Shang period chariot burials, including steppe style bronze knives, whetstones, and curious bow-shaped objects, are known only from two other contemporary contexts: Karasuk period burials in Minusinsk and from carvings on the Mongolian deer stones (Wu 2013: 9-42; cf. Shaughnessy 1989: 3). Moreover, Shang oracle bone inscriptions suggest that chariot technology was adopted during a time of internal political turmoil and external conflicts, some of which clearly pitted the Shang against northwestern "chariot-using" groups from whom chariots, horses, and prisoners were seized (Shaughnessy 1988: 217, 220-221).

As mentioned in the previous chapter, no direct evidence for chariots has ever been recovered from South Siberia or Mongolia with the exception of an impressive number of chariot petroglyphs pecked into panels of rock at sites across western Inner Asia. Based on excavated chariot remains from sites farther west, stylistic depiction, pecking sequences, and patinas, most researchers agree on a Late Bronze Age (mid-second millennium BC) date for this corpus of rock art (Jacobson-Tepfer 2012: 2; Novgorodova 1989: 142, 146, 157; Francfort 2011: 57). Evidence from at least one chariot image pecked onto a late period deer stone at Darvi sum in Khovd province of western Mongolia suggests that chariot rock art may have persisted into the early first millennium BC as well (Novgorodova 1989: 162–163; Volkov 2002: 218). Chariot burials seem not to have been part of mortuary ritual at this time in Inner Asia; and so far, this unfortunate fact has deprived archaeologists of even a single concrete

indication of chariot use during the Late Bronze Age.³ If, however, the distribution of chariot rock art is accepted as evidence for chariotry and these images are mapped out, a clear geographical corridor is apparent. Archaeologists document these images in eastern Kazakhstan, Minusinsk, the Altai region, Tuva, Xinjiang, western Mongolia, and central Inner Mongolia (e.g., Hanks 2012: 93, 95; Littauer and Crouwel 2002: 106–109). The greatest numbers of chariot images follow the northwest to southeast arc of the Altai and Tian Shan uplift which has its easternmost extensions in Gobi-Altai, Bayankhongor, Ovorkhangai, and Omnogobi provinces of Mongolia. Chariot images are found along this entire mountain arc, and interestingly, the southernmost and easternmost images occur in the Yinshan and Helanshan Mountains just northwest and west of the Ordos Loop (Di Cosmo 1999: 904; Demattè 2004).

In other words, a very precise northwest to southeast record of these vehicles does indeed exist and seems to terminate in the Northern Zone west of the Taihang Mountains in keeping with Wu's argument (cf. Shaughnessy 1988: 204–208; Novgorodova 1989: 158). Furthermore, within Mongolia, there is a clear eastern limit for these images. Examples of chariot petroglyphs are reported from Tsatsyn Ereg (central Arkhangai) and Chuluut (western Bulgan), and they are well known from the Tevsh Uul (western Ovorkhangai, Fig. 7.2) and Arabjakh (also Arvijakh) sites (west-central Omnogobi) (Novgorodova 1989: 142; Magail et al. 2009). Just slightly eastward of these locations, the regional surveys at Egiin Gol and Baga Gazaryn Chuluu recorded hundreds of rock art panels, but not a single chariot scene was found (Torbat et al. 2003; Galdan 2010). Another indication of the significance of these images is that the earliest pictographs in the Shang writing system for "chariot" clearly derive from this rock art tradition (Barbieri-Low 2000: 39; Demattè 2004; Littauer and Crouwel 2002: 119, 122).

Finally, even though a western route via Xinjiang-Gansu and a northwestern route through Mongolia are usually discussed as mutually exclusive pathways, I see no reason why the chariot technology ultimately transferred to the Shang court could not have derived from both of these regional traditions. This seems particularly probable given the fact that Late Bronze Age groups of the Mongolian Altai and northern Xinjiang were undoubtedly in contact based on their common use of khirigsuur monuments, deer stones, chariot images, and similar bronze artifact assemblages (Debaine-Francfort 2001; Jia et al. 2009). The one exception to this is the fact that so far the presence of domesticated horses in Xinjiang does not credibly predate 1000 BC (Flad et al. 2007: 191; Renfrew 2002: 5; Chen and Hiebert 1995).⁴ I suspect, however, that with additional research, especially in northern and northeastern Xinjiang, the dates for domestic horses will certainly be set back in time.

³ A possible exception is the remains of a spoked wheel hub from a corral feature at the site of Nuomuhong in Qinghai province, China; however, both the identification of this find as part of a wheel and its dating are disputed (Wu 2013: 35; Linduff 2003: 144).

⁴ Some researchers argue that domesticated horses were already present in Xinjiang by the midto late second millennium BC (e.g., Debaine-Francfort 2001: 65); but a lack of systematic faunal analysis and poor resolution in the dating of multi-phase cemeteries are still major problems that need to be resolved.



Fig. 7.2 Rock art image of a chariot from the Tevsh Uul site (A version of this image appeared in Honeychurch and Wright 2008)

While taking into account Jacobson-Tepfer's (2012) argument that Inner Asian chariots and chariot images may have been used primarily as symbols rather than representing functional transport, at minimum, this overlap in distributions of chariot-related bronze toolsets, deer stone depictions, and the eastern limit for chariot rock art favors a western introduction to China; and this geographic scenario is more convincing than a far eastern one, as Shelach proposes. Moreover, there does not seem to be any indisputable material evidence for chariots from the eastern part of the Northern Zone until the very end of the second or the beginning of the first millennium BC.⁵ Given this, chariots probably gained privileged status among the Shang prior to their introduction to politically important regions further east and northeast, which, for example, seems to be the case of the typical Shang style chariot burial at Qianzhangda in southern Shandong province (Liu and Chen 2012: 366). Ironically, at the same time China received the chariot, two thousand kilometers to the west in Late Bronze Age Kazakhstan, chariot technologies and horses had already lost their elite glamour-after all, the chariot-horse combination had been present in the Trans-Ural region for more than 800 years by that point and had spread geographically as far as the armies of Egypt. In China, however, this steppe technology was newly arrived and poised to have a major impact on politics, warfare, and the practice of statecraft in East Asia.

⁵ Shelach mentions some early examples of tentative chariot equipment from the east but none seem to be securely dated prior to the 1200 BC appearance of chariots at Anyang (Shelach 2009: 30–31).

7.2 Southeastern Inner Mongolia: Cultural Hybrids and the Horses of Zhou

It is indeed curious that the material culture and site types discussed above with respect to chariots all but disappear in the eastern regions of Mongolia, with one important exception: the Karasuk-style bronzes. Karasuk weapons, tools, and ornaments associated with the Northern Bronzes Complex do appear in both eastern Mongolia and the eastern part of the Northern Zone in impressive numbers. Shelach (2009: 29) reports an early example of such artifacts excavated from a bronze cache at the site of Wanliu in northern Liaoning province and radiocarbon dated to the fourteenth century BC. Other examples date toward the end of the second millennium BC, and most of these artifacts are associated with Upper Xiajiadian culture in southeastern Inner Mongolia (c. 1200-600 BC).⁶ The Xiajiadian type site for the lower and upper phases of this Northern Zone culture is located in the Chifeng region. Thanks to several systematic survey projects, the archaeological database of Upper Xiajiadian cemeteries and habitations is detailed and impressive (CICARP 2011). Upper Xiajiadian cultural sites are distributed across the westernmost tributaries of the Liao River system of Inner Mongolia including the Shar Moron (Xilamulun), Laoha, and parts of the Xiliao River basins. Sites also extend southwards to the Luan River of northern Hebei province and eastward as far as western Liaoning province. Karasuk style bronze artifacts are not only characteristic of the Upper Xiajiadian record, but there is also robust material evidence that many of these artifacts were produced locally. This evidence in southeastern Inner Mongolia includes extensive copper mining sites, bronze working workshops, numerous artifact molds, and metallurgical analyses demonstrating local alloys (Shelach 2009: 31; Linduff 1997: 28). Such evidence raises a puzzling question: Why would distinct groups in both the Ordos and Chifeng regions adopt steppe style bronzes from the north and then develop their own local industries in order to produce these artifacts, seemingly in large numbers?

The most widely accepted explanation is that these Northern Zone groups began to adopt pastoral nomadic economic and cultural lifeways similar to their neighbors on the Mongolian Plateau. This model is generally coupled with the idea that changes in climate and local environments would have favored mobile pastoralism more than sedentary farming (Indrisano 2006a). However, similar to the case at Zhukaigou, the faunal evidence from sites across the Northern Zone does not support this hypothesis. Shelach (2009: 50–51) evaluates settlement and cemetery data from Qinghai and Gansu to Liaoning and concludes that throughout most of the second millennium BC, Northern Zone groups practiced sedentary millet farming

⁶ Similar to the situation at Zhukaigou, the chronology of Lower and Upper Xiajiadian cultures has varied substantially according to different researchers. The Chifeng International Collaborative Archaeological Research Project (CICARP) has recently analyzed a large number of radiocarbon samples from their fieldwork and currently date the Lower and Upper phases to 2000–1200 BC and 1200–600 BC respectively (Shelach et al. 2011: 15; Shelach 2009: 37; CICARP 2011: 118, 126).

and kept domesticated animals with an emphasis on pigs. Not until the initial first millennium BC does the archaeological record provide some evidence for an increase in herd animal investment. These patterns are especially pronounced in the western regions of Qinghai and Gansu provinces (e.g., Xindian, Siwa, Kayue cultures). They also characterize the Xicha culture in the greater Ordos, and, to a lesser degree, they are evidenced at Upper Xiajiadian sites (Shelach 2009: 52–54). However, it is not clear that greater numbers of herd animals were associated with increased mobility. Shelach makes the point that archaeologists have not generated the survey settlement data in the western Northern Zone that would test expectations for residential mobility in association with herd animal investment. While herd animal counts do seem to be increasing during the late second and early first millennium BC, recent settlement excavations at sites like Fengtai in eastern Oinghai (Kayue culture) suggest that grain production and wood or mud brick houses were still the basis of a relatively low mobility agro-pastoral lifeway in the far-western reaches of the Northern Zone (Wagner et al. 2011: 15737; Shelach 2009: 52, 55; Jia et al. 2011; Jin 2009: 181–185).

With regard to this question, the archaeological evidence is more informative for the Upper Xiajiadian culture, mainly due to extensive pedestrian survey and systematic settlement excavations. Shelach (2009: 53) reports faunal assemblages from the Dashanqian site (Upper Xiajiadian level) and Guandongche settlement in Chifeng and Keshenketeng banners respectively, and concludes that while sheep, goat, and cattle investment increased in some places and decreased in others, overall pig husbandry and grain production were still the main emphases of the Upper Xiajiadian economy (see also CICARP 2011: 129). In the Chifeng region, another way to examine this question is to compare the settlement patterns for the Lower and Upper Xiajiadian periods with regard to the amount of habitation nearby to pastoral versus agricultural land resources. Shelach (2009: 60-62) demonstrates that during the Lower Xiajiadian phase, a majority of settlement was situated on primary agricultural lands, while during the Upper phase, habitation was more evenly divided between land suited for irrigated farming, dry farming, and pastoralism with slightly higher numbers of sites in the pasturelands. In terms of the extent of mobility practiced in relation to distance from sources of water, Shelach determines that 17 % of habitation sites were located more than 3.5 km away from a river or stream. In other words, the minimum movement regime was fairly limited in scope but still more mobile than had been the case during the Lower Xiajiadian period.

Based on this analysis, Shelach suggests that Upper Xiajiadian groups were organized into primary agricultural villages that seasonally sent out a subset of households to pasture sheep, goat, and cattle herds in nearby areas having the best grasslands (Shelach 2009: 61–62). Additional analyses of Chifeng and northern Liaoning survey data support this hypothesis of a mainly sedentary agro-pastoral lifeway with limited use of residential movement (CICARP 2011: 129; Williams 2014). In fact, this agro-pastoral community model seems to be quite similar to that documented during the Final Bronze Age in the greater Ordos region (Liu and Chen 2012: 385; Indrisano 2006b) in eastern Qinghai and parts of Xinjiang (Jia

et al. 2011; Li et al. 2011) and even in South Siberia (Svyatko et al. 2013; Murphy et al. 2013). As discussed in the prior chapter, this is a very different pattern from that documented in the central regions of Mongolia based on both habitation and subsistence data. The Mongolian evidence argues for Final Bronze Age lifeways centered on sheep/goat, cattle, and horse pastoralism with residential movements made on a seasonal basis and utilizing a minimum range of three to ten kilometers and a maximum range of up to 100 km. If and when more evidence arises for agricultural production in Mongolia during the early to mid- first millennium BC, it will probably have to be understood as a secondary addition to a longstanding mobile subsistence economy centered on pastoralism, hunting, gathering, and fishing. In contrast, Northern Zone groups gradually added herd animals and some degree of mobility to a fundamentally sedentary and agricultural way of life. Despite the pervasive idea of the Northern Zone as home to specialized nomadic herders, it seems that even during the latter half of the first millennium BC, these agro-pastoral lifeways were largely unchanged in both the greater Ordos and the Chifeng and Liaoning regions (Indrisano and Linduff 2013; Shelach 2009: 54, 62; Williams 2014).

If, however, an economic shift to mobile pastoralism was not the basis for Northern Zone cultural transformation toward the end of the second millennium BC, then what was? Shelach offers an alternative explanation for these changes based on a shared cultural identity (Shelach 2009: 111-113). He argues that between 1100 and 900 BC, Northern Zone groups opted to re-create local identities by drawing upon the ideological and symbolic vocabulary of northern steppe groups in the context of greater interaction with their steppe neighbors. The most obvious markers of this new identity were highly visible bronze decorations, weapons, and toolsets in Karasuk and animal styles meant to be carried on an individual's belt or attached to clothing. Furthermore, this new local identity emerged among Northern Zone groups as a way to distinguish themselves from representatives of the late Shang (c. 1250-1050 BC) and Western Zhou (c. 1050-770 BC) courts with whom trade and elite ties were likewise increasing (Shelach 2009: 144–145). Such southward exchanges of elite prestige goods, and in particular horses and bronzes, were gradually becoming more significant from a political perspective. Clear evidence of Central Plain and Northern Zone elite trade is provided by the many horses, chariots, and northern bronzes discovered in the burials of Shang and Zhou rulers; and, on the other hand, the occurrence of Shang and Zhou ritual bronze vessels in the largest and most opulent Upper Xiajiadian burials (Shelach 2009: 140).

Shelach's interpretation of the regional and macro-regional evidence agrees well enough with the archaeological data available from Mongolia. However, in assessing the shape and character of interaction northward of Upper Xiajiadian areas, Shelach mainly emphasizes contacts with groups in the forested Manchurian region (Liaoning, Jilin, and southwestern Heilongjiang provinces) at the expense of interactions oriented toward the Mongolian provinces of Dornogobi, Sukhbaatar, and Dornod (via Xilingol League). Using the distribution of Karasuk-style bronze knives to map the northern interaction sphere, Shelach (2009: 129–130) traces these artifacts across the forest and forest-steppe belt of southern Siberia and Manchuria. This distribution is certainly not incorrect, but it overlooks the numerous Karasuk-style finds (knives, daggers, socketed tools, celts, decorations, etc.) excavated from slab burial contexts and discovered as surface finds in eastern Mongolia (e.g., Navaan 1975: 72–82, 86–88; Erdenechuluun and Erdenebaatar 2011). Some of these artifacts are the same kind of knives with "animal-heads, animal figures, or openwork bell pommels" that Shelach focuses on, although such knives are actually quite rare in regions of Karasuk distribution. Most of the eastern Mongolian artifacts represent the more typical Karasuk and early Tagar bronze assemblage associated with slab burial culture (see Chap. 5). Given the similarities in bronze assemblages across eastern Mongolia, eastern Inner Mongolia, and western Manchuria, it is likely that the Upper Xiajiadian groups were involved in multilateral contacts with peoples of the forests as well as the steppes.

Furthermore, these distinctive bronze artifacts and the animal symbology they employed were not simply identity markers on the northern steppe-they were specifically associated with the rise of local elite leadership among steppe peoples (Honeychurch et al. 2009). Therefore, Upper Xiajiadian groups were involved with two very different and equally distant elite bronze traditions: ritual bronze vessels from the Central Plain and animal style Karasuk and Tagar bronzes of the northern steppe cultures. Shelach, however, argues for divergent interpretations of the social and cultural meanings of these two artifact assemblages from the perspective of Upper Xiajiadian groups. Shang and Western Zhou bronze vessels appear in the richest of Upper Xiajiadian tombs, whereas steppe style bronzes seemingly appear in almost all burial contexts; leading Shelach (2009: 127) to conclude that interactions with Central Plain groups involved exclusive transfers pertaining to elite activities while interaction with Eurasian steppe groups involved an egalitarian and "ethnic-like" common identity. In fact, it is more likely that interactions in both northern and southern directions depended upon alliances between elite groups with the crucial difference having to do more with the makeup of political organization on either side of the Northern Zone frontier.

Dealing with a formalized royal court, such as that of the Western Zhou, would engender quite different relationships from those based on engagements with multiple and, dispersed groups of pastoral nomads under the leadership of elite lineage groups. I would also expect that both the relational and material bases for these two modes of interactions would likewise have been quite different and, furthermore, that these distinct interaction spheres would have involved different segments of Upper Xiajiadian society. Interactions with Central Plain representatives probably comprised very few elite members of Upper Xiajiadian society, whereas interactions with steppe groups were likely more community-based and may have involved multiple alliances with different groups requiring a great deal more cultural communication and identification in order to maintain strong relationships. One could imagine that alliance building with steppe peoples may have been most effective when Northern Zone leaders and community entourages attended seasonal gatherings, games, and ritual events hosted by their mobile counterparts on the steppe. At such gatherings, there would have been ample opportunity to bestow generous gifts of Karasuk-style bronzes made in Northern Zone workshops upon steppe leaders in order to affirm alliance relationships. A similar interaction process with Shang officials would have required much less communal participation and would not have immersed Upper Xiajiadian communities in the lifeways of Central Plain culture as closely. Therefore, interactions to the north and south were similar in spirit (i.e., both were rooted in relationships between elite groups), but necessarily different in execution. Perhaps, rather than describing the Upper Xiajiadian identity formation process as ethnic and egalitarian, a better way to describe it would be "communal," but still rooted in elite differentiation and alliance building measures.

If the above argument is correct, Shelach's proposal (2009: 100-101) that steppe style bronzes furnished the graves of both Upper Xiajiadian elite and the poorest of commoners should be reassessed. As with slab burials in Mongolia, it is quite possible that Upper Xiajiadian tombs were not constructed for every individual, but instead that these burials represented a relatively small and privileged group whose members were interred in special earth and stone structures over the 600 or so year extent that Upper Xiajiadian mortuary practices were in use (see Anthony 2009: 63–64 for a similar argument). Detailed demographic modeling for the Chifeng survey region demonstrates that Upper Xiajiadian population levels were significantly higher than those of the Lower Xiajiadian period, numbering between 60,000 and 120,000 people (CICARP 2011: 126). Since all evidence points to a relatively sedentary village-based lifeway in the region, we might expect the numbers of graves within and around the survey area to be fairly high. In fact, a preliminary assessment by Shelach suggests the opposite: the number of graves for this period is exceedingly small in comparison to the estimated population (Shelach 2009: 43). The presence of northern steppe style bronzes in most Upper Xiajiadian graves might therefore support the idea that these mortuary contexts, in and of themselves, marked a degree of status distinction.⁷ This interpretation of the mortuary patterns fits better with the survey settlement data from Chifeng that finds Upper Xiajiadian society to have been integrated, centralized, and highly differentiated in terms of the social standing of some groups (CICARP 2011: 128; Shelach 2009: 37).

If a transition to pastoral nomadism did not occur, and a shift in local ethnic identity seems to be only partially correct, then our central question still stands: what motivated Upper Xiajiadian (as well as Ordos) leaders to establish alliances with steppe elites and take it upon themselves to produce bronze prestige objects having great value among their neighbors to the north? These bronzes were clearly less about local

⁷ An alternative explanation for the relatively high quantities of steppe style bronzes in Upper Xiajiadian society is that these artifacts did represent high status prestige goods among northern steppe groups but within the Chifeng region they were an easily produced gift item that facilitated access to steppe products having much greater value within the Northern Zone. This would explain the later development of bronze knife coins having the same shape as steppe knives but minted as currency to be used for internal and external barter by some of the eastern and northern Zhou states during the mid- to late first millennium BC (Linduff 1997: 62; Bunker 1997: 294).

self-identification among Upper Xiajiadian peoples and more about the creation of exchange agreements that bridged spatial and cultural gaps between the Northern Zone and the steppe lands of Mongolia. Indeed, these artifacts constituted a shared vocabulary, but one that furthered elite interests, and, as a number of scholars have already pointed out, those interests revolved around a politically oriented trade in highly valued prestige goods (So and Bunker 1995; Linduff 1997; Shelach 2009: 140; Di Cosmo 1999). Unfortunately, the archaeological evidence for the Mongolian side of this proposed interaction network is rarely addressed in detail. Archaeologists studying Mongolian slab burials unanimously agree that significant cultural connections existed between groups in the eastern part of the Northern Zone and those taking part in slab burial culture (Tsybiktarov 1998: 151; Navaan 1975: 10, 84–85, 128; Dikov 1958: 59). A logical question therefore is what were these interactions and exchanges all about and what archaeological evidence substantiates these interregional contacts?

Three kinds of resources were available to groups on the Mongolian Plateau and in eastern Transbaikal that had substantial value in the south and especially in the political heartland of the Shang and Zhou states. The first of these was forest products from the Siberian Taiga and forest-steppe zone likely including furs, skins and leathers, medicinal plants and roots, minerals, and wild animal parts such as horn, antler, bone, fish derivatives, and feathers (Bunker 2009). Few of these organic items would have remained in the archaeological record, but we do know that similar products were eagerly sought by traders during the Han dynasty and throughout later periods of history even up to the present day (Christian 2000). One line of evidence archaeologists have for such forest resource procurement is the well-documented expansion of slab burial groups from the foreststeppe area southeast of Lake Baikal (i.e., Transbaikal) into the forested regions on the western coast of the lake and further inland (i.e., Cisbaikal) (Kharinskii et al. 1995). Slab burial cemeteries on Ol'khon Island and the western Preol'khon regions of Cisbaikal document the introduction of both domesticated herd animals and steppe prestige goods in addition to steppe burial practices which Turkin suggests were adopted and innovated upon by the local hunter-fisher groups in the Cisbaikal area (Turkin 2004: 84). Burial locations and evidence for combined local and introduced practices indicate that relations between pastoralists and indigenous hunter-gatherers were relatively stable. The dominant interpretation of this precipitous appearance of slab burials far to the northwest during the early first millennium BC⁸ is the establishment of trade relations with forest dwellers (Dikov 1958: 64-65; Tsybiktarov 1998: 154; Turkin 2004: 89). The Sagan-Zaba settlement in Cisbaikal mentioned in chapter five provides additional confirmation of these movements based on the arrival of herd animals among what seem to have been primarily sealing, hunting, and fishing groups (Nomokonova et al. 2011). Trade in forest products was probably one of the oldest links between the northern and southern parts of Inner Asia and may well have encouraged down-the-line

⁸ Turkin dates this to the twelfth century BC based on a single early date but all other slab burial C14 analyses from Cisbaikal, including those reported by Kharinskii et al. (1995), cluster between 900 and 400/300 BC.

transfers into the Northern Zone as early as the late third and early second millennia BC, if not earlier (Bunker 1993: 30).

The second set of valued resources available from the Mongolian Plateau was ideas, technologies, materials, and products transferred from regions farther west (i.e., from Kazakhstan, West Siberia, and beyond). The best example, of course, is chariot technology and horse traction techniques for driving chariots. Other aspects related to chariot use transferred from the steppe southwards include the ideological association of chariotry with elite differentiation, and, presumably, the concept of the chariot-centered hunt as elite political display. Whereas many rock art panels show chariots used in hunting expeditions, whether the chariot was actually used for warfare in ancient Mongolia is highly doubtful (at least there is no evidence so far), and therefore, its use as an instrument of war in East Asia may have been an invention of the Ordos groups who confronted the Shang military (Shaughnessy 1988). Another example of west to east transfer via the Mongolian steppe is Karasuk-style bronze tool and weapon sets. Based on their close association with chariots, these may have been viewed as material symbols of Shang control over the resources and skills necessary for chariotry. In addition to chariots, however, evidence is accruing for other kinds of western prestige products that had value among the Central Plain aristocracy for their rarity, exoticness, and beauty. Rawson (2010) has investigated the use of carnelian beads as markers of status among the late Shang and Western Zhou elite as revealed by a growing number of burial excavations in China. Raw material sources for carnelian and the technology for working this extremely hard mineral into impressive beads are especially well documented in South and Southwest Asia (Rawson 2010: 10-11).

Some of the earliest known instances of such artifacts in East Asia are from burial contexts dated to the mid- to late second millennium BC. These include one burial context in Xinjiang, a few burials from the Dadianzi cemetery (Lower Xiajiadian culture) of southeastern Inner Mongolia, and the royal Fuhao burial at Anyang (burial M5, c. 1200 BC) (Rawson 2010: 9). The Fuhao burial context is also well known for its assemblage of Karasuk-style bronze artifacts and chariot gear (Linduff 1996). Beginning at about 1000 BC (i.e., early Western Zhou period), Rawson (2010: 5-8) reports several other burial contexts with elaborate biconical and cylindrical-shaped carnelian beads from Shanxi and Shaanxi provinces. While the Xinjiang carnelian finds suggest a western origin consistent with the bead industries and raw material sources of Southwest Asia (Rawson 2010: 11), the distribution of these distinctive kinds of beads during the Late and Final Bronze Age extends farther to the north and east in Inner Asia as well. Kuz'mina (2007: 409) reports carnelian bead finds from the Final Bronze Age cemetery of Borovoe in northern Kazakhstan and discoveries of similar kinds and shapes of carnelian beads have been recovered from Ulaanzuukh-Tevsh burials in west-central Mongolia (Kovalev and Erdenebaatar 2009: 165; Novgorodova 1989: 138). Moreover, these unique cylindrical and biconical beads are also known from several slab burial contexts from the Mount Malyi Bator site in the Onon River region of eastern Transbaikal (Grishin 1975: 53-55). These slab burials were badly disrupted, but Grishin recovered sherds from a paddle-decorated tripod pot, suggesting an earlier rather than a later date in the first millennium BC, and a fragmentary stone mold for bronze production. In particular, he identifies the carnelian bead finds as similar to others known from early Tagar cultural contexts in the Minusinsk Basin (Grishin 1975:55).⁹ Given this evidence, the use of carnelian in elite Shang and Zhou burials can probably be linked to the same Mongolian and Inner Mongolian routes of contact that brought Karasuk and early Tagar style bronzes into the Central Plain.

Finally, there is little doubt that in addition to other exotic items from the west and north, the primary resource of interest to the late Shang and even more so, to the Western Zhou, was a reliable supply of horses (Shelach 2009: 138; Linduff 2003, 2006b; Wu 2013). We should not underestimate the importance of both chariots and horses to the fabric and maintenance of the early state in China. While chariot technology was masterfully indigenized by the Shang and Zhou states and could be reproduced locally, the acquisition of the most important part of chariotry, i.e., a supply of horses, was an ongoing issue of political concern at the highest levels of leadership. Not only were there official administrative positions established to manage and care for royal horses, but it is also clear from the oracle bone inscriptions that Shang kings personally interacted with horses at court in what was probably a ceremonial display connecting the ruler with horse care and maintenance. As Yuan and colleagues (2008: 99) point out, oracle bones describe the Shang king personally feeding the horses in the royal stables, while on the other hand, "...no such inscriptions describing the king feeding cattle, sheep, dogs, chickens, or pigs have ever been identified." While the late Shang court began this political tradition associated with horses and chariotry, Linduff (2003: 149) counts only 16-20 burial sites from this early period having horse and chariot remains. She contrasts this with the virtual explosion in the number of horse and chariot sites during the Western Zhou period (c. 1050-770 BC) when chariots became the standard platform for conducting warfare and a primary symbol of the state itself.

Wu (2013: 72–74) makes an important connection between the capacity of Western Zhou rulers to delegate authority beyond their capital and the symbolic gifting of horse and chariot teams. Unlike the Shang elite, Zhou rulers devised methods of entrusting subordinates with decision-making authority in order to extend their political reach over a much larger territory (Wu 2013: 61). These subordinates were put in control of substate regions beyond the direct oversight of the central court. This form of political delegating is ultimately the basis of state administration and was an effective way for a state to expand in size even though the act of delegation itself carried the risk of empowering those who could become potential rivals. The Zhou court therefore ritualized this bestowal of authority and maintained direct contact with subordinates by hosting frequent gift-giving ceremonies in which among other items, the so-called "golden" chariots and horse teams of Zhou were symbolically given to regional administrators (Linduff 2006b: 309). By virtue of such

⁹ Grishin (1975: 60–61, 64) discusses three other slab burial cemeteries in eastern Transbaikal with cylindrical carnelian bead finds. He points out that these, as well as numerous turquoise beads, are some of the most notable exotic artifacts recovered from Transbaikal slab burial contexts. However, Grishin's hypothesis of a Southeast Asian origin for such trade items is probably not correct given Rawson's documentation of primarily northern and western finds within China.

material symbols from the royal court, a subordinate official's right to govern was perceived as coming from the center rather than having anything to do with the local official himself (Wu 2013: 73). As such, horses were a critical component in the material prestige system that partly underwrote the Western Zhou political process.

Faunal evidence for horses from sites across the Central Plain and Northern Zone does not convincingly demonstrate that domesticated horses were present in China prior to their appearance in late Shang contexts (Yuan et al. 2008).¹⁰ However, by 800 BC, horse remains in settlements and cemeteries as well as bronze horse-related equipment are pervasive finds in the archaeology of both the Northern Zone and Central Plain regions (Shelach 2009: 136). The absence of domestic horses prior to c. 1250 BC and their sudden occurrence in the most exclusive of elite burials between 1250 and 1200 BC, argue for their direct and purposeful importation from an external region. So far, the western and central parts of the Northern Zone have good evidence for domestic horses dating to the end of the second and initial first millennium BC. Horses are reported from habitations and cemeteries of the Kayue and Xindian cultures in Oinghai and Gansu provinces (Shelach 2009: 52) and at the Xicha settlement just east of the Ordos (Liu and Chen 2012: 388). While the western presence of early horses is to be expected given the early presence of chariots, the eastern portion of the Northern Zone was also an area long associated with horses and horse acquisition (Nelson 2008). During the late Shang period, horses from the northeast were given as tribute gifts to the Shang court, and bronze horse fittings appear in large numbers in the burials of Upper Xiajiadian culture (Sun 2003: 762; Di Comso 1999: 947). Additionally, images of horses and depictions of horse use for riding and chariotry occur in Upper Xiajiadian contexts during the early first millennium BC (Linduff 1997: 69-71). Faunal analysis of settlements and burial assemblages clearly confirms the presence of horses in southeastern Inner Mongolia, although the quantities of horse bone recovered there are much lower than those in the west (Shelach 2009: 56). This suggests either a different cultural understanding of horses or possibly an altogether different fate for the horses that were once present in the eastern part of the Northern Zone.

One possible explanation for the relatively low level of horse remains in the northeast is presented by events immediately south of the Upper Xiajiadian cultural region at the turn of the second and first millennia BC. In what is today north central Hebei province, including the area around Beijing, representatives from the newly founded Western Zhou state were granted the authority to establish an administrative province (i.e., the administrative district of Yan) in what was then the far northeastern territories of the new state. Wu (2013: 10, 89–91) argues that this political action was partly intended to secure and develop the great wealth in horses known to exist there. She (Wu 2013: 90–91) examines Western Zhou inscriptions referring to the appointment of the first ruler of the territory of Yan in which he was directed

¹⁰ The widely cited Qijia evidence for domesticated horse use in the early second millennium BC is in fact not very robust (Yuan et al. 2008: 95–96; Linduff 2003: 144; Chen 2013: 113). When assessing domesticated horse presence in the Northern Zone it is especially important to keep in mind that zooarchaeological analyses are rarely reported and, much like the situation in Mongolia, archaeologists must anticipate better data and analyses in the near future.

to govern several groups including one referred to as the "horse people." Accordingly, horses were one of the primary kinds of local wealth opulently displayed within the earliest Yan tombs discovered at the elite cemetery of Liulihe near Beijing. The site of Liulihe is associated with the Western Zhou capital of Yan and comprises a royal cemetery of more than 200 burials with 26 horse and chariot pits not far from the remains of a large urban center (Sun 2003: 761). Within the cemetery, burial M202 and the associated horse and chariot pit M202CH (c. tenth century BC) stand out as particularly rich examples of horse ritual with over 42 horse sacrifices, seven chariots interred, and numerous bronze pieces of horse and chariot equipment fashioned in northern steppe style (Linduff 2006b: 310; Wu 2013: 89). Notably, the horse count far exceeds the number of animals needed to drive the seven chariots suggesting that the ability of the Yan elite to access horses was conspicuously on display at this funerary event (Wu 2013: 89). Contacts with groups farther north, such as those of the contemporary Upper Xiajiadian culture, would have been the logical source of this horse wealth.

While the Liulihe burials of Yan were constructed according to Central Plain practices, their incorporation of steppe style artifacts is suggestive of the importance of non-Zhou peoples within Yan political culture. Other burials contemporary with these early Liulihe contexts (c. tenth century BC) were discovered only 70 km to the north of the Liulihe center at the site of Baifu (Changping, Beijing). The Baifu cemetery contains what are clearly Northern Zone style burials, but their close proximity to the Yan capital argues for a strong and early link between Yan and Northern Zone groups of northern Hebei, eastern Inner Mongolia, and western Liaoning. The Baifu cemetery is not considered to be part of Upper Xiajiadian culture but bears many similarities in terms of the bronze artifact assemblage. Consistent with Upper Xiajiadian mortuary practices, the Baifu burials do not have much evidence for horse skeletal remains, but instead, the richest interments at the cemetery have large assemblages of horse-related gear including bone cheekpieces and numerous steppe style bronze tools, weapons, and decorations (Wu 2013: 91-93). The notable fact that Zhou style bronze ritual vessels, probably made in the Yan capital itself, were also included in the richest and most elaborate burial contexts at Baifu indicates a clear intermixing of Northern Zone and Central Plain traditions (Linduff 2006b: 309). This cultural trend in the northeast leads some scholars to argue that the early Yan administrative province (later the Yan state) cultivated a form of hybrid culture resulting from the importance of sustaining frontier interactions (Linduff 1997: 28; Jin 2009: 194).¹¹ Contrary to models for inter-group conflict along the frontier, this kind of cultural interchange would not have been possible under conditions of intense warfare, state assimilation of local groups, and colonial style administration; rather it suggests conditions more akin to mutual alliance and coalition building.

¹¹ As Jin (2009: 167–172) describes it, the archaeological patterns of northern Hebei sites at this time show such a degree of hybridity that archaeologists have had great difficulty assigning them to distinct archaeological cultures.

In fact, these patterns strongly support Linduff and Yang's hypothesis (2012) for prestige goods and identity networks in several regions along the Northern Zone made up of multiple centers and cultural affiliations. Such a network in the northeast would have included the early Yan polity, their immediate northern and eastern neighbors, and the slightly more distant Upper Xiajiadian peoples of southeastern Inner Mongolia and western Liaoning. Moreover, interactions between these cultural groups would have been mutually influential and not just one way as evidenced by the bidirectional transfer of specialized elite goods. For example, the dual geographic distributions of Northern Zone bronze helmets and Zhou ritual bronze vessels offer evidence in support of two-way cultural influences both north to south and south to north. Bronze helmets were technically difficult to produce, they were visually stunning given the luster of newly cast bronze, and they probably symbolized prestige rather than having been used in frontier warfare, as some scholars suggest (Shelach 2009: 70-71; Bunker 2009: 281-282). These impressive artifacts have been recovered in several Upper Xiajiadian burial contexts, most notably from the Nanshangen cemetery (Ningcheng county) (Linduff 1997: 70; Shelach 2009: 70). Two more helmets were excavated from high-status contexts (M2 and M3) at the Baifu cemetery (Wu 2013: 91–92), and still another helmet is reported from a royal Yan burial (M1193) at Liulihe (Sun 2006: 227–228).¹² This north to south distribution is the exact reverse pattern of south to north finds of Western Zhou ritual bronze vessels as documented by Shelach (2009: 127). These high-status elite vessels were cast in the Yan center and recovered mainly in Yan cemeteries with declining numbers documented in northern Hebei, Inner Mongolia, and western Liaoning. This two-way distribution indicates that while occasional conflicts may have broken out between northerners and the early Yan polity, alliances and collaborations were probably more representative of early interaction than was conflict. The hybrid aspect of Yan's political culture can be attributed to the need to sustain and strengthen these exchangebased alliances with northern groups. The movement of horses, in addition to a wide array of other exotic goods, styles, and technologies, was probably a primary motivation for building and participating in these long-distance relationships.

7.3 Follow the Horses: Steppe Influences on Statehood in China

Interestingly, the horses involved in these exchange networks probably did not originate in the Northern Zone but rather came from steppe regions even farther to the north and northwest. This is suggested by several lines of evidence. First of all, the sedentary lifeways documented in the Chifeng region were not well suited for

¹² One stylistically similar helmet was also discovered at the Gaohong site at Liulin (Shanxi province) near the eastern Ordos Loop and is considered slightly earlier than these northeastern examples (Rubinson 2006).

large-scale horse herding, even though more mobile lifeways could possibly have been practiced in other areas (CICARP 2011: 129).¹³ Second, there is good material evidence for contacts between the Upper Xiajiadian region and slab burial groups to the northwest where horse herding and expertise were widespread. Besides the mortuary and artifactual evidence already discussed above, the discovery in Mongolia and Transbaikal of bronze helmets very similar to those from the Nanshangen cemetery and other Upper Xiajiadian and northern Hebei contexts gives indication of these exchanges (Khudiakov and Erdene-Ochir 2010; Rubinson 2006). Two of these helmets were excavated from slab burial contexts at Egiin Gol (see Chap. 5) and two others are from unknown contexts in west-central Mongolia (Zavkhan province) and eastern Transbaikal (Chita district). The three Mongolian helmets for which metallurgical analyses have been conducted were each made from tri-metal alloys (Cu-Sn-Pb) similar to the bronzes of northern Hebei sites (e.g., Jin 2009: 174–175). The geographical route for such an interactive network would likely have included Xilingol of Inner Mongolia as well as eastern Dornogobi, Sukhbaatar, and eastern Dornod provinces of Mongolia. Unfortunately, all of these provinces are among the areas least studied by Mongolian and Inner Mongolian archaeologists. However, Mongolian archaeologists have reported a number of very large and impressive slab burial centers in these regions including Tsagaan Uul/Avargyn Ovoo (eastern Dornogobi province) and Buural Khangain Uul (central Sukhbaatar province).

Another source of evidence arising directly from horses themselves comes from genetics research. Both modern equid population genetics and ancient DNA analyses on horse remains from East and Inner Asia argue for a probable Mongolian steppe origin for the horses transferred into China during the Late and Final Bronze Age. These studies help to clarify how domestic horses arrived in the Central Plain at c. 1200 BC as well as the most likely routes for their entry. The main genetic clues are the timing of increased mtDNA diversity of horse populations within China, the process of producing that diversity, and where such diversity might have been geographically present during contemporary time periods. Some archaeologists have argued for the indigenous domestication of horses in China from wild populations of Equus ferus przewalskii (Przewalski's horse) known to have existed across much of the Northern Zone and in Mongolia (Liu and Chen 2012: 386–388; Cai et al. 2009: 835). The only remaining representatives of these East Asian horses went extinct in the wild during the 1960s, and the species has only recently been re-introduced to Mongolia from a small number of captured animals kept in urban zoos. A large number of DNA studies have determined that domestic horses were not derived from the domestication of Przewalski's horse, but instead, the two lines diverged tens of thousands of years prior to domestication (Jansen et al. 2002: 10909; Goto et al. 2011; Achilli et al. 2012: 2451).

Horses were originally domesticated somewhere on the central Eurasian grasslands 5,000–6,000 years ago. To date, the best evidence for this process is found at the Botai settlement in northern Kazakhstan at c. 3500 BC (Outram et al. 2009).

¹³ A new survey project in Liaoning has recently tested this proposition and discovered the same sedentary patterns as in the Chifeng region (Williams 2014).

Domesticated horses were quickly transferred between geographically dispersed human communities who found that breeding them and renewing herd numbers could be a substantial challenge. Based on the difficulties of trying to breed Przewalski's horse in captivity, these initial domesticated herds may have had significant problems with impotence, intra-herd aggression, and infanticide (Jansen et al. 2002: 10910). Therefore, geneticist argues that in order to maintain and increase horse numbers, these early groups had to continually re-stock their domestic herds by introducing fertile mares from local wild horse populations-a process known as female-mediated introgression (Jansen et al. 2002; Levine 2006; Cieslak et al. 2010; Warmuth et al. 2012). As a result, the maternal (mtDNA) lineages for both modern and ancient horse populations are extremely diverse and geographically intervoven. This diversity makes it difficult to pin down origins or geographical inputs to the domestic horse genome and contrasts with other domestic animal species which tend to have clear regions of origin. Such genetic diversity suggests that horse domestication was a long-term and multi-stage process and turning to ancient DNA samples may be the only way to unravel this intricate genetic history (Cieslak et al. 2010; Lei et al. 2009).

The number of DNA analyses on ancient horse bones from the Northern Zone of China is now growing, but so far, there are only four samples published that possibly predate the critical 1200 BC period, and these come from what are considered to be Lower Xiajiadian strata of the Dashangian settlement in Chifeng (Cai et al. 2007, GenBank samples DO90022–DO90025). Despite various discussions referring to these samples as dating to 2000 BC or even earlier, the latest chronology suggests they more accurately date between 2000 and 1200 BC. Still more problematic is the fact that Dashanqian is a multi-component settlement with later occupations during the Upper Xiajiadian and Warring States periods, and the mixing between Lower and Upper Xiajiadian layers is pervasive at the site (Shelach 2009: 53; e.g., Drennan 2011: 18). Given that horse remains are not known from any other Lower Xiajiadian context, these fragments may well belong to either the final phase of the Lower Xiajiadian period or, much more likely, they may be intrusive from Upper Xiajiadian contexts. In either case, they probably date no earlier than 1200 BC and, if so, could indicate the very beginning of northeastern regional interest in horses as a valued commodity. However, they almost certainly do not represent what Cai et al. (2009: 840) believe was a horse domestication process underway in the Chifeng region by 2000 BC.

While archaeologists are not certain whether these early horses were in fact domestic or wild animals (e.g., Yuan et al. 2008: 95; Shelach 2009: 50–51; Wang 2013: 95), the genetics team working with the samples argues that the morphometrics of the teeth and leg bones fit within the ranges for domestic horse (Cai et al. 2007: 545). Moreover, the two mtDNA haplotypes found in the Dashanqian samples (i.e., A7/X3 and F1/K3)¹⁴ are also known from other early domestic horses in Siberia and East Asia. While the mtDNA lineage A7/X3 entered the domestic horse genome in conjunction with the earliest horse domestication processes at c. 3000 BC in Kazakhstan or West Siberia, the F1/K3 maternal lineage is

¹⁴ These results are reported using two current nomenclature systems for horse haplotypes and haplogroups. See Jansen et al. (2002), McGahern et al. (2006), and Cieslak et al. (2010).
geographically dominant in East Asia and its earliest appearance so far is at Dashanqian, followed by multiple occurrences at other sites in the Ordos region during the first millennium BC (Cieslak et al. 2010: Table 2). F1/K3 is an important clue because it has a clear geographical distribution predominantly within East Asia, and its associated haplogroups K3 and K/F are most prevalent in early and modern horses from Mongolia (Cai et al. 2007: 547; Cai et al. 2009: 841; Lei et al. 2009: 942; Cieslak et al. 2010: 3). By the early to mid- first millennium BC, ancient domestic horses in the Northern Zone display such a degree of matrilineal diversity that it approaches the profile of modern day horse populations.

If we accept the strong likelihood of a later, rather than an earlier date for the Dashangian samples, then during the late Shang and early Western Zhou period (c. 1200-900 BC), the horses appearing at Northern Zone sites already had a substantial history of genetic intermixing, probably related to human mediated re-stocking. Given that prior to c. 1200 BC, there is little evidence for domestic horses, horse-related material culture, or even equid experimentation across the entire Northern Zone (Yuan et al. 2008; Flad et al. 2007; Linduff 2003), an early appearance of the East Asian F1/K3 haplotype in the domestic horse genome likely indicates introgression activities carried out elsewhere (Cai et al. 2009: 841; Lei et al. 2009: 942). This genetic evidence implies several conditions for the geographical regions and communities from which these earliest East Asian horses could have arrived. First, the degree of mtDNA diversity, including haplotypes from Kazakhstan and Siberia, suggests that the parent domestic horse population had already undergone a multi-regional process of introgression among western communities long familiar with horses. Furthermore, the respective horse population had already experienced introgression with East Asian wild mares, most likely mediated by eastern steppe groups with substantial experience in capturing, breeding, and herding horses prior to 1200 BC. Finally, these steppe groups must have had contacts with western peoples from whom genetically diversified domestic horses were originally obtained and likewise had contacts with Northern Zone groups who transferred horses into the dynastic centers of the late Shang and early Zhou states. Moreover, these different sets of interactions with western groups and with the Shang and Zhou would likely have been accompanied by material culture and knowledge transfers in addition to horse exchanges.

Prior to 1200 BC, the only region meeting these conditions for horse populations and horse expertise was Mongolia and specifically the central and westcentral parts of the Mongolian Plateau in the Khangai Mountain region. Although the Gansu–Qinghai area of the Northern Zone has been discussed as one potential region for early equid experimentation and possible domestication (Flad et al. 2007: 194), the evidence for domesticated horses in these western reaches during the mid- to late second millennium BC is still questionable (e.g., Jin 2009: 182). As discussed above, the northeastern regions around Chifeng probably had access to domestic horses by way of eastern Mongolia, Inner Mongolia, and possibly Manchuria, but likewise, the faunal and artifactual evidence from slab burials and Upper Xiajiadian sites suggests post-1200 BC exchanges were probably the case (Shelach 2009: 136). This leaves the sole possibility of an exchange network consisting of central Mongolia, the southern Gobi, western and central Inner Mongolia, and the regions just outside of the northern Ordos Loop. Perhaps not surprisingly, this is similar to the routes suggested above for chariot transmission.

Such a Khangai-Ordos interaction sphere would indeed have met all of the conditions required to fit the genetic and geographical data. These regions did indeed comprise areas having domestic horses from c. 1400 BC in Mongolia (e.g., khirigsuur and Ulaanzuukh-Tevsh cultures) and at c. 1300–1200 BC near the Ordos (e.g., Xicha culture). In both the north and south, there was an emphasis on horse-centered ritual practices. Furthermore, groups in the Khangai zone had contacts with northwestern communities in Tuva and Minusinsk as suggested by Karasuk-style artifacts and the probable use of chariotry. In addition, the genetic diversity of early horses moving southwards probably included other genetic markers as well, such as variation in genes that code for coat color which was a characteristic of interest to early horse breeders (Cieslak 2011). Oracle bone inscriptions reveal that the Shang court conceived of horse color according to a highly codified system of value and function (Linduff 2003: 156). This further suggests that an established set of beliefs relating to horse symbolism from groups long experienced in horse breeding was transferred along with the horses themselves, which again argues for a northern origin outside of China. In return for horses, groups of the Gobi and Khangai probably received, among other products, impressive bronzes forged in Karasuk style with high prestige value among steppe peoples. However, these bronzes were not produced in Siberia as their style would suggest, but manufactured by metallurgists in Inner Mongolia and probably by those associated with the early Xicha and Ordos Bronze cultures (Liu and Chen 2012: 385-386; Shelach 2009: 26). This "horses for bronzes" model is the same as that argued above for the eastern part of the Northern Zone and does not imply that such bronze work was not carried out on the Mongolian steppe, since metallurgical evidence suggests it certainly was (Erdenebaatar 2004; Legrand 2004; Park et al. 2011).¹⁵ Rather, just as with horse wealth, Karasuk-style artifacts acted as a common currency of value among steppe and Northern Zone groups, and transfers of such goods served to underwrite down-the-line relationships and exchanges between local leaders.

Although evidence points to the Khangai-Ordos zone as an initial introduction point for domestic horses, because of the desert, it was not an ideal route for moving horses prior to the advent of secure horseback riding. In order to traverse the arid Gobi, horse herders would have had to have traveled slowly with horses in small manageable groups probably tethered behind wagon trains or perhaps yoked in multiples to small two-wheeled horse carts (i.e., chariots). In fact, one possible function for such "chariot" carts, in contrast to their later political and military roles, may have been to safely move small herds of horses before riding allowed for

¹⁵ One significant difference may have been the volume of production and the technical sophistication of bronzes produced within Minusinsk and Inner Mongolian centers of metal working in comparison to what were lower levels of production within Mongolia proper. However, evaluation of this idea requires a much better understanding of early Mongolian metallurgy than currently exists.

controlled movement of larger herds over long distances. This would explain the many rock art images of one or more horses in tow along side the horses depicted as driving chariots. These extra horses could have been used for exchange and as reserve horses during long-distance travel (Littauer and Crouwel 2002: 114–117, 258–260). While the piecemeal availability of horses by way of the Khangai-Ordos circuit may have been sufficient for the rather small-scale needs of the Shang aristocracy, the political requirements of the Western Zhou would have encouraged a more diversified and high-capacity strategy. In addition to early transport through the Gobi (c. 1300 BC), horses were subsequently obtained by way of the uninterrupted and expansive grasslands of eastern Mongolia and southeastern Inner Mongolia (c. 1100/1000 BC) and resulted in their presence among Upper Xiajiadian groups. Moreover, horses probably also came through the Qinghai–Gansu region (c. 1000/900 BC), as well as being indigenously bred somewhat later within the western parts of Zhou territory (Lei et al. 2009: 934).

These three Inner Asian regions (i.e., eastern, west-central, and western) became involved in distinct down-the-line networks of exchange at slightly different times and with different sets of communities comprising each distinct interaction sphere. In the far west, communities of Qinghai–Gansu interacted primarily with groups in eastern and northern Xinjiang and in turn with peoples of far-western Mongolia and eastern Kazakhstan. Ordos groups maintained contacts via western and central Inner Mongolia to steppe communities in the southern Gobi and the west-central Khangai region and even further northwards into Tuva and Transbaikal. Finally, peoples of northern Hebei and the Chifeng region had ties to groups in Manchuria, eastern Inner Mongolia, and eastern Mongolia, and indirectly, these contacts reached as far as eastern Transbaikal. The Ordos and Chifeng interaction spheres were differentiated by the arid Gobi regions west of the Taihang Mountains and the comparatively rich grasslands and forests eastwards of these mountains. This environmental gradient had ramifications for the ease of movement and exchange between the Mongolian steppe and the Northern Zone that resulted in differences in material culture between the Ordos and Chifeng regions. The most obvious distinction is the very early presence of chariot technology in the Ordos and its absence in Chifeng, but differences were also reflected in the makeup of bronze artifact styles and even in dominant modes of pit versus cist mortuary traditions (Bunker 2009; Shelach 2009: 126-127). Without doubt, these patterns in the Northern Zone echo the geographical distribution of khirigsuur and kurgan cultures in western Mongolia and the slab burial cultures of eastern Mongolia.

By the early to mid- first millennium BC, peoples of the Northern Zone were introduced to the same technological innovation that was already sweeping across Inner Asia: secure and competent horseback riding. As discussed in chapters five and six, this was associated with the appearance of bronze jointed snaffle bits that allowed for close control of a horse's movements and saddles that facilitated longer distance riding. The earliest snaffle bits appear in both northern and southern Xinjiang by c. 850 BC (Wagner et al. 2011; Guo 2009: 108) as do early saddles in the south at c. 900–800 BC (Linduff and Olsen 2011). Snaffle bits are found in burials of the Chifeng region along with bronze images of horse riders by

c. 800–700 BC (Linduff 1997: 70–71; Shelach 2009:56), and they also occur in the greater Ordos and Ningxia region by c. 700 BC (Jin 2009: 149–152; Kawami 2006). Moreover, most of these bits are of the exact same types recovered from Arzhan 1 and from burial contexts and surface finds in the Minusinsk Basin, Mongolia and Transbaikal, and eastern Kazakhstan.

It is interesting, however, that in the Central Plain of China and probably in the Northern Zone as well, snaffle bits were adapted primarily for use with chariots which were already deeply embedded as cultural symbols of prestige and military power. Just as this new bit technology made a riding horse more manageable, it also greatly improved a driver's control over a multi-horse chariot team (Drews 2004: 90). Unfortunately, this mixing of technique and technology makes it difficult for archaeologists to discern how prevalent horse riding became in the Northern Zone as compared to chariot use. We do know, however, that by c. 300 BC textual sources report that the Chinese Warring States, beginning with Zhao, purposefully adopted cavalry techniques from northerners (Di Cosmo 1999: 912, 947). Despite the longevity of chariotry among the Zhou states of China, the main mode of inter-regional contact, transport, and horse exchange between Mongolia and the Northern Zone relied upon the ability of steppe groups to ride horses during most, if not all, of the first millennium BC (Linduff 2006b). A few centuries later, these early long-distance interaction spheres, firmly established during the Final Bronze Age, would prove pivotal to the rise of both the Xiongnu state and the Oin empire.

7.4 How the Eastern Bronze Age Came to an End: The Politics of Entanglement

In the previous three chapters, I have described the spread of some basic cultural building blocks. These were acted upon in different ways in numerous different settings and gradually configured a multi-regional geography of inter-group investments and dependencies. Over time, these long-distance relationships and their uncertainties altered the quality of local politics. Archaeology documents not only the many ways that wealth, prestige, status displays, and political investments gradually linked communities across thousands of kilometers, but it also brings out the variability across Inner Asia, a macro-region all too often seen as "homogeneous steppe" peopled by "homogeneous herders." The fact that a majority of communities surrounding Bronze Age Mongolia seemed to have practiced low mobility agro-pastoralism or sedentary farming with herd husbandry is an important contrast to the cultural and social emphasis on both animals and full residential movement within Mongolia. This contrast would have translated into clear differences in knowledge and technique with regard to managing animal communities, and in turn, this may have been one reason that the multiple values of horses as wealth, symbols labor, and transport were realized early on in Mongolia.

I certainly do not intend to imply that horses, any more than bronzes or monuments, were the sole driving force behind the Inner Asian Bronze Age. Bronzes, horse bones, and monumental sites are some of the remains that archaeologists can readily identify and can track over time and space, but these are just three elements in an interactive repertoire that certainly involved many other materials and ideas. A good example of this "tip of the iceberg" perspective that is so common in archaeology, is provided by Inner Asian historical research. Textual studies comparing late Shang and initial Zhou period inscriptions demonstrate a new interest in sky deities with the inception of the Western Zhou state. Sky worship is a very old tradition among steppe peoples, and some historians view this as a transfer of Inner Asian religious ideas via the Zhou court into China-beliefs that enabled the Zhou kings to proclaim themselves the chosen sons of heaven and thereby legitimize and strengthen their rule (Di Cosmo 2002: 172; Shaughnessy 1989: 7; Beckwith 2009: 1-3). Later in time, the political concept of a mandate from heaven became part of the institution of rulership in China. Even though archaeologists cannot directly confirm this kind of transfer, which was essentially a sharing of ideas, the artifacts and animal remains that do appear in the archaeological record are good at revealing new contacts, transfers, and dependencies. Knowing that steppe style bronzes, chariots, and horses were foundational to Zhou politics in the Central Plain makes the case more probable that, along with technology and animals, concepts such as sky worship may also have been transferred and elaborated upon in the context of China's developing traditions of statecraft.

Along these lines, I have paid particular attention to horse-related technologies and the making of "horse culture" as one aspect of the Bronze Age that exposes early inter-regional entanglements and their associated politics, all of which, of course, involved much more than just horses. Indeed, horses have already received much attention in archaeological discussions of the Late and Final Bronze Age world, though much of that has been focused on the question of mounted warfare and when it was that horses were first used for military purposes (e.g., Renfrew 2002: 5-6; Hanks 2012). As I argue in chapter five, the mounted warrior and the ideology of battle associated with that form of warfare was a critical part of understanding nomads in Eurasia, but, in my opinion, too much of an emphasis on militarism underestimates why horses were so pivotal within Inner Asian societies early on. In fact, it is not until the Early Iron Age, and quite late in that period (c. sixth or fifth century BC), that archaeological indications of conflict suggest that warfare was even much of an issue within Inner Asia (e.g., Kiriushin and Tishkin 1997: 80, 86). Instead, once horses could be ridden, they became important for two alternative reasons. First, horseback riding connected communities in new kinds of networks by way of longer distance movement. Second, horses assumed new roles and functions that appealed to all social classes and thereby helped to unify larger political communities.

In the first case, horse riding offered what would seem to be a purely pragmatic advantage of more rapid and efficient transport. However, the social ramifications of that change in mobility made it especially significant. Horseback riding made possible face to face interactions at much greater distances and at higher frequencies, and, as a result, it had the effect of compressing social space. In other words, the occasion of more efficient movement produced greater contact between individuals, similar to what might be expected under conditions of growing population density (Anthony 1986, 1998). Following the adoption of riding, local communities could capitalize in new ways on relationships that had been in effect for centuries but only at infrequent and incremental rates of interaction. Socially and politically, this capacity marked a change from the older community-to-community or "down-the-line" pattern of interaction to a system of alliance building that could "leap-frog" local neighbors in favor of more distant partners with differentiated resources at hand. These alliances farther afield would have encouraged local neighboring groups to join interests and collaborate, thus supporting the first steps toward greater local area integration. From the point of view of a local community, therefore, horse riding had the effect of both social projection and consolidation. In short, a radically new relationship between geographic and social space became possible and this constituted a significant step toward a novel tradition of spatial politics.

In terms of local political relations, however, horse riding may have had an even greater impact on the way political communities coalesced based on the fact that riding benefitted all members of society, not just the local elite. Prior to the advent of riding, both khirigsuur and Ulaanzuukh-Tevsh contexts indicate that horses were used for feasting, ritual, and mortuary practices. They also had obvious inter-regional value, and they were associated with chariot driving—all of which imply that horses were important for marking social distinctions. On the other hand, Houle's (2010: 126–129, 146) evidence from the Khanui Valley for horse mortality patterns consistent with meat procurement may also indicate more widespread ownership. Clearly, prior to the Final Bronze and Early Iron Age, horses had some very specialized and some general uses, but these were a fairly limited set of functions in comparison to what riding would enable. Riding technologies which greatly enhanced horse control made it possible for even children and elders to ride like experts, and therefore, these innovations broadly democratized the use and functions of the horse.

By 900/800 BC in Tuva, the Altai, and eastern Kazakhstan, a new burial rite arose among individuals who were members of local lineages and probably of some prominence and political standing. Their graves were marked by small to medium circular kurgan-like structures with single or multiple internal cists containing individuals who were probably genetically related. While burial inventories usually comprised a small number of bronze, bone, and stone artifacts, the most notable inclusions were entire horses or horse heads and/or bronze harness gear such as cheekpieces and bits (e.g., Khudiakov et al. 2013; Kiriushin and Tishkin 1997: 61; Grach 1980: 25). By c. 300 BC, when the militaries of China introduced horse-riding techniques from groups in the Northern Zone, the implication was that most Inner Asian individuals were "brought up in the saddle" despite their social standing. Although local elites may have been involved in the initial acquisition of these technologies and riding skills, it is likely that common herders would have been enthusiastic adopters given the benefits for managing their herds. Consider also that the later military use of horses empowered commoners with a political voice since skill with a bow and a horse became the de facto means of military collaboration or resistance. These observations suggest that the multi-purpose use of horses had something to offer everyone and these benefits provided incentive to participate in collective organization that supported expanded

horse herding and horse upkeep. This common appeal and the broad applicability promised by horses equipped with their new bronze fittings and saddles were therefore perfect social instruments for convening larger political communities.

Moreover, the upkeep of expanded numbers of horses and the provisioning of their riding equipment were not practicable given the relatively small-scale social organizations typical of the Late Bronze Age. Maintaining riding horses required sufficient horse herd size, greater pasture and water resources, knowledge and breeding skills, raw materials for metal working, and bronze implements that were not at all easy to make. According to Dietz (2006), jointed snaffle bits had interlinked mobile parts that maintained certain angles in order to be effective. In South Siberian workshops, a single snaffle canon was cast, and then a sister canon had to be cast directly onto the loop of the first one. Dietz (2006: 158-159) believes that this was a significant technical challenge even for the best bronze workers, which may suggest why finds of such bits are numerous in and around those Inner Asian regions with developed capacities for bronze working, i.e., central and eastern Kazakhstan and the Minusinsk Basin (Kuz'mina 2007; Bokovenko 2000). However, these bronze working centers may not have been the places where substantial horse expertise, skills, and knowledge had accrued in order to make the most of horse multi-functionality. That would have required a skill set based on substantial experience with selective breeding, management, and seasonal mobility and likely would have been present in regions where communities had intensively focused on horses just centuries prior to the advent of riding-as was the case in central and west-central Mongolia. It is not surprising then that the genesis of Inner Asian "horse culture" is argued to have arisen separately and endogenously in Kazakhstan (Kuz'mina 2007), Minusinsk (Legrand 2006), Tuva (Bokovenko 2000), and central Mongolia (Novgorodova 1989), when in fact it arose in all of these places precisely because of the inter-regional contacts between them.

Thanks to these innovations and available expertise, horses rapidly attained substantial internal value to Inner Asian societies and their local and regional uses ramified. For example, horses assumed added importance for ritual and elite symbolism and social differentiation; they became a source of wealth and even a means by which to transport wealth; they facilitated long-distance alliance building and political empowerment; and, finally, horses were important for traction, household mobility, and for enhancing pastoral production. In addition to their greatly augmented internal value, by the early first millennium BC, horses had also attained extremely high external value especially within the southern and eastern regions of Inner Asia in response to increased demand from the Western Zhou state. It is not surprising, therefore, that toward the mid- first millennium BC, archaeologists recover evidence showing that horse symbolism began to mesh with the older forest animal symbols that had originally constituted the Late Bronze Age animal style art and belief systems. This evidence is clear from Pazyryk elite burial contexts in which scarified horses were ritually garbed in horned and antlered masks suggestive of deer stone engravings and the forest animal pantheon (e.g., Jacobson 1993: 57; Samashev 2012: 36; Argent 2010). In part, these synchronized developments, at the turn of the millennium, were responsible for the political, cultural, and technological

changes that archaeologists refer to as the early Scythian horizon and, consequently, they mark the end of the eastern steppe Bronze Age.

Although a focus on horses is informative, they are only one example to illustrate a larger phenomenon. It is not the horse per se nor even the capabilities made possible by the use of this animal that are primarily important for understanding the Inner Asian transformations at this time. Rather, the involvement of horses as a catalyst for new kinds of relationships between human beings should be the main focus. The growth and maintenance of horse-riding steppe communities would have favored collaboration between commoners and elites and between multiple local groups in the form of new kinds of expanded networks. In prior sections, I described archaeological evidence for such expansions in Tuva (e.g., Arzhan), in central Mongolia (e.g., at Egiin Gol and at Baga Gazaryn Chuluu), and in the Northern Zone (e.g., Upper Xiajiadian and the State of Yan). In each of these cases, the shape of local relationships became increasingly invested in other relationships beyond the local area, although in each place, the expression of these underlying processes was different. This is best exemplified by the extreme emphasis on monumentality, spectacle, and wealth at Arzhan as compared to the more modest symbolic networking between Upper Xiajiadian groups and their northern and southern neighbors. However, in all cases, local politics and enhanced scales of organization intersected with novel political resources that were not just simple things and materials per se, as might be suggested by a term like "prestige goods." They were more often combinations of knowledge, practices, technologies, animals or materials, and symbolic schemassuch as "horse culture." In order to be sustainable among steppe communities, these combined packages relied on multiple and complex inputs from both nearby and far away. To the degree that these inputs presupposed a certain configuration of contacts and interactions playing out farther afield, the Early Iron Age social orders emerging across Inner Asia were already deeply entangled in contingent relationships.

This overview of eastern steppe prehistory during the latter part of the Bronze Age and Early Iron Age establishes one central, but often overlooked fact. The Xiongnu polity did not arise among dispersed egalitarian herders, but among groups having had 800 or more years of experimentation with hereditary inequality, locally centralized leadership, and sophisticated political technique. In other words, the indigenous nomadic political tradition of the eastern steppe began long before the Xiongnu period and consisted of cultural and political knowledge derived from centuries of experience with small-scale politics.

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Chapter 8 Nomadic Alternatives: Forming the State on Horseback

The Bronze Age came to an end as a function of far reaching entanglements and increased interactions across Inner Asia that ushered in a new era. I argue that political investments in these far-flung networks-rather than climatic changes, mass migrations, charismatic leaders, or economic dependency on China-ultimately brought about the first nomadic state in East Asia. By the second century BC, the many communities of the eastern steppe had become integrated into various nomadic polities or confederations having names like Wusun, Yuezhi, and Xiongnu. These names are known from the historical documents of China, and while the Chinese accounts are a major source of information on the society, culture, and politics of these various political groups, the process by which they were founded is still obscure. We do know, however, that the Xiongnu polity was constructed from diverse political and economic traditions by way of the integration of distinctive Inner Asian groups. Moreover, the polity was large but also changed in territorial extent over time, especially as a result of almost a century of warfare with the neighboring Han dynasty of China. So far, no identifiable Xiongnu capital has been documented, although it is fairly certain that the heartland of the state was in north central Mongolia and Transbaikal, along the drainages of the Selenge, Orkhon, and Tuul rivers. This region holds the major Xiongnu cemetery sites and most of the known settlements. Based on radiocarbon dating, the time-span of material patterns associated with Xiongnu archaeology range as early as 400/300 BC and as late as 200 AD. It is in the nature of archaeological dating to have wide error ranges but despite this, these archaeological patterns probably precede and postdate the Xiongnu chronology given in the histories (i.e., 209 BC to c. 93 AD).

This difference in chronology is to be expected since what is being dated by the early historians in China and modern day archaeologists are different entities and processes. To the distant historian in the center of the Han dynasty, the Xiongnu political organization was primarily understood as an enemy. As such, the Xiongnu entered historical focus and became a topic of interest only when conflict with China occasioned a shift of the historical spotlight northward. On the other hand, archaeological excavation may detect an initial change in pottery or a burial practice indicating that some set of social and political processes had begun to assume material form. Pulling together these two very distinct perspectives on Xiongnu statehood in some coherent manner is the main objective of this chapter. While there are many unanswered questions about the Xiongnu political phenomenon, one mystery that archaeology is well equipped to reveal is how such a state came about and especially how it drew upon prior organizational precedents.

In the previous three chapters, I described these precedents up to the beginning centuries of the Early Iron Age at c. 800-700 BC. My focus here is on the later part of the Early Iron Age beginning at 400-250 BC, a time when political rivalries in many parts of Inner Asia resulted in competition, conflict, offensive alliances, and greater uncertainty in daily life. Perhaps because of this political instability, the later Early Iron Age is also marked by increasing elite investment in grand funerary monuments and impressive wealth as one way that political groups sought to display their prowess and compete for followers. In specific, I am interested in the final centuries of this period when organizational and cultural changes in central Mongolia suggest a new kind of political order that constituted the foundation for the Xiongnu state. However, in order to adequately describe these shifts in organizational patterns and material culture, however, a good deal of context is required for the histories and the archaeological site types of this dynamic period. To set the stage, I provide an overview of what the historical accounts have to say about Xiongnu state formation and give a detailed account of the kinds of archaeological remains left behind during the Xiongnu period. I then provide local- and regional-scale archaeological evidence for what took place in and around Mongolia as nomads of the later Early Iron Age constructed what came to be known as the very first "state on horseback."

8.1 Histories of the Xiongnu

Both archaeology and historical sources provide valuable evidence for the Xiongnu polity. These sources tell us that in addition to a population of mostly nomadic peoples, the state controlled a large geographical territory, exercised a powerful military capability, and maintained extensive networks of long-distance relationships (Watson 1993: 135–137; Di Cosmo 2002: 176–178). Statecraft innovated during the period of the Xiongnu state was re-instituted and modified by subsequent steppe polities including the Mongol empire (Sneath 2006), and therefore, this early period represents a critical watershed in East Asian political history. The search for evidence about the Xiongnu state traditionally has taken researchers to textual records; however, such evidence is not without its own unique problems. Both the corpus of documents and controversies over ways to combine the textual and material records continue to pose conceptual and methodological problems for archaeologists working on Xiongnu statehood.

Four political periods in the history of ancient China were contemporary with the textually known Xiongnu polity: the Qin empire (221–207 BC), the Western Han (202 BC–AD 8), Xin (9–23 AD), and the Eastern Han (25–220 AD). While early Chinese records are based on a dynastic model that gives an impression of a single-group wielding power for centuries, in fact, most dynasties were heterogeneous in terms of who actually held political authority (Hansen 2000: 5–6). The Xiongnu polity was likewise a dynamic and changing organization with major reorganizations during its textually assessed chronological extent of about 300 or so years. Despite many problems in assessing the textual sources, archaeologists working on this period in the northern steppe zone are extremely fortunate to have historical accounts of the early nomads as seen through the eyes of state historians in China. Some textual information, no matter how problematic, is still better than none at all.

The major textual sources containing information on Xiongnu society are the Shiji (c. 100 BC), the Hanshu (c. 36–116 AD), and the Hou Hanshu (c. 435 AD). There are also several minor sources and more recently discovered texts with important information, such as the Dunhuang wooden documents (Giele 2011). Of the major sources, only the first two were created by authors contemporary with the Xiongnu polity; and, of these, the Shiji text authored by Sima Qian (c. 140–86 BC) provides information closest in time to the emergence of the nomadic polity. The Shiji text was recorded during a period when the Xiongnu state was relatively mature and when the Han dynasty and their Xiongnu nomadic neighbors were embroiled in an intensive period of warfare sustained over several decades. These historical events are known as the Sino-Xiongnu wars (see Chap. 1).

What Sima Qian knew about the Xiongnu to the north, how he knew it, and how he chose to report his cultural and political insights are the kinds of questions that make the work of deciphering ancient histories exceedingly difficult. However, current scholarship on Han dynasty representations of the Xiongnu has made significant progress in assessing and answering such questions (e.g., Di Cosmo 2002, 2010; Goldin 2011; Miller 2014). The Shiji descriptions of the Xiongnu are likely to have been based on earlier textual sources, contemporary interviews with individuals having frontier experience, the author's own travels as well as his father's historical notes, and common knowledge within the Han court (Di Cosmo 2002: 267–270, 2010: 309). Among the limitations of this account are unavoidable deficiencies in information as well as textual reporting subject to cultural misunderstandings, bias, and rather extreme internal political agendas (Chin 2010). For example, what was regarded in the Han court as Sima Qian's lenient attitude towards the Xiongnu, eventually led to his official punishment by castration (Di Cosmo 2010: 316).

There is an added problem in that the Shiji text likely projects backward in time. In order to describe the earliest form of Xiongnu statehood a century earlier Sima Qian may have extrapolated from the Xiongnu culture, organization, and frontier relationships of his own day (Di Cosmo 2002: 142). In short, the Shiji is a remarkable asset for understanding the Inner Asian past, but it is one that must be understood as a textual representation of a distant group by cultural outsiders, created during a time of mutual conflict. Moreover, as a document composed under

the auspices of the Han state administration, the text was strongly influenced by both the personal interests of Sima Qian and the views of the court elite at that time (Hardy 1994: 58–60).

In spite of its limitations, however, the Shiji relates critical information including the earliest account of Xiongnu state origins and a detailed description of Xiongnu political structure. In Chap. 110, Sima Qian provides a description of the Xiongnu state as a large-scale, socially stratified, and centrally integrated organization (Watson 1993: 136-137). It was led by a hereditary elite that consisted of a single ruling house and three consort clans that provided senior marriage partners to members of the ruling house. Only members of these corporate groups were eligible for the highest political offices, which combined political authority, divine right, military leadership, and elite endogamy (Di Cosmo 2002: 176-178). The Shiji text describes a great many offices that supported rulership as well as a military-administrative decimal system of positions based on the number of horsemen a leader was responsible to mobilize, e.g., 10, 100, 1000, or 10,000, although there is some debate over the specificity of these actual counts (Kradin 2001: 208). Geographically, the polity was organized into a central section and eastern and western sections called the "left" and "right" kingships, respectively. The ruler of the polity, i.e., the Shanyu, and his royal court directly controlled the central district, while the kingships on the left and right were positions appointed by the Shanyu from among male members of the royal family.

In addition, the Shiji text contains the earliest account of the formation of Xiongnu political and military power under the steppe leader Maodun (also Modu, Mode, or Modun) (Watson 1993: 134-136). According to Nicola Di Cosmo's indepth analysis of the Shiji text, this process began in 215 BC during a period of crisis on the steppe caused by the Qin dynasty's expansion into the northern pasturelands of the Ordos loop, which is reported to have been the original homeland of the Xiongnu (Di Cosmo 2002: 174–176; Watson 1993: 133). As recounted by Sima Qian, Maodun was a member of an existing elite lineage but had been disenfranchised from attaining the highest political positions. He usurped power by innovating new military techniques and organization, assassinated his father to acquire a position of leadership, and then rapidly expanded militarily against neighboring groups (Watson 1993: 135-136). The sources and reliability of this account are not at all certain and many researchers view this narrative as myth making (Kradin 2001: 47-55; Beckwith 2009: 1-7; Di Cosmo 2010: 307-309). Nevertheless, most explanations for Xiongnu statehood take this passage quite literally with regard to its reported timing, process, and geography (Di Cosmo 2002: 178-186).

Such valuable descriptions require close attention from both historians and archaeologists; and, accordingly, there has been much discussion about the proper relationship between the historical and material records (Brosseder and Miller 2011: 30–31; Di Cosmo 2011: 38). It remains a daunting task to match the material remains of archaeology to peoples referenced in ancient histories (Sinor 2005). Moreover, the term "Xiongnu" as it was understood by Han dynasty peoples was used in different ways and lacks precise reference (Giele 2011: 75; Goldin 2011:

226–228). There is little doubt, however, that the primary referent of the textual name "Xiongnu" was a large and powerful political organization north of China; for this reason, the definition used here is an organizational one rather than an ethnocultural designation (e.g., Hanks 2002: 184–185). Comprehensive arguments have been made for a material culture, known mostly from Mongolia and Transbaikal, as a likely referent for the historical "Xiongnu." These arguments have been made over the course of a century based on textual and material comparisons of geography, dating, organizational patterns, and even historical descriptions of material cultural practices (Dorjsuren 1961; Konovalov 1976; Batsaikhan 2003). If our objective is to analyze processes of regional-scale political complexity somewhere to the north of the Qin and Han dynasty territories, then the material record of Mongolia is the most reasonable candidate.

8.2 Overview of the Xiongnu Archaeological Record

Developing the Xiongnu-period material record is critical to understanding nomadic politics of the Eurasian past. A great range of information is simply not found in textual sources, and, therefore, a number of important problems cannot be addressed using ancient documentary evidence. Questions persist not only about the emergence of the initial Xiongnu polity but also about the exact makeup of the sociopolitical context in which this organizational transformation occurred, a context about which the early Chinese historians had little knowledge. With a primary focus on the archaeology of Mongolia, the following overview is intended to give a description of the major site types of Xiongnu archaeology and associated material patterns with an emphasis on social differentiation and organization (Fig. 8.1).

Archaeological research on the Xiongnu period has been conducted for more than 100 years across the steppe zone of Northeast Asia and has contributed substantially to anthropological debates about nomadic culture and society. The association of a specific archaeological culture with the historical Xiongnu polity was first proposed at the end of the nineteenth century based on the burial excavations of Tal'ko-Grintsevich in the Transbaikal region of Siberia between 1896 and 1903 (Tal'ko-Grintsevich 1999). This hypothesis was further tested in the 1920s by the Kozlov expedition's numerous excavations of well-preserved elite tombs at the Noyon Uul cemetery of central Mongolia. The results of these field projects in Mongolia and southern Siberia showed similarities in material culture and similar burial configurations. These early observations were also supported by Sosnovskii's excavations in the 1930s and 1940s at the Siberian cemeteries of Il'movaia Pad' and Dyrestui. By the mid-twentieth century, Russian and Mongolian archaeologists had established that many of the excavated artifacts reliably dated to the period of the historical Xiongnu including many objects of Han dynasty manufacture, as would be expected. These results strengthened the original proposal that a specific material culture, mostly



Fig. 8.1 Map of the major sites of Xiongnu-period archaeology discussed in the text. *1* Egiin Gol; 2 Baga Gazaryn Chuluu (BGC); 3 II'movaia Pad'; 4 Tsaram; 5 Gol Mod I; 6 Gol Mod II; 7 Noyon Uul; 8 Duurlig Nars; 9 Takhiltyn Khotgor; *10* Dyrestui; *11* Khudgiin Tolgoi; *12* Tamiryn Ulaan Khoshuu; *13* Shumbuuziin Belchir; *14* Ukhaa Khudag; *15* Maoqingguo; *16* Xigoupan; *17* Taohongbala; *18* Hulusitai; *19* Aluchaideng; *20* Boroogiin Suurin; *21* Ivolga; *22* Bayan Under, Ivolga cemetery; *23* Tereljiin Dorvoljin; *24* Khustyn Bulag; *25* Khanui Gol Valley; *26* Sotnikovo 12; *27* Naimaa Tolgoi. Note that Liushiu and Jinggouzi are listed in Fig. 7.1

known from mortuary contexts, was likely related to the Xiongnu nomads of the Chinese histories (Konovalov 1975: 17–18; Rudenko 1962: 6–8; Ivanov 2011).

Surface survey and excavations at walled settlement sites, by Davydova and Miniaev (Davydova 1995; Davydova and Miniaev 2003) in Siberia and by Perlee (1961: 17–39) in Mongolia, recovered artifact assemblages similar to those known from Xiongnu-period cemeteries and began to add a much needed settlement perspective to the archaeology of this period. These excavations confirmed reports in the Han dynasty records of sedentary, agricultural centers in use among the Xiongnu, despite a consistent emphasis on the Xiongnu specialized pastoral economy in the texts. This material culture associated with the Xiongnu polity has now been documented across a large geographical area including all of Mongolia, sections of South Siberia, and some parts of Inner Mongolia. In addition, contemporary artifact types and some burial practices extend into Manchuria, Kazakhstan, Minusinsk, and Xinjiang as well, probably indicating exchange and

elite interactions with neighboring groups, including a substantial investment in the westward Silk Roads economy (Barfield 2001, see Chap. 9).

As mentioned above, some archaeologists and historians have proposed that the greater Ordos region of Inner Mongolia and Ningxia was the probable heartland of the Xiongnu (Di Cosmo 1999: 953). These researchers identify a number of mid- to late first millennium BC cemeteries including Maogingguo, Xigoupan, Taohongbala, Hulusitai, and Aluchaideng (Tian 1976; Tian and Guo 1986; Wu'en 1990) as evidence for such an association. This argument arises from a text-based geography identifying the Ordos as the Xiongnu homeland. Consequently, fairly weak evidence, such as artifact styles not associated with the early states of China or the presence of domestic herd animals, was deemed sufficient to link these sites to the textual Xiongnu. Subsequent analysis and dating have shown that the Ordos and much of Inner Mongolia was home to diverse groups that maintained significant connections to both the steppe zone of Mongolia and the Central Plain cultures of early China in the south (Shelach 2009: 126-133; Miller 2011: 562; Indrisano 2006, see Chap. 7). The material culture and organizational patterns are different from those associated with the Xiongnu in Mongolia and are also different from place to place within the Ordos zone. There is little evidence for the kind of regional complexity seen in Mongolia (Holotová-Szinek 2011); and furthermore, the few cemeteries having material patterns related to those in Mongolia are later in date (c. late second/first century BC to AD second century, e.g., Pan 2011).

Despite its relatively long history, Xiongnu-period archaeology is still very much in a developmental phase, employing new methodologies and analyses that focus on site types and data not previously considered. Regional survey, subsurface remote sensing, luminescence dating, artifact sourcing by compositional analysis, and bone isotope analyses are among some of the techniques now yielding new information about this period of prehistory. These approaches complement the traditional emphases on mortuary research and monumental site mapping. The use of radiocarbon dating was initiated in Mongolia in the 1990s; and, although major accomplishments have been achieved for site and ceramic periodization, eastern steppe archaeology still struggles with the problem of a relatively unrefined chronology. For the Xiongnu period, chronological data represent 100-200 years blocks of time at best. The problems and questions of dating will be discussed throughout this review. Despite these limitations, archaeologists have developed evidence to test major models for steppe lifeways, showing that material patterns sometimes contradict the long accepted statements of ancient historians.

Of all Xiongnu-period site types, burials and cemeteries are by far the best known and the most studied. There are two primary forms of elite burial during the Xiongnu period: one with an embanked ring feature made of stone and soil, and the other with a large platform-like mound and several levels of deeply interred construction (Miniaev 1985). Both were labor intensive and contain imported items, precious materials, and have prominent cemetery locations. Of these two, the smaller and more widespread form is the Xiongnu-period "ring" burials (Konovalov 1976; Tseveendorj 1985; Torbat 2004). These have substantial



Fig. 8.2 Example of a Xiongnu-period ring burial from the cemetery site of Khudgiin Tolgoi (Grave 1), the cemetery site plan, and a detailed rendering of the wooden plank coffin found within the burial chamber (after Yun 2009)

ring features on the surface measuring up to 14 m in diameter and below this ring of stones are pit interments ranging from 1.5 to 4 m in depth (Fig. 8.2).

Interred individuals were placed in a supine position and oriented to the north, northeast, northwest, or much less often, to the east or south. Burial chambers consist of an internal construction that can comprise a simple earthen pit, a pit with stone slab siding, a wooden coffin, or an elaborate coffin in a timber frame enclosure, as well as combinations of these structures. Finds have included the remains of domestic herd animals and wild fauna, ceramic vessels and bone tools, iron, bronze, silver and gold artifacts, and long-distance goods from China, Central Asia, and even from the Mediterranean (Lankton et al. 2012). Burial sites vary from having a single burial to having groups of over 350 burials. Examples of such cemeteries in Mongolia are Burkhan Tolgoi [at Egiin Gol] (Torbat et al. 2003), Khudgiin Tolgoi (Yun 2009), Tamiryn Ulaan Khoshuu (Khatanbaatar 2007), Shumbuuziin Belchir (Miller et al. 2008), Naimaa Tolgoi (Tseveendorj 1985), and Alag Tolgoi [at Baga Gazaryn Chuluu] (Amartuvshin and Khatanbaatar 2010: 232-242). Two cemetery sites from Transbaikal that have been intensively studied and are critical to understanding mortuary patterns are the Ivolga and Dyrestui cemeteries (Miniaev 1998; Davydova 1996).

Ring-shaped burials are commonly associated with the second type of interment, which have been described as platform, terrace, or aristocratic tombs. Major cemeteries with these large and impressive burials include Tsaram, Noyon Uul, Gol Mod I and II, Duurlig Nars, and Takhiltyn Khotgor (Miniaev and Sakharovskaia 2007; Polos'mak et al. 2008; Yerool-Erdene 2010; Erdenebaatar et al. 2011; Yun and Chang 2011; Miller et al. 2009). The large raised platform-like constructions are oriented approximately north–south in orientation and consist of a low rectangular or slightly trapezoidal earth and stone mound ranging in dimension from 8 to 46 m on a side with a height of up to 2 m above the modern surface (Fig. 8.3). On the south side, there is a sloping entryway as much as 37 m in length that accesses the upper levels of what is usually a much deeper central burial chamber in comparison with ring burials. The burial pits of these tombs can reach 18 m in depth, and the construction work overlying the chamber consists of multiple layers constructed from soil, stone, and wood (see Brosseder 2009: 256 for summary data).

Though there is variation in components, the burial chamber itself includes an inner and outer wooden construction of hewn logs usually made of larch or pine. Within the innermost chamber, a wooden coffin often decorated with gold ornaments and holding an interred individual is sometimes found, though disruption from pillaging or desecration has usually destroyed the internal contexts of these sites. A wide range of faunal materials is also commonly recovered, primarily consisting of horse bones, but also comprising skeletal material from cattle, sheep and goats, and wild animals. Though furnishings can be quite variable, the



Fig. 8.3 Cutaway view of platform burial 20 from the elite cemetery of Noyon Uul (after Polos'mak et al. 2008)

richest of these tombs contain precious metals and stones, large ceramic vessels, felt and woven fabrics, silks, glass and jade items, bronze mirrors, lacquer ware, and gilded horse gear. The geographical origins of these artifacts include China, Central Asia, South Asia, and the Mediterranean. Among the most impressive burial furnishings are Han dynasty horse drawn carriages interred in their entirety within some burial pits (Yerool-Erdene and Gantulga 2007).

Archaeologists have made substantial advances in dating these contexts, especially using AMS radiocarbon analysis; however, it is still too early to confidently delimit the chronological range of either of these burial practices. I present a series of radiocarbon dates for early ring burials below and while absolute dates from platform tombs so far fall within the first century BC to first century AD, reliably dated contexts are very few in number (cf. Brosseder 2009: 268–269). Because of this still under-specified chronology, researchers are unable to explain the geographical spread of these two different burial practices, though some promising hypotheses have been developed (Miller 2009; Honeychurch and Amartuvshin 2011; Eregzen 2011a). From a societal perspective, some archaeologists argue that these very large platform burials were likely related to the ruling houses of the Xiongnu polity (Miniaev and Sakharovskaia 2007: 201; Polos'mak et al. 2008: 85–87). The smaller ring burials, on the other hand, may have been the burial treatments provided to different ranks of intermediate- or local-level elite (Honeychurch et al. 2007b).

Habitation and activity sites of the Xiongnu period also show substantial differences in size, construction, and composition, in spite of the fact that to date very few of these settlements have been systematically studied (Bermann 2011). Archaeologists have located seasonal campsites of herding families as well as larger seasonal habitations that may have been associated with local elite activities (Honeychurch and Amartuvshin 2007; Houle and Broderick 2011). In addition to these campsites, large settlements having more intensive use and significant infrastructural investment have also been investigated. One example from the Egiin Gol valley is a site (EGS 131) with an extensive wall and ditch system perched above the main river on a substantial rise. Test excavations discovered a sparse ceramics scatter and a bronze mirror imported from China, but there was little evidence for consistent or repeated occupation. The function of this site is still unknown; but, given its prominent and defensible location, it may have been for temporary protection or possibly a site for hosting ceremonial events (Wright et al. 2009: 381–382).

Many larger walled and open-settlement sites have been mapped and excavated in Siberia and Mongolia as well. Some of these have planned layouts and include semi-subterranean houses, workshop areas, large central architectural structures, and very different kinds of use histories. The prominent settlements of Boroogiin Suurin in Mongolia or Ivolga in south Siberia are clearly village-like occupations where multi-resource production including farming, herding, and craft specializations was practiced (Davydova 1995; Pousaz et al. 2007). Others, such as the walled sites of Tereljiin Dorvoljin and Bayan Under (Fig. 8.4) may have been elite residences or ritual centers (Danilov 2011). This range of site structures,



Fig. 8.4 Plan of the walled settlement site of Bayan Under in southern Transbaikal, Siberia. *Black fill* shows areas of excavation (after Danilov 2011)

arrangements, and sizes suggests a great deal more functional and economic differentiation than is generally assumed of steppe societies.

Additional evidence for economic differentiation comes from a number of recent studies on Xiongnu craft production in iron and ceramics. The material culture of the Xiongnu period is distinguished from that of preceding periods by the preponderance of iron metallurgy and novel forming and firing techniques for ceramics. As I will argue below, the earliest indication of local change associated with the Xiongnu phenomenon is the appearance of iron objects and Xiongnu style ceramics in pre-Xiongnu-period burial and monument contexts. Archaeologists now know that craft production was carried out at both specialized workshops and seasonal campsites. These patterns were documented by the recently excavated ceramics kiln and iron production areas at Khustyn Bulag (Amartuvshin et al. 2011, 2012) and by the discovery of small-scale iron working at campsites in the Khanui Valley (Houle and Broderick 2011). Moreover, the iron working process employed at these sites was quite different from contemporary methods practiced in China, and most likely was an indigenous technology or one brought in from western regions (Park et al. 2010). Craft production was also not just a smallscale, local, or household endeavor. Ceramics manufacture at the Khustyn Bulag kilns seems to have included both a wide range of vessel forms and also ceramic roof tiles used at a walled settlements 50-80 km away (Eregzen 2011b: 1994-1995). This evidence contradicts historical research arguing that steppe peoples had a one-sided and relatively unstable pastoral economy that would not have supported the infrastructure needed for sophisticated craft production.

8.3 Archaeological Trajectories Toward Statehood: The Prelude, c. 600–300 BC

Throughout the later mid-first millennium BC, regional cultural dynamics were driven by increased access to horses and rapid mobility, intra-steppe political interactions, and greater interchange with state societies on the periphery of the Eurasian grasslands. By c. 700 BC, khirigsuur building seems to have stopped, the Mongun-Taiga kurgan culture of Tuva and western Mongolia ceased, and deer stones were no longer erected. In their place, a tradition of elaborate kurgan burials with stone cists and internal wooden structures spread broadly and with many varieties across western Inner Asia (e.g., Arzhan 2, Aldy-Bel', Maiemir, Pazyryk, Chandman-Ulangom) (Tsybiktarov 1998: 137; Griaznov 1992). In the eastern part of Mongolia, slab burial practices continued, but individual contexts and wealth inventories grew in size and richness although, in the latter case, inventories are difficult to quantify because of massive pillaging at slab burial sites (Chlenova 1992: 250; Nelson et al. 2009). In the central regions of Mongolia, western and eastern material patterns overlap and many of these monument and burial practices are found together in complex diachronic landscapes (Honeychurch et al. 2009; Honeychurch and Amartuvshin 2011; Horton et al. 2012). In general, these observations suggest a political setting with more formalized hierarchies, longer distance alliance-building, and prestige gifting between local steppe leaders. What were still relatively small-scale territorial polities were probably organized by local factions that were well connected externally and that favored a political ideology of leadership based on these network relations.

New technologies and productive techniques are also apparent, the most notable of which is the introduction of iron working in Inner Asia. Iron appears in Xinjiang burials as early as 800-700 BC (Guo 2009; Wagner et al. 2011: 15734) and slightly later at Arzhan 2 and in slab burial contexts of Transbaikal and Mongolia (Chugunov et al. 2006; Grishin 1981: 196; Navaan 1975: 84). Variations in herding methods in different regions, higher mobility, and a broader range of mixed food sources, including the first occurrence of cultivated grain at Mongolian Early Iron Age sites, argue for a more flexible and readily adaptable approach to daily life and pastoral nomadism (Murphy et al. 2013; Machicek and Zubova 2012; Machicek 2011; Honeychurch and Amartuvshin 2007). Although environmental and technological changes were certainly important during the Early Iron Age, another factor that shaped pastoral nomadism was a competitive political setting that began to embroil nomadic households and communities in issues of territory, alliance, loyalty, and ideology. These conditions transformed pastoral nomadism, not just as an economy, but also as a set of strategies for negotiating a novel sociopolitical existence on the steppe.

In conjunction with these major transformations, the first comprehensive evidence for violence and warfare occurs in Inner Asia at this time, even though the geographic distribution of such evidence is so far quite variable. Violent conflict seems to have been endemic in some regions, especially in the west and northwest of Mongolia and in South Siberia. Burials dating from the middle Early Iron Age have extensive evidence for skull impact fractures, parry fractures, and scalping (Murphy et al. 2002; Jordana et al. 2009). This is the first period during which specific weapon sets occur as furnishings in burials and, at the same time, the impacts of those same weapon types are well represented in the human skeletal record. Evidence for this shift toward interpersonal violence is especially apparent in burial contexts from cemeteries in the Altai Mountains of Russia during the fifth to fourth centuries BC (Kiriushin and Tishkin 1997: 80, 86).

Similar periodicity and geographical variability is evidenced by the regional picture from southwest Inner Asia. For example, a recent comprehensive analysis of an Early Iron Age pastoral nomadic population in the Kunlun Mountains of Xinjiang found little evidence for conflict-related trauma. The cemetery at Liushiu, from which the mortuary sample derived, was probably in use from the initial first millennium BC to about the sixth century BC (Wagner et al. 2011: 15734, 15736–15737). In contrast, roughly contemporary nomadic groups directly to the north in Xinjiang and further north in the Altai region of Mongolia show pervasive signs of violent mortality, especially among adult males (Eng and Zhang 2013; Jordana et al. 2009; Naran 2004, 2007; Mamonova 1982).

This degree of variability is likewise apparent in other parts of the eastern steppe zone. In north central Mongolia and in the Middle and South Gobi, there is still very little evidence for warfare or interpersonal violence despite substantial work on paleopathology, analysis of "weapon" sets, and study of potential defensive locations (Machicek 2011; Nelson 2010; Honeychurch et al. 2009). This observation must be qualified by the fact that skeletal assemblages from slab burial contexts are often incomplete and show a clear pattern of disruption of upper body portions of the skeleton, i.e., the parts most likely to reveal evidence for violent injury. It is also possible that the kinds of warfare practiced in some regions, perhaps with greater emphasis on archery, would have left fewer detectable signs of violence. There is at least one report of an arrowhead embedded in the ilium of an individual from a slab burial at the site of Sotnikovo 12 in Transbaikal (Dikov 1958: 62) and two other arrowhead wounds from the cemeteries in southeastern Inner Mongolia (Shelach 2009: 85; Eng and Zhang 2013: 236); but this occasional evidence from the eastern parts of Inner Asia does not support the pervasive arguments for predatory raiding, warfare, and inter-tribal violence among these populations (e.g., Dikov 1958: 62; Volkov 1967: 96; Grishin 1981: 197; Tsybiktarov 2003).

Burials of the first millennium BC furnished with decorated weapons and armor have been interpreted as belonging to a male warrior elite involved in frequent combat with neighboring pastoral groups. The bronze weapon and tool assemblages of some Early Iron Age burials are indeed impressive but the material record often problematizes what seem to be straightforward expectations for Inner Asian conflict and violence. One such case is the cemetery of Jinggouzi (c. 650– 350 BC) in southeastern Inner Mongolia where careful skeletal analysis reveals that females bore most of the evidence for violent trauma rather than young adult males (Eng and Zhang 2013: 238–239). Such discrepancies defy simple explanations for warfare and conflict among nomadic groups and encourage alternative thinking about burial evidence. While the role of conflict during the Early Iron Age is more complex than often assumed, in those parts of Mongolia where signs of violence are so far absent archaeologists still recover comprehensive evidence for burial pillaging and/or desecration during the first millennium BC (Frohlich et al. 2009; Houle 2010: 189; Fitzhugh and Bayarsaikhan 2011: 188; Honeychurch et al. 2009; Turkin 2004: 85). Although there are no obvious signs of warfare in these areas, acts of burial desecration indicate that these populations likewise experienced political contestation, local uncertainty, and conflict. Some degree of competition would indeed be expected as inequality, affiliation, and leadership became issues more pertinent to everyday life among nomadic communities.

From this setting of subregional polities that became linked in networks of competition and alliance, a novel set of material culture, technology, settlement patterns, and mortuary traditions began to appear in central Mongolia by the third century BC. These new material patterns mark the beginning of the period archaeologists refer to as the age of nomadic states. The emergence of early states is a challenging problem addressed by archaeologists in many parts of the world, but is especially difficult in Mongolia given the many methodological and theoretical hurdles. In addition, there are only a few areas in Mongolia studied comprehensively enough to begin answering such questions in any detail. Fieldwork at Egiin Gol and Baga Gazaryn Chuluu provides two examples of such area where new information on local events and processes immediately prior to Xiongnu emergence sheds light on the ways in which statehood came about.

During the early to late mid-first millennium BC, both Egiin Gol and Baga Gazaryn Chuluu were characterized by a similar set of material patterns consistent with slab burial culture as described in Chap. 5. In comparison with these earlier cultural patterns, the Xiongnu period brings radical changes to both research areas, but not without some continuity to suggest that, in most part, these two sequences of transformation were locally driven. The first indication of continuity between the Early Iron Age and Xiongnu material records in both areas is an overlap in chronology. This finding contradicts earlier work by archaeologists who traditionally have viewed the Xiongnu phenomenon as arising from northward migrations which displaced indigenous peoples. Despite this dominant model inspired by the historical record, other scholars have long suspected a connection between slab burials and Xiongnu mortuary culture (e.g., Dorjsuren 1961; Volkov 1967: 103; Wu'en 1990). History-based approaches to the archaeological record cast doubt on whether Xiongnu associated patterns should even be expected to occur in Mongolia and Transbaikal prior to the first century BC (Miniaev and Elikhina 2009). Furthermore, based on radiocarbon results, some archaeologists have argued for a gap of one to two centuries between late slab burial contexts and the first sites associated with the Xiongnu period in Mongolia and Transbaikal (e.g., Tsybiktarov 1998: 160; Kradin 2001: 30).

In contrast to this existing chronological framework, a growing body of evidence from a number of different areas argues for a fourth to early second century BC period as marking major political changes across the central zone of Mongolia. Not only do the latest slab burials with Xiongnu style assemblages fall into this date range, but the earliest examples of Xiongnu style burials and the first habitations sites with Xiongnu ceramics also appear at this time. These early dates have been met with some skepticism since they diverge markedly from textual expectations for a 209 BC date for Xiongnu state formation and even later dates expected for Xiongnu organization north of the Gobi desert. However, the diversity of sample types and contexts and the consistency of these early dates across multiple areas



OxCal v4.1.7 Bronk Ramsey (2010); r:5 Atmospheric data from Reimer et al (2009);

Fig. 8.5 Radiocarbon analyses from Mongolian contexts having early "Xiongnu" style material culture based on significant probability of a fourth to early second century cal BC date (2σ) . Three dates have been published incompletely as calibrated ranges with laboratory numbers only (indicated by *asterisk*). In addition to dates reported here for Egiin Gol (*EG*) and Baga Gazaryn Chuluu (*BGC*) contexts, dates run by other projects have been published in Torbat et al. (2003), Yun (2009), and Brosseder and Yerool-Erdene (2011). See Fig. 8.9 for the geographical distribution of these early sites

support the earlier chronology (Fig. 8.5). For the time being, these radiocarbon results should be considered not as outliers or problematic analyses, but as indications that a particular set of material culture and associated social changes likely appeared in Mongolia earlier than previously thought.

8.4 Patterns of Transition in the Egiin Gol Valley

The earliest signs of Xiongnu associated material culture at Egiin Gol are the appearance in a very few early contexts of ceramics sharing similar forms and decorations with Xiongnu pottery. These ceramics have been recovered from a small number of pre-Xiongnu slab burial assemblages of which two are particularly notable (Torbat et al. 2003: 33, 36) and from a Late Bronze Age khirigsuur monument (Hall et al. 1999: 136–137). In the latter case, the ceramics were discovered atop a rectangular stone feature within a khirigsuur complex and probably placed there long after the monument's construction. Sherds from two different pots were recovered along with two types of bronze arrowheads typically found from slab burial contexts. The sherds and arrowheads were found together and the pottery in question (Darkhan Uul type 6) was most likely manufactured locally (Hall et al. 1999: 146). The sherds, however, differ from slab burial pottery in the use of thong-wrapped paddle-andanvil construction and slow-wheel finishing. Moreover, the original ceramic vessel was a large jar with a small mouth, narrow neck, and an out-turned rim (Fig. 8.6). These features are suggestive of Xiongnu style ceramics, even though these sherds have other decorative elements and a firing technique that differentiate them from later Xiongnu pottery. Given that this particular monumental site had long been a place of activity and deposition, the association of these ceramics with the pre-Xiongnu arrowheads and stone feature is a distinct possibility, but not certain.

The two excavated slab burials (EGS 354a and EGS 118) with Xiongnu style ceramics give a more definite set of observations to consider. Since both burials could have been disrupted in antiquity, the possibility still remains that Xiongnu style ceramics were intrusive (Torbat et al. 2003: 43); however, these slab burials have additional characteristics indicating a late periodization. In addition to having novel ceramics, both slab burials have a northern or northeastern orientation usually indicative of Xiongnu-period burial practices. Moreover, one of these slab burials (EGS 118) contained iron artifacts and provided a radiocarbon sample that dated to 396–341/327–204 BC (95 % probability). These characteristics have prompted speculation as to whether the EGS 118 context might in fact be something other than a slab burial (Wright 2011). However, the slab-based construction and size, as well as recovery of other more typical slab burial artifacts, and its presence near a second slab burial all confirm the Mongolian excavator's original interpretation of this context as a late period slab burial (Torbat et al. 2003: 36, 45).

This initial evidence for new ceramic types and iron artifacts during the fourth to third century BC at Egiin Gol is contemporary with¹ the establishment of an

¹ In other words, statistically indistinguishable given the two radiocarbon dates and error ranges.



important habitation site (EGS 110) also having Xiongnu style ceramics. At the lowest levels of this site, excavations revealed a hearth dug into sterile soils with these distinctive ceramics scattered both around and in the hearth feature, along with carbonized bread wheat (*T. aestivum*). A sample of this grain from the feature was radiocarbon dated to 388–197 BC (95 % probability). Given the stratigraphic context of the hearth, this date range probably represents an initial occupation of a new site in a part of the valley that had previously been unoccupied. A single date of course cannot indicate the full use period of the site, but given the relatively dense artifact scatter encountered, occupation and re-occupation may have

continued for some time. This settlement area was probably used seasonally during warm months since its location in the main river valley is exposed and subject to extreme winter conditions. Furthermore, the initial area of the settlement is not known; but, in time it grew to $11,000 \text{ m}^2$, becoming one of a number of sites in the valley to establish a novel habitation pattern specific to the Xiongnu period.

The new pattern is characterized by substantially larger sites located along major rivers in open, visible, and highly accessible areas (Honeychurch and Amartuvshin 2006). In those places of central Mongolia where systematic pedestrian surveys have been carried out, somewhat similar habitation patterns have been documented during the Xiongnu period (e.g., Houle and Broderick 2011).² As evidenced by the EGS 110 site, this pattern of valley occupation was initiated early on. Furthermore, the recovery of bread wheat suggests this change may have been associated with shifts in local subsistence toward greater grain use and/or grain production (Honeychurch and Amartuvshin 2007). Isotopic dietary studies support this pattern at Egiin Gol while also demonstrating significant diversity in local subsistence regimes at contemporary sites elsewhere in Mongolia and southern Siberia (Machicek 2011: 176).

Although survey has clearly shown that several large Xiongnu-period habitations appeared in the Egiin Gol valley, few of these sites have been chronometrically dated, and none have been assessed in terms of their full or episodic duration of use. Given the large sizes and artifact densities of these new kinds of habitation sites, they likely represent seasonal occupations over multi-year periods. That said, a better understanding of site formation processes related to sequences of return and re-occupation for these sites is needed in order to fully understand the dynamics of Xiongnu habitation practices (Honeychurch and Amartuvshin 2007: 53; Houle and Broderick 2011). One point that is entirely clear about the EGS 110 habitation is that it was established in a location central to the Egiin Gol valley immediately below the largest Xiongnu-period cemetery on a neighboring bluff known as Burkhan Tolgoi. Moreover, the earliest burials in that impressive cemetery are contemporary with the initiation date of the EGS 110 settlement, implying concurrent changes in settlement characteristics, landscape organization, burial practices, and material culture (Honeychurchet al. 2007a, b).

The Burkhan Tolgoi cemetery has approximately a hundred burials and is one of the most thoroughly researched cemeteries in Mongolia. In conjunction with surrounding settlement data, the mortuary perspective from Burkhan Tolgoi adds a more complete and interesting picture of political and cultural transition at Egiin Gol. While there are ongoing issues with the full reporting of radiocarbon analyses

² In fact, Houle and Broderick argue that the Khanui settlement pattern during the Xiongnu period likely continues that of the Bronze and Early Iron Age since seasonal campsite locations are reused. Similar to Egiin Gol, site size increases in the main Khanui river valley, although not to the same scale. So far at Egiin Gol there is no evidence that earlier habitation sites underlie Xiongnu settlements and despite several sherd scatters of unknown periodization, there seems to be a notable lack of occupation in the upper reaches of most tributary valleys in contrast to earlier periods.

from the cemetery,³ the available information suggests that the earliest Xiongnu style burials were not only contemporary with the nearby EGS 110 settlement, but also with the latest phase of slab burial construction—all taking place during the critical fourth to third centuries BC. The very first Xiongnu ring burials in the valley were constructed near the southern edge of the Burkhan Tolgoi bluff and, although early in date, their construction conforms closely to that described above for ring burials of the mature mortuary tradition. The artifact assemblages include Xiongnu style ceramics, similar to those recovered from the nearby EGS 110 settlement, as well as iron implements, and the first valley items originating from Central Plain China (i.e., exclusive of Northern Zone regions) in the form of lacquer ware remains (Torbat et al. 2003: 64–66, 93).

Interestingly, the initial interments at the Burkhan Tolgoi cemetery represent a choice on the part of some unspecified local group for a very different kind of mortuary event using new construction techniques, materials, and artifact types. The source for these burial practices is still unknown, but there is no evidence for a sequence of experimental mortuary transition within the valley. Slab burials seemed to have been abandoned in favor of a new suite of funerary activities. From the available evidence, one explanation is that these new Xiongnu style burials were already part of a broader political movement that had a commensurate set of group practices and recognized material symbols. In other words, these practices were purposefully introduced to the valley as a way of affiliating with an existing regional identity of some kind.

Given the long-standing tradition of monumental burial construction prior to the founding of the Burkhan Tolgoi cemetery, we might expect some continuity in practices. While the earliest Xiongnu style burials are substantially different from slab burials, there are indeed a few indications of such continuity. One example is the eastern orientation of some of the earliest burials at Burkhan Tolgoi instead of the usual northern orientation seen in a majority of Xiongnu tombs. This variation has been argued to represent a vestige of earlier slab burial practices that carried over when Xiongnu-period mortuary beliefs were initially introduced (Torbat 2003). A spatial analysis of Burkhan Tolgoi radiocarbon dates demonstrates that the southern sector of the cemetery, consisting mostly of twelve eastward-oriented burials, was the first section of the bluff to have interments and was the area around which the other four spatial clusters grew over time (Keyser-Tracqui et al. 2003: 248). This argument for a mixing of older and newer practices is strengthened by the fact that the two slab burials with Xiongnu style ceramics mentioned above have northerly orientations that are unusual for the slab burial tradition (Torbat et al. 2003: 50-51). That said, the early southern sector of the Burkhan Tolgoi bluff also contains eastward oriented burials of later date and early burials with northward orientations, and so the conversation will likely continue over an interpretation of these Xiongnu burials with atypical orientations (Brosseder and Yerool-Erdene 2011: 57; Torbat 2011).

³ This situation may have improved with the very recent publication on Egiin Gol fieldwork by Giscard et al. (2013).

Locational decision making for the Burkhan Tolgoi cemetery also show an attentiveness to the preceding monumental landscape. Though the Burkhan Tolgoi bluff is in an area where no prior activity had occurred, the cemetery is not far from major complexes of earlier stone monuments including the Belsgiin Am Bronze and Early Iron Age complex (EGS 101) and the EGS 118 slab burial site dating to the very end of the Early Iron Age. The distance to each of these areas from Burkhan Tolgoi is only 1.5 km and the combined 3-km zone comprises one of the primary concentrations of slab burials, khirigsuurs, rock art, and associated artifact scatters from preceding periods (Fig. 8.7). The decision to locate new kinds of burial ceremonies in the foreground of these existing sites may have intentionally created continuity with the older monumental landscape. At the same time, it also created contrast by way of the unique bluff micro-setting and the novel activity set used for Xiongnu funerals.

These tensions between continuity and discontinuity suggest that the fourth/ third century BC transformations at Egiin Gol were choices made by local inhabitants. They drew upon non-local, regionally circulating ideas, materials, and performances, but they did so with a clear recognition of the existing monumental landscape. This would have been a good way to distinguish and bolster the legitimacy of one or two local factions by linking their agendas to a broader movement in regional politics. Such an explanation, however, assumes that there was indeed



Fig. 8.7 The central section of the lower Egiin Gol Valley showing the earliest habitation and mortuary sites of the Xiongnu period. These sites were established nearby to major Bronze and Early Iron Age sites including a slab burial context (EGS 118) that overlaps chronologically with the early Xiongnu sites

something transpiring "regionally" at multiple areas across the steppe at this time; and, furthermore, that it would have involved somewhat similar patterns and processes. Archaeological research at the site of Baga Gazaryn Chuluu, about 400 km to the south of Egiin Gol, helps to contextualize these changes and suggests that these were indeed part of a larger multi-local set of processes.

8.5 Gobi Desert Evidence from Baga Gazaryn Chuluu (BGC)

As might be anticipated given the environmental contrasts between Egiin Gol and the northern Gobi, ancient settlement patterns in the two regions are quite different. The BGC habitation record is represented by fewer, smaller, and more ephemeral seasonal habitation sites during the Xiongnu period. On the other hand, the monumental and mortuary landscape at BGC shows a much greater investment than at Egiin Gol arguing for the importance of events, gatherings, and ceremonial projects drawing in participants from across a larger geographic space surrounding the BGC ridge system. Interaction in the Gobi setting was spatially and temporally dispersed; and so, we might expect greater emphasis on collaborative monuments, ceremony, symbols of identity, impressive landscapes, and seasonal gatherings as parts of both social and political life. Accordingly, early politics here probably did not rely on consistent face-to-face interaction as much as at Egiin Gol. For that reason, the primary sources of evidence from BGC are based upon landscape, mortuary, and bioarchaeological analyses (Amartuvshin and Honeychurch 2010a).

The mortuary record at BGC is similar in many respects to that of northern sites and includes slab burials and Xiongnu ring burial cemeteries. Excavations were carried out on both site types in and around the granite ridges with greater attention devoted to Xiongnu cemeteries. There is radiocarbon evidence for the appearance of early Xiongnu style burials at BGC in the fourth/third century BC, roughly contemporary with the early burials at Egiin Gol. While these contexts were disrupted in antiquity, much like those to the north, their construction is typical of Xiongnu practices and includes relatively deep pits, northern orientations, internal stone slab cists or wooden coffins, as well as assemblages of Xiongnu style ceramics and iron artifacts (Amartuvshin and Khatanbaatar 2010). Furthermore, the two earliest contexts (EX07.25a and EX08.25) each contained artifacts obtained through extensive long-distance exchange networks. In the first context, fragments of a lacquer ware box with unique bronze handles likely originating in late Warring States workshops of China, mark the earliest example of artifacts from the Central Plain region at BGC (Park et al. 2011). The second burial contained numerous glass beads provenienced to Central and South Asia based on style, manufacture, and chemical composition (Lankton et al. 2012; see Chap. 9). Just as at Egiin Gol, the appearance of new long-distance goods in association with shifts in mortuary practice suggests organizational changes beyond the local level.

While radiocarbon analysis of BGC slab burial contexts is ongoing, the latest slab burial context that has so far been dated (EX07.07, 510–360 BC, 95 % probability) immediately preceded the earliest Xiongnu style burials (Amartuvshin and Honeychurch 2010b: 22). Based on these dates, the two practices were probably not contemporary; and, in contrast to the Egiin Gol record, there is less indication

of substantial overlap in slab burial and Xiongnu burial practices at BGC. Instead, the current chronology argues for a slight overlap or a very close sequential relationship between these two funerary forms. There is some evidence, however, for continuity between the local groups who built the latest slab burials and those selecting the novel Xiongnu ceremonies as a way to bury their dead. As at Egiin Gol, the earlier monumental landscape forms an important backdrop for the new burial areas selected for the first Xiongnu style interments.

One example is the early EX07.25a burial which is the largest feature in the Duraal site, the local name given to a small Xiongnu cemetery on the western side of the granite ridges. Overlooking Duraal on a low rise 700 m away are some of the largest slab burials in the entire BGC region and nearby is a prominent khirigsuur monument. Furthermore, the largest slab burial cemetery (BGC 217), which has the dated slab burial context discussed above, is situated less than three kilometers away from the Duraal site. Despite this pattern of spatial embeddedness within the earlier monumental landscape, the Duraal Xiongnu cemetery is in a distinctive micro-location, similar to the Burkhan Tolgoi cemetery. Duraal is offset from the main monument cluster and located in an open and accessible plain beyond the perimeter of the granite ridges where no prior monuments had been located. Again, the pattern is one of continuity and discontinuity with prior landscape organization, as observed at Egiin Gol (Fig. 8.8).



Fig. 8.8 On the western side of the granite peaks at BGC, the Duraal cemetery with the earliest Xiongnu burials dated so far are embedded in a landscape defined by preceding slab burial sites and khirigsuurs. *Shading* shows the approximate extent of the granite ridge

Another source of evidence in the study of these early Gobi Desert individuals, who were buried in the strikingly different Xiongnu style, comes from analysis of the isotopic makeup of their skeletons. Isotopic variation from the local geological environment can determine whether these individuals were born and raised in the BGC region or whether they were non-local migrants, bringing new practices with them. Currently, a comprehensive strontium (Sr) isotope analysis project is underway using BGC geological, faunal, and archaeological samples to assess human mobility and indigeneity. Geological strontium isotope signatures can vary over space and are absorbed into human bone, dentine, and enamel differently. Tooth enamel forms during childhood and incorporates a Sr isotope signature from the surrounding environment in the subadult years. Dentine and bone remodel and incorporate the Sr signature over the most recent years prior to an individual's death with additional input from burial soils. By comparing Sr isotopic ratios (⁸⁷Sr/⁸⁶Sr) in enamel to those of dentine or bone and then to baseline Sr in the broader environment, similarities or differences in an individual's birth locale and the place of adult residency and burial can be detected (Price 2008).

While the comprehensive baseline Sr data for the BGC region are still in process (Johannesson 2011: 269–270), a pilot study using Sr analysis indicates that at least the male individual interred in the EX07.25a burial at Duraal inhabited the BGC regional neighborhood during childhood and in his adult years prior to death. The individual's enamel and dentine isotope ratios are identical, and these values closely match signatures provided by contemporary rodent bones from in and around the greater BGC region. These comparative background samples of rodent bones were collected over the same spatial extent used by BGC pastoralists today. Moreover, the EX07.25a values also group well with the majority of BGC enamel signatures for other individuals from both the Xiongnu and preceding periods. As a cross-check on these results, oxygen isotopes from the enamel and bone samples of the EX07.25a individual were also analyzed and suggest the same conclusion (Machicek et al. 2012, forthcoming).

The combination of these results, and especially the correspondence of isotopic values for multiple individuals buried through time at BGC, indicates that the EX07.25a adult male originated from and was buried within a narrow geographic range that included BGC. Today local households engage in seasonal herd movements of over 80 km outward from the granite ridges, and so in this case, the term "local" in fact encompasses a relatively large area. Until the wider environmental baseline analysis for Sr around BGC is complete, the spatial variation or homogeneity of these so-called "local" values cannot be determined precisely. The preliminary results, however, indicate that one of the earliest Xiongnu style burial ceremonies was carried out for a local individual and presumably by a local group performing an entirely novel kind of funeral ceremony. Furthermore, these practices were being chosen and conducted in the same ways and at approximately the same time as the earliest Xiongnu burials at Egiin Gol.

These comparative archaeological observations from Mongolia's northern forest-steppe and the Gobi Desert add substantial detail to an understanding of
local process and Xiongnu-period transformation. To summarize what we know about the first steps toward Xiongnu statehood, concurrent patterns of change in material culture, technologies, and practices all associated with mature Xiongnu organization seem to appear earlier than current models suggest. These changes were simultaneous with major shifts in settlement and landscape organization and at some places in subsistence production as well. Moreover, these patterns are found in multiple areas and in very different settings at about the same time, which suggests some form of multi-local political movement. The early transitions observed at Egiin Gol and Baga Gazaryn Chuluu demonstrate both continuity and discontinuity with prior organization. This subtle patterning is important since it indicates that changes were not intrusive but were rooted in local agendas and decision making that took into account existing codes of social order.

8.6 A Regional Political Community: From Local to Macro-regional Perspectives, 300–200 BC

Since patterns of change are similar and contemporary at the Egiin Gol and BGC study areas, more than 400 km apart, it seems that during the fourth/third century BC, local groups actively participated in some form of regional interaction sphere that included a shared material, ritual, and symbolic idiom. Based on the distribution of early dates for Xiongnu style mortuary practices, this zone of regionally circulating materials and beliefs comprised a roughly north–south corridor within central Mongolia (see Fig. 8.9). If our definition of "Xiongnu" is an organizational one as I have proposed above, then these early signs of multi-local reorganization marked by the appearance of materials and patterns typical of the later Xiongnu period are indeed the very first steps toward statehood. This is especially true if "state building" includes experimentation in varying forms of regional complexity. This central Mongolian phase of multi-local participation in a broader interaction network during the fourth/third century BC was a beginning to these broader sociopolitical experiments.

In comparing archaeological results to current models that explain Xiongnu state emergence, it is clear based on the above evidence that significant organizational shifts began earlier and further to the north than historical models would predict. Moreover, these changes were not the result of new groups entering through migration or displacement, nor is there evidence for significant social disruption within the central regions of Mongolia. Although all current models describe the first steps toward Xiongnu statehood as beginning with conflict and conquest, given the material evidence from central Mongolia, this hypothesis of "conquest precedes politics" is not supported. The late Early Iron Age and early Xiongnu archaeological records as known from Egiin Gol and Baga Gazaryn Chuluu show no clear sign of conflict-related trauma, mortality, or wider-scale instability (e.g., Nelson 2010: 398–400; Nelson and Naran 2004; Naran 2003,



Fig. 8.9 Map of the early Inner Asian frontier with China and the associated archaeological sites mentioned in the text and in Fig. 8.5. *1* Egiin Gol; *2* Baga Gazaryn Chuluu (BGC); *3* Chandman' Khar Uul; *4* Delgerkhaan Uul; *5* Beikang village, north Xi'an; *6* Xiadu [lower Yan capital], Baoding, Hebei; *7* Xigoupan; *8* Khudgiin Tolgoi; *9* Ukhaa Khudag; *10* Tsagaan Uul/Avargyn Ovoo; *11* Duulga Uul

2007). In fact, warfare has not been evidenced by archaeology in any way as part of the political process of Xiongnu state emergence—at least as known from these central areas of Mongolia. This is in sharp contrast to the somewhat gruesome archaeological evidence for frontier violence marking the mature state period only a century or so later (Kovalev et al. 2011, see Chap. 1).

Instead, the local changes seen in the material record arose from regional interactions, inter-community visitations, and alliance building among dispersed local leaders in what was a central zone of increasing contact and shared organization. As I have argued, these patterns suggest that at several local areas, a subgroup or leadership faction introduced new practices and materials in a bid for increased legitimacy and authority. This would have been especially effective had these symbols been associated with a growing regional network of leaders, alliances, and longdistance prestige goods. Accordingly, political posturing as a part of local politics may have led communities across the central steppe of Mongolia to participate in this trans-local network. What made this network different from the incremental and small-scale alliances of the Early Iron Age was the degree to which the standing of local leaders was predicated on their involvement within this growing regional organization. In other words, the early Xiongnu interaction sphere of the fourth/third century BC was a form of proto-integration in which local political relationships were even more contingent upon regional conditions.

Still the question remains concerning how political authority might have emerged across this interaction sphere. Current models for the rise of the Xiongnu state argue that central authority was the product of a series of successful conquests of local groups by a single leader. Based on the archaeological evidence from Egiin Gol, BGC, and other areas within central Mongolia, warfare and conquest did not play that kind of a role in Xiongnu state building. If warfare and conquest were not the primary means of consolidation and centralization, then we must turn to a different conception of political process among steppe nomadic groups. Given that archaeology suggests some kind of regional sociopolitical movement and proto-integration within central Mongolia at the end of the Early Iron Age, what series of steps transformed this initial configuration into the expansive and centralized military power that eventually confronted the Han dynasty?

By drawing on the concept of a regional political community, as I have defined it above (see Chaps. 2 and 3), my goal here is to provide a suitable answer by emphasizing negotiations and shared agendas among communities of nomadic peoples. The key to understanding the link between nomadic political process and large-scale complex organization is the kind of local decision making that took place within a macro-regional context of heightened political dynamics and uncertainty. For the purpose of hypothesizing about such politics, political community is a useful idea to work with because it does not rely on coercion, conquest, or managerial strategizing to explain the rise of a translocal elite authority, but rather begs the question of what local, regional, and macro-regional sociopolitical events made such an authority widely acceptable. I offer archaeological and textual evidence to explain these conditions under which regional authority emerged as an entirely new form of leadership made possible by the participation of local leaders and common nomadic herders alike. Critical to this new explanation is a reinterpretation of the role of steppe peoples in the contemporaneous political events of the Northern Zone and the Central Plain of China.

8.7 Re-imagining the Macro-region: Multiple Centers and Multi-lateral Contacts

The textual history of northern peoples prior to the Han dynasty is a narrative of frontier interaction and incorporation as states expanded from the center of China outward. Northerners on the margins of Zhou civilization were conceived of as outsiders who lacked the ritual and cultural propriety of the center (Pines 2005). This ideology of "center and periphery" has been a tempting model for explaining interaction far beyond the frontier, even in regions where early historians had no genuine knowledge of peoples or conditions (Pulleyblank 1983: 447). As I argued in Chap. 3, East Asia can be better understood from the standpoint of multiple geographic centers of unique and largely independent political development. A glance at the map shows that the various groups and regions relevant to the question of the Xiongnu state formation were distributed over hundreds if not thousands of kilometers and these places were inhabited by very different peoples with distinctive cultures, histories, politics, and lifeways.

In order to include this substantial diversity, I focus on three geographic zones of archaeological and historical research in addition to the steppe region of Mongolia. These are the Northern Zone, the northernmost Warring States of China made up of Qin, Zhao, and Yan (c. 300/250 BC), and the Central Plain political heartland of China (Fig. 8.9). I have previously defined these zone and discussed the history and prehistory of interactions between their various communities during the Late and Final Bronze Age. Following on those ideas and evidence, I propose that networks of substantial interactions between these regions made the Northern Zone pivotal to the unfolding of events in both Mongolia and northern China. This process continued a long-term sociopolitical trend that was already in evidence as early as 1000 BC. Toward the end of the first millennium BC, interregional interactions via the Northern Zone and the politics contingent upon them had become quite elaborate. By 300 BC, as "all out and total war" engulfed the Warring States, fluctuations across these informal interregional networks would have had widespread organizational significance even for distant parts of Inner Asia (Lewis 1999: 627-628). I begin with a consideration of the research on Northern Zone interactions with the Warring States and then explore the contemporaneous interrelations between Northern Zone groups and those on the Mongolian steppe.

While interaction consistently expanded over time between the states of China and the Northern Zone, the final phases of that expansion witnessed extreme versions of cultural entanglement, sharing, and conflict. For example, a major advent during the late fourth century BC was the adoption from Northern Zone groups of horseback riding and mounted warfare by the militaries of the Warring States (Di Cosmo 1999: 951–952). This raises the important question about the nature of the changing relationships between the Warring States and the Northern Zone groups as Qin, Zhao, and Yan intensified competition between their respective polities. The typical view has been that warfare between nomads and border communities was the primary form of interaction within the frontier region (Barnes 1993: 146). These conflicts have been explained as either defensive actions on the part of states to ward off nomadic raiding or as aggressive state conquests and expansion for the purpose of accessing northern resources (Di Cosmo 2002: 153–154). Because textual accounts of these outlying relationships are neither detailed nor numerous (Bunker 2009: 274-275; Di Cosmo 1999: 962-964), historians have not given a great deal of consideration to what seem to have been frontier events peripheral to the central arena of state-on-state warfare in China proper.

Research on the material record, however, demonstrates a significantly different image of these interactions. Detailed technological and stylistic studies of Northern Zone prestige artifacts offer a more nuanced interpretation of what was probably a multi-lateral and more intricate interregional series of relationships. This research suggests the possibility of competitive alliances and collaboration between the northern Warring States and Northern Zone elite. Studies of metallurgical technology by Emma Bunker (1995, 2009) have built an impressive argument for the manufacture of northern style prestige objects in the workshops of Qin, Zhao, and Yan. According to Bunker, exchange between the northern Warring States and members of the Northern Zone elite grew in volume and changed in style specifically to match Northern Zone demands and tastes (Bunker 1995; 57–61).

Linduff (2010) adds intriguing evidence to support this manufacture and exchange process in her study of a late Warring States burial site (c. late fourth/third century BC) of the Qin state discovered in Beikang village, north of Xi'an in Shaanxi province. This burial contained casting models for the kinds of bronze and/or gold belt plaques favored among Northern groups and using Northern Zone styles and themes. Qin was not the only area involved in the manufacture of trade goods intended for northern groups. Similar finds of contemporaneous date are reported from the former territory of Yan where, for example, an assemblage of gold artifacts using Northern Zone styles, but having manufacturing inscriptions in archaic Chinese script, was discovered at the site of Yan's southern capital near Baoding, Hebei (Li 1985: 334–336). More evidence for such interaction is found within the Northern Zone itself and specifically in the Ordos region. The best example is the well-known silver and gold artifacts from late Warring States burials at the cemetery site of Xigoupan, some of which have manufacturing inscriptions from both Qin and Zhao workshops (Di Cosmo 1999: 956–957).

These material signs of closer ties between the northern states and Northern Zone groups argue for a more complicated inter-relationship. Linduff (2010: 94-95) has considered the evidence for Qin products intended for Northern Zone consumption and links it to a cultural change occurring in the Qin state during the late fourth and early third centuries BC. She refers to prominent shifts within the northernmost Warring States in which indigenous and northern cultural forms were emphasized in place of the dominant Zhou practices of the traditional Central Plain state culture. These shifts have been studied in detail for the Oin (Shelach and Pines 2006) and the Zhao states (Di Cosmo 2002: 134-138; see also Barnes 1993: 153 on Yan) and they suggest a novel openness to non-Central Plain cultural elements. Some of these internal changes paved the way for direct military benefits, one being the adoption of cavalry techniques for warfare. Others promoted new identities linking the culture of state elite more closely to the commoners upon whom they increasingly depended for success in battle. The best example of this is documented in the state of Qin where textual accounts and material culture suggest that a unifying state identity emerged emphasizing the northwestern indigenous heritage of Qin commoners and the state elite together (Shelach and Pines 2006: 219-220).

These changes marked a turning away from the traditions, ceremonies, and material symbols of the Central Plain Zhou states, which had long been intended to strongly differentiate elites from commoners. Instead, Qin and the other northern states sought to embrace their local cultures and identities as an internal strategy for uniting their populations and polities. Additionally, this trend towards greater political inclusiveness made possible new coalitions for external support. Textual records suggest that by the initial third century BC, Northern Zone groups had become regionally important actors in both the military campaigns and the elite politics of the northernmost states (Di Cosmo 2002: 154; Shelach 2009: 149-150). In other words, it is probable that direct alliances with frontier peoples had become a significant part of the strategic competition between neighboring states (Di Cosmo 2002: 135; Yü 1990: 119). Northern Zone groups had a long history of controlling the importation of militarily important resources such as horses, but they also possessed manpower and cavalry battle skills that were not yet fully developed among the Warring States. Given the intense and devastating conflict between Oin, Zhao, and Yan, Northern Zone groups would have had a strong position to negotiate very profitable alliances. In return for prestigious wealth items and trade goods, these groups likely offered military assistance against neighboring states by opening up northern fronts and draining military forces away from the major state-to-state engagements. In addition, strong Northern Zone allies would have been critical for access to resources from networks further to the north reaching into Mongolia and even Transbaikal (Di Cosmo 1999: 964). Interestingly, early textual accounts mention such military cooperation with a group referred to as the "Xiongnu" as early as the late fourth century BC, although use of that specific name may have been a later redaction or an anachronism (Di Cosmo 2002: 157; Pulleyblank 1983: 450).

Such an interpretation of the frontier would explain the subtle "push-pull" relations that the states of Oin, Zhao, and Yan had with their immediate northern neighbors. Given this scenario of opportunistic alliances, powerful Northern Zone groups might have been allies one day and enemies the next if a neighboring state offered better terms. In fact, this model clarifies several contrasting characteristics of northern frontier interactions that seem to suggest simultaneous collaboration and antagonism. For example, in conjunction with this developing exchange between the Warring States and the Northern Zone, there was also a relatively sudden focus on the building of defensive northward-facing frontier walls by Qin, Zhao, and Yan-walls that were the earliest predecessors of the Great Wall (Di Cosmo 2006; Waldron 1983). In a similar vein, historical accounts portray episodic frontier conflicts that alternated with alliance-building interactions, such as elite intermarriage (Bunker 2009: 284). While fieldwork and analysis are needed to further test these ideas, a preliminary case certainly exists for a complex set of relations between the northernmost Warring States and Northern Zone groups. I propose that these relationships were not just peripheral and incidental, but rather central to the rapidly evolving conflict between Qin, Zhao, and Yan.

8.8 Disruption and Upscaling: A Complex Macro-region in the Making

The follow-up question is how did such alliances within the Northern Zone play out in terms of relations with groups farther to the north on the Mongolian steppe? To give an answer, I first consider a particularly interesting observation made by Emma Bunker. Against the political backdrop of late Warring States interactions, Bunker argues that a qualitative difference emerged between the western and eastern regions of the Northern Zone in terms of quantity, style, and opulence of prestige artifacts (Bunker 1995: 64; cf. Shelach 2009: 126–127). In particular, Bunker (2009: 282–287) points out that the Ordos region is recognized as having a substantially "rich" archaeological record with a great deal of finely made gold, silver, and gilded bronze artifacts recovered as both surface and mortuary finds (also see Di Cosmo 1999: 953). This is substantially different from the contemporaneous mortuary record from the far eastern sections of the Northern Zone. These apparent differences in wealth may have been due to heightened competition between the states of Qin and Zhao to ally with a common set of powerful Northern Zone groups within the Ordos and associated regions. On the other hand, the Yan state with a long history of hybrid culture (see Chap. 7) perhaps established alliances with less competition and less need for opulent gifting.

These geographical distinctions between east and west are pertinent for what was simultaneously transpiring on the steppes of Mongolia during the late fourth and third century BC. Notably, the powerful and seemingly wealthy Ordos groups to the north and northwest of Qin were located directly south and southeast of the central regions in Mongolia discussed above, including Egiin Gol and Baga Gazaryn Chuluu. In other words, the Ordos Loop region is geographically continuous with the north-south zone in which early Xiongnu style material culture and practices suggest the presence of a developing political interaction sphere. During the third century BC, it is likely that alliance networks linked groups of polities from central Mongolia to the Ordos and then to the Qin state, even though groups in each of these respective areas were focused on their own distinct and independent political environments. As pointed out in the prior chapter, the prototype of this interaction sphere was already established by the end of the second millennium BC as a result of the early horse trade. Archaeological evidence from the Gobi supporting such relations with Inner Mongolian groups includes the fourth/ third century BC appearance of bronze artifacts with alloy formulas similar to those in western Inner Mongolia and Ningxia and the first appearance of items from workshops centered in China such as lacquered goods (Park et al. 2011: 815-816). Presumably, parallel networks of contact and exchange would have existed to the east of the central Mongolian core region as well. These networks would have linked outer steppe groups to the eastern flank of the Northern Zone and then presumably to the state of Yan or perhaps also to Zhao (Barnes 1993: 135-136).

From the end of the fourth century through the third century BC, the balance of power shifted dramatically in China due to a devastating series of conquests and integration pursued by Qin (Lewis 1999: 641). As Qin engaged and defeated the armies of Zhao and Yan between 260 and 222 BC, Zhao and Yan relations with Northern Zone allies would have collapsed or spawned peripheral conflicts as a consequence of destabilization (e.g., Rhee and Choi 1992: 84–85). For groups on the Mongolian steppe who were not at all involved in these events but were politically active with partners in the Northern Zone, these compromised networks may have had major political significance. Archaeological evidence indicates that, toward the end of the third century BC, the core region of Mongolia, to the north and northwest of the successful Qin state and the Ordos polities, continued as a zone of sustained organization. The material culture and patterns evident in that early north–south integrative zone of central Mongolia subsequently appear in the eastern and western parts of Mongolia by the second century BC. This outward expansion of material culture is suggested by the early radiocarbon chronology of initial Xiongnu contexts in the central regions and, so far, the lack of any such early dates from the western or eastern regions of Mongolia. This evidence, however, must be considered with some caution since there is an imbalance in the amount of survey, excavation, and dating between these different regions of Mongolia and, therefore, additional fieldwork and analysis are required.

Despite this need for complementary field research, survey results from Sukhbaatar and Dornogobi provinces in eastern Mongolia do support some organizational differences between the eastern and central zones. A multi-year survey and excavation project by Tumen and colleagues has collected data at the site of Delgerkhaan Uul in Sukhbaatar province (Tumen et al. 2010, 2012) and, about 100 km away, several years of fieldwork have been conducted by Amartuvshin and his research team at Chandman' Khar Uul in Dornogobi province (Amartuvshin et al. 2013). In contrast to Egiin Gol and Baga Gazaryn Chuluu, both field sites demonstrate clear patterns of landscape discontinuity during the transition to the Xiongnu period. Whereas surveys in the central regions of Mongolia reveal Xiongnu site locations that register the prior distribution of slab burials and khirigsuurs, the situation at these eastern sites is very different. Not far from Chandman' Khar Uul, the massive slab burial cemetery of Tsagaan Uul/Avargyn Ovoo was discovered indicating a major center of Early Iron Age activities, perhaps linked to the copper deposits and ancient mining in the vicinity. Interestingly, survey failed to document more than a handful of Xiongnu sites in the surrounding region suggesting that this early central place did not remain central in the Xiongnu period, but rather seems to have been abandoned. At Delgerkhaan Uul, the situation is reversed: Major Xiongnu-period cemeteries and habitation sites are present in substantial numbers but so far there is no evidence for monumental activity or habitation dating to the preceding period from c. 600 to 200 BC. Based on brief reconnaissance, this pattern of discontinuity in the east seems to be similar for another major Xiongnu cemetery just north of these two survey areas at the site of Duulga Uul in Khentii province.

In other words, the eastern Mongolian field research so far reveals a significant break between Early Iron Age centers and Xiongnu-period centers, offering potential evidence for a collapse of the earlier social order and re-establishment of a new one.⁴Such a landscape pattern would be expected if indeed eastern parts of Mongolia

⁴ In textual sources, the eastern regions were reported to be inhabited by members of the Eastern Hu confederacy that some equate with the slab burial builders (Kradin 2011: 194). Histories describe the early Xiongnu state's conquest of this polity which could therefore provide another possible interpretation for these site patterns.

had experienced a ripple effect of instability arising from indirect entanglements with groups far to the south. Under such conditions, local leaders of eastern Mongolia with ties to partners in the eastern part of the Northern Zone would have been politically vulnerable to the extent that their external alliances supported political legitimacy at home. Given that the later Early Iron Age was a period involving degrees of conflict and competition, it is likely that group allegiance was somewhat fluid. The downfall of alliance partners and the weakening of local leaders in the east may have provoked factional challenge, increased competition and conflict, or the wholesale loss of nomadic constituents. Sequences of disruption in the east, therefore, may have provided reason for eastern or east-central steppe groups to seek an affiliation with the stable political network in the central regions of Mongolia. This would have resulted in new leadership in the east, central places purposefully differentiated from prior ones, and the adoption of material culture and practices from central Mongolia.

Based on the above, I propose that the first increments of steppe state formation occurred within Mongolia as a three part transition related to "upscaling" as discussed in Chap. 2. First, beginning with the late fourth and early third century BC, small-scale steppe polities participated and invested in north-south alliance networks built upon exchange, ideas and practices, and common forms of material culture. These alliances reached as far south as the Northern Zone. Local leaders drew upon these ties to bolster their political standing at home, and, in doing so, generated trans-local political identities involving powerful but independent groups of communicating elite figures. Second, during the third century BC, the above series of macro-regional events contributed to differential instability across some of these networks, destabilizing local elite legitimacy and patron-client relations in the east but not in the center. The evidence from central Mongolia for patterns of continuity and low levels of warfare suggests greater political resilience in this zone (e.g., Honeychurch and Amartuvshin 2011: 204-210). Transfers of allegiance and affiliation from weakened political areas to more resilient ones favored the core region in which a more stable alliance of elite leadership was recognized by neighboring eastern and, perhaps, western groups. Third and finally, these secondary groups did not affiliate with individual local leaders in the central zone of Mongolia but rather affiliated with the collective identity of the alliance network. Their joining empowered and promoted an existing set of elite figures as a collective leadership. This group of broadly recognized elite households and lineages, situated in different local areas of central Mongolia, constituted a trans-local or "regional" core leadership that was at once a central authority and at the same time plural and distributed in makeup (cf. Sneath 2007).

8.9 Along the Way to Becoming a State

In summary, a political coalescence that is best understood as a "regional political community" formed a kernel structure for what would become the larger and more institutionalized Xiongnu state. This transitional form of regional complexity was based on centralized but plural leadership, hereditary inequality, and elite privilege—but was also characterized by consensual participation on the part of local leaders and common herders. The community as such already had an associated material and symbolic culture, a strong political identity, and very likely an emerging ideology of central authority. One aspect that is still obscure is the role of expansion, warfare, and conquest beyond the central zone of Mongolia. The process of eastern or east-central steppe peoples joining-up with an initial loose and flexible core polity, as described above, may have cooccurred with some degree of military mobilization and expansion farther to the east and west as described in the historical accounts, though there is so far little material evidence to support this. Without doubt, political expansion did occur and involved increased central authority and a further reorganization of local area politics.

This new model for Xiongnu state formation also has specific consequences for understanding East Asian trends in complexity beyond the steppe region. The first and perhaps most obvious implication pertains to the rise of the Qin empire in 221 BC. Most historians attribute Qin's overwhelming success in conquering its rivals to internal administrative reorganization (Lewis 1999: 611-616). Qin also obtained control over extensive agricultural and industrial resources by occupying regions to the south and southwest (Lewis 1999: 635). The above framework suggests that attention must also be placed on the importance of Oin's alliances with northern groups as indirectly supporting its success against Zhao and Yan. Rather than the typical historical interpretation that views northern groups as dependant on states in China, the rise of the first empire likely involved Oin's reliance on northern peoples. Furthermore, the hypothesized destabilization of small-scale polities on the eastern steppe during the third century BC was perhaps just one case of political change among others in the eastern interaction sphere. These shifts in macro-regional politics may also have had consequences for organization among early Manchurian and Korean complex polities as well (Rhee and Choi 1992: 77-86; Kang 2008). Clearly, a number of macro-regional, regional, and local processes interconnected at this time and, in doing so, marked a new age of states and empires across greater East Asia.

During the beginning decades of the second century BC, the regional polity, that we today endow with the textual name "Xiongnu," continued to transform. The expanding organization became increasingly formal and standardized in the arrangement of its politics, though consonant with the initial practices, asymmetric relationships, ideology, and organizational structures of the original regional political community as described above. At the same time, novel forms of political relationships and management techniques were innovated in order to accommodate the growing geographical expanse of the new state (Honeychurch and Amartuvshin 2011). In my opinion, the point at which these ongoing regional processes themselves, especially for a comparative study of statehood. Certainly by the mid- to late second century BC, the Han dynasty of historian Sima Qian was confronted not only by a developed and powerful nomadic state, but one that had geographical breadth and organizational capacity similar to that of an empire.

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Chapter 9 Not of Place, But of Path: Nomads on the World Stage

In the previous chapter, I focused on the first few decades of Xiongnu political emergence. Rather than call this coalescence a "state" per se, I suggest it is better understood as a kind of social movement that encouraged active participation and consensus given the prevailing context of the time. Macro-regional processes of instability and uncertainty favored changes in the frameworks for decision making on the part of commoners and this fostered compliance with an emerging state order. As Wright (2006) argues, many such "political communities" arose around the world at different times, but relatively few proceeded organizationally in ways that produced a state that was sustainable over multiple generations.

While the incipient Xiongnu polity provided some benefits, especially given a prior social setting full of uncertainty, after the first few decades steppe people appraised the advantages and disadvantages of participating in a large asymmetric political order according to quite different criteria. Nevertheless, through experience and negotiation commoners, intermediate elite, and central authorities constructed a form of collective statecraft that made "the state" a recognized and sustainable set of relationships over time. My main question, therefore, is why would herders, fully capable of remaining independent, participate in a large-scale organization that was founded upon inequality and social stratification over decades, generations, and even centuries? The answer must be sought in a combination of history and precedent, local conditions, perceived futures, and associated actions on the part of commoners and leaders alike.

If we accept the proposition that negotiation is the basis for statehood, it then follows that the negotiation process displaces central rulers as the supreme political architects of the state and instead positions them as just one more interest group among others. Within this transactional environment, rulers may have had asymmetric advantages of wealth and resources, but they also had the necessity to constantly bolster and secure those advantages. The steppe discourse, in particular, demanded the sharing of wealth and power since military service rendered by non-elites ultimately was essential for the projection of external authority and the safe guarding of internal order. The Xiongnu state was therefore a particular kind of arena which supported multi-scale and multi-actor negotiations and these negotiations pertained to how people and groups in the broader community decided to engage with each other day to day. No matter how a regional polity initially came about, the ways in which it continued to be constituted had to have been innovated through ongoing political experience between a wide variety of factions. Sustaining statehood among nomads could not be accomplished by coercion or strategizing alone, but required a combination of other factors including belief, symbolism, and prosperity, and most importantly, by forms of power-sharing. In this sense, the real work of state formation was not about centralizing authority, building a bureaucracy, or controlling populations and resources, but rather about how to enfranchise various power holders just enough to strike an unstable but tolerated political consensus that was sufficient to hold together a large and complex organization.

Given these propositions on the nature of statehood, what was the shape that this new nomadic state assumed over the first 50-100 years of its existence? What forms of integration bound together segments of Xiongnu society and to what degree was central authority genuinely involved and how was power distributed and shared? While archaeologists have not yet focused much on the problem of integration and centralization, historians have long debated the makeup of Xiongnu political fabric and especially the role of the royal court (Miller 2014; Di Cosmo 2013; Kradin 2011). The Shiji historical account of Xiongnu organization seems to describe a centralized organization based on regional hierarchy, local area integration, and some version of administration by which authority was delegated. However, historians have interpreted these passages in very different ways with some emphasizing centrally integrated rule, while others have argued for local autonomy among internal groups (e.g., Mori 1950; Yamada 1982). The debate boils down to whether state processes re-configured and dismantled the small-scale territorial polities of the Early Iron Age or whether these same polities persisted and participated in some form of confederated structure, albeit with some state-like characteristics. These questions can be broken down into three parts in order to query the archaeological record for evidence on local, regional, and macro-regional organization. First, to what degree did local areas transform as a result of organizational changes associated with the Xiongnu phenomenon; next, what evidence is there for central authority, integration, and delegation across the Xiongnu territory; and, finally, were Xiongnu external affairs consistent with patterns expected of a unified polity or a temporary confederation?

9.1 Xiongnu Landscapes at Egiin Gol and Baga Gazaryn Chuluu: Spatial Politics at Work

I have already described the earliest appearance of Xiongnu material culture and associated organizational patterns at Egiin Gol and Baga Gazaryn Chuluu (BGC). These patterns suggest continuity and discontinuity with prior organization and the evidence argues for local groups as the primary agents for these political changes. But following the late third century BC, the overall re-configuration of both of these local areas suggests that they were integrated into an entirely novel political order substantially different from what had gone before. Along with colleagues, I have previously examined some of these significant changes at Egiin Gol (Honeychurch and Amartuvshin 2007; Honeychurch et al. 2007a; Wright et al. 2009), and here, I provide an overview and comparative synthesis of those earlier observations. BGC is an informative case study for comparison because the quality of changes in the northern Gobi seems to have been quite different from that at Egiin Gol. In turn, both of these cases differ from the course of events reported by Houle (2012) and Houle and Broderick (2011) for the Khanui Gol Valley. My suspicion is that variability in terms of what transpired at different locales is crucial for understanding Xiongnu statehood, but it also necessitates archaeological observations at similar regional scales (i.e., 200 or more km²) in order to make comparisons. This degree of comparability is as of yet not available in most parts of Mongolia given the current state of field research and survey.

Turning to the Egiin Gol survey area, the most notable change in the archaeological landscape of the Xiongnu period is the size and location of seasonal campsites. In Chap. 8, I described this new habitation pattern as consisting of larger settlements appearing in the main river valley; a pattern different from the tributary valley campsites of the Early Iron Age. The average size of sites prior to the Xiongnu period is 0.25 ha and this increased during the Xiongnu period to 1.26 ha. If calculating the distribution of Xiongnu campsites by hectare, then 91 % of the documented living area was located in the exposed and accessible main Egiin Gol valley (Fig. 9.1). Because this part of the valley is extremely cold in winter, modern herders use these



Fig. 9.1 Xiongnu-period sites of the lower Egiin Gol Valley. Settlement area (m^2) and cemetery burial counts are represented by the size of the respective symbols

locations only in summer and early autumn, and the same probably would have been true during the Xiongnu period. Immature teeth and unfused bones of sheep and goats from these main valley sites demonstrate that animals of 5–6 months of age were present. Given a lambing season in March as is the case today, that would indeed provide good evidence for a summer occupation. Even the burials at the central Burkhan Tolgoi cemetery were likely constructed in the summer since their 2–3 m depths would have cut into very hard frozen soils at any other time of year.

The absence of what might be considered Xiongnu winter sites at Egiin Gol is something of a mystery. There is a distinct possibility that some of the currently undated sherd scatters in the uppermost tributary valleys might in fact belong to the Xiongnu period (Wright et al. 2009: 376–375).¹ On the other hand, Xiongnu ceramics are among the most readily detectable and dateable wares of the existing ceramic typology. Moreover, there is one tributary valley that has several Xiongnu-period habitation sites and these were easily identified, not to mention the fact that even earlier and more ephemeral habitations have been recovered in these areas. It is possible that colluvial conditions prevented our crews from detecting these sites or that the warm and cold season Xiongnu ceramic assemblages are different, although Houle's work at Khanui Gol does not support this idea. Otherwise, the only other explanation is that winter and spring sites were located primarily in areas outside the valley, potentially indicating an expansion of territory and involving inter-valley instead of intra-valley seasonal movement. A recent survey in the neighboring Tarvagatai Am just north of the lower Egiin Gol has indeed revealed several Xiongnu-period habitations, some of which were likely winter campsites (Gardner and Burentogtokh forthcoming).

While animal herding was clearly important at Egiin Gol during the Xiongnu period, as I discussed in Chap. 8, there is also evidence for cultivated grain from Xiongnu habitations (e.g., from EGS 110 and EGS 486), including the remains of bread wheat and millet (Fig. 9.2). So far, there is no definitive indication that these grains were grown within the valley; but because this region has been known historically as an agricultural zone from at least the time of the Mongolian empire, there is a good probability that grain was cultivated locally. An analysis of landscape productivity and settlement shows that Xiongnu-period warm weather sites were located in areas near to the best lands for grain cultivation: the larger the settlement, the more agricultural land was nearby and accessible (Honeychurch and Amartuvshin 2007: 47-48). Stable isotope analysis of human bone from the Xiongnu cemeteries at Egiin Gol gives additional evidence for this local agro-pastoral economy. Results suggest a primarily meat-based and most likely a pastoral diet, supplemented by river fish, all of which is also evidenced by faunal remains recovered from habitation sites. This diet is not too different from the Early Iron Age one, with the exception that the δ^{13} C values in Xiongnu-period skeletons reflect contributions from a mix of C₃ and C₄ plants probably indicating domestic grain consumption (Machicek 2011: 123).

¹ Excavation work at many of the sites discovered by the Egiin Gol survey is ongoing as of 2014. Based on future radiocarbon analyses and expanded sherd assemblages, I expect that some sites will indeed be added to the current Xiongnu settlement pattern.



Fig. 9.2 Grains of bread wheat excavated from the EGS 110 Xiongnu settlement at Egiin Gol

Based on all of the above evidence, the Xiongnu-period patterns at Egiin Gol suggest summer and early autumn aggregations of population, perhaps associated with a newly established agricultural production regime.

Another important aspect of Egiin Gol landscape organization during the Xiongnu period is the appearance of two substantially large settlements at either end of the valley (Fig. 9.1). These locations are particularly interesting because they are located at the mouths of tributary valleys leading to the primary passes in and out of the river basin. In other words, any group entering or exiting the main valley would necessarily transit nearby one of these settlements. The two sites in question are approximately 4 ha in size and are the largest Xiongnu habitations known from the greater Egiin Gol region. Their surface finds are distinctive from other habitations and include coins from china, armor plate, horse gear, and so on. Some of these items are similar to artifacts recovered from burials at the centrally located Burkhan Tolgoi cemetery and at other major cemetery sites within the Selenge River basin (e.g., Miniaev 1998). However, the most common finds from these large settlements are ceramics and these, along with other ceramic samples from local and regional Xiongnu sites, provide a useful test for determining how special these large sites were. Chemical analyses of ceramics and clays from the Egiin Gol valley using neutron activation analysis has contributed a baseline set of elemental signatures for local pottery production. These can be used to distinguish

between local and non-local Xiongnu ceramic wares (Honeychurch 2004: 172– 203). In order to provide an expanded picture of Xiongnu pottery and its chemical variability, sherd samples from settlements and cemeteries along the lower Selenge basin and extending into Transbaikal were obtained and entered into the analysis. The study results show that Xiongnu-period pottery was indeed moving between major sites within this large northern region and, furthermore, non-local pots from Siberia were disproportionately ending up at the two very large settlements in Egiin Gol. Smaller sites in the valley did not have similar assemblages of non-local wares. This suggests special pottery transport to these sites perhaps for visitation, gifting, feasting, or other activities carried out at what were unique and quite large seasonal habitations probably associated with local leadership.

These major differences in settlement sizes and assemblages reinforce other evidence from the Burkhan Tolgoi cemetery for social differentiation (Erdenebaatar et al. 1998, 1999; Murail et al. 2000; Honeychurch et al. 2007b). Very few people in the greater Egiin Gol region received the kinds of funeral events and impressive burials represented at Burkhan Tolgoi and four smaller cemetery sites within the survey area.² Moreover, such cemeteries do not appear in neighboring valleys such as Tarvagatai Am, making the nearest Xiongnu cemeteries outside of Egiin Gol the two relatively small sites at Bugat on the far side of the Selenge River and at Khutag Ondor (Gunchinsuren et al. 2013, Fig. 9.3). Ancient DNA analysis on human bone samples excavated from Burkhan Tolgoi show that a small number of genetic lineages are identifiable at the cemetery and many of the interred individuals were genetically related (Keyser-Tracqui et al. 2003). An additional analysis comparing genetic relationships and the degree of burial elaboration and wealth shows a clear hereditary basis for different degrees of mortuary treatment (Honeychurch et al. 2007b). This evidence indicates that only a few lineage groups, suggestive of a local elite were able to sponsor these kinds of burial ceremonies.

By connecting the burial and settlement evidence, a clear pattern of differentiation emerges. Moreover, since similar sites and patterns are not apparent in adjacent valleys, it seems that Egiin Gol may have integrated a larger geographical area. As would be expected given an emphasis on spatial politics, these patterns of organization suggest a great deal of attention to the mobile nature of the local groups involved. A capacity for movement, the timing of movement, local topography, and distance are all factors that made up a new arena of politics in and around Egiin Gol. A good indication of this is the situating of large elite encampments at areas of entrance and exit to and from the valley, a pattern displaying marked disregard for geographic centrality within Egiin Gol. On the other hand, the largest Xiongnu cemetery sites are positioned exactly at the center of the lower valley (Fig. 9.1). This curious arrangement of the major settlements would only make sense given an expectation for summer movements along the river and

² Note that excavation work in the valley has recently confirmed a medium sized (n = 35) Xiongnu cemetery that was previously recorded as having an uncertain periodization. Prior publications report only three cemeteries in addition to Burkhan Tolgoi and a small number of single burial interments.



Fig. 9.3 All known Xiongnu cemeteries in the greater Egiin Gol region

through the valley (e.g., Schortman and Urban 1992: 242). This observation is even more significant if considering the regional topology of the Egiin Gol basin as a key intersection for movement between northern Mongolia and central and west-central Mongolia. Egiin Gol offers the best warm weather transit route for crossing the upper Selenge River short of floating or rafting across, even though these options may also have been viable given historical evidence for nomadic river crossings (Sinor 1961).

At a somewhat less obvious level, however, the spatial politics approach offers alternative ways for understanding some of the other transformations in the valley. For example, Egiin Gol may have been an early participant in what Kradin proposes was an internal system of agricultural production and circulation for use by

the Xiongnu state (Kradin 2001: 90; also Kharinskii 2005: 15). Kradin's argument is based on the substantial evidence for farming at the substantial Xiongnu settlement of Ivolga in Transbaikal (e.g., Davydova 1995, see Fig. 8.1), but it need not be limited to that site alone. If Egiin Gol did play such a role, then agricultural production and labor aggregation in the valley, even at fairly small-scales, could have had two subsidiary impacts. First, tribute extraction of agricultural rather than of pastoral products would have placed a valuable resource in the hands of central authorities who could then re-circulate grain to areas where agricultural production was less practical (e.g., the Gobi) as one way to enhance political influence. Second, a mandate for agricultural production at Egiin Gol would have given intermediate leadership a means of tethering local communities to predictable locations during the summer and autumn seasons, i.e., the seasons of maximal mobility and, from the standpoint of local elite, a time when household location could be most uncertain. As the nineteenth century Buddhist monasteries at Egiin Gol demonstrated 2000 years later, fairly intensive agriculture is possible in the valley, without interfering with local herding (Honeychurch 2004: 81-83).

The perspective from BGC, on the other hand, is not as detailed as that from Egiin Gol, mainly because excavations at Xiongnu-period campsites turned up little additional information. However, there are still important transformations evident, especially based on the distribution of monuments and burials across the greater BGC region. Similar to Egiin Gol, Xiongnu-period habitation sites increased in average size from 0.08 ha during the Bronze and Early Iron Age to 0.14 ha during the Xiongnu period, almost doubling in size though nowhere near the fivefold increase seen at Egiin Gol. Based on stable isotope analysis, local diets also expanded to include cultivated grains, most likely millet (Machicek 2011: 129). Although it is clear that drought-resistant crops were probably grown locally during some periods in BGC history, beyond the isotopic chemistry results, there is no other botanical, artifactual, or landscape-related evidence for local farming during the Xiongnu period. As suggested above, the presence of millet in the Gobi may have been related to a system of grain redistribution from the north to the south sponsored and administered by central leadership. In fact, managing such regional transfers of various products may have been one of the responsibilities of what historical texts describe as a series of administrative positions seemingly detached from any particular territory (Miller 2014: 7-8).

While Xiongnu habitation patterns at BGC do not demonstrate a pattern of major locational change, the opposite is true of the mortuary landscape in and around BGC. As mentioned in Chap. 5, in addition to BGC there are six other locations with significant Late Bronze and Early Iron Age monuments (i.e., khirig-suurs and slab burials). These locations range from 20 to 77 km away from the BGC granite ridge system. Among these archaeological areas of the greater BGC region, only three (BGC, Suman Uul, and Bayan Onjuul) have Xiongnu cemeteries. Of these, Suman Uul and Bayan Onjuul each have one to two cemeteries of between 10 and 20 burials. In contrast, BGC has 11 major cemeteries ranging in burial count from 5 to 75 interments as well as several single and double burial sites around the granite ridges (Fig. 9.4). Whereas Egiin Gol displays a



Fig. 9.4 Xiongnu-period settlement and cemetery sites at Baga Gazaryn Chuluu. The size of each cemetery symbol reflects burial count. Shading shows the approximate extent of the granite ridges

tremendous increase in settlement size and only a moderate number of cemetery sites, BGC has evidence for a moderate increase in habitation size but a surprisingly large rise in the number of cemeteries during the Xiongnu period.

Why was it that BGC became a mortuary center in the northern Gobi? First, it is important to remember that during the Early Iron Age, this region had already become a major mortuary center based on a substantial investment in the construction of slab burial sites there. However, slab burials appear at all of the other six regional locations as well. The disproportionate use of BGC as the principle area for Xiongnu funerary events probably arose based on motivations similar to those of the Early Iron Age, i.e., the functional creation of a central place to gather dispersed community groups from across a much larger surrounding area. The concentration of such activities at a single site, however, suggests that the political importance of outlying communities was diminished in favor of a more centralized approach. In other words, BGC became a center for the ceremonial and ideological tethering of multiple groups in circulation around the granite ridges. Participation in public gatherings such as funerary events may have been a way to regularly integrate these dispersed communities into the larger framework of the state. Impressive mortuary displays were probably an effective way to make the state plainly "visible" while attendance or the lack thereof on the part of local commoners may have been a way to assess political loyalties.

Each of these models for explaining a process of state integration at two very different locations leaves something to be desired because both rely on what are essentially synchronic snapshots. In reality, the Xiongnu material records at Egiin Gol and BGC represent 300 or more years of local and subregional political activities, but the chronological resolution needed to disaggregate these patterns over time is still in the making. For now, these ideas provide a framework for future research and testing to assess the ways in which two such landscapes might have differently formatted integration based on their distinct regimes of geography, space, and movement. In the case of Egiin Gol, a topographically defined mountain and river landscape with restricted pathways for movement favored gateway-type settlements and simple productive strategies for making seasonal movements and locations more predictable. On the other hand, the open plains surrounding BGC did not topographically delimit movement to predictable routes within the northern Gobi region. Perhaps for this reason, the archaeological record indicates that a system of funerary practices, ceremony, and display hosted at the impressive BGC center drew dispersed communities inward for the political activities that reified the state.

9.2 Patterns of Xiongnu Integration and Centralization

Having considered forms of organization at the local and subregional levels, archaeology also provides evidence for the bonds that tied these different regions together within the Xiongnu polity. In archaeological terms, this question of internal political integration is best addressed by looking at patterns of structured interaction between geographically separate communities. Specifically, those interactions geared toward political inter-dependence provide evidence that local groups and leaders were not as autonomous as many historical models suggest (e.g., Barfield 2001a: 13; Di Cosmo 2002: 224–227; Kürsat-Ahlers 1996). In most cases, the Xiongnu-period contexts displaying such patterns of interaction were associated with practices maintaining relationships between different levels of intermediate elites. Studies of local and non-local materials, animals, and human beings at Egiin Gol and BGC give some indication of the importance of these intra-steppe connections.

Egiin Gol evidence for ceramics circulation from as far away as Transbaikal is one such indicator of these internal state relationships. Additional evidence for the movement of pottery between Xiongnu sites throughout southern Siberia and northern Mongolia is also provided by XRF compositional analysis (Hall and Minaiev 2002) and reinforces the observation that these distant communities were not at all isolated but consistently in contact with each other. Likewise, the presence at Egiin Gol of substantial numbers of products from the Han dynasty including bronze mirrors, coins, and fine lacquer ware did not arrive there through direct trade between China and Egiin Gol leadership; rather they circulated via centralized political networks that made such long-distance products available locally. These contacts did not occur without individuals themselves circulating among different regions of the state; and, as would be expected, burials of some of these non-local representatives do occur at Egiin Gol. The EX00.14 burial context from a small cemetery near the primary Bayan Gol mountain pass into the Egiin Gol valley is a good example. The 17-19-year-old male buried there was clearly an individual of some local standing given his burial structure and its furnishings; however, the strontium and oxygen isotopes in his bones suggest that he was neither born nor raised at Egiin Gol. The canine teeth of the EX00.14 individual were formed by the time he reached the age of seven, but their chemistry suggests a local environment that was geologically dissimilar from Egiin Gol and probably one that was hot and arid, much like the Gobi. Based on his metacarpal bones, however, this individual's later life was spent at Egiin Gol where he died prematurely from unknown causes (Machicek et al. 2012). This interesting evidence may indeed argue for the kind of political migration or inter-elite marriages that might help to tie the state together across its substantial territory.

Mortuary evidence from BGC also makes a good case for inter-area dependencies, possibly linked to itinerant elite movements. Xiongnu-period burial practices at BGC conformed closely with those known from northern Mongolia and Siberia, including the lavish use of forest woods and the presence of other forest products. Substantial amounts of expertly worked pine and birch bark have been recovered from BGC burial assemblages in the form of coffins, coffin covers, and numerous containers (Amartuvshin and Khatanbaatar 2010). One burial of an adult male individual even contained a degraded but complete set of elk antlers (Cervus canadensis sibiricus) (Amartuvshin and Khatanbaatar 2010: 233). These plant and animal species belong to forested environments and were not present at BGC in the past. Their appearance in the desert indicates that local Gobi individuals of some prominence maintained relationships with groups to the north that provided symbolically important materials from the forest zone hundreds of kilometers away. The presence of forest products in the Gobi, the appearance of cultivated grain in the diet there, and the evidence for individuals born and raised in the desert but buried in the mountains of the foreststeppe zone, all begin to suggest a pattern of closer north-south integration as part of the political geography of the Xiongnu state.

In fact, the extent to which BGC burials generally conform to Xiongnu-period mortuary practices is itself quite striking and this suggests that close adherence to an acknowledged sumptuary code was of some importance. There is indeed local variation in burial practices (e.g., Miller 2011; Yang 2011; Brosseder 2009), but what is particularly interesting and pertinent to the question of central authority is that burials in outlying western and southern regions with ready access to Central Asian and Chinese prestige goods still seem to conform with established sumptuary codes. The significance of this observation is underscored by the argument made by steppe historian Joseph Fletcher that, "...(Xiongnu) tribes forfeited very little of their local autonomy (to central leadership) ... just enough to seem united for the sake of extorting wealth from the Chinese... and in warfare each person kept whatever plunder he seized" (Fletcher 1995: 21). If such local area autonomy had been the rule, then in areas closer

to the Han dynasty frontier presumably there would have been a surplus of Chinese prestige goods, greater incidence of these in burials, and a breakdown of sumptuary patterns. Interestingly, the very opposite seems to be the case at BGC where, as indicated above, burials are very much like those in the north and by and large obey a similar set of rules. This may be taken as indirect evidence that the behavior of local leadership was regionally governed to a greater degree than historians have imagined.

A centrally managed redistribution of Han dynasty status objects to local areas closer to the frontier would probably have involved slightly greater numbers of such goods to offset independent methods of acquisition. The southernmost Xiongnu cemeteries in Mongolia seem to fit best this pattern of controlled distribution. Based on a north to south series of Xiongnu ring burial cemeteries from Transbaikal to the northern Gobi (i.e., Dyrestui, Egiin Gol, Naimaa Tolgoi, Tamiryn Ulaan Khoshuu, and BGC, see Fig. 8.1 for locations), if calculating burials with Han dynasty products as a percent of the total number of burials excavated, the outcomes show a clinal increase from about 17-22 % in the north to 27-33 % in the south.³ In other words, there is indeed a greater representation of these goods but certainly not the geographical spike that Fletcher's frontier raiding model would predict closer to the frontier zone. A study by Miniaev (1980) of bronzes recovered from Xiongnu contexts in Siberia and northern Mongolia also demonstrates a similar pattern in the distribution of alloys associated with Han bronze work (i.e., Cu-Sn-Pb). Typical steppe alloys using arsenical bronzes are well represented in the north while central contexts have greater percentages of the Han type alloys. The BGC Xiongnu alloys indeed fit this geographical pattern with an expected mixture of Han style and arsenical bronzes (Park et al. 2011).⁴ Notably, the contexts with the highest percentage of Han type alloys are the aristocratic platform tombs of the northern regions of Mongolia-again suggesting elite control over the geographic circulation of Han dynasty prestige objects.

Finally, moving to the broadest scale of analysis, researchers have recently suggested that an integrative three part site hierarchy is apparent at the macro-regional scale of Xiongnu cemetery site distribution. Province by province cultural heritage projects sponsored by the Mongolian government have supported extensive low-resolution jeep surveys throughout many of the regions far beyond the central portions of Mongolia. The first country-wide synthetic database for Xiongnu sites was assembled in the years 2000–2001 and has been significantly enlarged over the past decade since new settlements and cemeteries are discovered on almost a yearly basis. From these provincial distribution maps, Mongolian archaeologists argue for a clear difference in site size, density, and diversity within the central part of Mongolia as compared to the western and eastern flanks of the distribution (Yerool-Erdene 2010: 26–28).

³ This analysis was carried out using cemeteries with 10 or more excavations and accounting for lacquer ware, coins, mirrors, and other miscellaneous items. The data are from Miniaev (1998), Torbat et al. (2003), Torbat (2004), and BGC field notes.

⁴ Note that several of the Han style bronzes at BGC are not prestige goods at all, but Han dynasty crossbow points possibly indicating conflict or the recycling of bronze material.



Fig. 9.5 Regional map of all known cemeteries with elite platform style burials. These cemeteries have both ring and platform burials and the counts provided are the total number of surface features assessed for each cemetery

Interestingly, the central, eastern, and western sectors are all marked by elite platform burial cemeteries but with greater numbers of these sites and much larger cemeteries in the central region which itself seems to have a western and eastern subdivision (Fig. 9.5). Mongolian archaeologists have compared this roughly tri-partite pattern to the textual description of a central, eastern, and western geographical division marking the underlying regional hierarchy of the Xiongnu state (Yerool-Erdene 2011). As a textual-material hypothesis, this idea requires substantial testing by additional archaeological fieldwork in the eastern and western parts of Mongolia. If correct, however, the geographical layout of the polity would not only suggest a dominant central region, but also the capacity to reliably delegate authority far beyond the center, a feature reminiscent of a more specialized administrative body (Honeychurch and Amartuvshin 2011). The possibility of a unique version of nomadic administrative organization has in fact been supported by some interpretations of the early Chinese historical texts (Bondarenko et al. 2003: 12; Miller 2014). In addition, from a purely functional perspective, the tri-partite organization offers some distinct advantages to the long-term maintenance of central authority. Some degree of monitoring of information and communication was an important source of support for state elite; and, since these internal flows were mostly transport dependent, tri-partite political geography facilitated control by channeling any interaction between eastern and western flanks through the central district. This geographical arrangement would have also discouraged large-scale military challenge from either flank because of the potential for an overwhelming response from combined forces of the center and the opposite flank.

Besides acting as an organizational wedge between the eastern and western divisions of the Xiongnu state, the central district also had geographic characteristics that were likely exploited for political ends. Climate and topography have made this core area of central and west-central Mongolia one of the most productive regions in the country for both herding and agriculture. Moreover, its major river basins and intermontane valleys delimit corridors of movement and create opportunities for the monitoring of access and use of the region's resources (Honeychurch and Amartuvshin 2011). From a mobility perspective, if established corridors of long-distance north–south and east–west movements are considered, then based on topography, this central district forms a macro-regional junction where many of the major pathways intersect (Honeychurch and Amartuvshin 2006: 270). Given these characteristics, it is not surprising that over the 2000 years following the Xiongnu state, every major eastern steppe empire has sought to capture this heartland as key to securing their political fortune (Allsen 1996: 126–128).

9.3 Macro-regional Conversions as Spatial Politics: The Early Silk Roads

To explore the final question posed at the beginning of this chapter which asked whether the Xiongnu polity acted externally as a unified political actor, I focus on multiple frontier regions in addition to the Han frontier which usually receives a majority of scholarly attention. In this respect, Xiongnu involvement in western Inner Asia including the Altai Mountains, Tuva, Minusinsk, Xinjiang, and Kazakhstan is informative and also touches on the well-known history of the Silk Roads. I emphasize the plural "roads" in this case because the network consisted of many routes that inter-connected a number of hinterlands (Parzinger 2008: 7). There were in fact several zones of exchange attributed to the Silk Roads, such as those linking regions between India and Xinjiang via the Pamirs and Bactria, and between Xinjiang and Parthia via Ferghana and Sogdia, and exchange even further northward that connected Dzungaria and the Pontic region via the Sir Darya and around the Caspian Sea (Vaissière 2005: 41; Christian 2000: 5–6). These interregional zones are best understood as complex spheres of multi-directional and inter-cultural interaction rather than as simple routes for the east–west transport of trade goods.⁵

It is perfectly clear from Han dynasty histories that the Xiongnu state played an early role in east–west relations, though it is not at all clear what that role was (Kidd 2007). Whether or not it included interregional exchange with groups in the west is unclear and at least historical approaches to the issue of steppe nomads and trade have not typically seen nomads as constructive agents. Drawing on accounts of nomadic raiding along the frontier, historians have long assumed that nomads of the steppe had little of value to offer their sedentary neighbors but rather took every opportunity to obtain resources from sedentary societies. In the texts mentioning

⁵ This section expands upon a 2014 publication entitled "From steppe roads to Silk Roads: Inner Asian nomads and early interregional exchange" published in Amitai, R., and Biran, M. (eds.), *Eurasian Nomads as Agents of Cultural Change*, University of Hawaii Press, Honolulu. I thank the publisher for permission to re-use parts of that earlier work.

early Eurasian states and empires, nomadic peoples are usually portrayed as greedy, parasitic, and covetous of wealth (Poo 2005). Rather than pursuing trade or political agendas, the stereotypical view of Xiongnu activity in the west focuses on conquest and the coercive extraction of tribute. For that reason, the concept of the Silk Roads is almost always viewed as pertaining to long-distance exchange between "civilizations" of which the Han dynasty is often considered to be the primary initiator.

Some historians have raised questions about the textual portrayal of nomadic frontier behavior as well as the Xiongnu expansion westward. Owen Lattimore (1962: 481-483, 1979) was among the first scholars to recognize that this wealth-seeking dynamic was linked to the internal reinforcement of political position, privilege, and rank within nomadic society. This strategy for bolstering a political system by using exotic and luxury items to mark distinction was embraced in many parts of the world in support of extremely different forms of political organization (D'Altroy and Earle 1985). In fact, the pursuit of such politically significant prestige items was as important to the Xiongnu state as it was to the Han dynasty (Yü 1967: 194; Barfield 1981). Christian (2000: 16–17) and Barfield (2001b) take this political economy argument one step farther. These researchers suggest that Xiongnu rulers not only redistributed Chinese luxury goods internally among their followers and intermediate elite, but also disseminated them beyond their territory based on a political agenda involving wealth-based exchange and alliance-building. It also bears noting that Manfred Raschke had earlier developed this same hypothesis in great detail using a combination of historical and archaeological sources of evidence (1978: 606-622).

Against this historical backdrop, some interesting questions arise: Wherein lie the roots of this wealth-seeking approach to nomadic political economy? Did earlier forms of politics-based exchange prefigure and configure the later commercial Silk Roads of the first millennium AD? What was the Xiongnu nomadic state's role in the west and why were those regions eventually recognized by Han advisors as a critical juncture for attacking and weakening the Xiongnu polity? There is no definitive answer to these questions; however, recent archaeological research is beginning to build a material foundation for assessing the Xiongnu political economy model and its connection to the early Silk Roads. In the following sections, I discuss recent archaeological evidence for these long-distance interactions and, based on that, I offer a revised explanation for Xiongnu investment in the far west.

9.4 Historical Overview of the Xiongnu and the Western Regions

Han dynasty texts refer only indirectly to Xiongnu activities in the western regions⁶ but the topic is important to debates between sinologists about Han exploration and expansion into Central Asia. As discussed previously, the Han dynasty historian

 $^{^{6}}$ While the use of "western regions" in Chinese historical sources (i.e., *xiyu*) specifies areas of Xinjiang and some parts of eastern Central Asia, throughout this study, I use this term in a more general sense that encompasses present-day Central Asia and areas further west.

Sima Qian (Watson 1993: 134–139) relates a series of narrative passages about the rise to prominence of the leader Maodun as the primary architect of the Xiongnu state at the end of the third century BC. Maodun's defeat of the Han armies at the battle of Pingcheng (200 BC, see Chap. 1), and the consequent tribute paid to the Xiongnu court can be dated to 198 BC, at which time a major supply of silk and other luxury goods would have been under the direct control of the Xiongnu elite (Di Cosmo 2002: 190–196), though they probably had access to such products before these events as well. Unfortunately, the extent of the polity's western reach at this early time is not clear from the histories. According to Di Cosmo's assessment of the *Shiji* text, the Xiongnu state's western extremity between 209 and 180 BC appears to have been near the western bend of the Ordos loop. However, he goes on to say that "we do not know exactly how far west it extended north of the Yellow river, into present-day Inner and Outer Mongolia" (Di Cosmo 2002: 189).

Sima Qian does provide a suggestive scenario of events in the west in his report of a letter that Maodun sent to the Han court. In that letter, Maodun mentions several wars that members of the Xiongnu state's western wing had launched against a number of groups, including the Yuezhi and Wusun, during the 170s/160s BC. The text clearly indicates the defeat or capitulation of these peoples and the expansion of both the Xiongnu state and its sphere of influence (Watson 1993: 140–141). According to Di Cosmo (2002: 197), these early conquests allowed the Xiongnu polity to establish a lasting political and economic influence in the Xinjiang region and in Central Asia.

While the aims of this expansion are shrouded in historical rhetoric, some scholars (e.g., Odani 2007: 52) view the control of exchange to be a major factor behind the Xiongnu western wars, especially those campaigns against the Yuezhi. According to some accounts, the Yuezhi were indeed key players in the early jade, horse, and silk trade circulating within the Gansu and Xinjiang regions (Liu 2001: 265, 273; Benjamin 2005: 94). However, we have little information about the precise nature of the Xiongnu polity's sway over Xinjiang and Central Asia. That said, textual research suggests that there were tributary and alliance relations that provided some degree of support for the nomadic state. In the region of Xinjiang, Xiongnu influence may have entailed taxation, corvée labor, and perhaps access to agricultural supplies and finished goods (Di Cosmo 2002: 250; Yü 1990: 127-128), but the extent of their direct control was probably limited and sporadic. The existing historical sources are similarly vague with respect to the Xiongnu state's interaction farther west and northwest of Xinjiang. However, it stands to reason that Xiongnu ties with western peoples were as varied and complex as was their relations with other foreign peoples, including the Chinese. In any event, there is little doubt that, prior to the initial Han exploration of the west by the state envoy Zhang Qian from 138 to 125 BC, the Xiongnu polity was already a major presence in the region and was involved in relationships with both sedentary and nomadic groups there (Kidd 2007: 359-360).

The sole objective behind Zhang Qian's mission was to forge a military alliance between the Han and the western Yuezhi states in the hopes of defeating the Xiongnu. While the Han's offer was rejected by the Yuezhi elite, who were occupying Bactria at the time, the information about the western regions that Zhang Qian brought back to the Han court turned out to be politically invaluable (Yü 1990: 131). His expedition constituted the first official Han exploration of genuinely unknown lands and attests to the dynasty's growing interest in geographies, peoples, and politics beyond its own frontiers. Moreover, Zhan Qian's journey bears witness to a growing desire to confront the political challenge put forth by the Xiongnu (Benjamin 2007: 4–7). It is important to note that Han knowledge of external lands grew as a function of political and military expedience, whereas exchange was a secondary concern (Di Cosmo 2002: 282–283; Chang 2007: 135–159). Looking at this process from the opposite direction, however, namely from the perspective of western states and their knowledge of eastern regions, there is a striking difference in the degree of interregional awareness. Early Sogdian peoples in the middle Zarafshan Valley (presently the Samarkand region of Uzbekistan) knew of China and its products as early as the late third or early second century BC, probably in part due to direct or indirect contacts with the Xiongnu and their political economy (Vaissière 2005: 22–24).⁷

To sum up this brief historical overview, I return to the logic implicit in Raschke (1978: 606–622), Christian (2000), and Barfield's (2001b) hypothesis for Xiongnu exchange. The Xiongnu had access to substantial amounts of Chinese products by 198 BC if not earlier. These prestige items were used internally as political capital to cultivate and maintain patron-client relationships among the upper classes and intermediate elite. These items were likely used to mark and attribute status and were probably displayed conspicuously in gift giving ceremonies, mortuary practices, and in public ritual events. Based on textual accounts, the Xiongnu were in all likelihood engaged with the western regions by no later than 175 BC. While their interactions may have included military coercion, as noted above, important alliances may have been supported by gift giving and elite exchange. It thus stands to reason that Xiongnu representatives understood that certain Chinese products, such as fine silks, lacquer ware, and bronze mirrors had immense conversion value vis-à-vis products from both the western regions and northern forest zones. The latter products also fetched high returns from Chinese frontier traders who had limited access to goods from the northern forests of Siberia (Rubinson 1992: 71-72; Christian 2000: 18). In fact, contrary to the notion that the steppe nomads had little of value to either exchange or to support internal political relationships, these nomads may very well have recognized and exploited opportunities for immense wealth conversion between extremely distant regions by virtue of their political expansion and expertise in long-distance movement.

In fact, the western desire for certain eastern materials and goods may have been cultivated through a Xiongnu model of political prestige symbolized by the distribution of these very products. While Xiongnu envoys probably did not bring the very first silk fabrics or Chinese bronze mirrors westward since early examples of these products are present in Pazyryk tombs of the Altai Mountains at c. fourth to third centuries BC

⁷ It is challenging to assess exactly how much pre-Han and early Han peoples knew about the western regions, although it is difficult to imagine they knew as little as the Zhang Qian story implies (e.g., Parzinger 2008: 8; Leslie and Gardiner 1982). Furthermore, knowledge of China may also have reached western peoples through the "Southwest Silk Roads," which linked regions of present day Sichuan and Yunnan to Southeast and South Asia (Yang 2004).

(Polos'mak and Barkova 2005; Rubinson 1992), Xiongnu access to and political use of these items was certainly very influential in the west by the second century BC. This would make sense of the steppe nomads' desire for Chinese luxury items as well as the commensurate frontier trade pursued by Chinese of all social classes in search of "barbarian wealth" from the north and west (Yü 1967: 200–201). Still, there is one major problem with this otherwise promising explanation, and that is a lack of textual confirmation. Historian Étienne de la Vaissière observes the following about the origins of Central Asian commerce:

[O]ne could imagine a Sogdian commerce already partially oriented towards the steppe, perhaps in the direction of the Xiongnu so well supplied with Chinese silk. But given the total absence of commercial documents concerning these areas, this possibility remains only a hypothesis (2005: 206).

While every so often new historical documents surface from the sands of the Tarim Basin and other arid locales (e.g., Giele 2011), the argument concerning the roots of Central Asian and Xiongnu exchange is therefore probably best evaluated by archaeological means.

9.5 Xiongnu Mortuary Archaeology and Riches from the West

The archaeology of the Silk Roads has developed in rather unexpected ways. As I discussed in Chap. 6, studies have shown that the inter-cultural ties linked distant parts of eastern Eurasia, east to west and north to south, thousands of years prior to the rise of "classic" Silk Roads exchange (e.g., Anthony 1998; Kuz'mina 2008; Beckwith 2009). While there is evidence for increasing contact and higher volumes of exchange during the first century BC, it is not until the first century AD that we can refer to the kinds of specialized activities and trade volume that characterized the Silk Roads proper (Brosseder 2011: 414). Turning from the historical to the material record of the proto-Silk Roads has advantages as well as drawbacks. With respect to the benefits, archaeological data from Siberia, Kazakhstan, Xinjiang, Mongolia, and Inner Mongolia create an appreciably wider geography for analysis. While historical documents tend to link any discussion of the western regions to a relatively narrow area (i.e., Gansu and Xinjiang), archaeological research extends our perspective to the Central Asian steppe and northern forest zone as well. On the other hand, the Xiongnu archaeological record still leaves much to be desired in terms of understanding basic chronology and development.

That said, cultural ties between central Mongolia and the far west have been a major theme in Xiongnu material studies from almost the beginning of archaeological explorations. By far the most impressive finds have emerged from the large platform style burials associated with the Xiongnu aristocracy. Almost a century ago, the recovery of extremely well-preserved remains from such elite burials at Noyon Uul in north central Mongolia originally demonstrated the polity's far-flung interactions (Fig. 9.6). Numerous burials at this site have been excavated by Russian and Mongolian-led teams (Dorjsuren 1961), starting with the famous Kozlov excavations



Fig. 9.6 Map of major sites in Inner Asia with finds related to the western regions. *1* Noyon Uul; 2 Tsaram; *3* Ialoman 2; *4* Gol Mod and Gol Mod 2; *5* BGC (Alag Tolgoi and Ikheriin Am); 6 Shombuuzyn Belchir; 7 Kuraika; 8 Takhiltyn Khotgor

in 1924 and 1925 (Rudenko 1962; Trever 1932) and, most recently, by a Mongol-Russian joint expedition (Polos'mak et al. 2008). The water-logged and frozen conditions inside some of the deep burial chambers preserved organic materials among them textiles, wood, lacquer ware, plant remains, and even human hair—to an extraordinary degree. A good number of these preserved burial furnishings were manufactured in Han dynasty workshops (Louis 2006–2007; Rudenko 1962: 36). Other artifacts thought to be associated with western regions generally belong to the category of textiles such as rugs and tapestries, felts, woolens, and cloth. The recovery of these objects has allowed archaeologists and art historians to discern artistic motifs and styles that are identified with the artwork of Graeco-Bactria, Sogdia, Ferghana, and Parthia (Trever 1932: 13).

First and foremost, scholars claim that tapestry depictions of the human countenance, clothing and head-wear, animals, and images of vegetation represent western styles and themes with a strong Hellenistic component (Ishjamts 1994: 167–168; Rudenko 1962: 105–108; Lubo-Lesnichenko 1991). While appraisals and comparisons of style can be subjective, the Noyon Uul textiles also have been studied using material and manufacturing analyses to enhance our knowledge of weaving methods, raw fibers, and dyes. These tests further strengthen the case that some of the textiles, especially several woolen pieces, were produced in western regions, while others are of local or Chinese manufacture (Voskresensky and Tikhonov 1936; Salmony 1942). Although these technical studies were carried
out in the early twentieth century, experts on Asian textiles have referred to them extensively within the framework of on-going discussions regarding the origins and technology of steppe fabrics (e.g., Rudenko 1962: 97; Riboud 1968; Good 1995).

In 2006, systematic excavations by Mongolian and Russian archaeologists at the Noyon Uul site discovered a great deal more about the construction of elite platform tombs and their inventories (Polos'mak et al. 2008). A relatively well-preserved assemblage of over 200 artifacts was recovered 18 m below the surface of burial 20 in the Sujigt valley section of Noyon Uul. The findings include ceramics, silk, wool, and linen clothing fragments, remains of felt coverings, lacquer ware, equestrian equipment, and pieces of a lacquered coffin that early on was destroyed by pillagers. While results from these latest excavations are still preliminary, the technology used to make woolen textiles recovered from the burial chamber has Parthian origins and suggests either exchange or local manufacture by artisans who had migrated from the west (Chikisheva et al. 2009).

One decorative item from burial 20 offers striking evidence for some kind of interaction with Graeco-Bactrian or Parthian regions and supports the above-mentioned stylistic and technological analysis of textiles. A circular silver plaque recovered from the burial chamber is unmistakably of Hellenistic style and depicts what is quite possibly a satyr and maenad or some other scene from Greek mythology (Tseveendorj et al. 2007, 2010, Fig. 9.7). The Hellenistic tradition was introduced to Central Asia through the conquests of Alexander in the fourth century BC. This was followed by extensive Greek settlement and the establishment of the Seleucid empire and then the Graeco-Bactrian kingdoms in the mid-third century BC (Bernard 1994: 117–129). Notwithstanding the decline of the Graeco-Bactrians (late second century BC), art work using the Hellenistic vocabulary and incorporating non-Greek idioms persisted.

Fig. 9.7 Silver plaque with Greek mythological theme from Noyon Uul burial 20 (photo by permission of the Mongolian Institute of Archaeology)



In addition, manufactured goods from the Mediterranean world continued to enter Central Asia by way of Roman, Indian, and Parthian trade (Koshelenko and Pilipko 1994: 137–139). As indicated by the well-known discoveries of Hellenistic-style textiles, artwork, and coins from contemporaneous burials in Xinjiang (Sheng 2010: 38–40; Laing 1995), it stands to reason that such products were available in areas directly accessible to the Xiongnu. Laboratory analysis of objects from Noyon Uul is still underway and should reveal more information about the chronology and origins of the exotic materials furnishing Xiongnu elite platform burials.

Recently, many more western artifacts have been recovered from elite platform burials in other parts of the Xiongnu world. Archaeologists from the Russian Academy of Sciences have excavated an artifact inventory from burial 7 at the site of Tsaram in southern Transbaikal that, while indeed similar to the ones found in the Novon Uul tombs, also attests to significant differences in mortuary ritual (Miniaev and Sakharovskaia 2002). This context has been dated by multiple methods to the early first century AD. Like Novon Uul's burial 20, the Tsaram excavation discovered an artifact depicting what the excavators believe to be a satyr from Greek mythology, though it is not rendered in a Hellenistic style. The artifact is a gold-gilded iron buckle with a turquoise and black stone inlay (see Miniaev and Sakharovskaia 2007: 53, Fig. 18). The satyr depiction probably incorporates local styles, perhaps from nomadic traditions, to express what was originally a Mediterranean theme. Scholars have yet to identify analogous objects with which to accurately assess the provenance of this buckle more precisely. However, two buckles featuring a somewhat similar design and technology have recently been unearthed in the Siberian Altai Mountains at the Xiongnu-period cemetery of Ialoman 2 (Tishkin 2011: 554).

Southwest of Tsaram, in Mongolia's west-central Arkhangai province, the two neighboring platform burial sites of Gol Mod and Gol Mod 2 have been excavated by archaeological teams for the past decade (Mission 2003; Erdenebaatar et al. 2011). These sites have yielded still more artifacts that are associated with Central Asia, mostly in the form of beads and jewelry (Brosseder 2007a). The Gol Mod 2 site boasts one of the largest known platform burials, surrounded by 30 smaller ring burials arranged in a gradual arc formation to the east of the platform (Erdenebaatar et al. 2011: 303–304). Excavations at ring burial number 30 uncovered a 3.4 m deep interment consisting of a wooden coffin and a wooden enclosure that contained an impressive assemblage of exotic artifacts (Erdenebaatar et al. 2011: 311-313). Aside from more typical long-distance items, such as lacquer ware, silk, and bronze mirrors from Han dynasty China, Erdenebaatar reports amber beads, probably from the west, and a glass bowl which, on the basis of its style and make, originated in the Mediterranean workshops of Rome (Erdenebaatar et al. 2011: 311; Fig. 9.8). The glass bowl was found intact and has been identified as a Roman ribbed bowl (Zarte Rippenschale). In shape, size, and manufacture, it bears a strong resemblance to the blue and white ribbed bowl of the Roman Glass Collection at the Corning Museum of Glass (Whitehouse 2001: 203). The museum piece dates between the early and midfirst millennium AD, which is consistent with current assessments of platform burial site chronology. However, researchers have yet to publish the results of compositional analysis of the glass or provide absolute dating for the burial context itself).



Fig. 9.8 Roman glass bowl (photo by permission of the Mongolian Institute of Archaeology)

9.6 Silk Roads Evidence in the Gobi Desert

While the above-noted artifacts have been discovered at burials and cemeteries that are thought to house the top echelon of the Xiongnu state, excavations at BGC have demonstrated that western artifacts, namely beads and pendants, were also circulated among the local or intermediate level elite. The BGC artifacts are made from assorted materials including carnelian, agate, turquoise, amber, rock crystal, nephrite, river shell, as well as glass and faience. While the carnelian, amber, and turquoise probably derived from western sources (Rawson 2010; Davydova 1995: 39–40, 1996: 22–23), it is the glass and faience beads that strongly suggest origins as distant as the Mediterranean.

Excavations of the ring burial cemeteries at Alag Tolgoi (northeast BGC) and Ikheriin Am (west BGC) produced a large number of beads from nine different contexts dating between the fourth/third century BC and the first century AD. Visual and chemical analyses have identified three kinds of beads that arrived at BGC via western exchange and contacts: triangular ribbon mosaic pendants, gold glass beads, and faience pendants. Triangular mosaic pendants (Fig. 9.9) were recovered from two burials at the cemetery of Alag Tolgoi and from a surface site on the western side of the BGC ridge system. The two excavated burial contexts, EX08.25 and EX08.03, were both disrupted in antiquity and each held an adult female who died between the ages of 35 and 45 (Amartuvshin and Khatanbaatar 2010: 233–234, 240–241). Triangular pendants were discovered along with a variety of other beads, but the design and technique of these particular artifacts are unique enough to be matched with triangular pendants known from Roman-period sites along the Mediterranean basin (Dubin 2009: 53, plate 42 upper left, 368, nos.



Fig. 9.9 Glass and faience beads excavated from Xiongnu-period burials at Baga Gazaryn Chuluu (BGC) (photos by permission of the Mongolian Institute of Archaeology)

367a, b, c) as well as major sites in South Asia, like Taxila (Beck 1941: 30 and plate ix, no. 27).

While their precise technique of manufacture is still uncertain, in all likelihood, these pendants were constructed by heating and fusing together different strips of colored glass into a mosaic ribbon block. Once cooled, these pieces were then cut into small triangular shapes and re-heated to smooth the edges, before being polished and drilled. The end result was a triangular design featuring undulating bands of color. Another possibility is that the triangular pieces were cut from a layered mosaic cane. In either case, the process likely involved a multi-step method employing hot- and cold-working techniques. Production of these pendants in the west reached its zenith between the second century BC and the first century AD, a period which roughly corresponds to the calibrated radiocarbon date, 364–163 BC, for the EX08.25 context (95 % probability). Similar pendants have also been found at a number of western burial sites with Xiongnu mortuary patterns and material culture (Leus 2011: 520).

Gold glass beads were more numerous in the Alag Tolgoi burial assemblage. Female adults between the ages of 35 and 50 at the time of death were discovered in three burials (EX08.02, EX08.03, and EX08.06) along with several weathered examples of gold glass beads (Amartuvshin and Khatanbaatar 2010: 236–237, 241–242). Similar beads have also turned up in other elite Xiongnu-period contexts in Mongolia (Brosseder 2011: 413) and are associated with workshops in the Mediterranean and in parts of South Asia, such as the Bara site near Peshawar, northern Pakistan (Dussubieux and Gratuze 2003). As with the ribbon mosaic pendants, the gold glass manufacturing process is still unclear, but there are at least two hypotheses. As the name implies, these glass beads were embedded with gold. This might have been accomplished by drawing out a miniscule tube of glass upon which a gold foil was applied using an adhesive. The composite was then inserted into a slightly larger glass tube, thereby sealing the gold inside. A second possibility is based on contemporary gold glass making on the island of Java in which the bead-maker applies gold foil to a glass tube and then seals the composite within a thin layer of glass by means of a hot-process technique (Lankton 2009). Though weathered, all the gold glass beads from Alag Tolgoi are readily identifiable as such. Radiocarbon dates for these burial contexts fall in the second to first centuries BC.

Finally, the Ikheriin Am cemetery in the western part of BGC has fifteen Xiongnu ring burials, one of which (EX05.02) was selected for excavation. The burial was that of a 30-35-year-old woman interred inside a decorated wooden coffin with a number of impressive beads. These include pendant amulets that were manufactured in the Mediterranean region, most likely Egypt, but were probably obtained by way of Central Asia (Khatanbaatar et al. 2007). In addition, the excavators recovered fragmentary evidence of ceramics, bone and iron items, a lacquer ware cup, and faunal remains, especially of horse. Grave robbers pillaged the entire context in antiquity via a small shaft leading directly into the burial's chest and head section depriving us of information on how the beads were worn (Amartuvshin and Khatanbaatar 2010: 248). The Egyptian artifacts are well-known fertility or prosperity amulets found throughout the Mediterranean region. The anthropomorphic figurine is a faience image of Bes, an Egyptian god, and the blue faience amulet features a hand gesture known in Latin as the "manus ficus" (mano fica) symbol (Khatanbaatar et al. 2007: 307–310; Lankton 2003: 85, Fig. 9.9). Egyptian faience was produced by a variety of methods. The most prevalent technique was to either mold or sculpt a figure and then apply a glaze compound which vitrified upon firing (Bogdanov and Sljusarenko 2007: 78–79). The Ikheriin Am burial has been dated by radiocarbon analysis on human and animal bone samples as well as pine wood from the coffin. Combining these results into a pooled mean provides a calibrated range of 170-20 BC (95 % probability).

Both of these faience artifacts have long histories in Egypt, Rome, and the Northern Pontic region. However, they have also appeared in Central Asian cemeteries and settlement sites from Tajikistan to northern Kyrgyzstan and southeastern Kazakhstan (Staviskij 1995: 195-200). The chronology of the finds overlaps the Graeco-Bactrian and Kushan periods-from the second century BC to the second/ third century AD. Sherkova (1991: 74-75, 77-86) discusses the Central Asian examples of these amulet pendants and compares them with multiple analogs from the Mediterranean world to argue that the Central Asian amulets were likely manufactured in Egypt and transported via the major trade routes. Although these artifacts are fairly well known from Central Asia and the Black Sea region, they have only recently begun to turn up in Mongolia and adjacent areas. The nearest analogous artifacts were discovered in the western Altai Mountains. These include the faience bead recently unearthed from the Xiongnu cemetery at Shombuuzyn Belchir (Miller 2011: 572-573) and additional beads from the Kuraika cemetery on the Siberian side of the Altai Mountains (Bogdanov and Sljusarenko 2007). High resolution chemical analyses of the BGC beads using LA-ICP-MS⁸ has provided additional evidence for their origins in the Mediterranean or South Asian regions (Lankton et al. 2012).

⁸ Laser ablation-inductively coupled plasma-mass spectrometry.

9.7 The Western Interaction Sphere of the Late First Millennium BC

Multiple kinds of archaeological evidence from Mongolia argue for Xiongnu political use of long-distance prestige goods, from the west and from China. This raises the question of what processes brought these items into Xiongnu territory in the first place. Conceivable answers are many, among them simple frontier commerce or gradual down-the-line exchange, or tribute exaction are all potential candidates. There is also the possibility that some of these items were made within the Xiongnu polity by foreign craft specialists or even obtained via China through the re-circulation of western goods northward, though this would in all likelihood be a later development. If indeed there was a close connection between prestige objects and political relationships, then these goods were probably too significant to have been obtained through casual exchange or border markets. Instead, they would have involved critical long-distance relationships that were managed by Xiongnu factions with a vested interest in political stability (Kradin 2008: 105-107; Di Cosmo 1999: 23-25). What is more, we might expect that such interaction along the Xiongnu polity's frontiers was a two-way process in which western items entered into Xiongnu hands and Xiongnu material culture, ideas, and technologies were acquired by groups outside of the polity. Such material patterns would have been especially prevalent in the case of Xiongnu alliance building, which may have involved co-option of western elites and their use of Xiongnu material symbols to bolster their own legitimacy at home.

Spatial distributions of Xiongnu material culture in the western parts of Mongolia and beyond offer insight to these long-distance dynamics. A series of survey, reconnaissance, and burial excavation projects in the Mongolian provinces of Khovd, Uvs, and Bayan Olgii have considerably enhanced understanding of the western periphery of the Xiongnu state (Navaan 1999; Miller et al. 2008; Torbat et al. 2009; Jacobson-Tepfer et al. 2010; Leus 2011; Tishkin 2011). One of the most comprehensive statements on this issue is a recent study by Miller (2011) on Xiongnu burial practices, cemetery organization, and mortuary landscapes at different western sites in Khovd province. The objective of this research was to compare material patterns on the political fringes with those in central Mongolia. Miller argues that a group of sites surrounding the platform burial cemetery of Takhiltyn Khotgor demonstrates patterns that are indicative of political integration within the Xiongnu polity proper (Miller 2011: 578). The western political frontier was therefore probably farther to the west and comprised groups that inhabited present-day Xinjiang, Kazakhstan, and central South Siberia. A closer examination of these archaeological patterns helps to clarify the process of westward Xiongnu interaction.

Though historical sources point to extensive Xiongnu activities in the Xinjiang region, the material evidence for these interactions is in fact quite limited (Miller 2014: 31). Drawing on a handful of artifact or burial similarities, archaeologists suggest the possibility of some form of political contact, but these arguments often rely more on textual accounts than on archaeological data. Archaeologists

have cited possible evidence for Xiongnu related material culture and patterns from the cemetery sites of Subashi/Subeixi (Lu 2002: 22), Aidinghu (Debaine-Francfort 1989: 192), Chaohugou (Molodin and In-Uk 2000), and most recently Dongheigou (Xinjiang Institute 2009). Likewise in Kazakhstan, the material record provides little testimony of direct Xiongnu-period interaction (Zadneprovskii 1992; Bokovenko and Zadneprovskii 1992). However, in eastern Kazakhstan, the cemetery sites of Kula Zhurga and Slavianka (third century BC-AD first century), north of Lake Zaisan, share some similarities in material-culture with the Gorno-Altai record (Bokovenko and Zadneprovskii 1992: 145), suggesting indirect contact with Xiongnu groups via the Altai interaction sphere (Khudiakov 1996: 337).

The Altai region of South Siberia does possess substantial material evidence for Xiongnu interaction and supports the idea of significant forest-steppe contacts during Xiongnu state development. Based on a stylistic and comparative assessment of artifacts, this sphere of interaction is traceable across much of South Siberia, especially during the Shibe phase of Pazyryk culture, the late Tagar Tes phase in the Minusinsk Basin, and the Ulug-Khem culture of Tuva (also referred to as Shurmak culture), all beginning in the second to first centuries BC, (Pshenitsyna 1992: 225; Mandel'shtam 1992: 178–179; Khudiakov 1996: 345; Kuzmin 2008: 79–80, 84–85). A series of initial radiocarbon analyses for burials that are associated with these cultures in the Siberian Altai and in Tuva provide some support for this chronology ranging between the second and first century BC at 95 % probability (Leus 2011: 520; Tishkin 2011: 557).

Evidence for Xiongnu-related material patterns in the Siberian Altai includes the following: Xiongnu ceramics occur in the fill of Pazyryk-period burial mounds at Uzuntal and Ulandryk (Khudiakov 1996, 2011: 345); direct analogies to Xiongnu-period burial architecture and inventories are present on the Ukok Plateau (Savinov 1994; Chikisheva and Pozdnyakov 2000: 117); and a substantial Xiongnu ceramics workshop was excavated on the River Iustyd near Lake Zhalgizuirokkol' (Khudiakov 1996, 2011: 345). In Tuva, the late first millennium BC phases of the Bai-Dag 2 and Aimyrlyg 31 cemeteries share construction techniques, tools and weapons, clothing accessories, ceramics, and bronze cauldrons in common with the Xiongnu record of Mongolia and Transbaikal (Mandel'shtam and Stambul'nik 1992: 197-199). In the Minusinsk basin of the middle Yenisei River, Tes-period sites, such as Bol'shoi Tesinskii, Kosogol'skii klad, Kamenka V, and Tepsee VII, contain numerous objects that are analogous to Xiongnu artifact inventories; among them are weapon types, open work rectangular belt plaques, a number of distinctive bronze or iron buckles, fasteners, buttons, and rings, as well as personal ornaments such as stone pendants (Pshenitsyna 1992: 231-232).

In each of these regional cases from Siberia, there is diachronic evidence for longterm and indigenous cultural sequences that incorporated materials from the heartland of the Xiongnu polity toward the end of the first millennium BC (Khudiakov 2011). The resultant cultural amalgam in these areas differed from preceding indigenous cultures and from mainstream Xiongnu culture. This was not a one way dynamic; there is good evidence for the transport of ceramics from sites in the western Altai to prominent Xiongnu cemeteries in the east (Hall and Miniaev 2002) as well as movements of people from the western Yenisei region of South Siberia eastward to Transbaikal (Brosseder 2007b). It is well substantiated that wherever Xiongnu material culture appears at western sites, there also appear the products of Han dynasty workshops and always in status-related contexts. The Han dynasty artifacts—bronze mirrors, silk fabrics, and lacquer ware items—were the same goods used to mark status in Xiongnu burials and these were commonly accompanied by Xiongnu made prestige goods such as bronze belt plaques (Khudiakov 1996: 342; Mandel'shtam and Stambul'nik 1992: 198–200; Vadetskaiia 1999: 65–71).

This pattern of Xiongnu political contact and cultural interaction extends beyond the forest steppe of Central and East Siberia and is documented in West Siberia's forest-steppe region at a substantial distance from the center of Xiongnu power. By the late third and second centuries BC, the mature Sargat culture, located between the Ural Mountains to the west and the middle Irtysh River in the east, apparently shared in these long-distance interactions. The Sargat record is well known for its mortuary sites, open settlements, and fortified enclosures corresponding to territorial enclaves spaced at 20-25 mile intervals along rivers, tributary streams, and lakes (Koryakova and Epimakhov 2007: 299). Beginning in the mid-first millennium BC, Sargat peoples interacted with pastoral nomadic groups to the south in present-day north central and western Kazakhstan. These contacts gave rise to a new cultural synthesis of forest and steppe elements and a mixture of forest and steppe lifeways. Subsistence was based on mixed economies that featured various degrees of mobility and integrated horse, cattle, and smallstock pastoralism with agriculture and hunting and fishing. Changes are also evident in Sargat ceramic production, increasingly sophisticated iron metallurgy, and the adoption of specialized weapon sets as well as the presence of many more nonlocal items due to participation in emerging networks of exchange (Koryakova and Epimakhov 2007: 298–299).

The extent of these external contacts is well attested in the Sargat mortuary tradition. Archaeologists have found evidence for clear social ranks marked primarily by external prestige goods (Koryakova and Epimakhov 2007: 307–308). While these exotic goods came from a wide array of regions, the second most represented class of non-local artifacts in Sargat burials were from the Xiongnu interaction sphere to the east. Prestige items associated with the Xiongnu include lacquer ware, silk, and impressive bronze and gold belt plaques that scholars directly relate to networks of alliances involving the Xiongnu polity (Koryakova and Epimakhov 2007: 310–311). Similar to the Sayan-Altai region, other aspects of Xiongnu culture were also adopted by western Sargat groups, most notably the heavy Xiongnu composite bow and iron arrowheads. Unlike the smaller Scythian style bow, these new armaments were designed for highly accurate, long-distance mounted warfare (Khudiakov 2005: 119).

Based on the early appearance of bone components from these distinctive bows in burial contexts, Sargat groups seem to have been the first users of this technology west of the Sayan-Altai. In all likelihood, Sarmatian nomadic groups southwest of the forest steppe adopted this technology from their Sargat neighbors (Koryakova and Epimakhov 2007: 309). Archaeologists ascribe these long-distance and likely indirect contacts between the Xiongnu and the Sargat communities to the rise of interaction networks along a "northern" route of the Silk Roads. Such exchange significantly increased the availability of valuable forest products to societies south and southeast of the Sargat regions (Koryakova and Epimakhov 2007: 333–336); however, prior to the first century AD, these interactions were probably more political in nature than purely economic. Through alliance building, elite gift giving, and tribute extraction, valued western goods made their way into the hands of Xiongnu emissaries and Xiongnu and Han prestige products moved westward to Sargat groups along the Ural Mountains and beyond.

9.8 Steppe Roads: A Re-orientation of Perspective

Two independent records, one textual and the other material, testify to an early interaction network to the west of the Xiongnu steppe state. An overview and comparison of these records shows different conceptions of the geographical extent and orientation of interregional contacts during the late first millennium BC. The original Raschke hypothesis (1978) attributed early Silk Roads activity to the Xiongnu in order to explain silk arriving in the Mediterranean prior to the Han dynasty involvement in western exchange. The dates for early silk in the Mediterranean range from the fifth to the second centuries BC (Wood 2002: 29; Richter 1929). However, subsequent historical and archaeological studies have shown that these early silk fabrics were probably not from China, but were produced from indigenous wild silks or domesticated silks from India (Good 1995). Interestingly, according to the latest archaeological research from Indus Valley sites in Pakistan, sericulture dates back as much as 4000 years in South Asia (Good et al. 2009).

That said, Raschke's hypothesis for Xiongnu redistribution of luxury goods is still intriguing, especially when combined with other theories for Inner Asian politics and wealth-based exchange. Historical sources suggest that the western regions provided critical support to Xiongnu organization and that both knowledge of Chinese products and a system of value linking these goods to high status and authority was in place prior to Han involvement in the west. Archaeology provides material evidence for two-way interactions between Xiongnu political centers and western regions. Xiongnu leaders had ample access to Chinese goods and to western products that had great value in China-these were the same kinds of products destined to become imports and exports along the mature Silk Roads. The appearance of these items in status-related contexts suggests that elite individuals managed the flow of such goods and the interregional relationships that facilitated their exchange. The forest-steppe zone of the Altai and Siberia attests to significant interaction with Xiongnu groups resulting in the transfer of both Xiongnu and Han prestige items to the northwest. Moreover, archaeologists recover these objects in contextual patterns akin to those found in the Xiongnu heartland. In Xinjiang and Central Asia, Xiongnu material culture was not as widespread; however, early examples of Han prestige items are indeed present and could have been supplied through Xiongnu alliances in conjunction with down-the-line exchange prior to the Han military build-up in that region.

This contrast in Xiongnu material patterns between Xinjiang/Central Asia and the northern forest steppe may stem from political conditions in these two regions during the mid- to late first millennium BC. Xinjiang and Central Asia had a long tradition of petty state societies, a few of which were integrated into successive empires. For this reason, they already had stable traditions of political order and material expressions of that order. In contrast, the northern forest-steppe zone was organized into multiple small-scale polities probably competing for followers, such that its leaders were reliant on exotic goods and gifts to legitimize their standing. Consequently, the forest-zone leadership would have been inclined to embrace new and politically significant prestige goods in order to gain an edge in cultivating local political relationships.

These regional differences would certainly have been understood by Xiongnu representatives as they expanded their political influence into the west and encountered varying peoples, traditions, and cultures during the second and first centuries BC. Furthermore, Xiongnu leaders probably tailored their interactions with different groups to fit their own political needs. Archaeological data show that interactions along the Xiongnu polity's many frontiers were diverse and probably ranged from military coercion to inter-elite alliances and from co-option to migration and inter-marriage (Brosseder 2011). On most of these frontiers, the early use of Chinese prestige goods marked the influence of a Xiongnu political agenda rather than trade or involvement with the Han dynasty.

Xiongnu acquisition of Chinese products partly sustained internal political relationships and the loyalty of followers through the bestowal of gifts and wealth (Di Cosmo Di Cosmo 1999: 23–25). If this was indeed the case, then the purposeful outlay of what were valuable internal political goods in external regions suggests that some political return warranted such an investment. One possible reason for this might have been wealth conversion and accrual through re-circulation. By means of their interregional relationships, the Xiongnu elite exchanged accessible luxury items from China for northern and western goods, which had greater conversion value within the indigenous political sphere. Thereafter, these same northern and western products may have also been re-exchanged along the southern and eastern frontiers where maximum value could be realized from Chinese traders. As one of many strategies to buttress their own positions, Xiongnu rulers created an interregional political economy with similarities to many of the later steppe empires (Honeychurch and Amartuvshin 2011: 211–213).

This proposed model helps to clarify the social and historical processes that gave rise to trans-Eurasian Silk Roads exchange and, specifically, the movement of Chinese products westward. Historians have examined the sudden increase in trade during the first phase of the commercial Silk Roads (c. first to fourth centuries AD) and have contrasted it with the much smaller-scale exchange up to that point (Di Cosmo 2002: 248; Christian 2000: 5–6). This sudden flourishing of Silk Roads activity might be attributed to a system of cultural value that was fostered in the west through Xiongnu use of Chinese goods. Such goods were originally connected with high status leadership; as such, they were rare and used primarily in support of political authority and alliance building. This system of value

connected with Han material culture would probably have had relevance across a broad swathe of Central Eurasia, judging from the example of the Sargat groups.

This sort of prestige-goods economy is premised on restricted access to highly significant materials in order to maintain exclusivity, symbolism, and value. However, by the first century BC, these same goods were brought to Central Asia by Chinese envoys and informal traders who were eager to trade them for gold or silver coins, carpets, horses, or exotic stones. In purely economic terms, it stands to reason that the sudden availability of such coveted products set off a trade boom that rapidly assumed almost commercial scales. Though it was hardly the intention of Xiongnu leadership, their political economy, interregional interactions, and systems of nomadic value may have indeed set the stage for one of the great eras of economic networking and ancient globalization.

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Chapter 10 Steppe Cores, Sedentary Peripheries, and the Statecraft of Empire

By proposing a spatial politics model for the Xiongnu state, I move away from the long-held view that steppe polities were mere reflections of states in China. Over the decades, the degree to which scholars have relied on concepts of direct borrowing and emulation of China in order to explain process and change on the eastern steppe is surprising. At one point or another, just about every part of steppe culture, short of the horses, has been attributed in some way to China's influence and example. This tendency reflects a strong orthodoxy of stereotype rather than a genuine grappling with the substantive issues presented by the Inner Asian past. Archaeological evidence from indigenous contexts gives us good reason to abandon this simple core-periphery perspective and view steppe political process as emerging from a dynamic setting in which the polities of China were merely one set of distant actors among many others. This is not to discount the importance of interregional interaction, nor the significant role played by the Han dynasty, but instead, it focuses on the intricacies of these processes rather than assuming their simplistic unidirectionality. In practical terms, the spatial politics model is no more than an attempt to bring theory more in line with existing evidence, both textual and material.

Spatial politics is as much an inquiry as it is a concept—it specifies that the quality of politics changes as geography, distance, and dispersion intervene and therefore begs the question of how differently mobile cultures treat these factors as polities expand and transport technologies develop. Political communities, states, and empires that grow in size, integrate external groups, or otherwise shift to a more encompassing scale must devise some form of answer to this basic question. What is interesting is that these answers are surprisingly diverse. Since states are fundamentally large-scale complex polities, the different ways of creating spatial politics should likewise yield wholly different configurations of states and empires. Quite literally, "one size" of state does not and cannot fit all. More importantly, however, these ideas imply that differentiated traditions of spatial politics have some potential to cross-inform each other via interregional interaction.

If so, this may help to address the problem of how relationships between polities, whether "nomadic" or not, govern processes of reciprocal development over time. This places a premium on how we conceptualize the making of these interregional spheres of interaction.

Perhaps not surprisingly, the mutual history of the Xiongnu and Han states is one of the major case studies in a long-running debate over the organizational impacts of interaction (e.g., Beckwith 2009). This debate was originally inspired by the early historical works of, among others, Peake and Fleure (1928), Teggart (1939), and, of course, Lattimore (1940); all of whom sought to explain Eurasian history as a dynamic contrast between civilizations and their often nomadic neighbors. The idea of consequential connections (i.e., entanglements) between differentiated societies, therefore, has a long heritage (e.g., Pitts 2008: 495). One of the most recent and comprehensive statements on these historical processes in the Inner Asian context comes from the work of Barfield (1989, 2001, 2003, 2011) who proposes that Inner Asian polities emerged in tandem with large centralized states in China. In fact, Barfield argues that a centralized and strong Chinese state is a prerequisite for the organizational strategies employed by steppe elite. The main issue here is determining the sources of finance for regional nomadic polities, especially given that, in Barfield's assessment, the pastoral nomadic economy is not expected to produce a reliable surplus for capture by the state. Simply put, a regional polity among steppe nomads would have had no viable tax base to support its privileged leaders (Barfield 2001).

The answer to this organizational problem, according to Barfield, was the "outer frontier" strategy innovated by the Xiongnu aristocracy at c. 200 BC as a way to effectively translate assembled military might into political support (Barfield 1981; cf. Lattimore 1979). The outer frontier for steppe communities was China whose tremendous wealth could be accessed by threatening the frontier and extorting direct payments in the form of prestige items, grain, wine, and favorable border trade. Prestige products and grain then circulated among the elite as political gifts used to gain support for their positions while trade benefitted common herders. One problem, however, was how to sustain this system over time. Xiongnu leadership solved this by periodically threatening the borderlands with military incursions, just enough to keep the Han court sending annual payments and to remind them of the devastating potential of nomadic power. As a result, in Barfield's opinion, the Xiongnu state was centralized and integrated for the purpose of foreign affairs and military operations, but internally, it was arranged as a loose confederation of independent smaller polities that, nonetheless, collaborated militarily.

Moreover, the outer frontier strategy could not work unless there was a strong and centralized state in China whose royal court would have need to engage in such negotiations. Extrapolating from this model, Barfield (2003) makes two far-reaching assertions. First, throughout Inner Asian history, the emergence and re-emergence of strong dynasties in China called forth nomadic polities of roughly equal size, and this interactive dynamic continued over 2000 years and explains the cyclical nature of steppe organization. Second, because nomadic polities seek to reach parity with their sedentary neighbors to extract wealth, the outer frontier strategy also explains why it was that Inner Asian nomads organized such large empires while nomads in Central Asia, the Middle East, and North Africa generally organized much smaller polities. This was directly related to the fact that, historically, states in China were among the largest in the Old World.

Barfield's model is clear and even elegant in the way it explains Inner Asian history, but overall, it is not supported by the facts as established by either the textual accounts or by archaeology. For example, the archaeological perspective I have provided on the formation and organization of the Xiongnu state does not conform to Barfield's expectations for timing, the process of emergence, the shape of local area organization, centralization, or the variety of sources of political control available on the steppe. Moreover, the model fails to explain the timing and conditions for the rise of both the Turk and Mongol empires (Drompp 2005). Despite this, Barfield's ideas have made major advances in our understanding of the Inner Asian past. In my estimation, some of Barfield's major contributions include a truly indigenous model for steppe politics that does not rely on emulation of state models from China and does not fall back on older themes of barbarian hordes and charismatic leaders. Barfield also touches on the important tensions within steppe polities between centralized and distributed authority and emphasizes that the state need not be one or the other, but rather that both processes could have operated simultaneously. Barfield's scholarship on the Xiongnu role in the early Silk Roads has been important to the work of a number of other researchers (see Chap. 9), and his ideas about steppe approaches to cultural and political diversity are fundamental to how we conceive of the imperial projects of nomads (more below).

Ultimately, what Barfield fails to do is re-imagine the nature of inter-cultural interaction as it pertained to the frontier and to the mutual transformation of largescale polities. In other words, he is in the same boat as Lattimore before him and he also keeps company with many archaeologists who have gone through any number of models and paradigms for dealing with this exact same question in prehistory. What is more, despite the substantial criticism sometimes leveled at Barfield's model by historians and archaeologists alike, his approach to interregional interaction has not been substantially improved upon by any other scholar over the past several decades. As a matter of fact, Barfield offers an understanding of long-distance interaction and politics that should be intimately familiar to archaeologists. Based on the synthetic work of Blanton et al. (1996), the outer frontier model is essentially a version of wealth finance with a strong emphasis on "network" as opposed to "corporate" political strategies. More or less the same understanding of interregional interaction is employed by other Inner Asian scholars researching the Xiongnu state including Kradin (2008) and Di Cosmo (2002). In my opinion, one problem with political economy models that focus on external wealth finance is that the acquisition of wealth becomes the explanation for almost everything, including the shape of interregional interaction and the building of relationships needed to apply, maintain, and secure wealth as a political resource in the first place. Too great an emphasis on the functional process of accessing wealth tends to overlook the intricacies of social interaction and political variables that, without doubt, were more important.

10.1 Reciprocal Entanglements: Historical Experiments in Imperial Statecraft

As an alternative, I have drawn on Dietler's example and used the concept of entanglement precisely because it gets around some of these problems. Entanglement is explicitly social and political in terms of its expectation for how external goods will be consumed locally, but it is generic enough that contextual details must be specified. In addition, entanglement is a process that articulates across social scales, from macro-regional networks to the household, and as such, it acts essentially as a scale-free concept. Although my study of Inner Asian entanglements focuses mostly on the centuries leading up to nomadic statehood, the early Silk Roads example in the previous chapter reveals that multi-directional entanglements became more entrenched as the Xiongnu state persisted through time. In this respect, the historian Chun-shu Chang (2007) makes an intriguing set of observations about the course of Xiongnu-China interactions and entanglements over the first 150 years of Xiongnu state history. The backdrop to Chang's historical model does not begin on the eastern steppe but in the river valleys and mountain passes south of the Ordos Loop where the very first empire of China, the empire of Qin, was abruptly established in 221 BC. The Qin empire, however, was so short-lived that it is worthwhile asking whether or not Oin was really an empire at all?

The first empire (221-207 BC) was founded after Qin had conquered and integrated all other Eastern Zhou states. The result of this violent and destructive process was a macro-polity, the kind of which had never before been seen in East Asia. Qin is considered to be the beginning of the imperial era in Chinese history based on the fact that one widely accepted definition of an empire is a state made up from prior states. Though greatly expanded in terms of territory and resources, the political model put in practice within the nascent empire was one based on the statecraft of the pre-imperial Qin state (Shelach 2013). This established political tradition was based upon a highly regulated and rigid form of centralized control, political and cultural conformity, and strong militarization. The basic political philosophy of Qin was built upon suppressing alternatives and diversity in support of a single stringent political reality focused on central control and mobilization (e.g., Wolf 1990: 593). The model was successful for a small-scale state attempting to survive in a highly competitive political and militarized environment, but it failed abysmally given a greatly expanded scale of statehood (Shelach 2013). As a result, the Qin empire barely outlasted its founding emperor. It was indeed an empire in size and make-up, but certainly not in practice.

Qin was followed by the Han dynasty (202 BC), which moderated the political model of the first empire. The Han elite brought a more flexible approach to central integration that initially suffered from a lack of economic control and factional challenges but eventually proved viable over multiple successions. The Han state was relatively weak during the first 70 years of its existence, and during this time, the adjacent Xiongnu polity expanded to an estimated 1.3 times the territorial size of the Han polity (Chang 2007: 158). As pointed out in Chap. 9, during this early period, the Xiongnu had extended their influence and contacts far to the west, into what is now Xinjiang

and western Siberia and very likely had already initiated a prototype of Silk Roads interaction (Yü 1990: 128; Barfield 2001: 21–22). Political practices that were effective at articulating dispersed and differentiated peoples over great distances, like those exhibited by the Xiongnu, were precisely the kinds of techniques required for managing an expansive empire. By the mid-second century BC, steppe leadership had become masterful at effectively organizing large and diverse groups of people over substantial distances (e.g., Sinor 1970: 103–104). Although the Xiongnu polity was not an empire per se, it certainly had some organizational characteristics that were very similar to an imperial state. In support of this capability for articulating and managing populations geographically, the political culture of the steppe tended to be strategic rather than dominating, inclusive as opposed to exclusive, and flexible instead of rigid. A high degree of horizontal as well as vertical integration and the capability to synthesize very different cultural elements made steppe organization viable at a macroregional-scale (Rogers 2012: 214; Sinor 1970: 102).

In contrast to this expansive steppe model, the Han state, up to the time of emperor Wu (also Wudi, r. 141-87 BC), had focused internally on economic control and the consolidation of factions without explicitly developing a working model for sustainable long-distance expansion. Wudi initiated the Sino-Xiongnu wars to counter the nomadic military, but it was also the organizational challenge posed by the Xiongnu state that had to be matched. What quickly grew into a macro-scale confrontation pitted a larger, militarily superior, highly mobile system against the Han dynasty's centralized, integrated, and industrial powerhouse that, despite its organization and capacity, was still unable to "get out from under" the Xiongnu threat. As Chang convincingly argues, it was precisely this political, economic, and military contrast and the formidable challenge posed by the Xiongnu that initiated the transition in Han to an internally consolidated and externally expansive state under Wudi (Chang 2007: 135–159).¹ The main thrust of these changes, however, was the creation of an internal support system that made it possible for Han to accomplish the spatial reach that the Xiongnu had mastered long before. Implicated in that system was the Han adoption of techniques from the steppe that enabled geographic projection of power, such as the creation of massive state-managed horse pastures for cavalry-based armies-a process begun prior to Qin but greatly expanded under Wudi. Other innovations included a farm and irrigation-based colony infrastructure that created buffer zones and supported frontier fortresses for forward operations and an administrative system for creating long-distance political treaties to compete with the Xiongnu alliance system in the west (Chang 2007: 158-159, 193-201). Wudi's primary objective in adopting a far-reaching offensive policy was eventually to defeat Xiongnu supremacy in the western regions and, in effect, to "cut off the right arm" from the Xiongnu polity (Di Cosmo 2002: 269).

¹ At about the same time, the Han state was also involved in expansion to the south although conditions of interaction, prior history, and even geographical distances and mobility were substantially different between north and south (Yao 2008: 24–46). It was not until the initial Han successes against the Xiongnu after almost 20 years of frontier warfare (c. 115/110 BC) that expansion into the south then proceeded (Allard 2006: 233–234).

What is telling about these historical details is not Wudi's military exploits, but rather the gradual elaboration of Han political models to include techniques and structures for supporting long-distance information gathering and expansion. Up until the time of Wudi, the Chinese political system had expanded on the basis of integrating self-same units, i.e., a process of "sinicize and incorporate" (e.g., Allard 2006; Yates 2001). In fact, the Han elite initiated tribute payments to the Xiongnu as a way to sinicize and eventually to control the steppe peoples (Di Cosmo 2002: 193). In the process of competing with the Xiongnu in the far west and developing the local infrastructure to support that effort over extended distances, the Han state transformed its own political system, and to some degree, its ideology with regard to non-Han cultures. The military mobilization against the Xiongnu consolidated state energy and military preparedness to the point that expansion against lesser neighbors at much greater distances became a possibility. At the same time, Han political effectiveness at integrating peoples that were very different from themselves in terms of their society, productive capacity, and organization greatly improved as a result of having to draw external groups away from Xiongnu influence. From one point of view, therefore, the origin of the expansive Han empire, which eventually projected direct and indirect influence as far as Xinjiang, Korea, and Vietnam, was encouraged by a long-term relationship between the initially insular Chinese states and the expansive Xiongnu polity (Chang 2007: 158-159).

Chang ends his account of the Sino-Xiongnu wars with a declaration that almost a century of conflict waged by Wudi and his successors (c. 133-50 BC) led to the gradual weakening and demise of the Xiongnu state. By 50 BC, a series of succession disputes had begun to cause rifts in the Xiongnu political structure, and, as a result of internal conflicts, some nomadic factions made overtures for support from the Han dynasty. This, according to Chang, marked the end of a dual East Asian political order and the permanent ascendancy of Han (Chang 2007: 159). In fact, nothing could be farther from the evidence provided by the Mongolian archaeological record which clearly contradicts Chang's account. The mid- to late first century BC is marked by construction of the massive elite platform tombs in eastern, central, and western Mongolia, Transbaikal, and Tuva, which would seem to suggest a period of resurgence, wealth, and opulence, and perhaps stronger ties with polities in Central Asia and West Siberia (see Chaps. 8 and 9). There are several theories about this apparent contradiction in the textual and material sources of information. For example, Di Cosmo suggests (2011: 38–39) that the Xiongnu elite experienced a fragmentation of their polity due to military pressure from Han and what he argues was an intrinsically weak political system. The outcome, according to Di Cosmo, was a breakdown into several autonomous regional groups who resorted to grandiose mortuary displays as a way to evoke the former polity and keep themselves in power locally. This is one possible explanation but other than a shift in elite mortuary practices, there is no other archaeological evidence for increased factional competition or breakdown within the polity at this time.

The discrepancy between the textual and material records may have a more prosaic explanation if we consider changes in the process of writing history in China. The historical project of the Eastern Han dynasty resulting in the *Hanshu* text (c. 36–116 AD), from which our understandings of this time period derive, was taken over by the Ban lineage—a cadre of state scribes with a more bombastic and ideological style and a marked hostility toward the Xiongnu "cultural" enemy (Goldin 2011: 231–232). In fact, lead historian Ban Gu's younger son was a Han general warring against the Xiongnu in the western regions. To the extent that writing history was a decidedly political process during the Han period, it is impossible to take it at face value without being systematically critical of statements, motivations, and perspective (e.g., Chin 2010). Therefore, recent historical research that sees this period as marking a Xiongnu collapse should be regarded with some caution. Surely, if we had texts from Xiongnu historians recording events in distant China, such as the fall of the Western Han dynasty in 8–9 AD, the conclusion of scholars today might be quite different. In reality, both the Han and Xiongnu states seemed to have persisted and continued to be each other's primary competitor for at least another century if not longer (Miller 2014: 23).

This is not to say that Xiongnu political organization was unchanged by close to 100 years of warfare begun by Wudi. Rather, just as the Han dynasty transformed organizationally by confronting the differential spatial and mobile capacities of the Xiongnu state, so did Xiongnu statecraft transform. As the platform burial cemeteries in Mongolia suggest, something major indeed transpired in steppe political relations during the first century BC. To know what that change was about, we must rely on archaeological evidence paralleled by informed and critical scholarship on the textual accounts. Miller (2014) and Brosseder (2009) have considered both records carefully and concluded that the new mortuary culture was indicative of a wider set of novel political practices on the part of the uppermost elite to assert their legitimacy. In other words, these tombs may have been one ingredient in a much larger experiment to promote greater central authority over the Xiongnu polity. According to these researchers, that political experiment involved re-formulating external relationships, confronting regional factions vying for prominence, and expanding the direct authority of the royal court, in part by sponsoring mega-event funerals in regions across Inner Asia (Miller 2014: 28-29; Brosseder 2009: 271-277). Such innovation is exactly what might be expected given a long episode of competition with a highly centralized polity, such as the Han dynasty. Therefore, in both China and the steppe, there is evidence indicating critical expansions of indigenous statecraft linked to intensive interactions between "differently complex" neighbors.

While this evidence does not suggest that the Han state adopted a model of spatially extensive networking directly from the Xiongnu polity, the Han court certainly innovated upon techniques related to mobility, communication, and long-distance military strategy. These techniques emerged from within the existing political system of Han and were elaborated based on the Han cultural and organizational tradition. Likewise, the Xiongnu elite did not emulate techniques of centralization from the Han dynasty, but devised strategies befitting their own political environment and traditions of statecraft. As such, this process of reciprocal development should not be understood as emulation, hybridity, or symbiosis. Rather, it is more like a prod or impetus toward innovation that primarily referenced an indigenous sphere of understandings and precedent. In the process of producing a greater spatial capacity within the political tradition of China and new centralized powers in the steppe tradition, these decades of direct interaction actually conserved or even ramified the differences between the political systems of China and

the steppe. This recalls Lévi-Strauss' observation that "diversity is less a function of the isolation of groups than of the relationships which unite them" (Lévi-Strauss 1952: 10). Furthermore, if we take a step back and look at these dual transforming political models from the standpoint of imperial statecraft, the benefits of analogous but diversified statecraft goes a long way toward explaining why East and Inner Asia became a center for large empires. Clearly, having multiple traditions for spatially extensive networking and for the stable management of a political core region would facilitate the organization of larger imperial states and promote their sustainability over time (e.g., Bauer and Covey 2002; Sinopoli 1994).

Based on these ideas, East and Inner Asia produced large empires for reasons quite different from current explanations of reciprocal development and imperial emergence. Of these, three models in particular are pertinent to the Far East, one of which is Barfield's sedentary-nomadic parity model discussed above. Another is the "marcher state" hypothesis developed by world-systems theorists Chase-Dunn and Hall in which secondary states on the periphery of primary states have the opportunity to innovate upon the original model for statehood based on its successes and failures. This produces a more efficient political-military organization and as a result, these secondary states often turn on their weaker predecessors and integrate them to create an expanding empire (Mann 1986: 130-133; Chase-Dunn and Hall 1997: 84–88).² Turchin (2009) provides the most recent explanation for Inner Asian reciprocal development. He proposes a dual-feedback model in which cycles of warfare and collective defense between sedentary and nomadic peoples progressively escalated polity sizes, i.e., nomadic polities enlarged to face a larger state in China and, in response, the Chinese state enlarged even further in defense. None of these models would be supported by the 1500 or so years of Inner Asian archaeological and historical evidence that I have presented in the preceding chapters.

Instead, an explanation in which imperial expansion involved input from an existing "pool" of differentiated political forms and techniques across a culturally diverse macro-region is more plausible. Barfield (2001) makes the intriguing case that empires are large polities that strategically exploit spatial and cultural diversity for political ends. I suggest that the degree of political diversity, interaction, and experimentation within a given macro-region should be directly related to the development of this capacity. Moreover, the process involved in this development can be thought of as a large-scale version of inter-organizational learning. That form of "learning" would have been predicated on differences in available forms of regional sociopolitical complexity (e.g., Wright 2006). As such, these ideas make the case that instead of being passively influenced by neighboring states, pastoral nomads contributed their own formats of complexity to the process of state building and were therefore major participants in the shaping of Old World civilizations.

The outcome of political diversification and intensive interaction is clear in the case of East and Inner Asia. Following centuries of negotiation, warfare, exchange,

² According to Chase-Dunn and Hall, the marcher state model may not apply to Inner Asia since nomadic polities often did not conquer states in China (Chase-Dunn et al. 2010)—although, sometimes, they certainly did.

factional defections, and many other kinds of interaction between the Han and Xiongnu states, these regions subsequently witnessed the emergence of some of the largest political organizations ever known to history. These include the Turk and Uighur empires, the Tang dynasty, the Khitan-Liao state, and the Mongol and Manchu empires. However, it was the initial kernel of a contentious, shared, and diversified political experience more than 2000 years ago that first set Inner and East Asian peoples upon this eminent historical path.

10.2 Epilogue: Mobile Legacies in a Globalizing World

At the end of the last century, the people of Mongolia experienced a sudden transformation in almost every aspect of their daily lives. It affected how and from where they obtained food, the kinds of clothes they could wear, their freedom of movement, what they saw on television, and the prosperity and hopes of every individual and family. The year 1990 was the start of the much heralded "dual revolution" that swept aside 70 years of Soviet influence to usher in democratic political reform and a free market economy. Mongolia, with its expansive steppe territory, small population, high literacy, and pastoral nomadic culture was expected to make a rapid transition with ease and to provide a model for similar transitions in nations across the former Soviet Union and Eastern Europe. In the early summer of 1991, the Mongolian people, young and old alike, in the serene capital of Ulaanbaatar, were flush with enthusiasm for the future.³

Two decades later, that future has arrived in Ulaanbaatar. The results of radical "shock therapy" advocated by Western trained macro-economists, Mongolian political leaders, and international development agencies have received decidedly mixed reviews. From one perspective, Mongolia today is mostly poor with a small but extremely wealthy elite, a struggling government plagued by corruption, a dysfunctional legal system, and a capital city densely packed with economic migrants from an increasingly desperate rural sector (USAID 2005; Griffin 2003: 1–2). The contrasting view comes from those who were directly involved in promoting and facilitating the rapid transition from socialism. Their perspective is that because Mongolia lost one-third of its GDP at the outset, great hardship, loss of services and support, and widespread poverty were all to be expected. Furthermore, they claim that due to drastic and swift measures taken in the 1990s, Mongolia experienced a relatively quick resurgence in GDP and an overall economic and political recovery that compares favorably to that of other transition nations in the former Soviet bloc (World Bank 2007: 2; Bikales 2005). In other words, things could have been much worse. Critics and advocates of the transition policies alike agree that only the resilience and perseverance of the Mongolian people avoided a far more devastating outcome.

³ This section expands upon my 2010 publication entitled "Pastoral Nomadic Voices: A Mongolian Archaeology for the Future" in *World Archaeology* (42: 405–417). I thank the publisher for permission to re-use parts of that earlier work.

Debates over how to structure goal-oriented social transformations, like those advocated by international development agencies, tend to be tied to narratives about the past in complex ways. Our understandings of modernization, progress, and improvement are usually constructed in opposition to the past and, as a result, the assumptions underlying important decision making are sometimes uninformed about that past. Moreover, these modern myths can be subject to cultural stereotype and inclined to a "one size fits all" approach (e.g., Buyandelgeriyn 2008). Modernization narratives can have profound impact on perceptions of present-day lifeways, identifying some as archaic and backwards and others as more suitably modern. When governmental and international policies are made on the basis of uninformed beliefs, things can go terribly wrong in the lives of ordinary people. Knowledge of the past is important, not as a source of answers, but instead, as a source of salient questions that challenges these ideologies of the contemporary.

Mongolia provides a case study in which a nuanced understanding of the past, had it been available and expressed, might have made significant contributions in promoting beneficial structural changes. With an eye to contemporary issues, I offer three examples of how archaeological research, including that presented in the previous chapters, confronts underlying assumptions in policy decisions, resource allocation, and development priorities in Mongolia today. My examples concern pervasive ideas about nomadic pastoralism and nomadic societies, the value of the rural sector, and globalization. Using these examples, I argue that archaeologists can and should raise authoritative voices, rooted in the past, to question simplistic and narrowly conceived frameworks for present-day policy making. While modern Mongolia's own coming to terms with nomadic pastoralism is one instance of the past challenging the present, it need not be an isolated example. Similar debates over the future of nomadic communities are taking place in many corners of the world today, and their outcomes will impact the livelihoods and daily existence of millions of people (Blench 2004). Is nomadic pastoralism indeed a thing of the past or a sustainable pathway to the future?

10.3 Modern Mongolia: A Nation of Herders

Mongolia has been described as having a distinctly different perspective on its pastoral sector because it is a country of herders in which most citizens still retain direct investment in or connections to the pastoral countryside. Many of the citizens of Mongolia, if not practicing herders, are only one or two generations away from family members who once were. This situation is substantially different from the pastoral experience in some parts of the Middle East or East Africa where pastoralists may be marginalized ethnic minorities and politically disenfranchised (Mearns 2004: 105). However, the situation in Mongolia is more complex than it at first would seem. Opinions of the pastoral nomadic lifeway are not unitary in Mongolia and many urban apartment dwellers, though they are familiar with and not far removed from rural life, nonetheless view this lifeway as difficult and undesirable, or on the other hand, as part of an idealized Mongol past (Marin 2008: 77). These attitudes first gained currency under the former socialist system (ca. 1921/24–1990), which exploited pastoralism through collectivization while simultaneously portraying the nomad as archaic (Humphrey and Sneath 1999: 1). Those Mongolians distinguished from their pastoralist origins by foreign education and prominent positions under socialism, adopted dominant discourses about nomadism, which would become further entrenched and reified during the market transition of the 1990s.

The process of privatization swiftly dismantled the socialist collective system beginning in 1991, leading to major changes in the pastoral sector of Mongolia and the overall economic health of the nation. Under the guidance of international development institutions, including the World Bank, the International Monetary Fund, USAID, and the Asian Development Bank, a newly democratic Mongolia embarked on free market reforms intended to disengage the economy from the political structure of the state. Reforms emphasized the reduction of barriers to cross-border trade, the privatization of state industries and services, diminishment of a state sponsored social safety net, and the development of internal markets. To finance this massive transition, international donor assistance in the form of grants and loans virtually replaced subsidies formerly provided by the Soviet Union, though this was contingent on Mongolia's adoption of the prescribed economic program advocated by development experts. The targeting and distribution of donor aid went toward a starkly different set of priorities than had been the case prior to 1990 with the result that during the first five years of transition, investment in national education, health, and infrastructure collapsed and more than a third of the population fell below the poverty line (Mearns 2004: 109-110).

Under the policy of privatization, state-owned herds were distributed among households. This created an immediate influx of new producers to the pastoral sector and an urban-to-rural migration. The pastoral sector contribution to GDP rose to approximately 36 % and herding became a dependable social safety net for more than a third of the population. However, rather than supporting this growth, the distribution of monetary aid, primarily through the Mongolian government, concentrated funds in the urban capital of Ulaanbaatar and only 5 % of aid reached beyond that one urban area (Bruun 2006: 214-216). Neglect of the rural parts of the country, especially in the provisioning of services, transport infrastructure, communications, and direct market access to herding families led to reverse migrations toward settled and populated areas in order to sell products and to access schools and clinics. Rural-to-urban movement was substantially increased by the devastating episode of droughts followed by unseasonal snows and cold snaps (i.e., zud) between 2000 and 2002, a multi-year weather event the pastoral sector was not prepared to withstand. Approximately ten million animals died during the environmental downturn at the start of the millennium, which disproportionately affected poorer households, many of which headed for Ulaanbaatar hoping to find scant urban sources of income (Fratkin and Mearns 2003: 118).

10.4 Discourses of Development and Modernity

Strong criticism has been leveled at multilateral and bilateral assistance organizations and the various Mongolian administrations over the past two decades, not least of all by those working within the aid agency framework itself. Among these critiques, misconceptions about nomadic peoples and rural life are implicated as one reason for the failure of international assistance programs and governmental outreach. In debates over nomadic pastoralism in modern Mongolia and subsequent policy outcomes, three underlying narratives are evident. The first is that nomadic pastoralism is an unsustainable form of production that is low tech, simplistic, and unadaptable (Humphrey and Sneath 1999: 305–306). Such ideas about the backwardness of the Mongolian pastoral sector have inspired legislation to privatize land, to move toward a system of industrialized animal production, and to grant land and water resources for mineral extraction with little consideration of pastoral needs or economic potential (Fernández-Giménez 2000; Sneath 2003: 444; Fratkin and Mearns 2003: 113; Bruun 2006: 222; Marin 2008: 80, 86).

A second narrative evident from the Mongolian case study is that mobile herders are thought to be independent of larger integrative structures, self-sufficient, and peripheral to the region of actual economic potential, which is considered to be the city. These preconceptions have largely been responsible for the focus on Ulaanbaatar in the process of social transformation with little attempt to link the urban and rural sectors either conceptually or on the ground (Denizer and Gelb 1992; Schmidt 1995: 168; Bruun 2006: 219–20). The third and last narrative is a long-standing belief that nomadic pastoralism is fundamentally obsolete and has no place in a modern, globalized economy. In 2001, Nambaryn Enkhbayar, the prime minister of Mongolia, voiced this opinion forcefully: "in order to survive we have to stop being nomads. We have set this agenda for ourselves and I think a lot of herdsmen are starting to understand this is inevitable" (Murphy 2001: 30-32). The policy outcome of this deeply embedded idea has diminished support for herding production and has endorsed a one-sided argument in favor of the mineral resource sector. This has led to neglect of the existing manufacturing base for cashmere, wool, leather goods, range-fed and organic meat export, and other marketable pastoral products (Rossabi 2005: 122-124; Marin 2008: 76-77; 84-86).

The question of whether or not nomadic pastoralism can be a viable and sustainable lifeway in the modern world harkens back to the same conceptions of the nomadic herder as "other" and dichotomies of "steppe versus sown" that I have discussed throughout this work. While archaeologists researching Eurasian steppe prehistory have been busy debunking these frameworks for explaining the past, it would seem that they need to be challenged in the present as well. The internalization of such discourses as a way to move from the past toward a some version of "modernity" began under Soviet influence but has found its greatest expression in the systematic under-privileging of the rural pastoral sector in contemporary Mongolia. One role the Mongolian past could play in these recent events is not to argue for or against the preservation of mobile herding per se, but to raise questions about why it is we hold the beliefs we do about this lifeway and whether or not those beliefs are indeed valid. This is especially important when such beliefs and assumptions configure major social and economic programs for change across the Old World from Manchuria to Morocco. In the case of Mongolia today, what questions does the archaeological perspective raise for those making decisions?

10.5 An Ancient and Unchanging Nomadic Pastoralism?

History and prehistory have played significant roles in the creation of a modern Mongolian identity, especially based upon the resurrection of Genghis Khan (Chinggis qahan) as father of the nation (Lkhagvasuren 2009). The importance of this imperial past during the post-Soviet transition period is reflected in extensive research on the *Mongolian Secret History*, a thirteenth century narrative of the rise of Genghis Khan, and teaching of the imperial Mongol writing system as an alternative to the Soviet inspired Cyrillic script. Museum exhibits, national ceremonies, impressive monuments and statues, and political rhetoric commonly make reference to this glorified past that has become central to the creation of today's independent Mongolian state. Archaeology has likewise played a public role in creating time depth for this identity, linking present-day Mongols with those considered to be distant nomadic forbearers, such as the Xiongnu. This sense of long-term continuity has inspired interest in cultural heritage and its protection at the highest levels of government but has also affirmed the popular perception of nomadic herding as a simple, unchanging, and anachronistic way of life.

The results of archaeological research discussed in this work diverge markedly from this popular interpretation of the past and suggest a very different reality for the pastoral nomad through time and up to the present. Pastoral nomadism in Mongolia has been successful primarily because it was readily adaptable to the changing social and political environments of Inner Asia. These have ranged from small-scale polities to territorial and competitive polities to the first states and empires; and in every time period, different versions and arrangements of pastoral nomadism supported communities throughout these transformations. Fieldwork in the Egiin Gol valley gives the best diachronic perspective on these shifts in subsistence strategies. At various times in the past, the people of Egiin Gol have emphasized a generalized productive strategy that included herding, farming, hunting, gathering, and fishing, but as regional organizational changes transpired, archaeology shows that local production recombined these strategies opportunistically or intensified some over others.

For example, as the Xiongnu state emerged, Egiin Gol experienced greater agricultural production and expanded pastoral rounds, while during the Turk–Uighur period (c. sixth to ninth centuries AD), more specialized pastoralism predominated, perhaps related to the interregional horse trade and the founding of an urban center nearby (Honeychurch and Amartuvshin 2007: 52–55). By the eighteenth to nineteenth century, canal systems, sponsored by the local Buddhist monasteries, supported intensive grain cultivation and, at the same time, community herds were pastured in and around the valley for local consumption. During the nineteenth century, fishing was abandoned due to a Buddhist prohibition, but hunting for furs increased and became more specialized to satisfy regional and international markets. These changes were associated with both demands and opportunities created by external political orders but were accommodated by a uniquely flexible approach to production, always pivoting on the pastoral base. Moreover, these early innovations were fundamentally no different from pastoral innovations today, such as herders who use cell phones and Internet uplinks to monitor market prices, motorcycles to recover lost cattle, and solar cells to power ger tents. Not far from these herding families, the agricultural fields first plowed 2000 years ago are now being worked using the latest GIS-guided plowing and harvesting technology from Korea.

This impressive record of both variability and sustainability at Egiin Gol disputes the static image of nomadic culture that underlies governmental decision making and international consulting. The archaeological perspective suggests that the herding-centered economy is flexible, resilient, technologically oriented, varied in degree of generalized or specialized production, and integrated with other forms of production. From at least the second millennium BC, nomadic pastoralism has been the major economic sector throughout every historical period in Mongolia despite shifts in territory, interregional interactions, technology, religion, and ideology. The latest expression of this capability was the contribution of rural pastoralism to sustaining the Mongolian population through the free market transition. From 1991 to 1993, shelves in food stores were empty, the nation was on a ration card system, and the only products to eat came from the pastoral sector, despite little or no government support for rural services or facilities.

10.6 Is the Center Always Central?

The abandonment of the rural sector was part of a larger "retreat of the state" from involvement in economic life, except as it related to the nation's center, Ulaanbaatar. Disengaging the state from the economy resulted in resource and expertise investment in the capital city where the controls of government resided in order to support the restructuring. The rural sector, devoted mostly to pastoral production, was assumed to be self-sufficient, small-scale, and relatively disconnected from the operations of politics and macro-economic planning (e.g., Denizer and Gelb 1992: 27–32). The "retreat of the state" therefore was in fact a retreat as far as the boundaries of Ulaanbaatar, which formerly had been the major gateway for Soviet influence as well. The rising imbalance between rural areas and Ulaanbaatar in terms of wealth, services, education, and opportunity, though far from intended, promoted uncontrolled urban migration. Today, more than half of the nation's population presses in upon the capital city where public services and infrastructure are stretched beyond capacity.

Historically, nomadic peoples have been perceived as peripheral to urban process and to centers of "civilization". In Mongolia today, there is a tangible value judgment placed on the "high culture" of the urban setting and the "low culture" of the countryside (Bruun 2006). Mongolian prehistory again gives us reason to question the deeply ingrained narrative of the peripheral and independent nomad in terms of both urban process and the meaning of centrality. Archaeologists have conducted research at a number of walled and urban sites across Mongolia since the nineteenth century. In the past decade, this research has accelerated with projects at walled centers of the Xiongnu state, the Uighur capital city of Khar Balgas, the imperial Mongol capital of Kharakhorum, and what may have been an early palace complex in the career of Genghis Khan at the site Avarga. Early walled centers were established as areas for ritual and integration on the steppe and these practices and technologies developed into an indigenous tradition of city building (e.g., Rogers et al. 2005; Bemmann 2011). This tradition, however, raises some interesting questions. For example, when large-scale urban centers were constructed, how did these seemingly sedentary practices fit into the mobile environment of the nomad? Moreover, does a nomadic approach to cities suggest a different way of thinking about urbanism and centers altogether?

In the past, the steppe nomad's experience of urbanism involved city centers that were used seasonally, or were partially mobile, or entirely mobile. For example, the capital city of the Uighur empire (eighth to ninth centuries AD) was an impressive walled center today known as Khar Balgas, but it did not always house the elite court, which was the true "center" of the empire. Instead, the court and its administration circulated seasonally through a broad territory around the city in the same way as local pastoralists (Honeychurch and Amartuvshin 2007: 54-55). The city and palace sites of the Mongol empire were also used seasonally. The Khan's entire retinue regularly moved 300 or more kilometers to a summer palace and then to another site equally far for winter (Shiraishi 2004). The predecessor of Ulaanbaatar was an entirely mobile city formed around the court of the Buddhist ruler in the mid-seventeenth century, which moved consistently over a 139-year period before settling in the present location in 1778 (Campi 2006: 36-38). In these examples, the urban center was closely integrated with a broad pastoral nomadic hinterland that not only interrelated elite to commoner but also dispersed elite resource consumption and resource distribution. The purposeful circulation of authority and wealth through the pastoral nomadic countryside was fundamental to supporting early political systems and depended upon a concept of the center that is distributed instead of unitary (Sneath 2007). Given this tradition, it is not surprising that both urban-to-rural and rural-to-urban migrations would take place fairly regularly to adjust to conditions. As such, modern assumptions and policies that produce stark imbalances between the urban and rural sectors within this mobile environment are clearly untenable, as both past and present experiences have shown.

10.7 Globalized Herders

The global economy has enveloped Mongolia most ominously in the form of multinational mining corporations that view the Mongolian Gobi Desert as a mineral doorstep to Chinese markets (Rossabi 2009: 245–247). In 2011, Mongolia had the fastest growing economy in the world thanks to foreign corporate mining of coal, gold, copper, tungsten, tin, and molybdenum deposits. The wealth and benefits generated by this economic growth are distributed unequally across Mongolian society favoring mostly the new elite. The costs of industrial mining, including environmental damage, depletion of water supplies, the loss of pasture and pastoral livelihoods, and even the disbanding of local communities-impacts the entire nation. Mongolia's mineral wealth has long been figured into economic simulations for the nation's recovery from massive international debt, though development of the existing manufacturing base for pastoral export products seems to have been largely ignored. As one transition economist explained this logic: "despite the positive influence of the country's nomadic heritage on the past decade of reform ... nomadism is not economic in a modern market" (Murphy 2001: 32).⁴ This vote of no-confidence has been most apparent in the downfall of the indigenous cashmere industry. Finished cashmere goods had great potential as a valuable export but rapidly became a casualty of free-trade ideologies that prohibited tariffs against Chinese manufacturers. As a result, the bulk of Mongolia's raw cashmere went to China while development of the existing Mongolian cashmere industry went into decline. These misguided trade policies came about as a condition of receiving international assistance and poor planning on the part of the Mongolian government (Marin 2008: 84-86).

Again, the lessons of the past contradict the assumption that pastoral products are of low value and not marketable. As discussed in Chap. 9, archaeologists working in Mongolia recover substantial evidence to confirm the role of nomadic peoples in what is sometimes described as an early form of globalization along the trans-Eurasian Silk Roads. There are interesting arguments to be made on both sides of the question of whether or not early networks of interregional interaction and exchange were similar to or fundamentally different from contemporary globalization; however, prehistory does demonstrate that demand for pastoral products partly configured these long-distance relationships. The kinds of products that moved along these trade networks were in part silk, cloth tapestries, small luxury items, but much of the trade during the first and early second millennia AD was in steppe and forest products from the north (Christian 2000: 18).

Long-distance economies went hand in hand with expansive empires, and these patterns increased substantially under the Turk-Uighur and Sogdian states and even more so under the Mongolian empire (Beckwith 2009). Large-scale nomadic supply networks also continued into the modern world as well. During the nine-teenth century, Mongolia supplied a million animal units of livestock and animal products annually to Manchu China in addition to highly valued steppe and forest

⁴ The current international market for organic free-range meat, most of which is exported from Australia, demonstrates how shortsighted these opinions were at the time. Furthermore, as the middle class in China expands, one of the largest meat-consuming nations in the world will be right next door to Mongolia. Although the mining sector is important and has been for centuries, there is absolutely no doubt that the products of modern pastoral nomadism continue to be highly valued on the world market.

medicinal plants, aromatics, and wild animal products such as reindeer horn. The fur markets of Europe and North America were also in part expanded and fueled by exports from Mongolia and Siberia. In the twentieth century, the little known history of Mongolian support for Soviet Russia and the Red Army during World War II shows massive transfers of essential pastoral products that maintained the war effort, including meat, butter, horses, skins, wool and felt, and leather goods (Voaden 2007). Following the war, the pastoral economy continued as a net export generator with Mongolia exporting 5 % of the national herd in 1985 to the Soviet bloc economy, totaling an estimated 63,100 horses and 61,500 tons of livestock and meat (Sneath 2003: 447). What archaeology and history reveal together is roughly 2000 years of long-distance exchange, transport logistics, communications, and inter-cultural dialogue—an intrinsically modern résumé—founded on mobile pastoral production. The testing of a narrative that views nomads as incompatible with global economics does not find support in the distant or recent past, and therefore, why assume that nomadic pastoralists could not accomplish the same today?

Clearly, the past holds lessons for the present and future of Mongolia. Informed and innovative pastoral development will be key to national economic health in this steppe nation and perhaps in other national contexts where nomadic populations have long been marginalized (Galvin 2009). However, Mongolia's example is not primarily about nomadic pastoralism, economic policy, or globalization it is about the beliefs and assumptions that underwrite these contemporary processes and how often these basic narratives remain unexamined. That international development work and governmental policy both represent theory applied directly to a living society is a sobering thought. How such work is predicated upon certain ideas and how some conceptual frameworks are privileged over others are of major importance given the debilitating problems these efforts address and the unanticipated problems they create. It is in this marketplace of ideas that the unique perspectives of prehistory have relevance for the future.

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Index

A

Agriculture, 4, 9, 84, 85, 89, 96, 104, 138, 164–166, 168, 268, 274, 287 Alag Tolgoi, 228, 279, 282–284 Alexander the Great, 280 Altai Mountains, 85, 86, 110, 116, 157, 164, 172, 175, 233, 274, 277, 281, 284 Andrews, Roy Chapman, 80, 137 Arzhan 1 and 2, 158, 176, 178

B

Bactria, 274, 276 Baga Gazaryn Chuluu (BGC), v, xi, 12, 13, 80, 89, 93, 94, 99, 100–106, 109, 113, 114, 121, 123, 125, 126, 129, 138-141, 143-147, 149, 158, 170, 171, 186, 193, 215, 226, 228, 234, 235, 241-246, 250, 251, 262, 263, 268-272, 279, 282-284 Barley, 160 Bayan Bulag, 2, 104 Beads, 122, 125, 141, 201, 202, 241, 281-284 Begash, 158–160 Bioarchaeology, 105, 106, 241 Bronze alloy, 170, 272 Bronze helmet, 130, 131, 141, 205, 206 Bronze metallurgy, 133, 188 Bronzes, bronze artifact, 114, 133, 157, 168, 169, 190-192, 195, 198, 204 Bronze vessel, 197, 198, 205 Burkhan Tolgoi, 228, 238-240, 242, 264-266

С

Campsites, 79, 90, 92–94, 96, 98, 110, 132–134, 137, 139, 148, 159, 164, 230, 231, 263, 264, 268 Carnelian, 125, 130, 201, 202, 282 Celts, 31, 190, 198 Centralization, 9, 50, 53, 54, 62, 64, 67, 72, 246, 262, 270, 299, 303 Ceramics, 2, 122, 130, 132-137, 165, 168, 190, 230, 231, 236, 265, 270, 280, 284, 286 Chandman' Khar Uul, 113, 124, 125, 158, 170, 245, 251 Chariot, 5, 160, 161, 166, 187, 191-195, 197, 201-204, 209-213 Cheekpieces, 128, 129, 162, 166, 175, 204, 213 Chicha, 158, 162 Chifeng, 20, 186, 195-197, 199, 205-208, 210 Chronology, 51, 117, 122, 125, 130, 132, 136, 138, 139, 187, 195, 207, 221, 227, 230, 234, 235, 278, 281, 284, 286 CICARP survey, 186, 195, 196, 199, 206 Cisbaikal, 86, 132, 135, 200 Co-community, 12, 55-57, 63 Complexity, 38, 49, 50, 54, 57, 59, 60, 62, 67, 71, 91, 120, 149, 163, 164, 253, 304 Conflict, 5, 27, 31, 32, 51, 63, 68-70, 72, 102, 121, 130, 177, 191, 205, 212, 222, 224, 233, 234, 244, 247, 249, 250, 252, 272, 302 Cultivation, 88, 104, 138, 160, 166, 310

D

Deer stone, 112, 116, 117, 119–122, 125, 128, 130, 133, 134, 140–142, 148, 149, 170, 172, 174, 192–194, 214, 232 Delegation, 53, 202, 262 Delgerkhaan Uul, xi, 113, 125, 245, 251 Democratic transition, 305, 307

© Springer Science+Business Media New York 2015 W. Honeychurch, *Inner Asia and the Spatial Politics of Empire*, DOI 10.1007/978-1-4939-1815-7 Desert-steppe, 83, 93, 98, 101, 102, 104, 147 Diet, 57, 98, 104, 135, 136, 138, 140, 148, 161, 264, 271 DNA, 105, 206, 207, 266 Domesticated grain, 138, 160 Domesticated horse, 121, 148, 149, 193, 203, 207, 208 Domestic grain, 110, 148, 264 Domestic horse, 14, 69, 121, 148, 157, 193, 203, 206–209 Dornogobi, 124, 125, 127, 197, 206, 251 Dottore-namak, 113, 137 Duraal, 242, 243 Dureny, 113, 134, 135

E

Early Iron Age, 13, 20, 111, 132, 134–136, 138, 139, 146, 147, 160, 163, 164, 172, 173, 176, 177, 187, 212, 213, 215, 222, 233, 234, 238, 240, 244, 246, 251, 252, 262–264, 268, 269

- Egiin Gol, v, xi, 12, 13, 80, 93–99, 102–106, 109, 113, 115, 121, 126, 129, 131, 132, 139–145, 149, 158, 186, 193, 206, 215, 226, 230, 234–246, 250, 251, 262–268, 270–272, 309, 310
- Empire, v, xi, 1–6, 8–12, 14, 17, 30–32, 39, 41, 47, 48, 50, 51, 64, 65, 68, 73, 136, 164, 185, 211, 253, 264, 274, 275, 280, 289, 299–302, 304, 305, 309, 311, 312
- Ethnography, 10, 13, 54, 55, 68, 87
- Eurasia, 3, 4, 7, 8, 9, 21, 28, 47, 50, 56, 69, 80, 81, 86, 116, 129, 160, 161, 166, 177, 198, 206, 278, 290

F

- Faience, 282–284
- Farming, 47, 85, 109, 110, 133, 138, 160, 166, 188, 195, 196, 211, 230, 268, 309
- Faunal analysis, 121, 159, 160, 203
- Fieldwork, 7, 94, 105, 113, 133, 141, 188, 195, 234, 239, 249, 251, 273, 309
- Fishing, 89, 98, 109, 110, 136, 141, 148, 166, 197, 200, 287, 309, 310
- Flexibility, 56, 57, 67, 91, 148
- Forest-steppe, 12, 83, 84, 86, 89, 91, 93, 95, 98, 102, 132, 134, 135, 140, 144, 162, 164, 165, 198, 200, 243, 271, 286–289
- Frontier, 3, 5, 10, 14, 17, 39, 40, 47, 79, 83, 185–187, 204, 205, 223, 246, 247, 249, 272, 274, 277, 299

G

Gated community, 23–25, 35 Gathering, 55, 89, 91, 98, 104, 109, 110, 121, 136, 138, 141, 148, 149, 165, 197, 198, 241, 269, 302, 309 Genghis Khan, v, 3, 309, 311 Geography, 7, 33, 79–81, 91, 92, 106, 224, 225, 270, 273, 297 Glass analysis, 281 Globalization, 26, 88, 290, 306, 312, 313 Gobi Desert, 2, 3, 12, 30, 70, 83, 86, 89, 93, 99, 110, 136, 137, 185, 187, 235, 241, 243, 282 Gold glass, 282–284 Great Wall, 5, 9, 249 Greek, 6, 31, 39, 280, 281

Н

Habitation sites, 104, 125, 132, 134-137, 139, 140, 161, 166, 171, 188, 196, 238, 241, 251, 264, 268 Han dynasty, 1, 2, 14, 27, 47, 51-53, 72, 73, 200, 221, 223-226, 230, 246, 253, 270, 272, 274, 275, 279, 281, 287-289, 297, 300-303 Hanshu, 223, 302 Harness, 66, 69, 128, 135, 162, 163, 166, 173, 175, 176, 213 Hedin, Seven, 137 Hellenistic, 279-281 Herd animals, 11-13, 49, 54-56, 63, 79, 83-85, 90, 93, 96-98, 110, 121, 125, 133, 135, 137, 138, 140, 141, 146, 161, 196, 197, 200, 227, 228 Herds, 3, 47, 48, 50, 54-56, 83, 84, 87, 88, 90-92, 94, 96, 97, 101-104, 109, 132, 136, 148, 166, 196, 201, 207, 209, 210, 213, 236, 268, 307, 308, 310 Herodotus, 5, 6 Heterarchy, 62 Hierarchy, 9, 29, 52-54, 62, 70, 71, 134, 262, 272, 273 Horse, 1, 5, 6, 8, 12, 14, 19, 48, 66, 69, 80, 83, 84, 88, 94, 96, 98, 101, 102, 109, 110, 114, 116, 119, 121, 122, 128, 129, 133, 135, 136, 140-142, 148, 149, 157, 159-167, 173-177, 187, 191-195, 197, 201-215, 221, 222, 224, 229, 230, 232, 247, 249, 250, 265, 276, 284, 287, 290, 297, 301, 309, 313 Horseback riding, 69, 128, 142, 148, 160, 209, 210, 212, 247 Horse skull, 114, 116, 119, 129, 148

Index

Horse trade, 250, 309 Hunting, 55, 89, 98, 99, 104, 109, 110, 135, 136, 138, 141, 148, 165, 166, 197, 200, 201, 287, 309, 310 Hunting, 89, 98, 109, 110, 136, 141, 148, 166, 197, 200, 287, 309, 310 Hybrid culture, 204, 250

I

Ibn Khaldun, 6 Identity, 14, 23, 29, 30, 33, 41, 42, 87, 191, 197–199, 205, 239, 241, 248, 252, 253, 309

- Imperial emergence, 304
- Inequality, 9, 23, 25, 26, 40–42, 49, 50, 56, 58–60, 62, 64, 65, 69, 110, 111, 120, 121, 130, 131, 164, 177, 215, 234, 252, 261
- Inner Asia, 3–5, 7–15, 17, 18, 20, 21, 27–32, 39–41, 47–49, 51, 54, 57, 59, 62, 63, 67–70, 72–74, 79–83, 86, 90, 94–96, 98, 106, 110–113, 116, 118, 120, 121, 129, 130, 132, 133, 138, 148, 149, 157–159, 164, 165, 167, 172, 173, 175–177, 185, 186, 192, 194, 200, 201, 206, 210–215, 221–223, 232–234, 245, 247, 261, 274, 279, 288, 297–300, 303, 304, 309

Inner Asian Frontiers of China, 7 Inner Mongolia, 2, 3, 5, 13, 14, 19, 20, 28, 41, 69, 81, 83, 85, 86, 109, 110, 126, 128, 130, 132, 137, 138, 146, 158, 168, 185–193, 195, 198, 201–206, 208–210, 226, 227, 233, 234, 250, 278 Integration, 14, 31, 53, 60, 65–68, 146, 213, 221, 246, 250, 262, 270, 271, 276, 285, 300, 301, 311

- Interaction sphere, 18, 172, 186, 197, 198, 209–211, 244, 246, 250, 253, 285–287 International development, 23, 305–307, 313 Interregional, 11, 14, 56, 63, 68, 130, 146, 149, 157, 173, 175, 176
- Interregional interaction, 18, 26, 27, 30, 31, 247, 290, 297, 299, 310, 312 Isotopic analysis, 140

J

Jew's harp, 18-21

K

Kamenniy Log, 158, 165, 166, 168, 172

Karasuk, 125, 165-172, 175, 189, 191, 192, 195, 197, 198, 201, 202, 209 Karasuk bronzes, 167, 170 Karasuk culture, 125, 165, 167, 170, 172, 189 Kazakhstan, 3, 12, 13, 69, 80, 81, 85, 86, 111, 128, 138, 148, 149, 157-168, 173, 175–177, 189, 193, 194, 201, 206–208, 210, 211, 213, 214, 226, 274, 278, 284-287 Kent, 158, 162, 163, 175 Khanui Valley, 117, 139, 213, 231 Khirigsuur, 112-122, 128, 132-134, 138-146, 148, 149, 162, 165, 170, 173-175, 193, 209, 210, 213, 232, 236, 240, 242, 251, 268 Khovsgol province, 95, 117-120, 130, 138 Kurgan, 116, 122, 148, 157, 163-165, 173-178

L

Lake Baikal, 85, 86, 94, 110, 135, 138, 200 Landscape, 3, 14, 57, 60, 65, 66, 74, 79–81, 83, 85, 86, 91, 94, 97–101, 103, 111, 115–117, 125, 133, 134, 139–141, 144, 145, 159, 185, 232, 238, 240–242, 244, 251, 262–265, 268, 270, 285 Liangcheng survey, 186, 188

М

Manchu empire, 14, 73, 305 Maodun, 1, 2, 6, 224, 276 Marcher state, 304 Market economy, 23, 88, 105, 305 Mediterranean, 11, 31, 39, 81, 228, 230, 281-284, 288 Metallurgy, 133, 188, 231, 287 Milking, 162, 163 Millet, 110, 138, 159, 160, 166, 168, 195, 264, 268 Mining, 18, 88, 105, 128, 136, 168, 186, 191, 195, 251, 265, 298, 311, 312 Mining sector, 312 Minusinsk Basin, 86, 121, 138, 158, 164, 165–168, 170, 175, 176, 178, 202, 211, 214, 286 Mobility, 4, 6, 11, 12, 14, 21, 48, 50, 57, 59, 63-67, 69, 71, 73, 80, 88, 92-94, 96, 102, 109, 134, 136, 139, 140, 143, 148, 160, 164, 166, 185, 190, 196, 197, 211, 212, 232, 243, 268, 274, 287, 301, 303 Mobility theory, 6, 11, 48, 66, 274 Modernity, 308

Mongolian empire, 136, 264, 312 Mongun-Taiga, 116, 165, 174, 232 Mortuary differentiation, 131 Mortuary practices, 122, 124–126, 130, 176, 177, 199, 204, 213, 244, 271, 277, 302 Mukri, 158–160

Ν

Negdel, 87, 88 Negdel system, 88 Negotiation, 12, 24-26, 30, 32, 35, 37-39, 40, 58, 60, 62, 64, 66, 72, 91, 246, 261, 298.304 Network, 5, 11, 31, 33, 34, 37, 56, 62, 69, 70, 105, 109, 110, 121, 146, 147, 149, 158, 165, 168, 177, 190, 205, 208, 215, 222, 232, 234, 299 Nomadic civilization, 7, 8 Nomadism, 11, 13, 48, 54, 57, 63, 80, 86, 92, 94, 137, 307, 312 Northern Bronzes Complex, 189, 192, 195 Northern Zone, 5, 28, 69, 70, 86, 149, 185, 186, 189, 191–193, 195–201, 203–211, 213, 215, 239, 246–250, 252 Novelty, 18, 21, 22, 26, 27, 30, 38 Noyon Uul, 225, 226, 229, 278-281

0

Ol'khon Island, 186, 200 Ordos Loop, 186, 187, 192, 193, 205, 209, 224, 250, 276, 300 Oreo cookie, 21, 22 Owen Lattimore, 7, 17, 67, 91, 275

Р

Parthia, 274, 279
Pastoral nomadism, 11–13, 54, 55, 57, 63, 68, 74, 80, 86, 87, 94, 125, 147, 199, 232, 309, 312
Political community, 41–43, 244, 246, 253
Political uncertainty, 40, 68
Preol'khon, 200
Prestige goods, 5, 52, 197, 199, 200, 205, 215, 245, 272, 287, 289, 290
Privatization, 307

Q

Qin dynasty, 10, 51, 224, 300 Qin empire, 8, 41, 51, 211, 223, 253, 300 Qin state, 248, 250, 251, 300

R

Reciprocal development, 298, 303, 304 Relational archaeology, 33 Residue analysis, 162 Ribbon mosaic pendant, 282, 283 Rock art, 106, 110, 129, 163, 166, 192–194, 201, 210, 240 Roman, 31, 32, 39, 48, 281, 282 Roman empire, 31, 32, 39, 48

S

Sagan-Zaba, 113, 135, 136, 186, 200 Saka. 163 Sargat culture, 287 Savan-Altai, 164, 168, 172, 287 Scale, 11, 14, 28-31, 33, 38-43, 49, 50, 52, 54, 56–63, 66, 68, 70, 71, 80, 81, 89, 90, 104, 105, 109, 133, 136, 141, 146, 147, 149, 175, 205, 210, 213-215, 222, 224, 231, 232, 238, 246, 253, 261–263, 266, 268, 272, 289, 290, 297, 300, 301, 304, 309–312 Scythian, 5, 6, 50, 163, 173, 175-178, 215, 287 Seals, 136, 284 Semirech'e, 158-161, 163 Settlement pattern, 139, 163, 166, 188, 196, 234, 238, 241, 264 Shang dynasty, 5, 187, 190 Shaped burial, 122, 123-126, 140, 228 Shiebar-kul, 113, 118 Shiji, 223, 224, 262, 276 Siberia, 3, 11-14, 19, 41, 69, 70, 81, 84-86, 94, 109, 112, 121, 127, 128, 132, 134, 137, 138, 158, 160–165, 168, 173, 176, 177, 189, 192, 197, 198, 201, 207-209, 225, 226, 230, 231, 233, 238, 266, 270-272, 277, 278, 285-288, 302, 313 Silk Roads, 21, 86, 227, 274, 275, 277, 278, 282, 288, 289, 299-301, 312 Sima Qian, 1, 2, 5, 223, 224, 253, 275, 276 Simukov, 7, 91–94 Sino-Xiongnu wars, 2, 28, 32, 223, 301, 302 Slab burials, 112, 122, 126–131, 134–136, 139-146, 148, 149, 165, 166, 170-172, 177, 178, 198–202, 206, 208, 210, 232-236, 239-242, 251, 268, 269 Social negotiation, 24-26, 30, 32, 33, 35, 36, 38, 39 Social relationships, 12, 22, 33, 34 Sogdia, 274, 279 Soviet Union, 23, 80, 87, 89, 92, 305, 307 Spatial Politics, 12-14, 49, 63, 66-68, 71, 72, 213, 262, 267, 274, 297

Index

Statecraft, 12–14, 42, 53, 59, 66–68, 73, 194, 212, 222, 261, 300, 303, 304
Steppe zone, 3–5, 8, 12, 50, 53, 70, 80, 81, 84–86, 93, 94, 98, 101, 109, 111, 112, 134, 145, 159, 177, 200, 223, 225, 227, 233, 271, 288, 289
Sukhbaatar, 93, 124, 125, 185, 197, 206, 251
Survey, 12, 22, 38, 105, 106, 113, 119, 124, 125, 132, 133, 137, 139–142, 144–147, 159, 186–188, 193, 195, 196, 199, 206, 226, 227, 238, 251, 263, 264, 266, 272,

Т

285

Talapty, 158, 160 Taldy Bulak, 158, 160 Tasbas, 158, 159, 160 Temperate steppe, 83, 91, 93, 94, 101, 145 Tevsh culture, 122–126, 140, 143, 169, 189, 209 Tevsh Uul, 113, 123-125, 147, 158, 169, 186, 193, 194 Toynbee, 6, 7 Transbaikal, 86, 115, 116, 121, 126, 128, 129, 132, 134, 135, 139, 158, 165-169, 171, 177, 200-202, 206, 210, 211, 221, 225, 228, 231-234, 249, 266, 268, 270, 272, 281, 286, 287, 302 Tri-partite organization, 273 Tripod vessel, 128, 134 Tsagaan Uul, 113, 127, 129, 186, 206, 245, 251 Tsaram, 226, 229, 279, 281 Tsenganka, 158 Tuva, 85, 86, 111, 116, 121, 128, 131, 164, 165, 168, 172, 173, 176, 177, 193, 209, 210, 213–215, 232, 274, 286, 302 Tuzusai, 158, 160

U

Ulaanzuukh culture, 122, 125, 126, 130, 140, 143, 169, 189, 209 Upper Xiajiadian, 20, 192, 195–200, 203–208, 210, 215 Upscaling, 41–43, 71, 249, 252 Urt Bulag, 113, 115, 117, 119, 148, 174, 175 Uushigiin Ovor, 113, 119, 120, 138

W

Warfare, 5, 10, 27, 39-41, 47, 48, 51, 52, 54, 63-65, 68-72, 111, 120, 130, 177, 194, 201, 202, 204, 205, 212, 221, 223, 233, 234, 245–248, 252, 253, 271, 287, 301, 303.304 Warring States, 5, 41, 70, 71, 207, 211, 241, 247-250 Western Zhou, 190, 197, 198, 201-205, 208, 210, 212, 214 West Siberia, 69, 161-163, 165, 168, 176, 201, 207, 287, 302 Wheat, 99, 110, 138, 159, 160, 237, 238, 264, 265 Workshops, 189, 190, 195, 199, 214, 230, 231, 241, 248, 250, 279, 281, 283, 286, 287 World Bank, 23, 305, 307 World War II, 313 Wudi, 301–303

Х

Xicha, 186, 188, 190, 191, 196, 203, 209 Xiongnu settlements, 221, 230, 236, 238, 263, 265, 266, 272, 287

Y

Yan state, 204, 250 Yenisei, 86, 164, 165, 172, 286 Yinxu, 186, 191 Yuezhi, 221, 276

Z

Zavkhan province, 118, 131, 172, 206 Zhang Qian, 276, 277 Zhao states, 248 Zhukaigou, 186–191, 195 Zud, 98, 103, 307